

**37**  
PAGES OF  
EXPERT TUTORIALS



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## POWER UP WORDPRESS

PLUG-INS AND TOOLS DESIGNED TO TAKE YOUR BLOG TO THE NEXT LEVEL

### THE FRONT-END DEVELOPER GUIDE

27 TOOLS FOR CREATING  
FORM AND FUNCTION

### BUILD A PHP WEB SERVER

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### MASTER CAPTION STYLES WITH CSS3

ADD IMPACT TO YOUR NEXT  
PROJECT WITHOUT JAVASCRIPT



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MAKE BEAUTIFUL  
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ISSUE 208

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### ALSO INSIDE

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# Welcome to the issue

## THE WEB DESIGNER MISSION

“To be the most accessible and inspiring voice for the industry, offering cutting-edge features and techniques vital to building future-proof online content”



Russell Barnes

## Highlight



“They demanded great ideas, but never let themselves get caught up with the details”

We get together with Try/Apt to find out how they helped Norwegian online marketplace FINN attract customers to its comparison website  
Page 22

## Just another WordPress site?



According to Google (and a studious Jayson Winters), most of you haven't done much with your WordPress blogs beyond uploading your holiday snaps and embedding videos of cats

clambering up curtains. Why so lazy?

Whatever the reason, the WordPress tagline 'Just another WordPress site',

which gets attached to every new blog by default, returns a whopping 139 million results from a simple Google search. It's one of the most basic customisations possible, yet there it stays.

Regardless of whether it's a personal blog or a site you built and maintain for a client, there's no excuse to leave

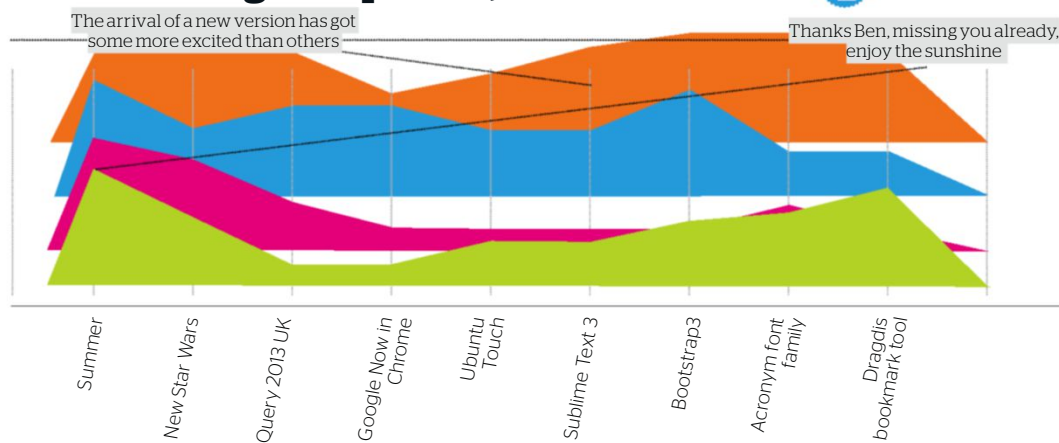
your site in anything resembling its default layout. You owe it to your collection of hilarious cat videos and yourself.

Since a good number of you clearly need a nudge in the right direction, Jayson Winters has stepped to the fore with nine pages of the best plug-ins, tools and themes to help take your blog to the next level (starting on page 40). As you'll probably already be aware, the sheer amount of WordPress plug-ins, widgets and associated tweakery is staggering, to the point where the amount of customisation you undertake is only limited by the time you have available and your technical capability. While we can't help free up your diary, we can help sort through the myriad options and help get them running on your blog. Enjoy the magazine!

“Nine pages of the best plug-ins, tools and themes”

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## Excitographic

Plotting the features that got us in a frenzy over the month...

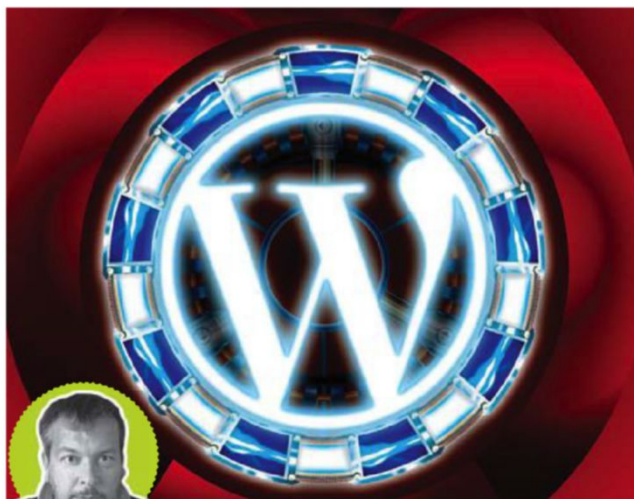
- Steve Jenkins, Features Editor
- Russell Barnes, Editor
- William Shum, Designer
- Ben Martin, Sub Editor

Turn over to the contents to discover what's going to get you excited this issue...

# This issue's panel of experts

Welcome to that bit of the mag where we learn more about the featured writers and contributors...

☞ The best plug-ins and tools to Power Up WordPress and make a site stand out from the crowd ☞



**Jayson Winters**

Jayson Winters is the creative lead at Brace Design and is always looking to improve and customise WordPress installations to provide a better customer experience. This issue he reveals the best plug-ins and tools to Power Up WordPress and make a site stand out from the crowd. **Page 40**



**Mark Shufflebottom**



Programme leader of the BA Digital Media Design course at Bournemouth Uni and an Adobe Education Leader, Mark delves into creating animation for webpages linked to the scroll bar using the jQuery plug-in Skrollr. **Page 52**



**Sam Hampton-Smith**



A graphic designer and web developer based in Scotland, Sam works with clients including Manchester Metropolitan University and The Home Office. This issue he employs calendario.js to make a gorgeous responsive calendar. **Page 56**



**Jeffrey Way**



Jeffrey is a developer, evangelist, instructor and author who works for Envato. His front-end developers guide looks at the essential collection of modern tools, frameworks and utilities that today's web pros are using. **Page 84**

**Pete Simmons**



A digital marketing manager for Lionhead Studios, Pete is solely responsible for the Lionhead site redesign. This month he guides you through the process of adding and styling embedded tweets to your site. **Page 68**

**Richard Wenkt**



Richard makes iPhone apps, writes books about coding and development, and composes music for games and installations. This issue he shows how to use the very new web audio API to add sound to your HTML5 pages. **Page 76**

**Matt Gifford**



A lead RIA consultant developer and industry author from Cambridge, he specialises in ColdFusion and mobile development. This issue Matt shows how to utilise a PC to build a testing server with open source software. **Page 90**

**Tim Stone**



Tim is a front-end developer who earned a first class degree in Interactive Media Production from Bournemouth Uni. This issue he shows how to use the PLoader library to preload image and audio assets for HTML5 apps. **Page 94**

**Adam Smith**



The resident Photoshop expert on our sister mag **Advanced Photoshop**. Adam loves to demonstrate how to recreate the latest graphic techniques. This issue he reveals how to do heavily illustrative web layout. **Page 74**

**Got web skills?**  
We're always looking for the hottest web-design talent. Email [webdesigner@imagine-publishing.co.uk](mailto:webdesigner@imagine-publishing.co.uk) with examples of your creative work

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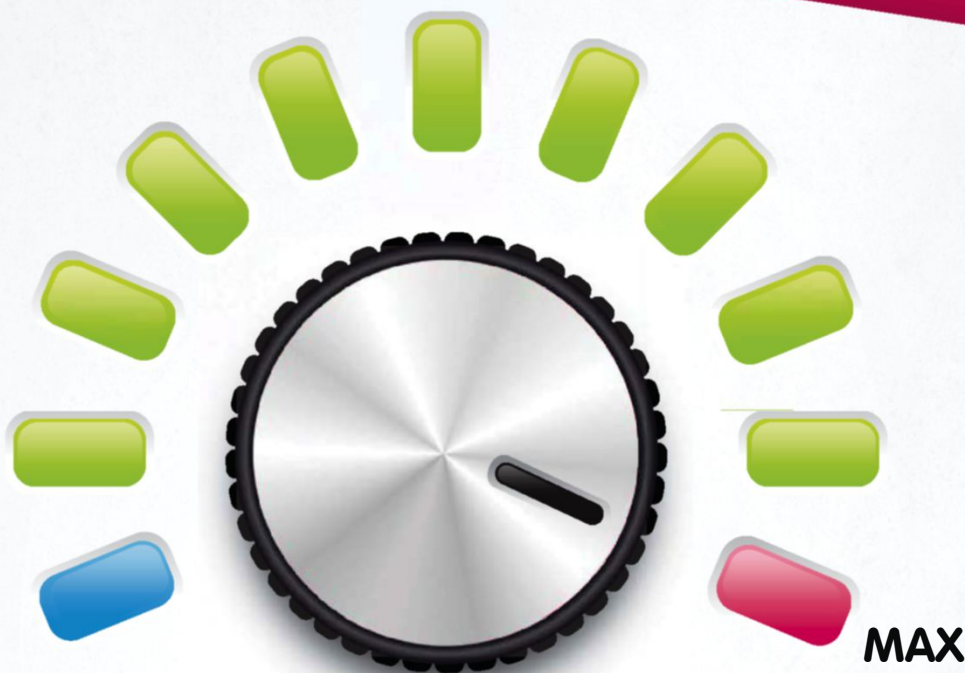


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**Cutting-edge features, techniques and inspiration for web creatives**

Chat with the team and other readers and discuss the latest tech, trends and techniques. Here's how to stay in touch...

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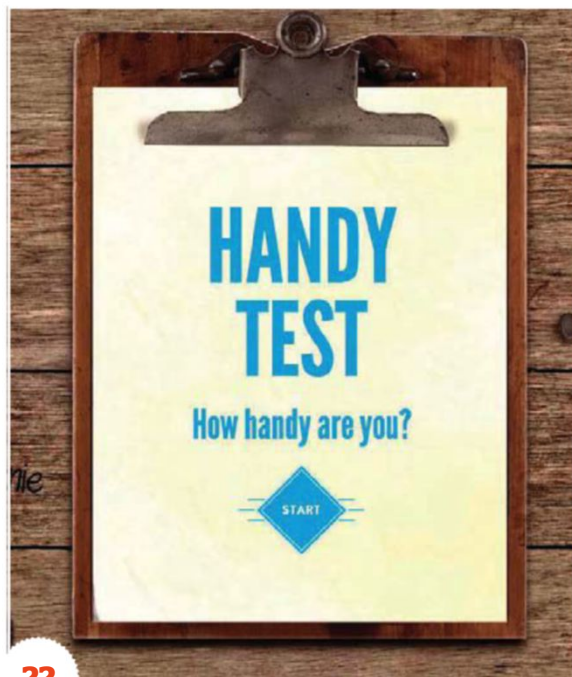
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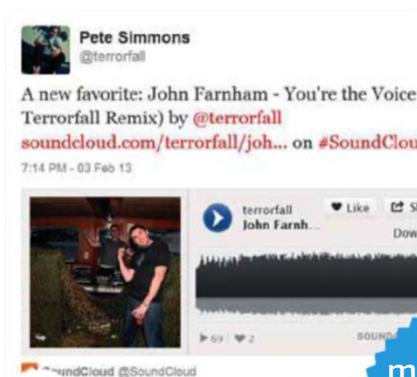
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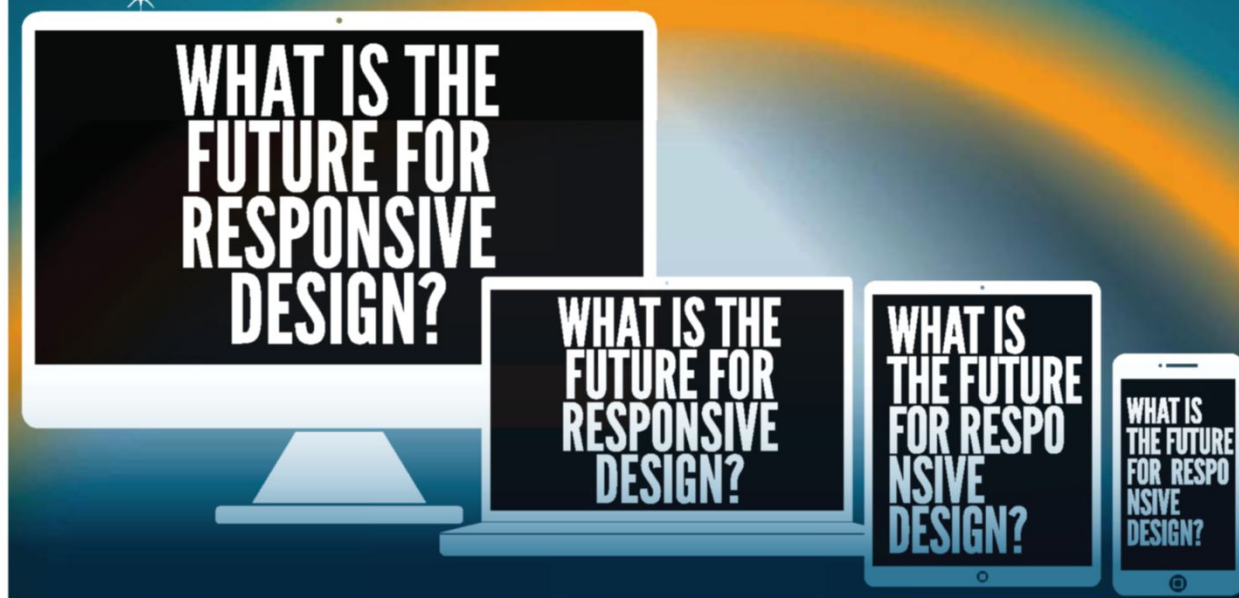
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If you have a creative project, new web product or great designer story, contact the editorial desk

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# What is the future for responsive design?

Responsive design has yet to fully mature, but what'll happen then?

**R**esponsive design has been hailed as the saviour of web design ever since Ethan Marcotte coined the term and followed up with his book *Responsive Web Design*. But, 2013 looks set to finally be the year where the art of adaptive design finally achieves mass adoption. For those in the know, responsive web design (RWD) is the art of getting sites to adapt and work with all screens. However, for the average user it's more web 'magic', that simply makes their favourite web pages readable on smartphones and tablets.

But, this makes the assumption that all smaller-screen users want a 'mobile-friendly' version of a desktop

site. It is considered good practice to include a link to a desktop version of the site since some users prefer that, zooming in on content. It is also worth pointing out that while more and more sites are becoming mobile-friendly, there are still plenty that aren't. It could be that this is the very reason that many users adopt the zoom technique. Will this change when every site on the web has been made mobile-friendly? And, what constitutes mobile-friendly? Does adding the viewport tag and setting to device width make a site mobile-friendly? Not in our opinion, but it shrinks a page to fit a device, which takes us back to the users who like to zoom.

The premise of responsive design is to create a single design base that adapts to the device it is being viewed on. The popular choice for creating a responsive site is to employ media queries and create breakpoints for the popular mobile resolutions. This is a technique that works, but employing media queries immediately means compromise. Do you build a desktop and make it fit mobile devices, or do you start at the small screen and build up to fit all other resolutions? There is no doubt that whatever option is chosen, it will have an influence on the outcome. Designers and developers stick to the grid, which means that columns rarely step

outside the predefined. The content hierarchy has to be very carefully thought out to ensure that users are getting the best experience possible, but again there is almost guaranteed to be a compromise somewhere along the line.

To keep compromise to a minimum, the planning stage takes on even greater importance. And this means more time is assigned to this stage. The RWD workflow in general takes more time than building directly for the desktop, but do the results provide more benefit? Most would say yes. There is the obvious: one URL and all-screen success. There is no doubt that as RWD becomes more

sophisticated it will be able to create all-screen solutions that offer less and less compromise. It is already changing designers and developers way of thinking. Plus, a host of boilerplates, frameworks and tools are making the process ever more efficient and productive.

But, surely compromise shouldn't even be an issue. When building a site, the client or designer has a set vision and they will stick to that vision. Building without compromise should be a mantra that many designers stick to. And, a bespoke site will undoubtedly remove almost all odes to compromise and produce a result that is very close to the desired design.

Building bespoke sites obviously means that designers and developers will need to build multiple versions of a site. Will this produce shorter project time scales and better end results? Conversely, will this extend time scales? And we haven't even mentioned maintenance.

And, there could even be an argument that as RWD matures, the

process becomes more involved and workflow and time scales simply start matching the bespoke process. So, building a one-for-all solution becomes very much the same as building separate solutions.

Again, all that has gone before simply assumes that RWD is the only way forward - are we being blinded by the buzzword? Is there any point building a responsive site when it is viewed primarily via the desktop? Mobile may be becoming the preferred choice for viewing the web, but what are users viewing via their mobile devices? Facebook? Twitter? eCommerce? There is no doubt that mobile users have a different agenda to desktop users and the near future will see the desktop become more isolated. But it'll be years before it ever goes away, if ever. It is more likely to evolve and big screens, such as TVs, will become the new desktop and web designers will be looking at new solutions again. Will RWD fit the bill? Or will it be back to separate bespoke solutions to fulfil users' needs?



## COMMENT

## Richard Lamb

Founder of Inspired Lamb Design

“ I think it's reasonable to say that RWD is well on its way to becoming the norm, rather than just an interesting trend adopted by the creative elite. The growth of the mobile

device as a primary portal for web use has, in many ways, forced the hand of designers and developers and this can only be a good thing. The variety of free responsive boilerplates currently available, and their ease-of-use, makes arguments about the extra cost and time consumption of responsive building far less convincing than they once were. Arguments now need to be presented to justify not making a site responsive. Future-proofing is a must.

WordPress have recently adapted their base themes to a responsive layout, more and more sitebuilder services are offering responsive templates, and eCommerce platforms such as Magento are also increasing their stock of responsive themes. RWD has entered the mainstream and is here to stay. How long before fixed-width sites begin to seem aged and out-of-touch? ”

## 5 Tools to help go responsive

The responsive revolution has seen a host of tools hit the web. Here are five tools that will assist with going responsive



### 01. Bootstrap

[twitter.github.com/bootstrap/](https://twitter.github.com/bootstrap/)  
■ Powerful front-end framework for quick web development



### 02. Adobe Edge Reflow

[html.adobe.com/edge/reflow/](http://html.adobe.com/edge/reflow/)  
■ Create responsive layouts via an intuitive user interface



### 03. Reverie

[themeforest.com/reverie/](http://themeforest.com/reverie/)  
■ Reveries is an HTML5 responsive WordPress framework based on the Foundation framework



### 04. Isotope

[isotope.metafizzy.co](http://isotope.metafizzy.co)  
■ This clever jQuery plug-in is designed to rearrange your webpage content to fit all screen sizes



### 05. Style Tiles

[styletil.es](http://styletil.es)  
■ This template enables you to create a quick visual presentation of site elements and design

## <news cloud>

Bite-sized coverage of the month's trending topics

### Adobe Photoshop Touch for iPhone and Android

The Photoshop Touch app has been available for the iPad for about 12 months. Finally, the photo-editing app is now available for the iPhone and Android. Users will be able to work on files of up to 12 megapixels and work with core Photoshop tools. Check it out in the Apple App Store and the Google Play Store - price £2.99.

## WordPress.com

### WordPress.com for Business

The designer's favourite web publishing platform has added a new tier to its WordPress.com accounts. Users can now sign up to a Business account for \$299 a year. This includes advanced customisation tools, 50+ premium themes, unlimited video storage and unlimited web space.

## Photoshop Touch

Social sound network revamps Android app

## Foundation 4

The responsive framework goes mobile-first

## Flat UI

Free HTML user interface kit for Bootstrap

Microsoft fined £484m for offering no alternatives to IE

## Internet Explorer

# Bootstrap

Sleek, intuitive, and powerful mobile-first front-end framework for faster and easier web development.

Download Bootstrap

GitHub project Examples Version 3.0.0



## Get ready for Bootstrap 3

The latest version of Twitter's responsive framework adopts a mobile-first policy for even better site builds

**T**he joy of responsive frameworks is that they bypass much of the hard work involved in the building process and cut straight to the chase. A collection of code is ready, waiting, willing and able to build a responsive site.

Bootstrap from Twitter is one of the prominent players in this field and is making the step up to version 3. So what's going to change? A major step is the switch to a 'mobile first' policy, as the Bootstrap 3 site explains: 'With Bootstrap 2, we added optional mobile friendly styles for key aspects of the framework. With Bootstrap 3, we've rewritten the project to be mobile friendly

from the start. Instead of adding on optional mobile styles, they're baked right into the core. Mobile first styles can be found throughout the entire library instead of in separate files.' The switch to a mobile-first approach is not an unsurprising move and it is one that has been adopted by other popular responsive frameworks, including the new version of Foundation.

The release candidate for Bootstrap 3 ([rc.getbootstrap.com](http://rc.getbootstrap.com)) also reveals a host of other changes that look set to make Bootstrap even more popular. To make sure users are aware of the changes, and make the building process easier, the accompanying docs are being simplified.

Looking at the CSS, BS3 is looking to drop support for older browsers like IE7 and Firefox 3.6. Grids are being overhauled, leading to a simpler and more fluid layout by default, the Carousel has been redesigned, and image icons are getting the heave-ho and being replaced with icon fonts. The complete list is far too long to be covered in detail here. To see the full list of changes, pay a visit to the Bootstrap GitHub pull request at [bit.ly/XZcO5X](http://bit.ly/XZcO5X).

Finally, a new project known as Bootstrap Expo ([expo.getbootstrap.com](http://expo.getbootstrap.com)) has been put together to reveal 'Beautiful and inspiring uses of Bootstrap'. If you have a suggestion, or want to get your site seen, head over to [bit.ly/ZfniWQ](http://bit.ly/ZfniWQ).

## The Map of the Internet

An inspirational 3D visualisation of the internet is yours for free

■ Trying to map the internet on the screen of a smartphone or tablet is an ambitious feat, but hosting specialist Peer 1 ([bit.ly/W4POAn](http://bit.ly/W4POAn)) has attempted to do exactly that with its latest app.

The Map of the Internet is a 3D visualisation of all the networks worldwide that make up the internet. It shows ISPs, internet exchange points, universities and other organisations that route traffic online. The 3D visuals are gorgeous, in either Globe or Network view, but it is the interaction with the timeline that needs to be admired. Starting back in 1994, the 3D globe is almost bare. Moving forward reveals historical web moments and the rapid evolution of the internet.

The app is free to download from the App Store or Google Play Store.



The Map of the Internet is a creative and informative use of 3D visualisation

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# Think before you ink

Ben Dyer is CEO of eCommerce software supplier SellerDeck (formerly Actinic Software) and has worked in application development all of his career



Ben Dyer

## Striking the perfect balance between analysis, code and cash

**L**incoln once said that if he was given six hours to fell a tree, he'd spend the first four sharpening his axe. As well as being a pearl of wisdom for the political activist, it's not without application in the world of web development.

One of the great challenges of any software development project is the balance between analysis and coding. For good reason, customers tend towards impatience, and love to hear the virtual thump of pixel upon screen. They often aren't aware of the cost of making that happen and making sure that the right pixel ends up on the right screen at the right time.

While using agile development methodologies offers a helpful compromise, it's important you do research to ensure what you are developing is going to meet your customers' goals. When someone offers you work and waves a wad of cash at you this can be hard to do. However, taking projects that deliver technically and not commercially aren't that different to projects that don't deliver at all.

In my experience, commercial projects are driven by three objectives; increasing sales, reducing costs or achieving both. Ultimately, if a project doesn't deliver on these, it will have failed. Understanding how the project will deliver is an essential part of the process, even if it seems a little distant.

A great case in point is the rush to implement mobile-friendly websites. Right now if you go within 15 feet of any online retailer, someone will tell you smartphones are the future of eCommerce. This may be true, but investment in mobile needs careful planning.

We recently undertook a survey of consumers about their mobile buying habits. To our surprise, almost 60 per cent didn't use any kind of mobile device for purchasing online. When we asked those that did often use a mobile device to buy online, they did so mostly at home. Also, the purchase of apps and music was considered as shopping online, not just buying and ordering physical goods.

I'm a great believer in the future of mCommerce, but what this tells me is that the hype is running well ahead of the adoption curve.

Every project needs a big red 'buyer beware' sticker. For my own company, this means we will do more research ahead of mobile projects, to ensure we deliver the value where it counts. The research suggests that mobile success is heavily influenced by a combination of the products and services being offered and the demography of the target audience, so a one-size-fits-all approach is a bad idea.

Analytics can tell us important information about the volume of mobile visitors, the devices they are using, the bounce rate and time on site, as well as other important metrics. This information adds up to crucial details about the current effectiveness of a site, when viewed on mobile devices.

This data needs to be augmented with more detailed reach about buyer behaviours. Are visitors looking for a transactional engagement or a shopping experience? What frustrates them about mobile shopping and what stops them for using it? Check for roadblocks that you can't navigate with technology, and where this is the case cut your cloth to suit.

It's hard to say no to customers, which is why the latter course of action is difficult to execute. However, taking the long-term view is the most consistently positive strategy for retaining clients. So long as you communicate your analysis effectively, saying no to stuff that doesn't make sense from a business perspective, will enhance your customer relationships. If you take the time and trouble to identify your customers' business objectives, it is often possible to identify other ways they can invest their limited resources to greater effect.

To successfully run, and indeed grow, any business you have to roll with the punches, adapt to new surroundings, and invest time and effort learning new technologies. There is no doubt that mobile devices hold a firm place in the future of eCommerce; while maybe it is not the be all and end all, it's certainly an important cog. In this technological age, new branches of technology will be growing around you all the time. Unless, like Lincoln and his axe, you are well prepared, you'll be lost in the forest before you know it.

🌲 Right now if you go within 15 feet of any online retailer, someone will tell you smartphones are the future of eCommerce 🌲

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# Web hosting: the real test

Jacob Colton is director at catalyst2, which provides managed hosting services to organisations across the UK. It specialises in high availability websites and exceptional customer support



**Jacob Colton**

## There are many web hosting companies out there, so how do you find the best one? How do you test them out?

**Y**ou have your domain and your site, and now you need somewhere for it to call home - your hosting. Choosing the right host for your site may not be as simple as you think. Like most services, not all are created equal, and you have to weigh up cost against the level of service and resources.

So how can you test a service when you haven't used it? Over the past 13 years I gained a few tips and tricks you can use to help you make the decision and identify the right host for your needs.

How do you find that hosting company in the first place? There are a *lot* of hosting companies out there. The best way is to ask your friends and colleagues. Over 60 per cent of our customers come via recommendation, and personal experience is invaluable. I would also recommend checking reviews. Not being able to find any negative reviews is a very positive sign as people typically only go online and write them when they have an axe to grind.

I would also recommend looking at the ISPA awards - they are the UK internet industry awards (we recently won Best Consumer Customer Service), as someone else has done the hard work for you in terms of testing all the various companies.

Another important factor when choosing is testing their support. Ring or email at different times of the day, ask a few questions with different levels of complexity. How well/quickly is your call handled? Is it a freephone number? Do they do the bare minimum to help or will they go that extra mile? Testing their support is crucial for two reasons. When you need their support you are not going to want to wait around. Secondly, we typically see that the quieter a support team is, the fewer issues their customers are generally having.

You also need to know what you want. Do you need 500GB of disk space and 5TB of bandwidth, or do you just need 100MB of space and 5GB bandwidth? Knowing what you need is important so you can shop around. Personally, I would suggest staying away from



Finding the right web host is not an easy task. Recommendations and reviews provide a trustworthy source that will help users make the right decision

the 'unlimited' hosting plans, as they are not actually unlimited (fair use policies often apply) and I would always prefer to deal with a provider that was completely up-front about the resources available.

The final step is testing out the hosting itself. Check to see if they have a money-back guarantee. If they do, sign up and upload a site and run some tests. A great tool is [www.iwebtool.com/speed\\_test](http://www.iwebtool.com/speed_test). You can see how fast your site downloads on their servers. Now, try cancelling. The ultimate test with this is seeing how friendly and helpful they are when you decide to cancel your account. Drop them an email and say you would like to cancel your account and you are within the money-back guarantee period - it's a great test to see if they stick to their word. It's also worth checking if they host in your home country. It's likely to be faster for your visitors, and it can help your SEO as search engines see the IP as locally based.

While it's hard to be certain, the above steps will help give you peace of mind when you choose your host, and a bit of homework can help save a lot of pain down the line.

“ Ring or email at different times of the day, ask a few questions with different levels of complexity ”

# SELL ONLINE BACKUP TO YOUR CUSTOMERS

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MONEY BACK  
GUARANTEE

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You pay a fixed £39.95/month.  
Sell accounts at any price.



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Unlimited storage and bandwidth for  
all accounts.



#### Get set up in minutes

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#### White label everything

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desktop software.



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Add users in minutes.



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## Gozu

[www.gozu.fr](http://www.gozu.fr)

Development technologies Pen and paper, jQuery, Photoshop



Designer/developer **Ugo Le Prud'homme**  
(aka Gozu) [www.gozu.fr](http://www.gozu.fr)

The extraordinary skills that Gozu possesses are on show from the moment this site loads



As a graduate of only a few years, Gozu has clearly hit the ground running judging by the work on show across this impressive portfolio site. Gozu lets his work speak for itself. His showreel instantly launches the moment the site loads. Visitors can sit back and

enjoy the show that includes web design, flash and interactive components.

Gozu explains the concept of his site: "The concept is rather simple really. I wanted to gather all of my best work and present this to potential clients in the most engaging way possible. It was also important that my portfolio site showed that I was more than just a Flash developer and that I have evolved

my skills as new technologies have come along."

What is interesting and engaging about this portfolio site is that it illustrates how these showcases have developed over the last few years. As Gozu points out: "I principally use jQuery as I wanted my site to have the feel of a Flash portfolio, but have the advantages of using HTML - SEO and more visibility for instance. I could also ensure that the quality of the site was high to show that attention to detail is very important to me."

Portfolio sites have to do a number of things: Showcase the work of the designer, engage with the viewer as well as offer the usual contact details. How these elements are creatively combined makes one portfolio standout from another. Once viewed you'll certainly remember this one.

It was also important that my portfolio site showed that I was more than just a Flash developer and that I have evolved my skills as new technologies have come along



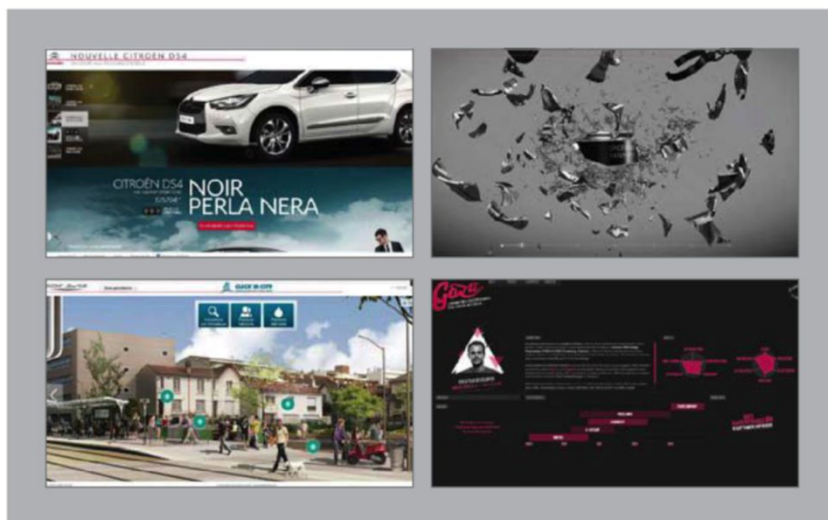
<Above>

• Just one shot of a dynamic showreel that plays the instant this site loads

<Below>

• The rich and diverse skill set that Gozu has is on show as his showreel plays





**<Top left, clockwise>**

- Highly commercial projects illustrate a level of skill that today's agencies demand
- With a Flash background, Gozu has embraced what HTML5 can now offer
- As you watch Gozu's showreel you can see how the designer's skills have developed
- Gozu's work takes centre stage, with a simple and understated supporting site pages

**ABCABC1234567890**

**<Above>**

- The main font is Bebas by Ryoichi Tsunekawa of the Flat-it foundry. It's free from Dafont

**<Below>**

- The OpenType version of Myriad Pro is also used on the site and is available from MyFonts

**abcABC 1234567890**



**<Above>**

- Design is a journey that clients are taken on. On this micro site each stage is clearly explained



**<Above>**

- Digital techniques meet traditional materials and create an engaging trip through DEGO's creative process

**<Above>**

- The design process animation is one element of what is a slick and highly polished web presence

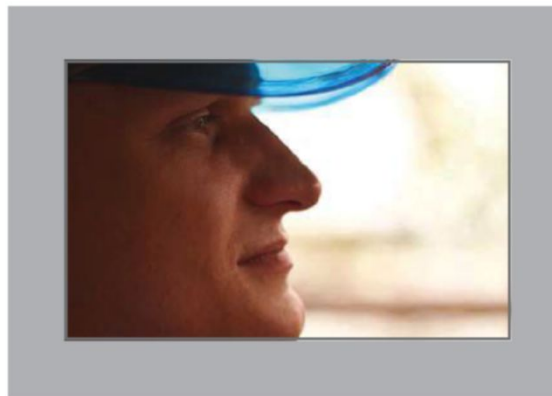
**<Above>**

- DEGO showcase its current work using the familiar tile design, which is striking, as it is useful for prospective clients

# DEGO Interactive

[www.package.dego.lv](http://www.package.dego.lv)

**Development technologies** Paper, Glue, Camera, Photoshop, Illustrator, HTML5, CSS3



Designer **DEGO Interactive**  
[www.dego.lv](http://www.dego.lv)

How to explain DEGO's approach to design? Create an engaging micro-site to show each design step



s this agency has so much to offer, one of the questions every new client asks is how they approach each project. Being innovative, DEGO Interactive decided to create a micro site to give an insight into their design processes.

Georgy Orlenko, DEGO Interactive's art director explained: "One of the top customer questions is: what is the development process? That is why we have decided to foresee both the question and the answer. We needed a simple and clear description of this process presented in an entertaining and fresh manner. So we created the dego.packit promo-site that illustrates all of the work stages we go through while creating any type of design."

The website of the agency follows a familiar layout that presents their work using a conventional environment, and the breadth of the work on show is impressive. When the dego.packit promo-site is opened, visitors are left with no doubt that DEGO Interactive has the technical skills, but it's the wonderfully styled and flawlessly executed design that stands out.

As Georgy says, having fun is the important part: "I designed the site with a smile permanently on my face." The agency could have developed a flashy technology-driven explanation of their design process. Instead the simple paper graphics, minimal animation and sense of humour easily communicate that clients are in safe hands if they work with DEGO Interactive who can deliver innovative design, being a master of the craft.

When the dego.packit promo-site is opened, visitors are left with no doubt that it has the technical skills, but it's the wonderfully styled and flawlessly executed design that stands out



#### <Above>

- A masterful command of the latest web and mobile technologies is showcased across DEGO's site design

#### <Below>

- The single font Alt One WGL Volume is used throughout the website. Designed by Eric Gill, it can be purchased from the FontShop

a.b.c.A.B.C 1234567890

# Wrangler Europe Spring/Summer 2013

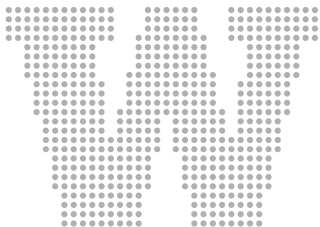
[www.wrangler-europe.com](http://www.wrangler-europe.com)

Development technologies HTML5, WebKit, CSS3, Photoshop



Designer **Kokokaka**  
[www.kokokaka.com](http://www.kokokaka.com)

The latest site to showcase the spring/summer collection from Wrangler



Wrangler has over the years attempted to create an online presence that supports its brand values, and

of course attract potential customers. This current site offers yet another new angle on how fashion can be presented online. Developed by Kokokaka in Sweden, Wrangler never looked so good.

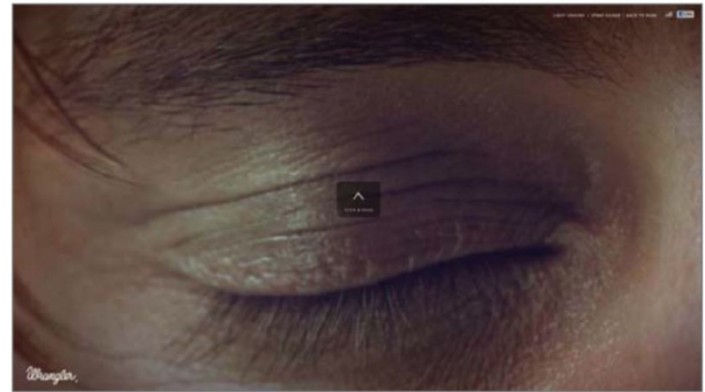
Creative director Jimmy Herdberg explained their approach: "We wanted to create six dreamy interactive artworks. We used HTML and WebKit to create a depth to it and developed a technology to animate film sequences within the 3D space. We also used the

gyro in some scenes for mobile devices and different techniques to zoom and scroll backgrounds.

"We always want to keep the technique in the background and deliver emotional experiences to the user, which is very tricky! Music and sound is always important for us. Therefore we created a music soundtrack for each scene and added sound effects that are synced to the interactions to emphasise the experience even more."

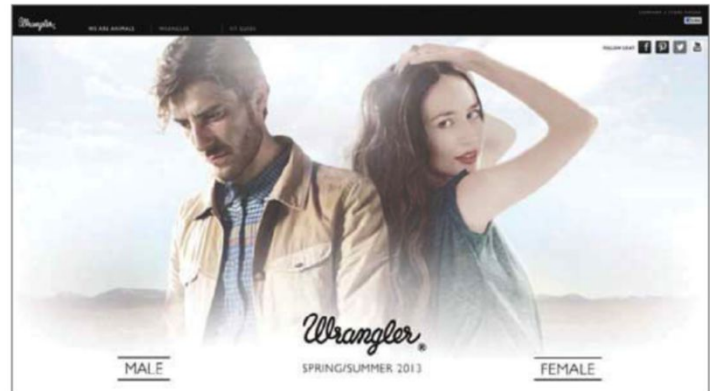
It's the zoom and drag interactivity that sets this site design apart. Visitors not only see the latest ranges from Wrangler, but they are also presented with the new clothing range in a striking and well-executed environment that is complemented by a soundtrack. Music can be difficult to get right. Kokokaka clearly has great sonic creativity to complement their technical prowess.

**We always want to keep the technique in the background and deliver emotional experiences**



#### <Above>

- The click and drag interface begins from the opening screen. Visitors immediately have to interact with the site



#### <Above>

- Choosing Male opens a sound and animation lead environment that showcases Wrangler's new range



#### <Above>

- The final screen of the site offers a fitting climax to what has been a technical and creative journey

#### <Right>

- The agency hasn't forgotten that low bandwidth still exists so offer a video montage of each 3D animation



abcABC 1234567890

#### <Above>

The entire site uses Gill Sans, developed by Eric Gill in 1926. It can be obtained from MyFonts



WHEN YOUR  
**WEBSITE**  
*is your*  
**WORLD**  
• YOU NEED •  
**SUPPORT**  
MADE  
**IN BRITAIN**

**That picture up there?**  
**It's Worcestershire. In England.**  
**That's where we are.**

We're **names.co.uk** and all our Web Hosting data centres are in the UK, just like our UK support team that you can contact at no extra cost.

When you call us, you call real people, in the same country as you. **That's important.**

With 4 out of 5 people preferring .co.uk websites when searching online, we think .co.uk is a great place to be.

If you want the perfect .co.uk domain to get your website up and running quickly, you know where we are.

**Get in touch and let's make your website our world too.**



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- ✓ Expert UK Based Support
- ✓ Choose Windows or Linux

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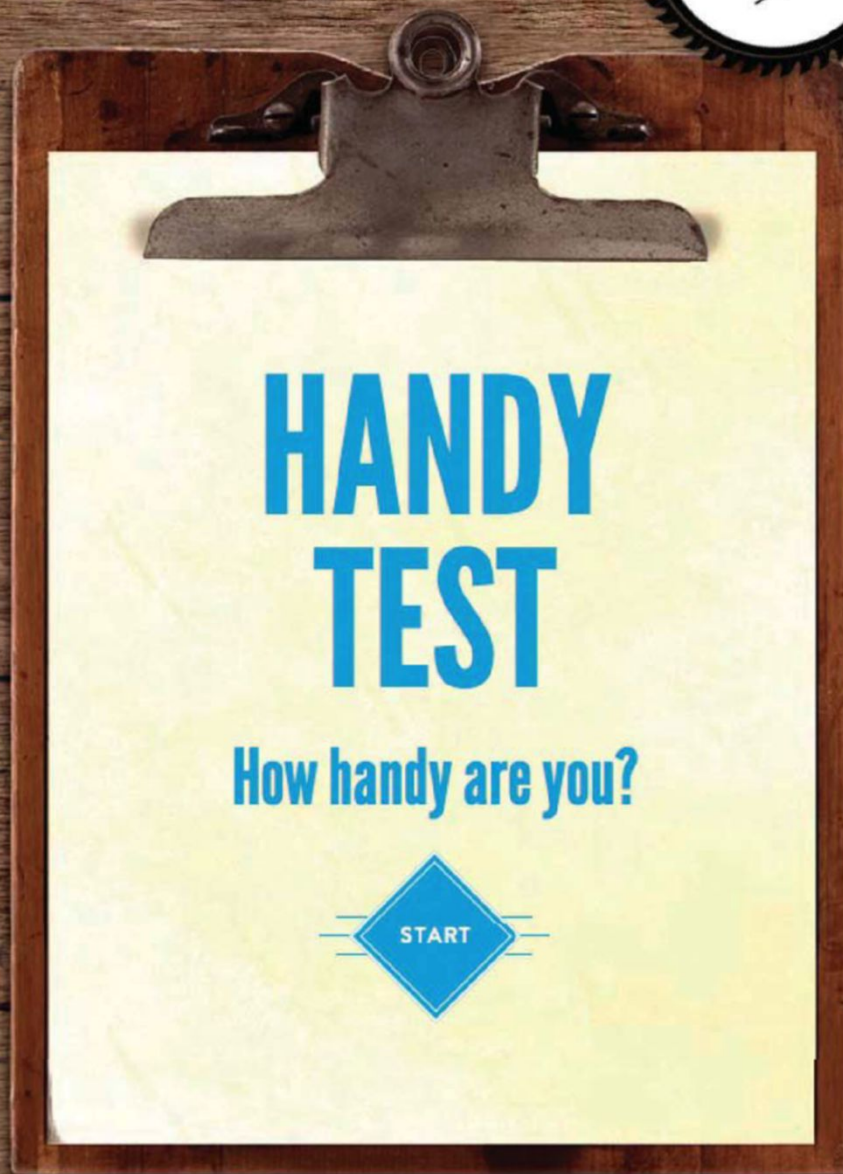
 **names.co.uk**  
A NAMESCO BRAND

**TALK** 0845 363 6175  
**VISIT** [www.names.co.uk](http://www.names.co.uk)  
**EMAIL** [hello@names.co.uk](mailto:hello@names.co.uk)

Handy test



Trøstepremi



WIN A  
TRADESMAN  
FOR A DAY

**FINN**  
Mulighetenes marked

Regler

Project  
Web  
Agency  
Web  
Duration  
People involved  
Total man hours  
Project budget

## The Handy test

[handytesten.usedtobe.no](http://handytesten.usedtobe.no)

Try/Apt

[www.apr.no](http://www.apr.no)

Four weeks

Five

Confidential

Confidential

## Norwegian online marketplace FINN needed to launch a service to compare price quotes from contractors. How could leading advertising agency Try/Apt help? A DIY interactive quick quiz wrapped up in an easy-to-consume design sold the service to the masses

**D**IY is a pastime that is rarely recognised for its glamour, but there is a little bit inside of everyone who wished that they could be good at it. All that is needed is the right tools and a little patience. For those less enthusiastic about doing it themselves, the services of an expert can be called upon. This is where Norwegian advertising agency Try/Apt and Norway's equivalent to Craigslist, FINN, decided to join forces. The brief from FINN.no was simple: launch a service that makes it easy for people to compare price quotes from

different contractors. The assignment for Try/Apt was again simple and to the point: 'make it more popular than similar Norwegian services.'

The FINN website, established in March 2000, is an online marketplace that specialises in advertising and services for purchase and sales between private individuals and small and large businesses. It is the ideal web presence for finding almost anything.

With such a wide remit, the process was open to a plethora of opinions and suggestions. 'How can we make such a subject, engaging and exciting? What can we do to encourage users to visit FINN? Where is the path from concept to completion?' The big issue was how



<Above>

The Norwegian equivalent to Craigslist, FINN.no is a marketplace website with sections including jobs, housing, cars, travel and services. It is massively popular in Norway



**Sebastian Rasch**  
ART DIRECTOR/DESIGNER

**Anders Holm**  
COPYWRITER

“FINN.no is the perfect client. They demand great ideas, but they never let themselves get caught up with details. They trust our know-how and gut feeling”



to connect the average consumer with the website.

The answer came in the shape of a bespoke microsite that looked to grab the attention of the average consumer with a simple set of questions. The quiz, dressed in a neat and easy-to-consume design, gives users a quick insight into how their DIY knowledge is rated. At the same time it is quietly persuading the user that they could well be in need of expert help.

Engaging online users can be a tricky issue and striking

the right balance was crucial to the success of the Handy test, as copywriter Sebastian Prestø explains: “We wanted to convey the message that everyone - no matter how handy they are - needs a professional craftsman from time to time. A quiz would hopefully make people think for themselves that maybe they are not so handy after all.

“Since the client practically bought the idea in the first meeting, we had a lot of time to tweak the design and interaction. The designer started right away with the look and feel; and as a copywriter, I spent a lot of time on the assignments.

“It was important that they were realistic and moderately difficult. We wanted the user to be able to finish fast if he or she

wanted to. It’s annoying when there are too many questions, and you start to click randomly just to finish. That helped shape the interaction as well. A couple of clicks or drag and drops per assignment is enough. And it is not necessary [to have] 20 questions. We tried to make 7-10 good ones instead. We also rejected compulsory Facebook sharing, which we still see in web campaigns, including ones where you have to connect before you know what the campaign is about. We never do that. Many assignments were rejected because they were either too easy, or too difficult. Initially we started off with some really hard questions, but when we started to admit how little we actually knew about carpentry, we realised that maybe junior



The handy test from start to finish

Step 1>



HOW MANY TOOLS DO YOU KNOW?  
YOU’LL LOSE 8 POINTS FOR EVERY MISTAKE.



Step 2>



DRAG AN  
**WOOD DRILL BIT**  
TO THIS CIRCLE

Step 3>



HOW DO YOU INSULATE AN EXTERNAL WALL?  
CLICK AND DRAG THE MATERIALS TO SORT  
THEM IN THE RIGHT ORDER.  
YOU’LL LOSE 3 POINTS FOR EVERY MISTAKE.





**Ole Kristian Hustad**  
ACCOUNT MANAGER



**Sebastian Presto**  
COPYWRITER



**Mona Larsen**  
PROJECT MANAGER

**“We rejected compulsory Facebook sharing, which we still see in web campaigns, including ones where you have to connect before you know what the campaign is about. We never do that.”**

high curriculum is hard enough. Like the difference between volt, watt and ampere. I still get that one wrong.”

The questions were the crux of the Handy test and provided the basis to assist with the formation of the user experience and aesthetic. The next step was to decide how the questions would be worked into the design concept. What were the challenges the design had to overcome? Art director Sebastian Rasch gives an insight into how this was tackled: “I think one of the biggest challenges we designers face today is to find a good and effective workflow to developing our design for all sorts of screens. It is really important to have that in mind during the conceptual phase. In this case we knew a lot of our

users would come from mobile devices, so it was natural to develop an idea and a design that would suit small screens well and use the strengths of those devices. The drag-and-drop functionality is one of the things I think worked really well. It feels completely natural on touch devices and is really intuitive.”

Functionality and form are core components of any project, but it's the visuals that bring users to the table, or is that screens. Defining the right style is paramount and a clear vision needed to be established. Sebastian Rasch explains how the agency approached the visual design process. “We started off with trying to find a style that would suit the project and have a

strong connection to the brand. I had a clear vision for the design direction I wanted to take with this project. The next step involved developing a mood board and mock-ups to present the client to show a direction for the campaign. The client then immediately gave us the green light to go ahead with the project.

“Research is always an important part of our projects. Carpenters, electricians, bricklayers and other professional craftsmen were contacted to help brainstorm and develop the tasks presented in the quiz. We started sketching on paper in order to figure out how each of the tasks would work. The real challenge here was trying to balance the difficulty of the



*Hammer* →

## INSULATION

SORT THE MATERIALS IN THE CORRECT ORDER



WIND BARRIER  
VAPOUR BARRIER  
EXTERNAL WALL  
PLASTER  
INSULATION

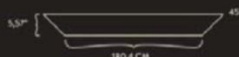
Step 4>

Step 5>



## REMEMBER THE MEASUREMENTS

THE SKIRTING BOARD MUST BE 180.4 CM LONG, 5.57 INCHES WIDE, WITH A 45 DEGREE MITER AT EACH END



Step 6>



DO YOU KNOW WHAT THE TOUGHEST TOOLS ARE FOR?  
CLICK ON THE SAW THAT IS THE MOST SUITED.  
YOU'LL LOSE 8 POINTS FOR EVERY MISTAKE.



## Handy test

**FINN**  
Mulig hetenes marked



**Illustration**  
Some lovingly designed vintage-style icons reinforce the handmade theme throughout the test

## THE PERFECT CLIENT

A project is a two-way street between agency and client. Interaction is the key to effective communication, while trust can go a long to a successful outcome. Copywriter Anders Holm reveals the relationship between Apt and FINN.

"FINN.no is the perfect client. They demand great ideas, but they never let themselves get caught up with details. They trust our know-how and gut feeling. When they see that 'this idea does the job' they leave the rest us in our hands. They listen to rational argumentation. And when you have a client that says 'if you think this will work, do it' you don't want to let them down. So you work harder.

"With this project the client immediately liked the design and direction. Since we arrived at the desired look and feel very fast, we had a lot of time to really make it shine. This is time that we sometimes spend in meetings, trying to calm down marketing directors. So, in a way, the client made the design possible - by giving us time to make it right."

The Handy test provides a great indicator of DIY skills. So we asked Apt, 'Have you taken the Handy test and how well did you do?'



**Simen Lysebo Developer**

I've got **62/100**. I had expected to score a bit higher, but fair enough. At least I can get help from people handier than me.

**Marius Nohr Developer**

**70/100** - The score was way better then I expected it to be. I thought I was going to get... pretty much close to zero, so I'm really surprised and happy with the outcome.

**Trond Sande CEO**

My score was **54/100**, which is probably quite close to reality, and it shows that you can trust the Handy test :)

The handy test from start to finish continued...

WHICH SAW IS THE BEST SUITED:  
**TO CUT AN OPENING  
IN AN ERECTED WALL**

CHOOSE THE TOOL



Step 7>

Step 8>

Step 9>

**WHAT WERE THE  
MEASUREMENTS AGAIN?**

DO YOU REMEMBER THE MEASUREMENTS OF THE SKIRTING BOARD FROM EARLIER?  
YOU'LL LOSE 7 POINTS FOR EVERY MISTAKE.



95" 45" 180.4 CM 187.2 CM 197.5 CM 52" 54"  
5.45" 8.54" 5.57"



WIN A  
TRADESMAN  
FOR A DAY

Handy test

“We knew a lot of users would come from mobile devices, so it was natural to develop an idea and a design that would suit small screens”

questions, so that the user would find them challenging enough. Not too hard or too easy.

“Using vector graphics during the design phase enabled me to easily adapt the illustrations for different screen sizes. My main goal was to make the users have the same experience, no matter what device they were using.

“Making the design of the tasks as similar as possible across all device types also shortened our front-end development time.

“Typography is a really important design element, and the tools available for creating nice typography increases all the time. One of my favourite services at the moment is [typecast.com](http://typecast.com), where the designer can directly check the readability and rendering of the fonts, and compare fonts side-by-side.”

With all the elements in place, a launch date is set and everything is go. How successful will the site be? Do we have the right marketing strategy? Does everyone love cats? Rasch reveals the inside track on the final phase of the project. “The campaign was marketed through banners at the client’s own site ([finn.no](http://finn.no)) and a small television spot. After the

user had taken the test they got a written result on how handy they were, in addition to points. The results were written in an attempted witty and humorous tone, to encourage the user to share those results with friends on Facebook.

“We are the editors of the client’s Facebook account, which was a great place to spread the campaign. The quiz was then of course posted on their Facebook page. One of our posts there specifying the consolation prize, a smokin’ hot choppin’ board with an engraved picture of a cat, turned out to be FINN.no’s most liked Facebook post ever. I guess everyone on the internet just loves cats... Facebook turned out to be one of our main sources of traffic and accounted for about a third of the site’s total number of unique visitors. A lot of users gained awareness of the new FINN.no contractor service as a direct result of the campaign.

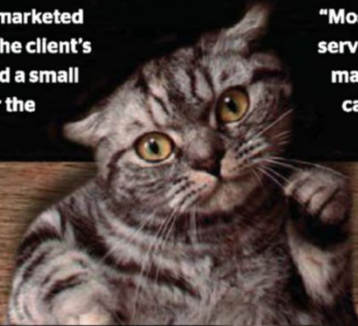
“Most importantly, FINN.no’s service was bigger than their main competitor during the campaign period.”



## FACEBOOK FRIENDLY

The launch of the Handy test campaign site wasn't the end of Apt's involvement. Art director Sebastian Rasch gives a brief insight into how they analysed and improved the FINN experience.

“After the project launch, we take care of the general maintenance of the site, which usually involves improving the project based on analytic data and user feedback. We also handle the Facebook page of the client, creating new posts and content to increase traffic to FINN.no and to the campaign site.”



WHAT DO YOU KNOW ABOUT ELECTRICITY?  
DEFINE THE ELECTRICAL TERMS CORRECTLY.  
YOU'LL LOSE 5 POINTS FOR EVERY MISTAKE.

START

Step 10>



## ELECTRICITY

PLACE THE WORDS IN THE CORRECT FIELD.

IF WE COMPARE ELECTRICAL CURRENT TO A WATERFALL, THEN

VOLT

IS THE HEIGHT OF THE WATERFALL

AMPS

IS THE AMOUNT OF WATER PER SECOND AND

WATT

IS THE TOTAL WATER POWER

DONE

Step 11>

# YOU ARE IMPRESSIVE!

64/100

You have no problems tackling some decking or assembling a frame for a door. You have, however, some distance to go before you can call yourself "handy". Anyway - you are probably super good at something else. Spend your time on that - and use [FINN.no/oppdrag](http://FINN.no/oppdrag) the next time you need trade services.

REGISTER  
AND WIN

PLAY AGAIN

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# Creative browsing

With a diverse range of clients and firm business plans for the future, Browser is an agency that knows where it's going, and how to get there



**he foundations of Browser can be traced back to one phone call.** René Morency, creative director and co-founder of Browser was working in Tokyo when his brother Julian called about a project he had been asked to pitch for. The

only problem was this had to be Monday morning – Julian had called the previous Wednesday. René was keen to be involved, so he flew back to the UK. The pair then worked on their pitch for 48 hours straight to get it ready for early Monday morning. The duo got the job and in fact worked with the client for the next six months. This was 2008, and from there, the work the brothers were being offered began to snowball.

René studied graphic design at Solent University, with Julian studying interactive media production at Bournemouth. They had worked for similar clients but from slightly different angles, as René explained: "Our backgrounds were complementary. Julian has a digital background. I worked for more design and branding agencies when I was freelancing. We were working on the same kind of clients, but from slightly different angles."

"Our experience then was much as you would expect. We were working from a bedroom in effect and had other freelancers coming in when we needed additional help. At that time it was really making do with anything we had. I can remember we didn't have enough desks so we had freelancers working on ironing boards. You could say we had an extreme ironing experience in the early days!"

After the job they had worked all weekend to pitch was landed successfully, and was followed by several months of additional work, their thoughts turned to formalising their business and setting up an agency, which is an ambition René and Julian had nurtured for some time. René explained what their thought process was: "After about six months of running the company we saw that we needed some business advice if the company was to continue to expand, as we wanted it to."

"So we looked for someone to help us with things like contracts and all the legalities of running a business. I think that agencies when they start out, forget that they have to think about the business side of their company. The nuts and bolts of running a successful and profitable business means looking at these elements, as well as gaining clients and doing good work."

"With the business side of things, the director of the last company that Julian worked for took a keen interest in what we were doing. He's Syd Nadim, the CEO and founder of Clock. So he came on board as a non-executive director to help shape the business. We wanted to accelerate the rate of growth with the company. With his help we were able to achieve this much quicker than if we had tried to do this alone. He helped with the development of the internal structures of our business, but also how to approach particular projects. We shared a lot of processes and methodology, which we always do. We believe that the more people you share with, the better your business will become."

The name of the agency came out of the work the Morency's were doing while still at university. "The agency was already running for a while before we formally named it, as we needed to incorporate," said René. "The name Browser actually came from another project that I was originally involved in. At the time I was working with a good friend of ours – and who works for us now – running an arts magazine when we were at university. Both Julian and I had always had personal projects on the side even when we were still studying, actually from when we were at college and then later at university. We have both been quite entrepreneurial in fact, since we were young."

"As we had this arts magazine, the idea was that people could just browse the content of the magazine. That's where the name for the agency came from. At the time it was a lot of fun, but as we became busier, we didn't have the time to continue with it. The magazine was actually a great training ground, as we were selling advertising space, which meant we had to go out and meet people – something we have continued with the agency."

"I think this kind of activity is vital to develop right from when you are at college and university. It shows that you have a passion for what you are interested in, and haven't simply waited for a job to come along, or waited for any placements your

**who** Browser  
**what** Passionate designers, digital design consultancy, specialist platform developers, bespoke UI/UX creators, industry educators

**where** The Green Room, 151-153 Curtain Road, Shoreditch, London, EC2A 3QL

**web** [www.browserlondon.com](http://www.browserlondon.com)

## Key clients

NHS, Seven Hills PR, BBC/Top Gear, Emap, Music Week



## Browser timeline

Established 2008  
Founders René and Julian Morency



Browser upgraded to its office in Shoreditch (East London) and took on a non-exec director. Started on first retainer account.

Number of employees

5

Began specialising in sectors with a focus on strategy and innovation. Agile design and development methodology in full effect. Built its first responsive website. Econsultancy innovation award



2008

2009

2010

2011

Number of employees

2

Started off as many other agencies - in a bedroom with lots of freelancers. It outgrew and moved into a small office in North London.



Began recruiting new staff with specialist skills. Fine-tuned its process and methodology with a focus on efficiency. Award presenters at Music Week Awards.

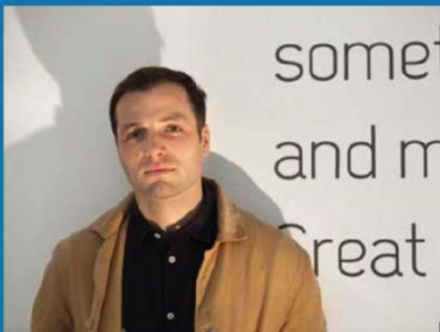


Number of employees

8

## industry insight

René Morency, creative director and co-founder



“I can remember we didn't have enough desks so we had freelancers working on ironing boards. You could say we had an extreme ironing experience in the early days!”

course may have organised. Today you need to be more proactive about your career. You really need to start preparing to sell your services as soon as you can. We had the URL for Browser for quite a few years, so as the business started to take shape, we thought that Browser would be an ideal name for the agency. It's also quite a fitting name for the kind of work we do.”

The six months of work that Browser secured allowed it to build on this client base, which has continued to diversify, yet maintains a focus on the strengths that the agency has. “We do gain a lot of work through referrals. We also of course do all the usual things to gain new clients such as networking and now using social media. What we also do with our clients is what we call initial qualification. What this means is that if a potential client approaches us, we look at the job that is on offer, but also who the client is,” René explained.

René outlined what he means by ‘initial qualification’: ‘The elements to the qualification process includes whether the client has the kind of business we want to be involved with. We also look

at whether the client would benefit our agency. We have our strategic and business objectives. Every new job and client that approaches us is measured against these and must meet one or both for us to take them on. This allows us to forward plan where we want our business to be in several years time, and ask ourselves whether the jobs on offer can help us get there.”

Clearly for Browser, being choosier with the clients it take onto its books works, as the agency has grown rapidly and gained them reputation for world-class work, delivered on time and on budget. René explained how the twin business and strategic objectives work together: “So our strategic objective would be whether the client is asking us to work within a medium that we are happy to work within. We have a number of sectors that we have carved a niche into, and have become known as leaders in that sector. If we continue to do jobs in these areas, that perpetuates more work like that and as a consequence it enhances our reputation.

“Business objectives on the other hand could be the financial side of the business where we have to



Number of employees  
**10**

2012

Moved into a much larger office still in Shoreditch. Put on its biggest office party to date. Responsive Site of the Month from .Net, RAR recommended.

2013

Started off as a great year, winning three consecutive pitches in a row. New staff intake and looking to expand its production team even more this year.



Number of employees  
**12**

Number of employees  
**12**



manage our finances to ensure the business remains profitable. I think its dangerous to try and take every project that comes along. I think agencies in their early years tend to take on all projects that are offered to them, but I think you have to quickly decide what kind of agency you are, and what kind of projects you excel at. This focus then feeds into your business, and more importantly, your strategic planning for the future of your company.

"You have to individually evaluate each project that comes along and the client that is attached to it. In the past we have taken on projects that were perhaps not a great fit for us - we all enjoyed them, but the bottom line was that the project contributed to our strategy for the business. Sometimes you have to even lose money on a job if it takes you one step closer to the strategic goals you have set for your business.

"And of course the other side is that we will do jobs that may not set the guys on fire in the office, as far as design is concerned, but there are sound business reasons for doing them. I think we are now at a point where we have a clear business and

strategic plan, and can say no to projects if they don't help us achieve those goals. We have worked on some great projects for some great clients. I would like to think that all of them met either or both of our qualifying criteria."

It is interesting to see how agencies approach the process they go through from the initial contact with a client to the delivery of their finished project. Browser always begins with a detailed meeting with the client. "Once a project has been given the go ahead we will initially look at our diary for scheduling and what kind of resources the project will need, and when these will be available," René explains. "Over the past two years we have been refining our approach and focusing on improving our efficiency. This is for us internally, but also for the client. We want to do a good job, but this has to be achieved in a time and cost effective way."

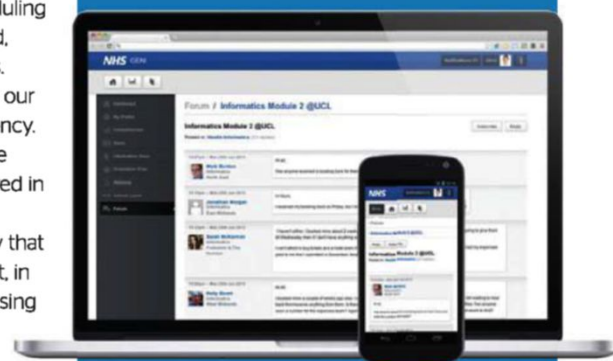
Browser subscribes to the agile methodology that is different from traditional project management, in that teams can respond to unpredictability by using incremental steps in a project's life-span known as sprints. René continued: "We take about

## NHS

Browser's work with the NHS has been a recent highlight. The NHS needed a bespoke system to manage its graduate training scheme, with an aim to improve both efficiency and effectiveness. With this in mind, Browser wanted to create a clean, fast design that was intuitive to use and made it easy for users to share information.

The agency created Geni, a hub where course leaders and trainees can access all the information they need quickly and easily. It allows managers to track employees' progress and give feedback, while enabling employees to access the information that they need instantly. It also features a real-time feedback process, tools to track performance, and widgets for a quick overview of course metrics - so it packs a real punch as far as saving people time and effort is concerned.

Of course for the NHS, in a time of such austerity, the end goal of this project was about making the process more efficient. Browser explains: "It's been great to be able to help in this way. The project is something that we still work on and we've recently been given the go ahead to add even more features which is exciting. While it's quite the monster project, the results have been really rewarding: seeing the design that you have worked so hard on for so many months actually making a real difference by saving people time, money and effort is a fantastic feeling."



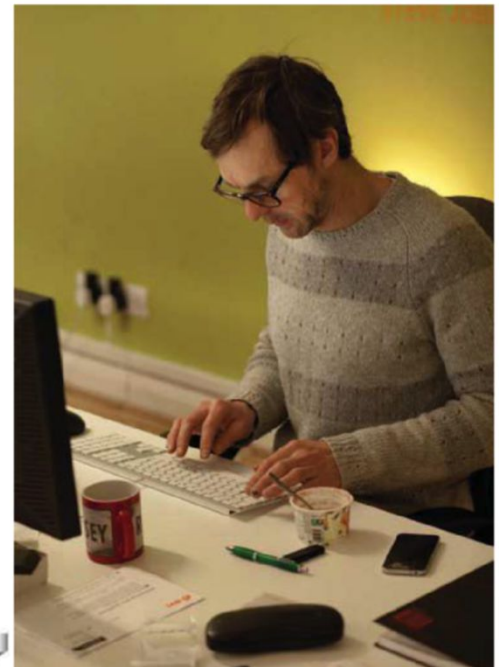
## BBC Mexican Wave

Browser has worked on a number of projects for the BBC that have provided a great opportunity to engage with users through its digital design, and for this reason it has always been a pleasure to work with.

One project helped Radio 5 live launch a digital campaign aimed at increasing engagement across the network. Named BBC's Big Mexican Wave, it was launched to promote coverage of the World Cup and gave Browser one of its first tastes of the social side of digital.

Using a video mechanism and microsite, Browser brought together video stills of celebrities taking part in a Mexican wave. Browser invited users to upload their own wave, which was then stitched together with celebrity stills to make one World Cup Wave. Browser commented: "When you're working on a project where names like Richard Hammond, Dizzee Rascal, and Jonathan Ross feature, you know it's probably something good."

Browser pointed to the video mechanism as a highlight of the project. Working out a way for users to be able to upload their photos quickly and easily into their video was an interesting challenge to face and one that was new to Browser. While the agency has come a long way since then, the project was an eye opener into the potential of the social sharing via web. The way the content spread so quickly as users shared the video with their friends opened Browser's eyes to the increasing power that these sharing mechanisms can have if implemented in the right situations, and still influences its designs today.



## AGENCY BREAKDOWN

- 1 Managing director
- 1 Creative director
- 1 Commercial director
- 1 Non-exec director
- 1 Marketing & social strategist
- 1 Project manager
- 2 Designer/front-end developer
- 4 Back-end developer



two-weeks to gather the information we need about the requirements for the project. This is before the first part, or sprint, of the project begins. Typically we will get all of the project's stakeholders together. From our side this will be the key personnel we will need to deliver the project. We'll capture all the information and organise this into a hierarchical set of steps. We usually use Pivotal Tracker to do this.

"It's important to really have a hands-on session with the client to ensure they fully understand what can be delivered within the time and budget they have available. Often, when we have done this exercise the brief may have changed radically, but what we then have is a plan that fulfils the client's brief, and one that we can deliver on time, and more importantly on budget. Often what the CEO of the company wants, but their sales director needs, is very different. Having them in the same room for a completely open conversation resolves these issues. And it's a pleasure to work with our clients in this way."

Producing cutting-edge design and developing tools for their clients means being masters of the tools that Browser uses to deliver each project. Their approach is to get materials on screen as soon as possible. This could be just a basic homepage to get a feel for the direction of the project. So rather than spending time to produce flat visuals, Browser always tries to move the project forward as fast as possible. This is all about rapid development and not just about showing the client images etc, as you can't really show a client what is intended with just flat visuals. This then gives Browser an HTML file with a CSS style guide for a visual direction that can be just simple elements like headers, search boxes, or how the navigation will work.

After that Browser looks at each of the sprints it has defined, and sits down with a group of its staff to sketch out in more detail how the project will work. Again this is all about using agile design and development to push the project forward as quickly as possible. This first sprint is typically a week. After

that the client comes in to see what they have done. Each section of the project has its own sprint and client input. So after the client input, from the Monday afternoon to the end of the week, the designers and developers will be working together to deliver the next completed sprint for the client to assess. Browser then continues like this until the project is completed.

Browser also generally shuns the traditional tools that are used for design and development, instead using a bespoke toolset to meet its client goals. Lead developer Matt Senior commented: "I think one of the most important things we are doing at the moment is making projects device and resolution agnostic. And I think the tools we now use are gradually changing to meet those demands. We use Sass/Compass a lot now instead of writing vanilla CSS, for example. BDD tools such as Behat are also essential for QA in our agile workflow, where the project is evolving at a rapid rate."

James Lutley, UX/UI developer also chimes in with creative tools: "Some of the front-end technologies that are coming along will allow us to create even richer experiences in the browser and are very interesting. CSS3 masks, filter effects and blend modes, plus new relative units that we actually just used for a project, and Flexbox for instance, enable us to use fewer images and as we are designing in

the browser – everything is much faster. jQuery 2 is very light so is geared towards mobile browsers, as performance has become a big issue for developers. As part of our workflow, we're using build tools, such as Grunt.js and command-line SVG optimisation and SVG fallback asset creation tools."

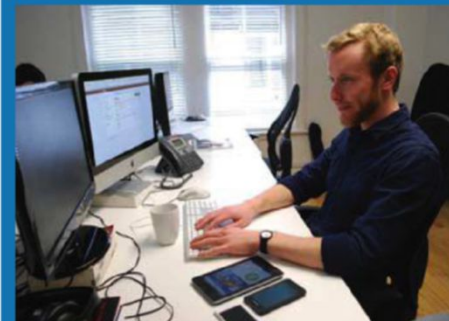
René also commented: "There are of course access issues when you have to develop for several mobile platforms for instance. This is why progressive enhancement is so important for these projects. Being able to develop a baseline of content that anyone can access, that can then have a specific layer of interactivity based on the display device's capabilities, is very powerful.

"We have also been using off-canvas responsive navigation, and we are seeing what has been tied to mobile applications also now coming to the web. There will always be native applications on all the major mobile platforms, but as we move forward there will be more convergence between the web and mobile platforms."

Freelancer designers and developers will staff many agencies, but Browser takes a different approach favouring full-time staff. René explained why he would rather employ a full-time member of staff: "We tend to focus more on having full-time staff rather than just using freelancers. I would like to think we have a great working atmosphere here that

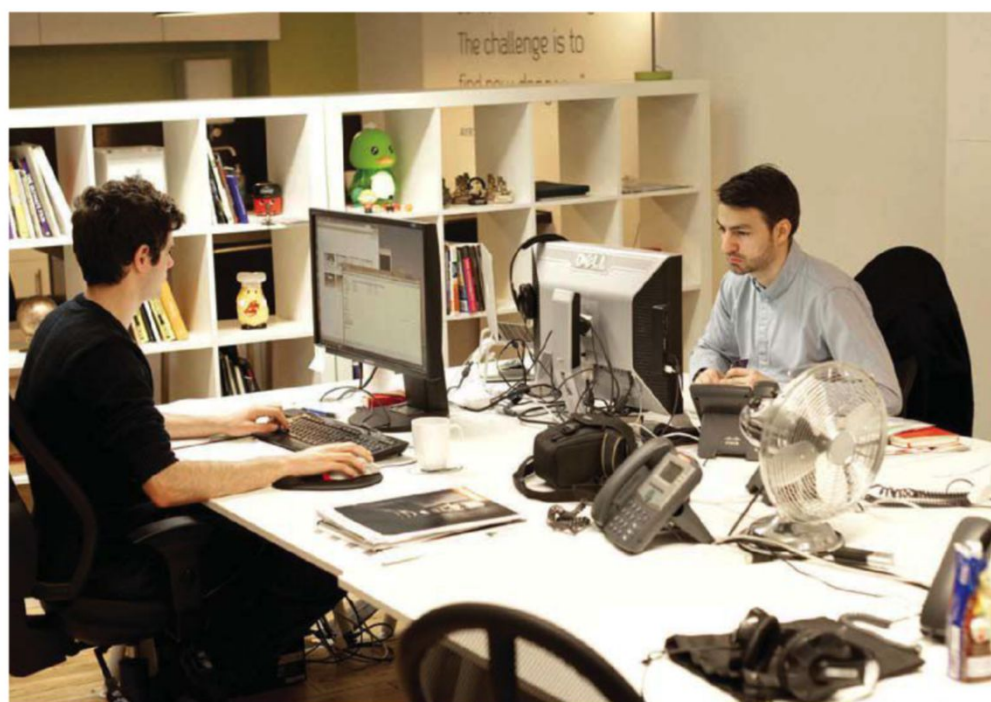
## industry insight

Matt Senior, lead developer



"I think one of the most important things we are doing at the moment is making projects device and resolution agnostic. And I think the tools we now use are gradually changing to meet those demands"

🔧 We use Sass/Compass a lot now instead of writing vanilla CSS, for example. BDD tools such as Behat are also essential for QA 🐞



is conducive to producing great work. We spend rather a lot of time and effort getting the people we employ up to the standard we need that fits with the work we do.

"And as we use the agile design process we need people working full time to meet a project's objectives using this method. We do use freelancers for specific jobs. If we have a project that requires a particular direction, we will bring in one of our trusted designers to work up some ideas. Or perhaps we have a heavily technical project for which we have people that we can call upon.

"However, when we can we will stick with our full-time staff as they know how we work, and as efficiency is at the core of our business, we find full-time staff are the best way of achieving the levels of efficiency we are looking for. We also want to promote an open environment where everyone learns from everyone else. We like to think that if someone wants to progress, they can within our agency, as we have set things up to foster that kind of personal development."

And if you fancy working for Browser, what's the best way of approaching them? "I think one of the biggest headaches for agencies is staffing," said René. "This really goes back to what students should be doing when they are still at university. We look for people that have done interesting work in the industry. This is why it's vital to have high quality work out there to be found. We may not have a vacancy at the time, but if we see someone's work we think is interesting we will initiate an open chat. This is a great way of finding people we think could be a good fit when we have a need. I think we have found some of our best people by simply keeping in touch with them, as we liked their work.

"If I see a portfolio I will often drop the designer a note just to say I liked their work and perhaps ask how they achieved a particular effect. We also often hold open chats where we talk about what is happening in design and development. These events are informal but it's a nice way to start relationships and build a community that could benefit us in the future. And if a project comes in that doesn't meet our business or strategic objectives we will often recommend another agency or designer we think could help. We have built a rapport with these people over a time and are confident with our recommendations."

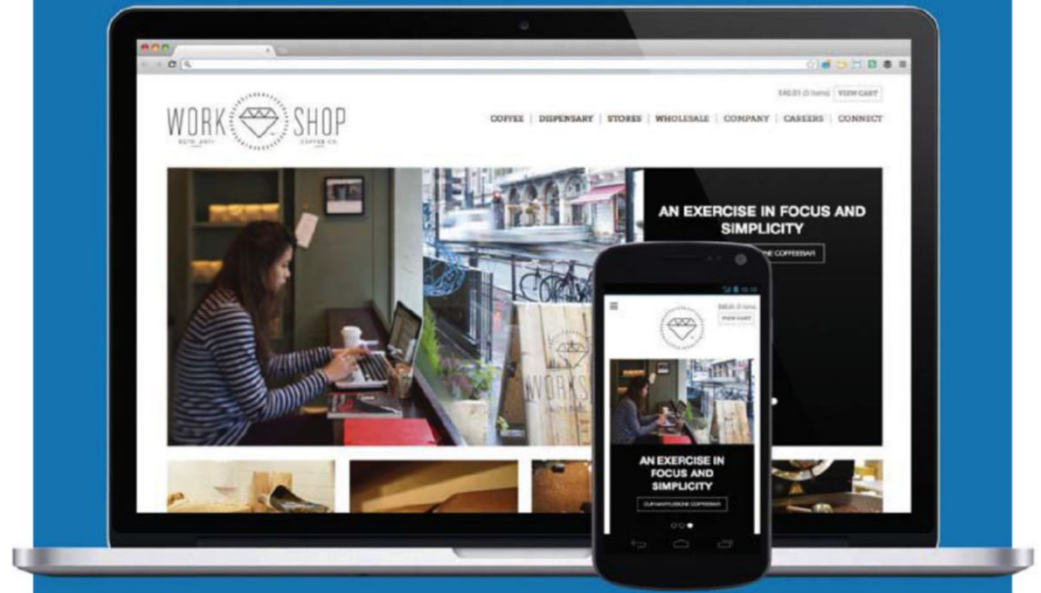
And what is Browser looking for in the people it employs? René explains what talents make him sit up and take notice: "The quality we are looking for first and foremost is enthusiasm with the craft and also within our community. Many of the people we have employed are also avid bloggers, or networkers who have understood how to market themselves. When you do come across someone with an inner thirst for learning, that really does shine and they are the kind of people we want to work with. We also actively go out to universities and present to

## Workshop Coffee

For the past year and a half, Browser has been using Agile for both its design and development processes. Taking this approach has allowed the design and development to take place in tandem during each sprint, meaning Browser can move quickly from sketching out design ideas to having a working solution in the browser. A benefit of this is that it enables user testing of new features early on in the design process. Browser can do this quickly and often, as well as being able to gain client feedback - clients can add new content for a user story at the end of each sprint, so content evolves as the project progresses.

The website design for Workshop Coffee ([www.workshopcoffee.com](http://www.workshopcoffee.com)) is one of the most recent projects to receive the Agile treatment, and is Browser's most refined example of it. After initial scoping, Browser mapped out the user stories and then organised them into phases and sprints. From start to finish the agency held weekly consultation meetings with Workshop Coffee to make sure that what it was working hard on was exactly what Workshop needed. This approach enabled Browser to tweak the project as it went along, rather than making costly, time consuming changes at the end.

Browser is proud of the result. As well as producing a nice responsive site, it managed to throw in some advanced design features, such as an off canvas design, more commonly found on native apps. To achieve smooth animation and great performance for the off-canvas navigation, it utilised CSS transforms and transitions rather than a JavaScript/jQuery solution. This achieved a great and engaging result. The sepia CSS filter effect used for online store images is an excellent touch too.



students. We have close links to our old universities (Solent and Bournemouth) and we are building new relationships all the time. And we don't just present about the work we have done, but also talk about the methodology we use."

Browser is an agency on the move. The fact it has clearly defined business and strategic objectives is often missing from other agencies in this sector. With an order book that is full until the summer, René concluded by outlining what the future holds: "The business has grown year-on-year. What we are particularly proud of are the processes we have now defined, which enable us to work efficiently. We have just taken on a new business director who has a lot of experience, and we have new members of staff starting shortly. What's more, with an order book that is full until the middle of the year, including some interesting clients in the enterprise sector, 2013 is looking like a great year for us."

## BROWSER

WEB..... [www.browserlondon.com](http://www.browserlondon.com)  
 FOUNDERS..... Julian Morency  
 .....and René Morency  
 YEAR FOUNDED..... September 2008  
 CURRENT EMPLOYEES..... 12  
 LOCATION..... Shoreditch, London

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# POWER UP WORDPRESS TO THE NEXT LEVEL

As more people discover the potential of WordPress, you'll need to dig a little deeper to make your website stand out from the crowd

**T**he WordPress CMS works great 'out of the box'. With its famous five-minute install, WordPress powers over 25 per cent of the world's websites and comes in two distinct versions.

**WordPress.com** provides a great introduction for less technical users who just want a website that works. No doubt there are a number of very attractive benefits, including no hosting fees and no maintenance, with automatic updates, backups and optimisation. However, this has to be balanced against limited themes and no plug-in support.

Since you're reading this magazine you're almost certainly more interested in **WordPress.org**, where you have to take care of the website hosting yourself but, under the terms of the GNU General Public License, you are pretty much free to do what you want with your installation.

With freedom comes responsibility, though, and you owe it to yourself (and to your client - if you are working for one) to make your WordPress site the best it can be. Google reports about 139 million results (February 2013) for the phrase 'just another WordPress site' which is automatically published for all new WordPress sites. While you probably know how to get rid of this cleverly conscience-pricking tagline (Settings>General>Tagline), don't fool yourself into believing that removing that tagline by itself makes your WordPress website anything more than 'just another WordPress site'.

Daft Punk nearly had it right with their 2001 hit, but you need to be aiming for Easier, Better, Faster, Stronger as your mantra. Ultimately, the

improvements you can make are only limited by your time and technical ability.

So, where to begin? Plug-ins are probably the most widely used WordPress 'enhancements' and the following pages will introduce five of the most popular that are likely to benefit any site.

Why stop at 'free', though? If you're investing in hosting and a significant amount of your own time (and hopefully charging good money for your services), there are an abundance of premium plug-ins, ranging from less than £2 to more than £25, that will provide functionality not found elsewhere.

Five (and a bit more) popular premium plug-ins are reviewed here to help you dip your toe into the world of paid-for code.

No amount of free or paid-for plug-ins will set your WordPress site apart, though, if your theme isn't up to muster. Premium WordPress themes tend to follow, and occasionally lead, general web technology trends. It's definitely worth checking out the bestselling premium themes as they deliver, in their own way, emerging practices that we soon won't want to live without. For example, the majority of the top 50 template sales on the popular **themeforest.net** site are for responsive templates - when during 2012, responsive themes were just only starting to be launched.

Finally there is some advice on choosing a host, how to ensure the server is properly configured and what tools you might like to use to ensure everything is as it should be.

Hold on tight, it's time to power up!



### IMPROVE YOUR WEBSITE'S SEARCH ENGINE RANKING

#### WordPress SEO by Yoast

[wordpress.org/extend/plugins/wordpress-seo/](http://wordpress.org/extend/plugins/wordpress-seo/)

**S**earch engine optimisation can be daunting, so it comes as a relief that WordPress SEO by Yoast is easy to use.

Once activated, head over to any site page to see where the main action happens. The first real decision is to choose your 'focus keyword' - that is the word or words you want this page to be found for. There's a button that will suggest related keywords to help refine your thinking. Once you've chosen one, the plug-in will analyse your content and confirm if that keyword appears in your article heading, page title, page URL, content and meta description and you'll be rewarded with green text or flagged with red text depending on the results.

After you've carefully crafted your page snippet on this plug-in tab, you should go to 'page analysis'.

This tabbed page also uses a colour code system - from red for 'needs attention' to green for 'all good' - for a wide range of measures including reading ease, number of words on the page and whether your keyword appears within the first paragraph. As you work through each point, you should eventually turn the overall colour for that page green. You can give yourself a pat on the back but should also move on to the next page, and the next, until you have scored green on as many pages as possible.

There are advanced options to explore, but you might want to do all the most obvious work first and then move on to tweaking and refining.

### SUPERCHARGE YOUR WORDPRESS SITE WITH THIS SUITE OF PLUG-INS

#### Jetpack by WordPress.com

[wordpress.org/extend/plugins/jetpack/](http://wordpress.org/extend/plugins/jetpack/)

**I**nstalling Jetpack is like installing (currently) 24 plug-ins in one go.

Before you get started you'll need to go and create a WordPress.com account if you don't already have one set up.

Okay, you might not need to use every one of Jetpack's features (for example LaTeX - a 'powerful markup language for writing complex mathematical equations'), but don't let that put you off the real big hitters that installing this plug-in gives you.

First, there's WordPress.com stats and yes, you can and probably should have Google Analytics installed, but these stats are handy, right there in the site's admin area (and with a nice 48-hour summary chart

**WordPress SEO by Yoast**

Improve your WordPress SEO: Write better content and have a fully optimized WordPress site using the WordPress SEO plugin by Yoast.

[Download Version 1.3.4.4](#)

[Description](#) [Installation](#) [FAQ](#) [Screenshots](#) [Changelog](#) [Stats](#) [Support](#) [Reviews](#) [Developers](#)

WordPress out of the box is already technically quite a good platform for SEO, this was true when I wrote my original [WordPress SEO](#) article in 2008 and it's still true today, but that doesn't mean you can't improve it further! This plugin is written from the ground up by [WordPress SEO consultant](#) and [WordPress developer](#) Joost de Valk to improve your site's SEO on all needed aspects. While this [WordPress SEO plugin](#) goes the extra mile to take care of all the technical optimization, more on that below, it first and foremost helps you write better content. WordPress SEO forces you to choose a focus keyword when you're writing

**Requires:** 3.1 or higher  
**Compatible up to:** 3.5.1  
**Last Updated:** 2013-1-14  
**Downloads:** 3,633,189

**Ratings**

WordPress SEO is a long-established plug-in with a host of features that helps optimise a site for search engines

**Jetpack**

Connected to WordPress.com

Welcome to Jetpack 2.2!

**WordPress.com Stats**  
Simple, concise site stats with no additional load on your server. [Free](#)  
[Learn More](#) [Configure](#)

**Publicize**  
Connect your site to popular social networks and automatically share new posts with your friends. [Free](#)  
[Learn More](#) [Configure](#)

**Notifications**  
Monitor and manage your site's activity with Notifications in your Toolbar and on WordPress.com. [Free](#)  
[Learn More](#)

**Jetpack Comments**  
A new comment system that has integrated social media login options. [Free](#)  
[Activate](#) [Learn More](#)

**Subscriptions**  
Allow users to subscribe to your posts and comments. [Free](#)  
[Learn More](#)

**Post by Email**  
Publish posts to your blog directly from your personal email. [Free](#)  
[Learn More](#)

**Likes**  
Likes are a way for people to show their appreciation for your content. [Free](#)  
[Learn More](#)

**Carousel**  
Transform your standard image gallery into an immersive full-screen experience. [Free](#)  
[Learn More](#)

Jetpack is a suite of plug-ins that offers a URL shortener, statistics, social media integration and a free CDN

there too - which will quickly help you spot any sudden spikes in traffic).

Photon is one of the newest additions to the Jetpack suite. It's basically a free, zero-configuration content delivery network for your site.

Extra Sidebar Widgets provides seven useful additional widgets including a Twitter feed, Blog subscription sign-up, mini Gravatar profile, Facebook Like Box, a widget to display an image in your sidebar, RSS links, and Top Posts and Pages.

There are two gallery enhancements available. Carousel transforms your standard image gallery into an 'immersive full-screen experience', while Tile Galleries (which is powered by Photon, whether or not you have that option activated) creates a groovy magazine-style mosaic of your images.

With 19 further plug-ins to explore, you're very likely to find something in Jetpack that will improve your site and there's always the hope of new plug-ins around the corner.



# SECURE YOUR WORDPRESS WEBSITE AGAINST HACKERS

## Better WP Security

[wordpress.org/extend/plugins/better-wp-security/](http://wordpress.org/extend/plugins/better-wp-security/)

If you don't have appropriate security in place, you might well wake up one day to find that you no longer have a website at all. So before investing time in making your site better, it's essential to secure your installation. This plug-in combines a wide range of security features and techniques to help you harden your WordPress site against attack from hackers.

The developers have usefully identified those features that can easily be implemented and features that should be considered more carefully to avoid conflicts with other plug-ins, themes or server configurations.

The security measures are categorised into Obscuring (hiding information or access to your site), Protecting (restricting or banning access, strengthening server security), Detecting (reporting unauthorised access or file changes) and Recovering (backing up your site on a regular basis should the worst happen).

In the plug-in dashboard, colour codes are used to indicate the security status of your site against 21 measures. Green-indicated items are fully secured, orange items are partially secured, red are not secured (you are urged to secure these items immediately) and blue are not fully secured items that might conflict with other site factors which you should secure if you can.

Some example security measures include enforcing strong passwords (with inadequate passwords being a common security failure) and restricting administration access to certain times of the day only (as many bank vaults do). The plug-in can also be configured to ban access from specific IP addresses by reference to blacklists or following repeated login failures.



■ System status info is colour-coded for easy recognition

## Fast Secure Contact Form Options

Downloaded 3,440,174 times.



(Average rating based on 1,365 ratings) [rate](#)

Good news! A major update is being worked on. The Fast Secure Contact Form 4.0 project began in late August and has made great progress. Read about the changes here:

[Fast Secure Contact Form 4.0 project reports](#)

**How you can help with the new 4.0 version:** [Donate to the project](#), and/or contribute your ideas in the [WordPress.org](#) post.

Version: 3.1.8.1 (latest version) | [Changelog](#) | [FAQ](#) | [Rate This](#) | [Support](#) | [Donate](#) | [Free PHP Scripts](#) | [Contact](#)

☒ I have donated to help contribute for the development of this Contact Form.

### Usage

Add the shortcode in a Page, Post, or Text Widget. [help](#)

Shortcode for this form: `[si-contact-form form='1']`

### Options

■ The Fast Secure Contact Form plug-in is a quick and easy method for adding forms to a site

“In the plug-in dashboard, colour codes are used to indicate the security status of your site”

## BACK UP YOUR WORDPRESS SITE

### WordPress Backup to Dropbox

[wordpress.org/extend/plugins/wordpress-backup-to-dropbox/](http://wordpress.org/extend/plugins/wordpress-backup-to-dropbox/)

While Better WP Security can back up your WordPress database and email it to you, WordPress Backup to Dropbox provides even more peace of mind against server failures.

This plug-in works with Dropbox (you'll need to register a free account) and can be configured to back up not only your WordPress database but your entire WordPress installation and media library. Better still, the whole lot is all backed up to the cloud so even if your server and your local machine fail at the same time, Dropbox's service has still got your back(up).

You'll need to ensure the backup doesn't exceed your Dropbox usage allowance, but the free service starts at a generous 2GB. You're also given an extra 500MB each time you refer Dropbox to someone; so if you build sites for others, you can refer Dropbox to them, get your extra 500MB and use that for backing up their website. Make sure the backup folder you set in the plug-in is also shared with the website owner.

That way the site is backed up on the cloud, your system and the owner's system. For no additional cost, this is a valuable additional service you can offer.

As well as changing the frequency, date and time of your backup, you can optionally exclude any files and directories that you don't want to be backed up.

## KEEP THE CONTACTS AND LOSE THE SPAM

### Fast Secure Contact Form

[wordpress.org/extend/plugins/si-contact-form/](http://wordpress.org/extend/plugins/si-contact-form/)

Contact forms in WordPress can be quite fiddly to configure, but Fast Secure Contact Form is easy to use and very customisable.

Most websites will attract their fair share of contact form spam, so choosing a contact form solution that helps you prevent this at source will help to keep your inbox free from this extra burden.

This plug-in comes with CAPTCHA and Akismet options, and the former works perfectly well. While Akismet frequently appears in lists of top ten popular plug-ins (possibly as it comes loaded with the standard WordPress install), it is worth pointing out that the service is only free for personal use. Use the service for more than one commercial website and you will need to pay \$50 per month.

With Fast Secure Contact Form you can have as many different forms as you wish, and there are many optional extra fields that can help you to ensure your forms are as user-friendly as possible, capture the user input correctly and are styled to match the look and feel of your site.

Incidentally, there is a sister plug-in 'SI CAPTCHA Anti-Spam' which provides spam blocking for comments, registration forms, lost passwords and login forms.

## CREATE SOPHISTICATED PAGE LAYOUTS EFFORTLESSLY

**Visual Composer**  
[demo.wpbakery.com/vc/](http://demo.wpbakery.com/vc/)

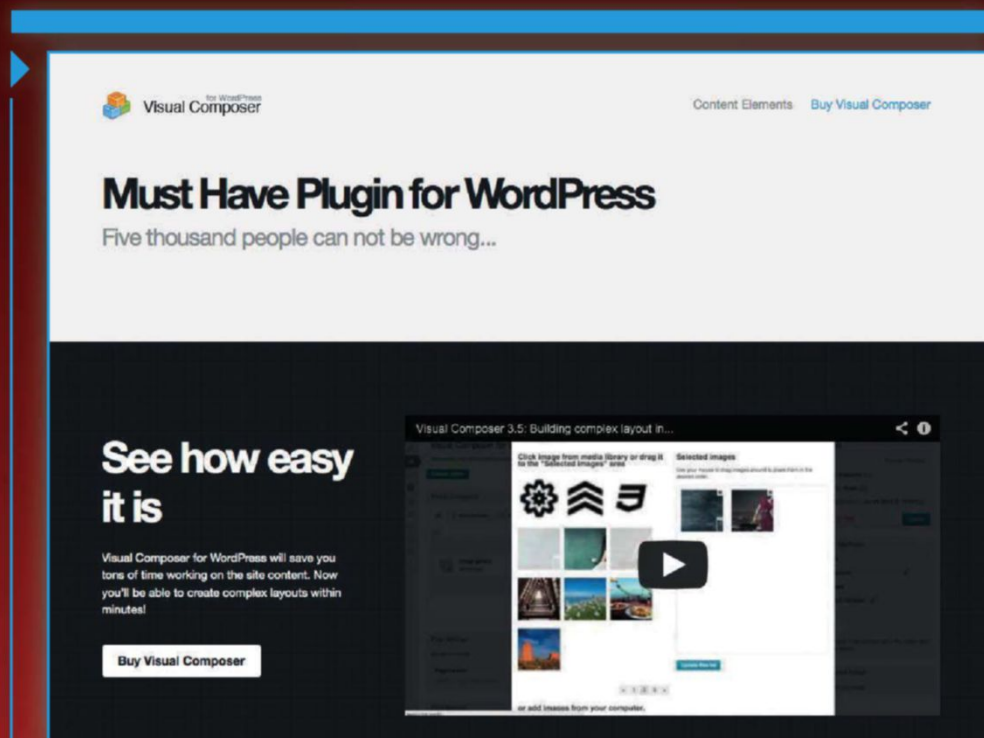
This plug-in costs \$25, but it boasts a truly impressive feature set. Visual Composer is a drag-and-drop page builder. Once installed, you'll need to configure which options are available to which category of users and which content types may be used with Visual Composer. Once that's done, you'll notice a new Visual Composer button above the editor window in your page or post or other custom content type (assuming you remembered to select that content type in the settings).

Launching Visual Composer lets you select new rows in nine different column width combinations, add elements to drop into the columns within those rows, load templates based on previous ones or save templates for future use with other pages. You can currently select between 28 element types: 18 content, five social and three 'structural' ones.

The interface is well executed, as are the elements that are generated, and it's easy to override the CSS of these elements if further customisation is needed.

There is an argument that many of these layouts could be done (better) using CSS and HTML with no need for a plug-in, but Visual Composer has been so well thought out and put together that it's not so easy to agree that they could be done better that way.

Visual Composer is a real time-saver and when it enables you to create richer, more interesting pages that stand out from everyone else's, does it really matter how they came into being?



■ A drag-and-drop interface allows users to quickly create complex layouts

## WOW YOUR VISITORS WITH A MEGA MENU

**UberMenu**  
[wpmegamenu.com](http://wpmegamenu.com)

UberMenu is one of the bestselling premium WordPress plug-ins of all time, and for good reason. \$16 buys you a menu system that

knocks the spots off the (already quite good) WordPress 3 Menu Management System.

You'll want to be able to fully customise the look and feel of the menu, obviously, and choose from over 20 preset styles. That's nice.

But what if you could put some funky graphics and description text in the menu to aid navigation and add a bit of pizzazz? That would be cool.

But wait. With UberMenu you can add widgets to your menu - which means blog posts, maps, contact forms, if you want - so you can effectively turn a menu item into a highly aesthetic, user-friendly and functional page in its own right. Now that's Mega!

Underpinning UberMenu is some pretty smart code that delivers its functionality efficiently and with as much compatibility as possible. As a premium plug-in, if you do need support you can be fairly sure of a responsive and helpful reply.

The developers are very upfront about how it works in different environments, who might expect problems etc, and they are not at all apologetic about not supporting Internet Explorer 6. Hurrah to that. iPhones and iPads are compatible.

UberMenu might not be for everyone. Or at least you might find yourself hoping that - because the fewer users there are out there, the more Mega your menu will be.

Visit the UberMenu demo site to experience the Mega-ness yourself.

### Select element type

Show all [Content](#) [Social](#) [Structure](#)

Row	Text block	Twitter widget	Separator (Divider)	Separator (Divider) with text	Message box	Facebook like
Google+ button	Pinterest button	FAQ (Toggle)	Single image	Image gallery	Tabs	Tour section
Teaser (posts) grid	Posts slider	Widgetised Sidebar	Button	Call to action button	Video player	Google maps
Raw js	Flickr widget					

■ Visual Composer breaks down the page elements, making it easy to drag a new element into a layout

# MAKE EVERY POST MORE EFFECTIVE WITH SOCIALLY SAVVY AUTHOR BOXES

## Fanciest Author Box

fanciestauthorbox.com

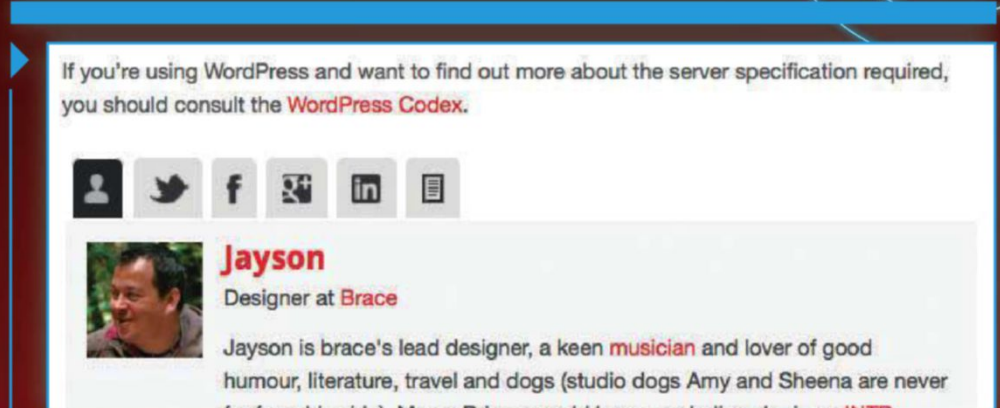
**A**uthor boxes are great for engaging with your site visitors. The latter can see who you are and read a little about you.

But why stop there? \$10 can buy you Fanciest Author Box – from amusingly named developers, ThematoSoup – and will take your author boxes to the next level.

The visitors to your website are most likely to be interested in the author while reading their post, so why not put links to your social sites right there in front of them? Your visitors will be able to read your Twitter tweets, see a summary of your latest posts and even hook up with you on Facebook, Google+ and LinkedIn – all by switching between the neat tabbed boxes that appear at the top of the author box thanks to this clever plug-in.

If you're looking for a cost-effective way of making more connections and keeping your visitors more connected, you should definitely give Fanciest Author Box a look.

The plug-in is very easy to configure and you can easily customise where and how the box appears for posts, pages and custom post types.



■ Author boxes add personality and presence to a post, as well as social media connections

“Visitors will be able to read your Twitter tweets, see a summary of your latest posts and even hook up with you on Facebook”

Fanciest Author Box fully supports multi-author blogs and Google authorship verification.

Guest blogging is a great way to increase the exposure of your site and this plug-in will help you provide the red carpet treatment for guest bloggers.

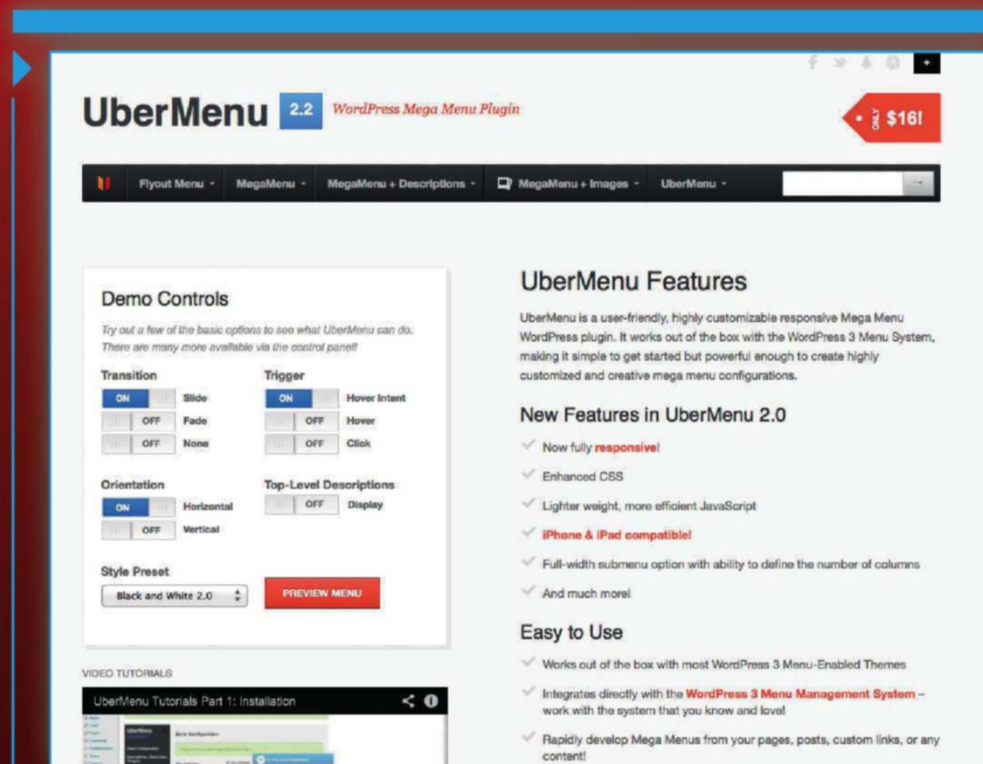
## INSTALLING AND ACTIVATING A PLUG-IN

■ You can automatically install plug-ins from the WordPress Plugin Directory, which is the normal method for free plug-ins. With a premium plug-in, you will download it first and then you can upload the .zip file – Install Plugins>Add New page (Upload).

Some due diligence is recommended before installing any plug-in (for example, by checking reviews and forum comments) and preferably you should try it out first on a clone of the site in a test environment. Seemingly benign plug-ins can cause apparently unrelated and unexpected problems.

Once you've uploaded the plug-in, you'll return to the Installed Plugins page and select Activate. Many plug-ins have settings that need to be configured and these are accessed from either a link on the Installed Plugins page or through a new menu item on the left-hand side if the plug-in has created one.

There are several good reasons for not running unnecessary plug-ins on your site and if you do run into problems you will inevitably find yourself 'doing the plug-in dance' where you will have to selectively deactivate some or all of the plug-ins to diagnose the problem. You don't want to find yourself attempting to perform that dance with too many partners.



■ UberMenu is the perfect plug-in for creating responsive mega menus



### DRAG-AND-DROP FORM BUILDER -NO, REALLY

**Quform**

[www.quform.com](http://www.quform.com)

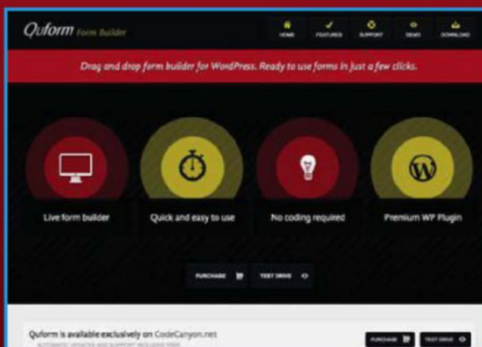
If these plug-ins are supposed to be about taking your site to the next level and standing out from the crowd, you might be forgiven for asking what place a form builder has in the line-up – especially as we included the free form plug-in Fast Secure Contact Forms earlier. Not exactly sexy is it?

However, you may be surprised to learn that Quform is the fifth bestselling plug-in at Code Canyon. So why does a form builder sell in such numbers? Most people don't like forms; they don't like to complete them, build them or even read about them. However, if you can build a better form you will get a better response.

Consider this scenario. Let's say you're a website designer and you want to encourage enquiries about your services through your website. You need to accomplish several objectives to do this successfully, including asking the right questions, making it attractive, providing in-form help and finally making sure all the functionality works as it should.

Quform is simply very well done and will help you achieve your goals, taking away the bulk of the pain and providing a form that people don't mind (as much) having to fill in.

New projects for any business start with an enquiry, so if you can show your customers how well you will look after them with a simple form, you might find it's not long before Quform pays for itself – many times over.



■ Build forms in double-quick time

“Quform is very well done and will help you achieve your goals, providing a form that people don't mind having to fill in”



■ Sign up and become a WPMU DEV member and get access to hundreds of plug-ins and themes

### 140+ PREMIUM PLUG-INS FOR THE PRICE OF A FEW WPMU DEV

[premium.wpmudev.org](http://premium.wpmudev.org)

This one is a little different. You can join WPMU DEV for \$39.50 per month. Wait a minute you say, that's nearly as much as I would spend on my monthly Akismet fee! But here, membership buys you 140+ plug-ins, 160+ themes, unlimited Q&A, and live and manual support for *any* WordPress issue.

Apparently it's like having your own personal WordPress development team. WPMU DEV claims to have 157,721 members and to have been 'kicking it since 2004'.

The firm majors on manuals and documentation and even produces white-label videos that you can use yourself or share with your clients without fessing up that you didn't make it just for them.

You can cancel your membership and continue to use the plug-ins and themes but without the support, upgrades etc.

WPMU DEV's FAQ says: 'Um, isn't this too good to be true? We thought you might ask that :) We can do this because we are the largest plug-in provider on the web, have the most members and consistently invest membership fees in improving the business. So it's 100% true, we're the real deal!'

As with any large organisation, WPMU DEV has its share of raving fans and vocal opponents. It's always advisable to do some research of your own before buying any plug-in or service, to ensure it meets your needs and you get value for money.

### WRITING YOUR OWN PLUG-IN

■ If you can't find a free or premium plug-in that meets your needs, you could always write your own. After all, WordPress has been developed deliberately to enable its functionality to be extended.

If you want your plug-in to be available to others through the WordPress Plugin Repository, it must comply with a range of criteria, from unique naming to the inclusion of the appropriate licence.

The WordPress Codex provides an excellent introduction to the subject: [codex.wordpress.org/Writing\\_a\\_Plugin](http://codex.wordpress.org/Writing_a_Plugin).

By offering your plug-in through the WordPress Plugin Repository you will be providing it for free and you will undoubtedly earn much kudos for that.

Assuming your plug-in is popular, you are also likely to receive plenty of support requests and it's sometimes easy for users to forget that you've made it for free. However good your plug-in and support is, you'll probably find yourself reading "Your plug-in sucks, you suck, you've ruined my website and I hate you".

No, you shouldn't let this put you off, but don't be surprised if it happens.

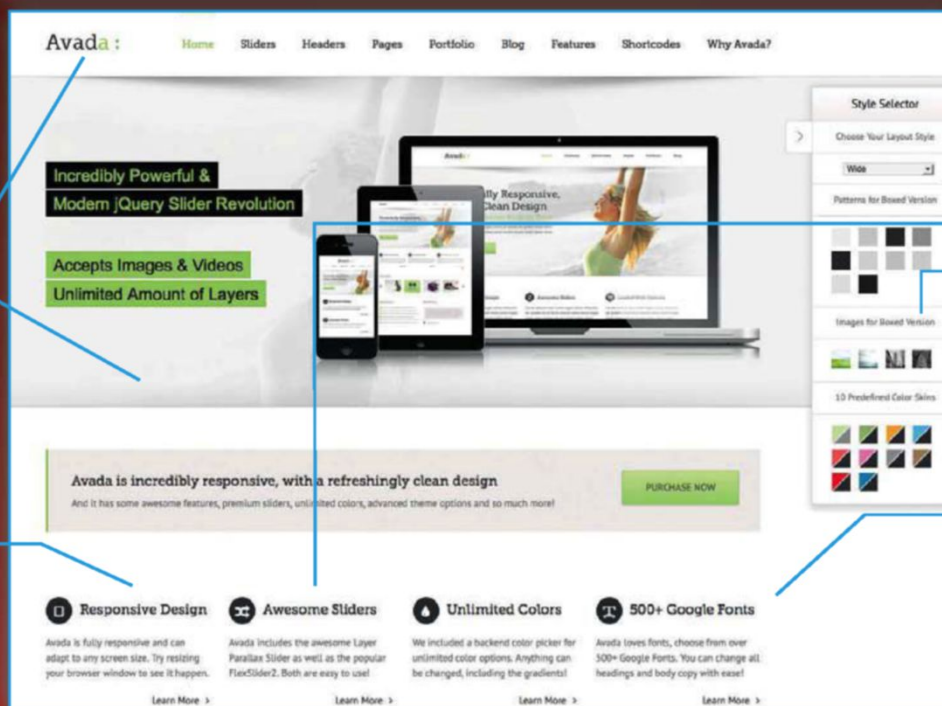
Try releasing a premium plug-in that sells for \$10 and experience how much greater is the support expectation.



A premium theme will list compatible browsers, providing peace of mind and freedom from extended periods of testing. You will also have access to bug fixes and new features as they are released.

Elite developers pro-actively research the market for the most demanded features to increase the marketability of their themes and the most popular themes tend to be rich with these features.

It's 2013 and you can rightly expect your premium theme to look great on a desktop or laptop, a tablet and a smartphone. Watch out for an increasing number of 'retina ready' themes.



Many themes come bundled with plugins, especially sliders, which bought separately, would cost more than the theme itself. This makes some premium themes incredible value for money.

You should be able to customise the color and typography used throughout the site through a user-friendly admin panel. You'll probably enjoy a number of layout options as well.

The best themes should provide template files, demo content, great documentation (often supplemented by video tutorials), helpful support, and a useful forum.

## ANATOMY OF A PREMIUM THEME

### Some features and benefits of buying a premium WordPress theme

Choosing a premium WordPress theme can be a big decision. Your alternatives are selecting a free one, probably from the WordPress Themes Directory ([wordpress.org/extend/themes/](http://wordpress.org/extend/themes/)), or building one yourself ([codex.wordpress.org/Theme\\_Development](http://codex.wordpress.org/Theme_Development)).

If you are new to WordPress you may find it helpful to review the above resources first even if you are planning to buy a theme, as they will help you to make a more informed choice.

**Themeforest.net** is the largest WordPress theme marketplace, so it's not a bad place to start your

search, but there are other smaller marketplaces and many developers selling their themes directly.

Premium themes tend to have Live Previews that you should spend a good amount of time perusing. It's often not possible to access a theme's support forum without first buying a theme, but you should try to find some user reviews and if you have any pre-sales questions, send them off to the developer. How these are responded to will often give you a good idea of the developer's approach to support.

When reading user reviews and setting your expectations about developer support, it's important

to understand the difference between legitimate support requests and customisation requests. When things don't work as they should, and are not caused by the user, you can reasonably expect the developer to help put things right. However, some users will be so frustrated by the problem they are experiencing that they'll post negative comments even if they have inadvertently caused the problem themselves. They may also expect to be able to make changes to the functionality of the theme (and receive free help with that) which fall outside of the scope of the built-in customisation options.

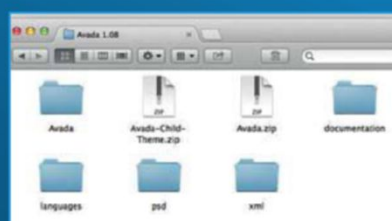
## HOW TO INSTALL A THEME

Themes in the WordPress Theme Directory can be installed by selecting Install Themes and then choosing Search, Newest, or Recently Updated, as required. Once your chosen theme is found you just need to select Install Now



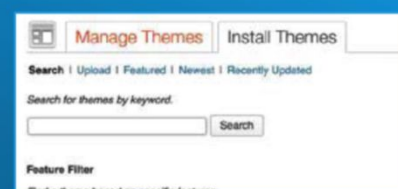
### 01 Downloading a premium theme

When you buy a premium theme you will download it in a ZIP format. You should keep this safe in case you need to use it again.



### 02 Locating the theme file

Unzip the file to typically find a folder containing a number of other files including documentation, template files and the theme itself - usually another ZIP file.



### 03 Upload and activate the theme

In WordPress, select Appearance>Themes>Install Themes>Upload. Select Choose File, select the theme file and hit Install Now. Select Activate to view the theme live.

# A HEALTHY WEBSITE IN SAFE HANDS

Given all the time and effort that you're likely to put in to your website, it really doesn't make sense to scrimp on the things that could have the biggest impact on it

## CHEAP HOSTING WILL CATCH YOU OUT AT SOME POINT

**With hosting, you get what you pay for. Approach with caution**

■ How cheap are chickens in the supermarket?

Almost certainly too cheap: it's not good for the chicken's welfare, and it's probably not good for us, but we've allowed this to happen by continuing to buy cheap chickens.

When a host wants to make more money (and who doesn't?), they can lower their prices and attract more websites. Sometimes they try to cram in as many websites as possible and inevitably at some point your website performance will suffer, often as a result of demand for another website on your server, sometimes because the server itself needs maintenance or just collapses under its own weight.

You really need to demand a higher standard of welfare for your own website if it is to remaining healthy in the long term. Even premium hosting is not that expensive now. Cloud hosting is a great way of avoiding downtime through individual server outages, or surges in demand, as your site normally lives on several servers and the cloud dynamically serves the most appropriate version of the files requested at the time they are needed.

If possible you should pick a host that specialises in WordPress hosting. At the moment in the UK there are no dedicated WordPress hosts (although it surely can't be long before that changes), but you certainly want to find out what type of services they offer, like one-click installation. Finally, if rapid, reliable support is important, you really need to do your research.

### Server requirements

- WordPress server requirements for Version 3.2:
  - PHP version 5.2.4 or greater
  - MySQL version 5.0.15 or greater
  - (Optional)(Required for Multisite) Apache mod\_rewrite module (for clean URLs known as Permalinks)
- Requirements for Older Versions

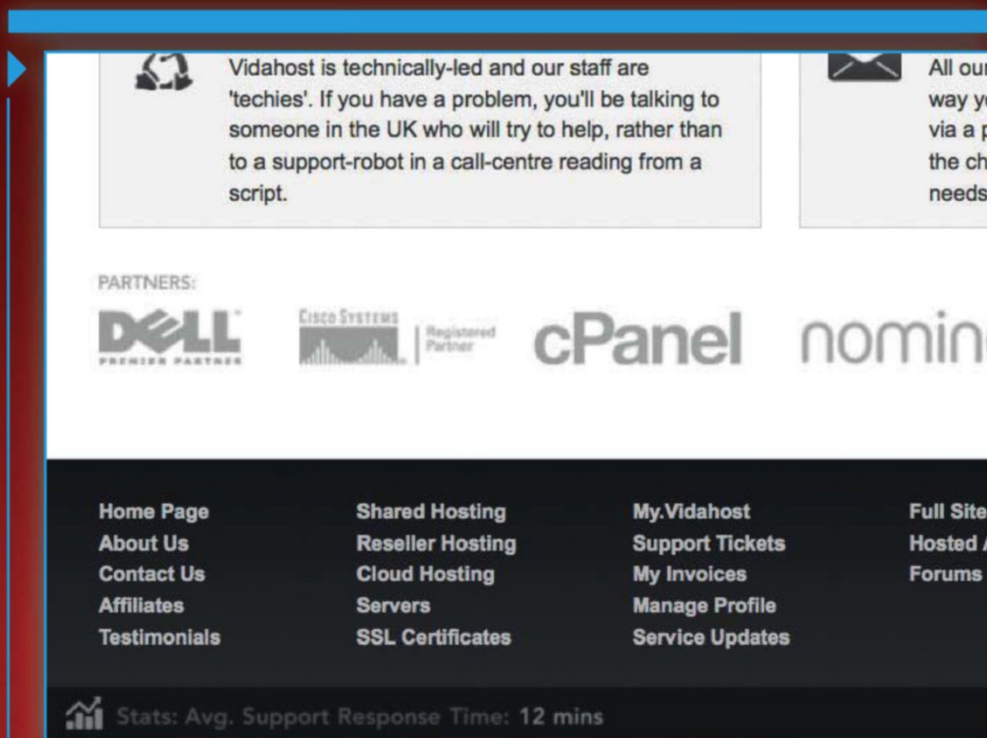
### Recommended setup

It is recommended you use a robust platform comprised of the Linux operating system, and either the Apache or NGINX web-server. Almost any server that supports PHP and MySQL will work. If your host doesn't support mod\_rewrite, you will probably be better off switching to one of the many hosting providers that do.

It is also essential that your host allows remote connections, for many of the WordPress features to work. HTTP connections, many parts of the WordPress will not function.

■ When purchasing hosting, do your research first

"You should pick a host that specialises in WordPress hosting, and find out what services they offer"



■ Picking the right web host is extremely important. WordPress users will need to look for Linux web hosting

## IS YOUR SERVER FIT FOR PURPOSE?

**Just follow the recommended advice and all will be fine**

■ Sometimes online you'll read comments like "I'm a Windows user, I know how Windows works, so I want my website to run on a web server that's running Windows because it will work better/ mean I understand it." You probably know that's tosh.

While it's possible to run WordPress on a Windows server, it's definitely not recommended.

Check this page for what the WordPress.org Codex has to say on the matter: [codex.wordpress.org/Hosting\\_WordPress](http://codex.wordpress.org/Hosting_WordPress). They make a clear recommendation to use a Linux operating system with either Apache web server or NGINX web server, so it's best to follow that advice.

When you first start setting up your WordPress website, you'll probably want to set up pretty permalinks ([codex.wordpress.org/Using\\_Permalinks](http://codex.wordpress.org/Using_Permalinks)) which mean your URLs will be neat and tidy, based on your page titles. If when you come to activate pretty permalinks your site breaks, it will be because the server isn't supporting it. With the Apache web server, the mod\_rewrite module needs to be enabled. If your host doesn't support this, switch to a host that does.

## TESTING TIMES

**If pushing out the WordPress envelope, you should probably take a regular pulse check**

■ Checking every aspect of your WordPress site is the only way you can be sure everything is okay.

If you are developing your own theme, the Codex recommends that you complete an eight-point Theme Testing Process ([bit.ly/94mGof](http://bit.ly/94mGof)).

If you're buying a premium theme, you can put the Live Preview through the W3C Markup Validation Service - [validator.w3.org](http://validator.w3.org). This can throw up errors that really won't cause you or your users any problems, but there's no harm in speaking to the developer and getting their feedback.

You may like to run speed tests on your site and compare its performance against others. Google's Page Speed tool (<https://developers.google.com/speed/pagespeed/>) offers practical advice on speeding up the performance, as does Yahoo with its Yslow browser plug-in ([yslow.org](http://yslow.org)).

Within WordPress, the Plugin Performance Profiler ([wordpress.org/extend/plugins/p3-profiler/](http://wordpress.org/extend/plugins/p3-profiler/)) will measure the performance of your plug-ins.

Finally, even with a thorough page-by-page check of your site, you may well overlook an error. So, it's always a good idea to get others to take a look at it.

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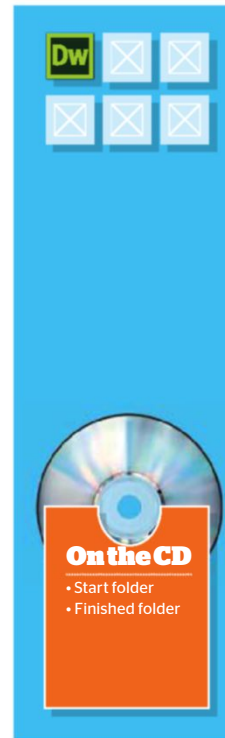
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# Creating an animation based on user scrolling

The latest craze in web design is here, and we show you how to create animations that react to how far the user has scrolled down the page

**tools | tech | trends** Dreamweaver  
**expert** Mark Shufflebottom



You've probably seen the sites we're focusing on here. They require the user to scroll down the page, and as they do so the site appears as normal, but then it might stop, other content might move in from the edges, text may animate, and so

on. The average web designer is left wondering how this is happening as it completely messes with what the scroll bar stands for. Fortunately, it's pretty easy to create this kind of content. First and foremost we need to use a jQuery plug-in called Skrollr ([prinzhorn.github.com/skrollr](http://prinzhorn.github.com/skrollr)). We've included it in the start folder, but check out the project page on GitHub. Once we have this plug-in we use the HTML5 data attribute to embed data based on how many pixels the user has scrolled down the page. To animate we simply change to CSS properties; so at 0px we might have top:30%, then at 2,000px we set top:50%. This would slide an object from off the top to the centre of the page over a scroll distance of 2,000px. It's straightforward to create, so let's dive in.

## 01 Getting started

Copy the start folder from the resource disc onto your desktop and open index.html in a code editor. In the head section add the link shown below that will display the correct typeface in the design. Take a look at the body section and you will see four comments splitting the body into four sections.

```
001 <link href='http://fonts.googleapis.
com/css?family=Dosis:500' rel='stylesheet'
type='text/css'>
```

## 02 Create the background

Just before the comment for the first section add the code as shown below. We are using the data attribute for HTML5 that stores the scroll position and what we want to happen. We are not doing anything for the first 1,400px on the display then we are going to change the background colour - we repeat the colour change at other scroll points.

```
001 <div id="bg" data-0="background-
color:rgb(70,168,189);" data-1400="" data-
1900="background-color:rgb(133,60,79)"
data-3500="" data-4000="background-
color:rgb(60,60,60)" data-4950="" data-
5250="background-color:rgb(255,142,73)"></div>
```

## 03 Style the background

Now move back to the head section and add the following code that will style up the h1 tag into the right font, but more importantly it sets the size of the

background. Later when we have added content you will see that as you scroll down the page the colour changes four times as per the colours in step 2.

```
001 <style>
002 h1{
003 color: #fff; font-size: 4em;
004 text-align: centre; font-family: 'Dosis',
005 sans-serif;
006 #bg {
007 top: 0; left: 0;
008 width: 100%; height: 100%;
009 }
010 </style>
```

## 04 Adding content

Move your cursor down to the first section comment in the body tag. Add the code after the comment as shown. This displays a clock and positions it on the screen. From 1,500 to 1,700px down the page the clock's opacity will fade out. You can see the opacity property in the data attribute.

```
001 <div class="holder" data-0="top:50%;
left:65%" data-1500="opacity:1" data-
1700="opacity:0"></div>
```

## 05 Lending a hand

The clock needs some hands on it, so let's start by adding the first. You can see in this code that we are

transforming the rotation property. This first clock hand we'll add will be the hour hand, so you will see it moves to 65 degrees in total, which is about 2.5 hours on the clock face!

```
001 <div class="arm" data-0="top:50%; left:65%;
transform:rotate(0deg);" data-1400="top:50%;
left:65%; transform:rotate(60deg);opacity:1"
data-1600="top:50%; left:65%; transform:rotate
(65deg);opacity:0"></div>
```

## 06 Hand in hand

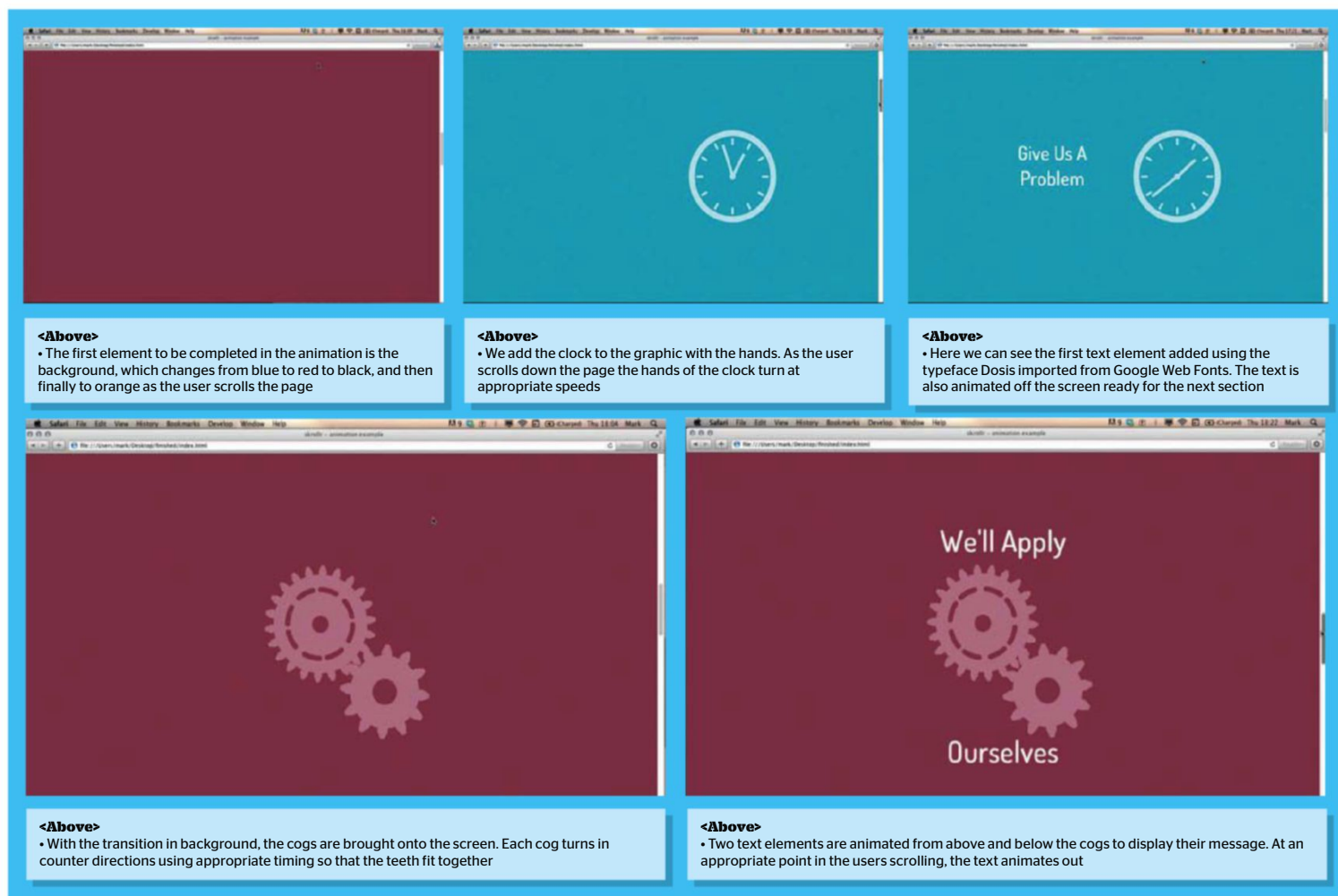
So now we add the minute hand to our clock and this time it rotates much more so that it echoes what is taking place on the hour hand. You will also notice that both hands actually fade out for the last 200px that they are on the screen. Any CSS property can be animated in this way.

```
001 <div class="arm" data-0="top:50%; left:65%;
transform:rotate(0deg);" data-1400="top:50%;
left:65%; transform:rotate(720deg);opacity:1"
data-1600="top:50%; left:65%; transform:rotate
(790deg);opacity:0"></div>
```

## 07 Style the clock

Now we'll move back into the style tags in the head section of the document. We're styling our holder that contains the clock graphic. Here we set the size of it and offset it by half of its width and height in the

## Creating an animation based on user scrolling



margins, so that we are controlling the centre position of the clock's location when we animate it.

```
001 .holder{
002   width: 300px; height: 300px;
003   margin-left: -150px; margin-top: -150px;
004 }
```

## 08 Styling the hands

Now we add the CSS for the arms of the clock. We once again set the width and height and offset it as in the previous step. More importantly here though, we set the transform origin position to the centre of the div element so that we can rotate it around it's centre point. Save and test this in the browser.

```
001 .arm{
002   width: 30px; height: 300px;
003   margin-left: -15px; margin-top: -150px;
004   -webkit-transform-origin: 50% 50%;
005   -moz-transform-origin: 50% 50%;
006   -ms-transform-origin: 50% 50%;
007   -o-transform-origin: 50% 50%;
008   transform-origin: 50% 50%;
009 }
```

## 09 Add some text

As you scroll down the page you should see the hands of the clock turning, before the clock fades out entirely. Return to the document and continue adding the following code into the first section comment of the page body. This adds some text that will appear alongside our clock. Here you can see that the text slides out to the left and fades.

```
001 <div class="text1" data-0="top:50%;
002 left:35%" data-1350="top:50%; left:35%;
003 opacity:1" data-1650="top:50%; left:-15%;
004 opacity:0"><h1>Give Us A<br>Problem</h1></div>
```

## 10 Style the text

Move back into the style tag and add the following CSS that will position the text and a wrapper for the next section of animation. Save the document and view in a web browser now. You will see the text to the left of the clock, and when the document scrolls down, the text will slide off to the left.

```
001 .text1 {
002   width: 300px; height: 320px;
```

```
003   margin-left: -150px; margin-top: -160px;
004 }
005 #cog-wrapper {
006   width: 400px; height: 400px;
007   margin-left: -200px; margin-top: -200px;
008 }
```

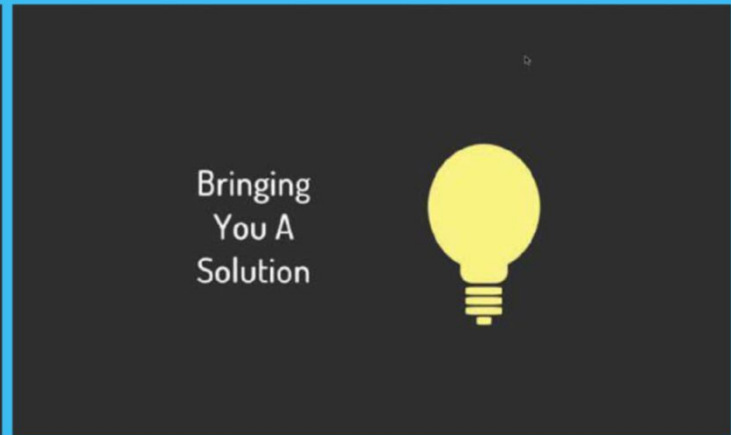
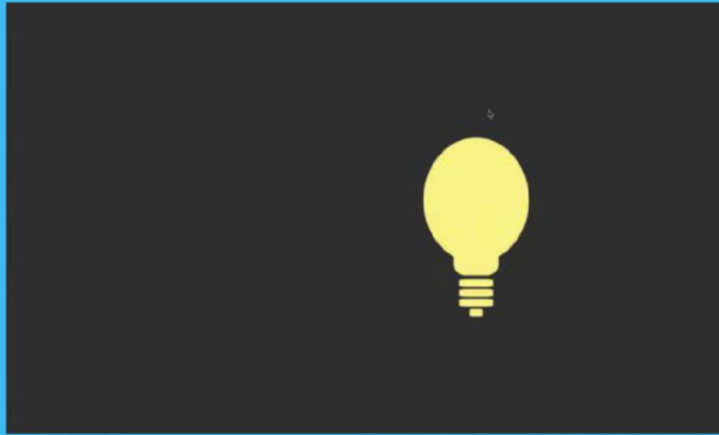
## 11 Adding a holding div

Our next section of code adds a holder that will contain two cogs. This starts to slide in from the right when the user scrolls 1,600px. It eventually slides off the left-hand side of the screen. In the next step, when we add our cogs they will need to be placed before the closing div tag shown below.

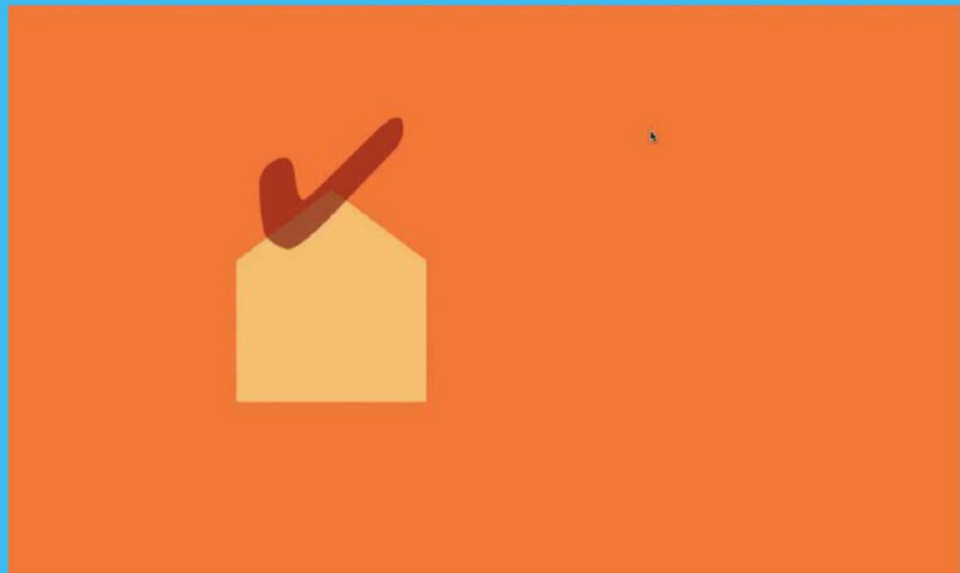
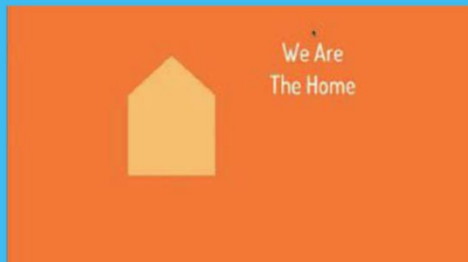
```
001 <div id="cog-wrapper" data-1600="top:50%;
    left:130%" data-1900="top:50%; left:50%"
data-3500="top:50%; left:50%" data-3800="top:50%; left:-130%"> </div>
```

## 12 Adding the cogs

Now we add two cogs inside the cog-wrapper we created in the previous step. Make sure the code here is placed inside the closing div tag of the code in the previous step. The cogs are rotating here at different

**<Above, clockwise>**

- The third section of the animation has the background turning darker to contrast the light bulb which is faded onto the screen
- The text is animated into the scene from above, then fades out to the left of the screen once the appropriate scroll distance has been reached
- The house image animates onto the screen, once the background has changed to orange. Over the top we bring in the tick image
- Appropriate text is added to give significance to the house graphic. This is brought in from above



speeds to reflect the different sizes of cogs turning against one another.

```
001 <div id="cog-wrapper" data-1600="top:50%;
left:130%" data-1900="top:50%; left:50%" data-
3500="top:50%; left:50%" data-3800="top:50%;
left:-130%">
002 <div id="cog2" data-
1600="transform:rotate(0deg);" data-3800="tran
sform:rotate(360deg);"></div>
```

**13 Placing the first cog**

Add the following code to the CSS section in the head of the document. This styles the width and height of the first cog and places it within the cog wrapper. The transform origin is moved to the centre of the cog so that it rotates correctly within the animation on screen.

```
001 #cog1 {
002 width: 250px; height: 250px;
003 margin-left: 30px; margin-top: 30px;
004 -webkit-transform-origin: 50% 50%;
```

**HTML5 Data Attribute**

The data attribute can be followed by any name, eg data-magazine="Web Designer", gives the attribute of magazine. This is designed to apply specific attributes to tags that can be used in JavaScript or CSS.

```
005 -moz-transform-origin: 50% 50%;
006 -ms-transform-origin: 50% 50%;
007 -o-transform-origin: 50% 50%;
008 transform-origin: 50% 50%; }
```

**14 The second cog**

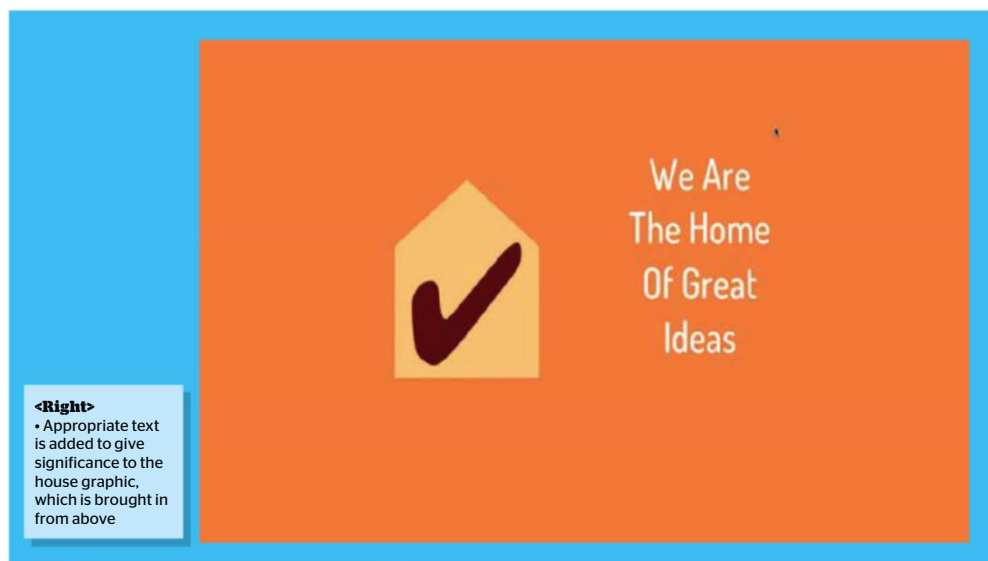
Add the CSS code for the second cog, which only differs from the first with the width and height. Now save the document and refresh your browser. You will see that as you scroll down the cogs will fly on to the screen and then fly off again. Meanwhile the cogs are rotating together in the centre.

```
001 #cog2 {
002 width: 200px; height: 200px;
003 margin-left: 200px; margin-top: 200px;
004 -webkit-transform-origin: 50% 50%;
005 -moz-transform-origin: 50% 50%;
006 -ms-transform-origin: 50% 50%;
007 -o-transform-origin: 50% 50%;
008 transform-origin: 50% 50%;
009 }
```

**15 Annotating the cogs**

Move the cursor back to the body section and place the following code before the third comment in the code. This adds two text boxes to the page, above and below the cogs on the screen. These text boxes animate in from the top and bottom of the document.

```
001 <div class="text2" data-1550="top:-20%;
left: 50%" data-1750="top:25%; left: 50%"
data-3600="" data-3800="top:-20%; left:
50%"><h1>We'll Apply</h1></div>
<div class="text2" data-1550="top:120%;
```



## Device detection

The code at the end of the document detects mobile and tablets and serves them a slightly different code library. Similarly there is also detection for Internet Explorer.

```
left: 50%" data-1750="top:80%; left: 50%"
data-3600="" data-3800="top:120%; left:
50%"><h1>Ourselves</h1></div>
```

## 16 CSS for the text

Move into the CSS section of code again and add the CSS for the text. This creates the text regions that are necessary for the text we added in the previous step. Save the document now and switch over to your browser. Refresh the page and scroll down to see the text move into the document with the cogs.

```
001 .text2 {
002 width: 50%; height: 200px;
003 margin-left: -25%; margin-top: -100px;
004 }
```

## 17 Spark of inspiration

Move the cursor to just after the third comment in the body of the document. Add the code below which sets up a light bulb to fade in after the cogs have left the screen. The bulb appropriately fades out when the user scrolls down 5,150px of page height.

```
001 <div class="holder" data-3900="opacity:0;"
data-4000="opacity:1;" data-4950="top:50%;
left:65%" data-5150="top:50%; left:125%; "></div>
```

## 18 Enlightening words

Directly under the last code we add the code shown here. This adds in the text that will display next to the light bulb. This text slides in from the top, pauses until the user has scrolled down to 4,950px then slides out to the left of the page. Save the document and refresh the browser to see it in action.

```
001 <div class="text1" data-3800="top:120%;
left:35%" data-4000="top:50%; left:35%;"
data-4950="opacity:1;" data-5150="top:50%;
left:-10%; opacity:0"><h1>Bringing<br>You
A<br>Solution</h1></div>
```

## 19 Final segment

We are now ready to move onto the final segment in the animation, so place your cursor after the fourth comment in the body code and add the div as shown below. This will slide a house image onto the screen from the left-hand side. As this is the final animation, there is no need to animate this content off the screen.

```
001 <div class="holder" data-4950="opacity:0;
top:50%; left:-15%;" data-5250="opacity:1;
top:50%; left:35%;"></div>
```

## 20 Doing it right

Once the house image has moved onto the screen, we let the user scroll down another 300px. Then we will move a tick image over the top of that to signify completion. Add the code shown below, which animates the tick fading in from above and positioning itself directly over the home icon.

```
001 <div class="holder" data-5550="opacity:0;
top:0%; left:35%;" data-5850="opacity:1;
top:50%; left:35%;"></div>
```



## Inspiration for scrolling

There is currently a slurry of sites that are using scrolling to push some very interesting boundaries in web design and front-end development. A recent addition is the Every Drop Counts site ([everylastdrop.co.uk](http://everylastdrop.co.uk)), which is a site promoting the conservation of water in the UK. As the user scrolls down the site a cartoon character is taken through an average UK day, and it shows how water is wasted and used in ways we don't expect. This is an excellent example of engaging the user through a scroll-based animation.

A little more design-led is the Zipper Galeria ([www.zippergaleria.com.br/en](http://www.zippergaleria.com.br/en)). This site scrolls as normal but as content appears on screen it animates when it becomes in focus. Really pushing the boundaries is the excellent Peugeot Graphic Novel ([graphicnovel-hybrid4.peugeot.com/start.html](http://graphicnovel-hybrid4.peugeot.com/start.html)) which features parallax and animation with beautiful visuals. Be inspired and push this format further!

## 21 Creating a home

Just before the tick animates down the screen onto the home we want there to be some text next to the home to give it some context. Add the code shown, below the last, and you will notice that this text slides down and fades in beside the home image.

```
001 <div class="text1" data-5050="top:20%;
left:65%; opacity:0" data-5350="top:40%;
left:65%; opacity:1"><h1>We Are<br>The Home</h1></div>
```

## 22 Final words

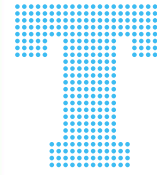
The very last element to add is the final text, which will appear just after the tick has animated. This slides up from the bottom of the screen and sits under the first text. Save the document and head back to your browser. You can refresh the page and see your animation from start to finish, in all its glory.

```
001 <div class="text1" data-5750="top:80%;
left:65%; opacity:0" data-6050="top:60%;
left:65%; opacity:1"><h1>Of Great<br>Ideas</h1></div>
```

# Create a responsive calendar with Calendario.js

It's easy to create a responsively-designed calendar that works across different devices using Codrop's latest jQuery plug-in

**tools | tech | trends** HTML5, jQuery  
**expert** Sam Hampton-Smith



The web is moving towards a more responsive design-based methodology, where a single design works across multiple devices and screen sizes. This is done by re-paginating to make best use of the available screen real estate.

This is quite straightforward to achieve with a two or three-column web layout, but it is far more difficult with something like a calendar, which would normally be laid out using <table> tags. Tables, by their very definition, aren't able to be responsive beyond the size of each cell being fluid, which makes for an impractical calendar on a small smartphone screen.

Luckily, Codrops ([tympanus.net/codrops](http://tympanus.net/codrops)) has crafted a nimble solution to this problem by using <div> tags to lay out a calendar, allowing for a more responsive approach to small screens, and some neat styling tricks to boot.

In this tutorial we'll take a look at how to configure the plug-in, add events to the calendar, and craft its responsive display.

## 01 Create the HTML

Our page features some simple HTML code ready to hold the calendar and individual days. We don't need to create the day cells themselves as these are generated by the jQuery plug-in, but we've got a <div> with an ID of Calendar that will be used to hold them all. We've also added some custom <span> tags ready to hold the navigation for moving between months, and the current month and year names.

```
001 <body>
002 <div class="container">
003 <div class="custom-calendar-wrap custom-
004 calendar-full">
005 <div class="custom-header clearfix">
006 <h2>Responsive Calendar</h2>
007 <h3 class="custom-month-year">
008 <span id="custom-month" class="custom-
009 month"></span>
010 <span id="custom-year" class="custom-
011 year"></span>
012 <nav>
013 <span id="custom-prev" class="custom-
014 prev"></span>
015 <span id="custom-next" class="custom-
016 next"></span>
017 <span id="custom-current" class="custom-
018 current" title="Got to current date"></span>
019 </nav>
020 </div>
021 <div id="calendar" class="fc-calendar-
022 container"></div>
```

```
</div>
</div>
</body>
```

## 02 Add jQuery to your page

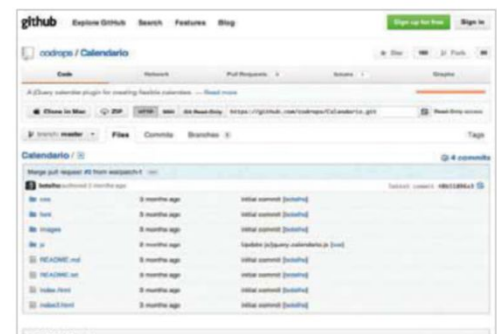
As we're using a jQuery plug-in, we'll need to add the jQuery library to our page. jQuery has recently reached version 1.9, which breaks compatibility with older versions of Internet Explorer, and also deprecates some older methods. To avoid any issues, use the migrate plug-in (found at [jquery.com](http://jquery.com)) to make version 1.9 behave like older versions.

```
001 <script src="http://code.jquery.com/
002 jquery-1.9.1.min.js"></script>
003 <script src="http://code.jquery.com/jquery-
004 migrate-1.1.1.min.js"></script>
```



## 03 Grab from GitHub

The Calendario project is hosted at GitHub, which makes it nice and easy for you to grab your own copy of all the assets you'll need for this project, including some example implementations of the plug-in. Visit [github.com/codrops/calendario](https://github.com/codrops/calendario) to download a zip of the plug-in and view release notes.



## 04 The basic call

To create your calendar, make sure you've added the jquery.calendario.js to the <head> of your page, after the calls to the jQuery library and migrate plug-in. Add a standard \$(document).ready() function to hold the rest of the code we'll need to set up the calendar and configure its opt-ins.

```
001 <script type="text/javascript"
002 src="scripts/jquery.calendario.js"></script>
003 <script type="text/javascript">
004 $(document).ready(function() {
```



## Inserting content via CSS

You may have come across the content property in CSS. This is a way to inject HTML into your document using CSS, and we've used it in this tutorial to create the icons for the previous and next month buttons.

layout of the individual cells in the calendar. You can style these to suit your own app needs, but for the purposes of this tutorial we'll keep it simple and model it after the example provided. The code from this step can be found on the resource disc.

```
004 // code will go here
005 });
006 </script>
```

## 05 Set up Calendario

Setting up Calendario is as straightforward as calling the Calendario method on a jQuery selection. We've assigned the resulting object to a variable so that we can make calls on it later, to change the month for example, and we've also added a simple argument that calls a function when a day is clicked.

```
001 <script type="text/javascript">
002 $(document).ready(function() {
003   var cal = $( '#calendar' ).Calendario( {
004     onDayClick : function( $el, $contentEl,
005       dateProperties ) {
006     } },
007   );
008 </script>
```

## 06 Add some style

We're using the sample CSS code from the first example as a starting point for our layout. Note that this includes some superfluous styles that are related to the Codrops site layout, so you can drop a lot of the styles included. The CSS is split across three stylesheets too. We'll combine ours into one CSS file.

```
001 @import url(http://fonts.googleapis.com/
002 css?family=Lato:300,400,700);
003 html { height: 100%; }
004 *,
005 *:after,
```

```
005 *:before {
006   -webkit-box-sizing: border-box;
007   -moz-box-sizing: border-box;
008   box-sizing: border-box;
009   padding: 0;
010   margin: 0;
011 }
012 /* Clearfix hack by Nicolas Gallagher:
013 http://nicolasgallagher.com/micro-clearfix-hack/
014 */
015 .clearfix:before,
016 .clearfix:after {
017   content: " "; /* 1 */
018   display: table; /* 2 */
019 }
020 .clearfix:after {
021   clear: both;
022 }
023 .clearfix {
024   *zoom: 1;
025 }
026 body {
027   font-family: 'Lato', Calibri, Arial, sans-serif;
028   background: #62bcc4;
029   font-weight: 300;
030   font-size: 15px;
031   color: #333;
032   height: 100%;
033 }
```

## 07 More styling

We've created the basic properties for the page, but we need to add some specific styles to create the

## 08 Calculate the width

A nice trick we can use to set the column width in a fluid design is the calc() method within CSS3. This allows us to hand over the calculation of width to the browser, which is very handy when we're dealing with non-round numbers. Note that it's not universally supported though – so we'll start off with an approximate number to fall back on.

```
001 /* seven days in a week, so divide the
002 overall width by 7 */
003 .fc-calendar .fc-row > div,
004 .fc-calendar .fc-head > div {
005   float: left;
006   height: 100%;
007   width: 14.28%; /* 100% / 7 */
008   width: -moz-calc(100%/7);
009   width: -webkit-calc(100%/7);
010   width: calc(100%/7);
011   position: relative;
012 } tx.render('beers.hb', ctx.beers);
```

## 09 Custom navigation

The Calendario plug-in generates its own navigation to allow us to move between months, but we've created a space to have our own navigation instead. We need to start off by telling the plug-in that we'll use custom navigation – we can do this by adding the code shown to the jQuery call at the top of our page.

```
001 $month = $( '#custom-month' ).html( cal.
002   getMonthName() ),
003 $year = $( '#custom-year' ).html( cal.
004   getYear() );
005 $( '#custom-next' ).on( 'click', function()
006 {
007   cal.gotoNextMonth( updateMonthYear );
008 } );
009 $( '#custom-prev' ).on( 'click', function()
```

# Create a responsive calendar with Calendario.js

```
008 {cal.gotoPreviousMonth( updateMonthYear );
009 } };
010 $( '#custom-current' ).on( 'click',
function() {
011 cal.gotoNow( updateMonthYear );
012 } );
013 function updateMonthYear() {
014 $month.html( cal.getMonthName() );
015 $year.html( cal.getYear() );
016 }
```



## Controlling Calendario using its API

Calendario is a jQuery plug-in, which means it returns a jQuery object on which you can perform any of the standard methods. In addition to the standard jQuery methods, there is also a set of pre-defined additional methods (getters and setters) you can call to help control your calendar. These are all detailed in the download you grabbed from GitHub, but the primary methods are listed below:

// return the currently viewed year

```
001 getYear()
```

// return numeric month currently being viewed

```
001 getMonth()
```

// return the month name currently being viewed

```
001 getMonthName()
```

// take the calendar to the specified month and year

```
001 goto( month, year, callback )
```

// goes back one month in the calendar

```
001 gotoPreviousMonth( callback )
```

// goes back one year in the calendar

```
001 gotoPreviousYear( callback )
```

// goes further one month in the calendar

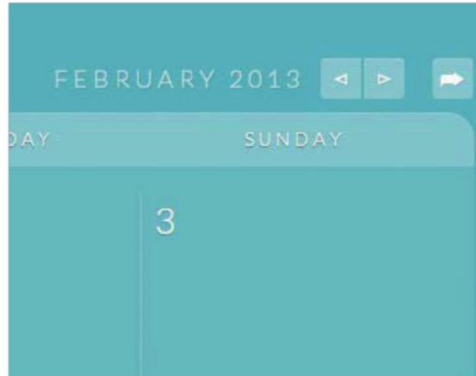
```
001 gotoNextMonth( callback )
```

// goes further one year in the calendar

```
001 gotoNextYear( callback )
```

## 10 Breaking it down

The code we've just added calls methods on the object we assigned to the cal variable when setting up the calendar. The different methods calculate the previous or next month, and displays it within the page. There's also a method for returning to today's date, and finally a function to update our custom month and year display to show the correct information once the update has happened.



## 11 Style the nav

As well as assigning the click handlers to the custom navigation, we need to style it up so the user can understand what each button does. Add the CSS shown to create this in your stylesheet, noting that we're using UTF-8 icons (find out more at [www.utf8icons.com/subsets/geometric-shapes](http://www.utf8icons.com/subsets/geometric-shapes)) as our content.

```
001 .custom-header span:before {
002 color: #fff;
003 display: inline-block;
004 text-align: center;
005 width: 100%;
006 text-indent: 4px;
007 }
008 .custom-header nav span.custom-prev:before
009 {
010 content: '\25C5';
011 }
012 .custom-header nav span.custom-next:before
013 {
014 content: '\25BB';
015 }
016 .custom-header nav span:last-child {
017 margin-left: 20px;
018 border-radius: 3px;
019 }
020 .custom-header nav span.custom-
021 current:before {
022 content: '\27a6';
023 }
```

## 12 Make it responsive

We've got a pretty good looking desktop version of our calendar now, but when you collapse your browser down to a small size (akin to a smartphone) it

becomes unwieldy to use. Let's deal with that by creating an @media query ready for some screen-size-specific CSS rules.

```
001 /* Make the calendar responsive */
002 @media screen and (max-width: 880px) ,
screen and (max-height: 450px) {
003 html, body, .container {
004 height: auto;
005 }
006 body {
007 background: #df73c4
008 }
009 }
```

## 13 Strip out styles

Our smaller size layout will use a linear view instead of stacking up the days of the month in a tabular style. This is the way HTML documents behave by default, so most of our rules within the media query should be about removing our earlier styling as much as adding new styles. Add the code shown inside the media query braces ({...}).

```
001 .custom-header,
002 .custom-header nav,
003 .custom-calendar-full,
004 .fc-calendar-container,
005 .fc-calendar,
006 .fc-calendar .fc-head,
007 .fc-calendar .fc-row > div > span.fc-date {
008 position: relative;
009 top: auto;
010 left: auto;
011 bottom: auto;
012 right: auto;
013 height: auto;
014 width: auto;
015 }
016 .fc-calendar {
017 margin: 0 20px 20px; }
```

## 14 Continue stripping

We've reset a good proportion of our calendar CSS to remove the absolute positioning, margins, and offsets, but there's still more to do. We need to get rid of the remaining styles that put our title in the top-left, the nav top-right, and some further cell-layout styles. Add the code shown inside the media query braces ({...}). The full code for this step can be found on the resource disc.

```
001 .custom-header h2,
002 .custom-header h3 {
003 float: none;
004 width: auto;
005 text-align: left;
```

## 15 Bring in some events

The last thing we need to deal with is to bring in some events to display within our calendar. This is very

straightforward, and there's a built in argument we can provide when calling the plug-in initially to provide the relevant data to the calendar. Change your initialization code to match the code shown.

```
001 var cal = $( '#calendar' ).Calendario( {
002   onClick : function( $el, $contentEl,
003     dateProperties )
004   {
005     for( var key in dateProperties ) {
006       console.log( key + ' = ' + dateProperties[
007         key ] );
008     }
009   },
010   caldata : webdesigner
011 }, ),
```

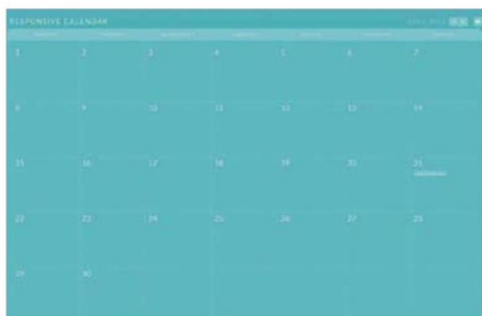
## 16 Store the data

We're going to create our data in a separate file, called data.js, and call it in at the top of the page. Once it's available, so long as the data has been formatted as a standard JavaScript object, the plug-in will use it to create events and place them within the calendar for us. Save the code shown as data.js, and include the data.js file in your page before the jQuery library.

```
001 var webdesigner = {
002   '03-23-2013' : '<a href="http://www.
webdesignermag.co.uk/">Issue 208 on sale</a>',
003   '04-21-2013' : '<a href="http://www.
webdesignermag.co.uk/">Issue 209 on sale</a>',
004   '05-20-2013' : '<a href="http://www.
webdesignermag.co.uk/">Issue 210 on sale</a>',
005   '06-19-2013' : '<a href="http://www.
webdesignermag.co.uk/">Issue 211 on sale</a>',
006   '12-25-2013' : '<span>Christmas Day</span>',
007   '12-31-2013' : '<span>New Year\'s Eve</span>'
008 };
```

## 17 Test and refine

You're now ready to test your page to check that everything is working as it should do. All being well, as you resize your browser window the calendar will responsively change to a single column layout, and if you page through the months, you'll see a series of events matching those we added to data.js. Complete the project by refining the design and making it suit your own needs!



## Code library

### Style the calendar

By using @media queries, two separate design layouts can be applied to the calendar; one for bigger screens, and one for small screens

The @media query is used to specify that when the available screen dimensions (or browser window dimensions) fall below the set limit, the enclosed set of styles will be used in addition to those that came before.

The main purpose of the media query styles is to remove the formatting introduced in the primary styles, allowing the document to flow in a linear top-to-bottom fashion.

If an row in the calendar does not contain any data the :empty pseudo class can be used to style the related div. The properties are all set to zero so that the div is not visible on the page

```
044 @media screen and (max-width: 880px) , screen and
045 (max-height: 450px) {
046   html, body, .container {
047     height:      auto;
048   }
049   body {
050     background:   #df73c4
051   }
052   .custom-header,
053   .custom-header nav,
054   .custom-calendar-full,
055   .fc-calendar-container,
056   .fc-calendar,
057   .fc-calendar .fc-head,
058   .fc-calendar .fc-row > div > span.fc-date {
059     position:     relative;
060     top:          auto;
061     left:         auto;
062     bottom:       auto;
063     right:        auto;
064     height:       auto;
065     width:        auto;
066   }
067   .fc-calendar .fc-row,
068   .ie9 .fc-calendar .fc-row > div,
069   .fc-calendar .fc-row > div {
070     height:       auto;
071     width:        100%;
072     border:       none;
073   }
074   .fc-calendar .fc-row > div {
075     float:        none;
076     min-height:   50px;
077     box-shadow:   inset 0 -1px
078     rgba(255,255,255,0.2) !important;
079     border-radius: 0px !important;
080   }
081   .fc-calendar .fc-row > div:empty{
082     min-height:   0;
083     height:       0;
084     box-shadow:   none !important;
085     padding:      0;
086   }
```

☛ When you collapse your browser down to a small size it becomes unwieldy to use. Create a @media query ready for some screen-size-specific CSS rules. ☛

# web workshop

## Minimal design photography site

inspiration [www.letstravelsomewhere.com](http://www.letstravelsomewhere.com)

1

### INSPIRATION

#### Navigational bliss

The navigation of Lets Travel Somewhere is a lovingly crafted gem. When first arriving on the site the user is presented with photography and the photographer straight away. The interface is kept to a few simple buttons – up and down – which navigate through the latest photography, drawing them straight into the content. Only later, when the user gets deeper into the site, is the full navigation given in the form of a top bar. However, most of the location content is hidden away behind a giant drop menu that separates the photography into geographic regions.

The beauty of all this is that the complex navigation is kept out of site until the user needs it.

#### A simple border

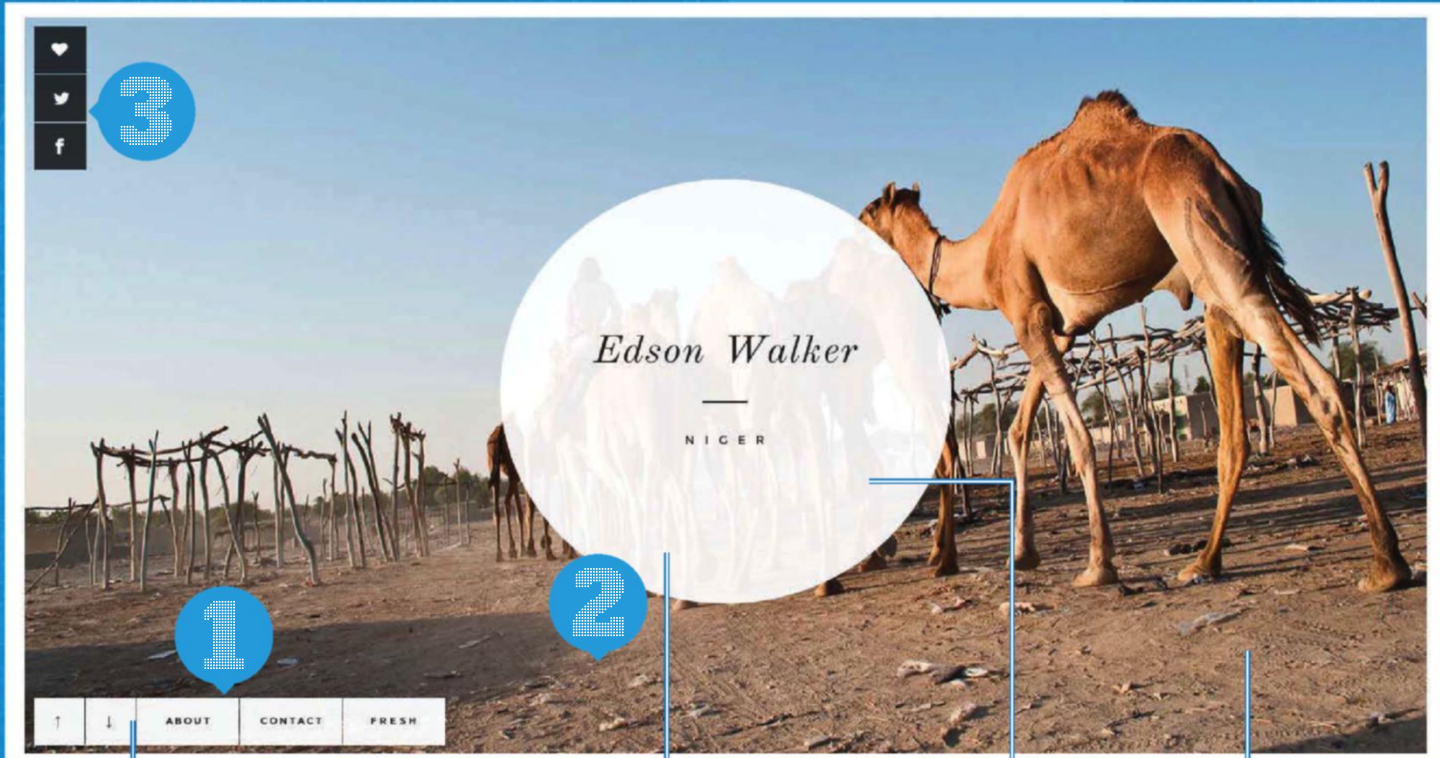
What sets the page off beautifully is the clean and elegant border around the edge of the screen. The image is measured to fit and then the white border applied dynamically so that the user gets an image served that fills their browser, presenting the image at the optimal size.

T

he luscious photography-led site Let's Travel Somewhere allows users to contribute their own images. Unlike sites such as flickr, however, LTS is aimed at showing different locations around the world,

with the premise that we will never get the opportunity within our lifetime to visit all of these wonderful locations. Photographers have to apply to be a

contributor, and then their images are displayed on the site at fullscreen to show off the beautiful shots in all their glory. The design of the site, by Ines Gamler of [purepleasuredesign.com](http://purepleasuredesign.com), is a minimal affair that measures the user's screen to allow the images to fit optimally within the space available. The site slides down to other images when they are requested by the user.



#### Navigation

The links are presented in the bottom of the design and kept to a minimum. The up and down arrows take the user through the latest photography added to the site.

#### Consistent framing

The dynamic border is added so that there is always a consistent white space around the edge of the image being presented. This effectively outlines the fullscreen images.

#### Rollover name dropping

The photographer is given credit in the centre of the screen, together with the location of the images. This is a rollover link that changes colour.

#### Vanishing act

The photo credit disappears when the user clicks to view the full range of images, and more information is given about the photographer and picture's location.

#### Use the screen real estate

The photograph is presented to take advantage of the browser window space on offer, completely filling the screen with stunning imagery.



<comment>  
What our  
experts think  
of the site

## Responsive design

"Let's Travel Somewhere is a collaborative, responsive website aiming at high-quality travel photography. Since the photos are the core element of the project, the design is focused on a minimal and flat approach, the use of elegant typefaces, and a pleasing UX on mobile devices. Yet, it's supported by carefully crafted icons/badges and subtle interactions/animations."

Ines Gamler, Pure Pleasure Design



## TECHNIQUE

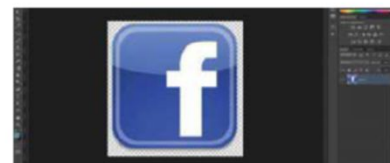
### Minimal icons

Social network icons are great for spreading the love on your site, but sometimes these icons can clash with the overall aesthetic of your design. Let's Travel Somewhere uses minimal branding for its icons, allowing them to fit within the design of its site.

#### 01 Download an icon

To start off we need an existing social media icon badge, so search Google Images for a relevant badge. Download this and open it in Photoshop or a similar image editor.

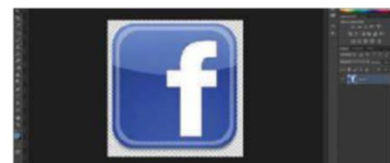
```
001 .productbox {
002 float: left;
003 height: 150px;
004 width: 500px;
005 background-color: #006699;
006 }
```



#### 02 Copy the selection

Select the Magic Wand tool and click on the core shape that defines the icon. In this example it is the 'f' of the Facebook logo. Press Cmd/Ctrl+C to copy this selection and then go to File>New.

```
001 .productbox:hover
002 {
003 background-color: #9C3;
004 }
```



#### 03 Paste the result

Photoshop will automatically create a new document the height and width of the clipboard, so click OK and paste in the icon. Scale this to the appropriate size and then save it as a transparent PNG ready for use.



## TECHNIQUE Hidden navigation panel

#### 01 Add the content

We are going to create a full-width sliding panel that will drop when the mouse is over the menu. To do this we place two div tags on the page that will represent the panel to be slid in and out, and the menu itself. Add the code shown below to the body section of your HTML document.

```
001 <div id="panel">Panel</div>
002 <div id="menu">Menu</div>
```

#### 02 Link and style

Now move your cursor to the head section of the document and add the link to the jQuery library as shown. Immediately below this we add the style sheet information that will style up the panel. We make it the full width of the browser with a height of 400px.

```
001 <script src="http://code.jquery.
com/jquery-latest.min.js"></script>
002 <style type="text/css">
003 #panel
004 {
005 background-color: #999;
006 width: 100%;
007 height: 400px;
008 position: absolute;
009 top: -400px;
010 left: 0;
011 }
```

#### 03 Style up the menu

We now add the CSS code to style up the menu and make the background white. This is so that when the panel drops in, which is grey, this will stand out as it is positioned above the grey drop panel. For brevity of code we haven't added any menu items.

```
001 #menu {
002 background-color: #fff;
003 width: 100%;
004 height: 60px;
005 position: absolute;
006 top: 0;
007 left: 0;
008 }
```

#### 04 Detecting the mouse

Now we add the code shown below directly under the style code we added in the previous step. Here we detect the position of the mouse on the y axis for the body of the document. If the mouse is greater than 400px and the panel is on the screen, we take the panel out.

```
001 var onScreen = false;
002 $(document).ready(function() {
003 $("body").mousemove(function(event) {
004 if (onScreen && event.pageY>400){
005 $("#panel").animate({'top': '-400'},
'easeOutSine');
006 onScreen = false;
```

#### 05 Finishing the code

We now add the counter if statement that checks if the panel is not on the screen, and if the mouse is less than 60px (the height of the menu). If it is then we slide the menu out of the screen. Save this document now and test in the browser to see it in action.

```
001 }
002 else if (!onScreen && event.
pageY<60){
002 $("#panel").animate({'top': '60'},
'easeOutSine');
003 onScreen = true;
004 }
005 });
006 });
```



#### Menu panel

Using jQuery it's easy for us to create a menu that drops in and out based on the position of the cursor. Here the menu panel drops in when the mouse is over the top 60 pixels of the document.

# web workshop

## Build hover and transition effects

inspiration [substrakt.co.uk](http://substrakt.co.uk)



The rise of CSS3 has seen a whole new collection of methods for creating cool and contemporary styling that used to need jQuery at its side to be achieved. The introduction of CSS transforms and transitions means that CSS is now far more capable of creating animation effects without the need for any external code. CSS transitions could be construed as hover effects on steroids, but that would be doing them an injustice as they have so much more to offer. Transitions can add a smooth transition from one state to another. Adding opacity into the mix allows the transition to go from a solid colour to an translucent state, or the opposite effect can be achieved just as easily. This is a technique seen on the homepage of the Substrakt site with

the addition of increasing the background image size. The opacity can be played with to create the right amount in the start and finish states.

Hover effects, it seems, have been around since HTML was invented and they are still a popular technique. The beauty of hover effects is that they can be manipulated to appear in a host of guises. They are relatively quick to build and offer good browser support.

The typical approach for creating navigational elements is to use an unordered list and add the hover effect on the active link. Nothing wrong with this, but to go more HTML5-friendly the <nav> tag can be styled to achieve much the same effect. This requires less code and is easy to display horizontally or vertically. Adding an underline, as demonstrated in the Substrakt site, is again a simple but effective hover effect using only CSS.

### Open

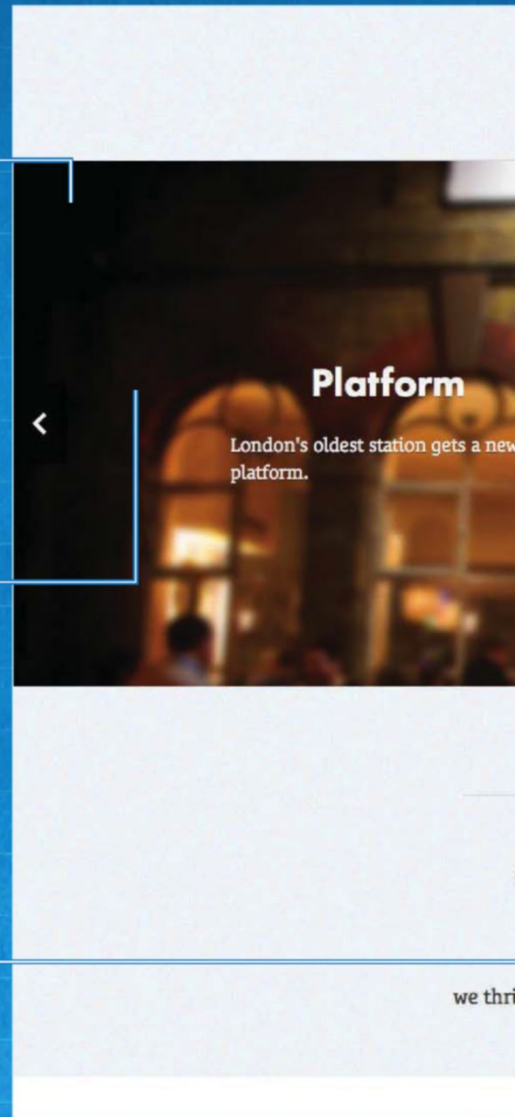
When the site loads, the image slider is hidden from view. After a quick delay, the page opens to reveal the image slider.

### Slider

An image slider is used to present a specially selected collection of projects which animate at timed intervals or can be operated manually.

### Web fonts

Web fonts are called into action across the site with the notable addition of an ampersand using the Baskerville font family.



### Cut the clutter and keep it responsive

"Too many websites are cluttered. We wanted to eschew this, instead focusing on a minimal, open layout that showcases our client work: no chaff, no fluff. A device-agnostic, responsive design with CSS transforms used to enhance user interactions."

**James Braithwaite, creative director, Substrakt**

<comment>  
What our experts think of the site

## 1 Technique

### Quick CSS3 fade effects

Fade effects on the hover state are very popular and the use of CSS transitions removes the need for any user coding. In the following example a <div> tag contains a background image with styled text overlaying it. The initial state uses a high opacity to give the merest hint of the image. The hover effect, applied to the <header> tag, uses a low opacity to view the image when the cursor rolls over the associated text.



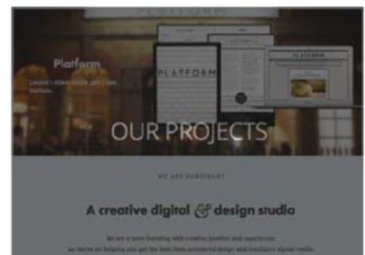
#### 01 Create container

Create a <div> tag to contain the background image and set height and width to match the latter. Now add the background image in the tag:  
background-image: url(escape.jpg);

```
001 .fade {  
002 opacity: 0.95;  
003 transition: opacity 1s  
004 ease-in-out;  
004 -moz-transition: opacity  
005 1s ease-in-out;  
005 -webkit-transition:  
006 opacity 1s ease-in-out;  
006 background: #333;}
```

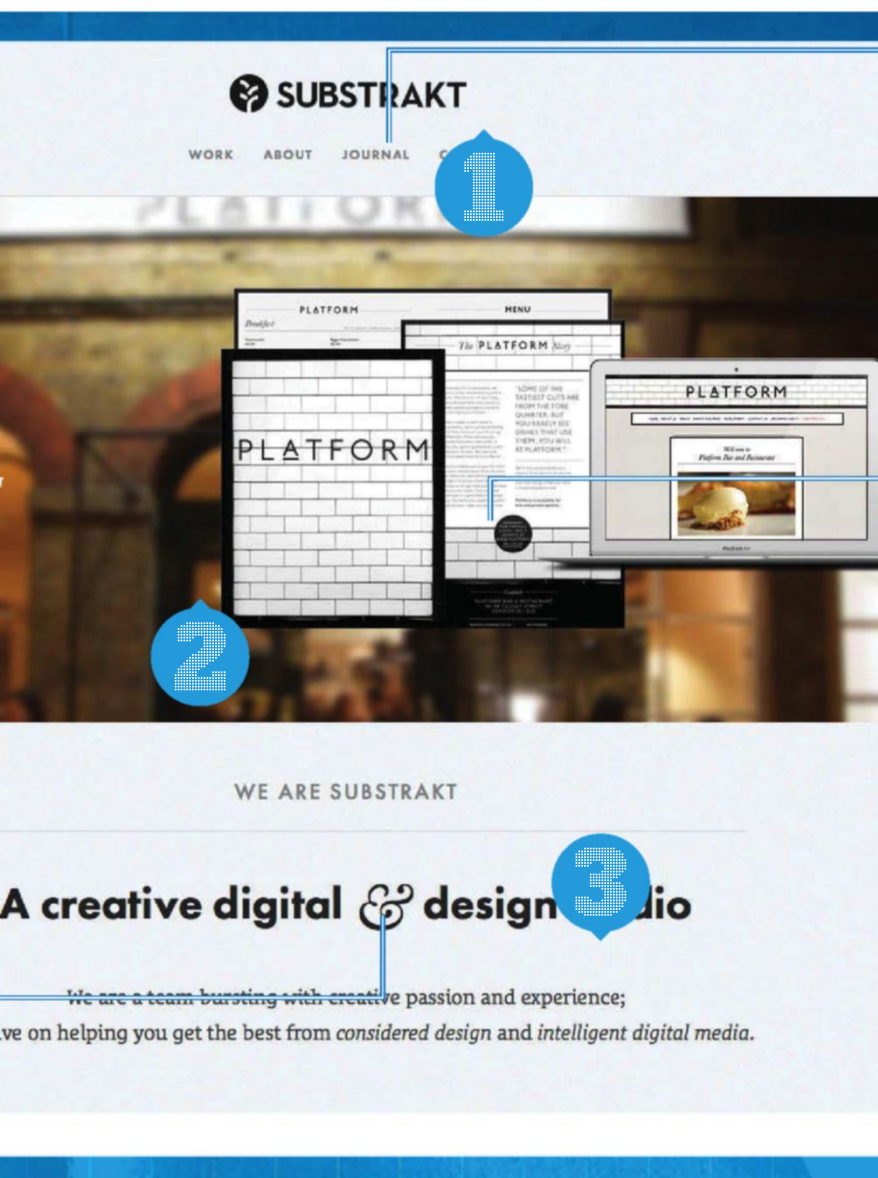
#### 02 Fade class

Now to create the fade class that determines colour, length of transition and starting opacity. The opacity ranges from 0-1, set to .9 to start with a dark background. Adjust speed of fade (eg 1s).



#### 03 Hover effect

Set the fade hover opacity to 0 or 0.1 to ensure the background image gets seen. Use the <h2> tag to add text and add the fade class to the tag (see disc for full code).

**Hover effect**

The navigation menu at the top of the homepage uses a hover effect on the text. The Journal menu adds an underline in a contrasting colour to the text.

**Transition**

Information and news about the agency comes to life when the cursor rolls over the associated image. CSS adds a transparency and transforms the image size.

**Add a glow**

The social media links on the Substrakt homepage use a glow effect on hover. This can be achieved by use of the text-shadow property. This has four values: x-axis, y-axis, blur radius and colour. Set the x and y axis to zero and blur to 5px. Choose the hexadecimal code for the glow colour...  
h2 { text-shadow: 0px 0px 5px #FF3300; }

3

**Technique****Add custom underlines to links**

An underline is often added to text links to emphasise the current link. The Substrakt site takes the basic concept and adds a hover effect. The hover effect changes the text colour and adds a styled underline.

```
001 <nav>
002 <a href="#">WORK</a>
003 <a href="#">ABOUT</a>
004 <a href="#">JOURNAL</a>
005 <a href="#">CONTACT</a>
006 </nav>
```

**01 The <nav> tag**

To create the navigation base, the semantic <nav> tag is going to be used rather than an unordered list. The first step is to add a set of <nav> tags in the body and then include the links that are to occupy the menu.

```
001 nav a {
002 padding: 10px 0px 20px 0px;
003 margin: 0px 30px 0px 0px;
004 text-decoration: none;
005 color: #999;
006 font: 800 14px Open Sans;}
```

**02 Style link**

By default links will sit horizontally, so the first step is to add a right margin to add space. To create the space between the link and underline, bottom padding needs to be added. To finish, style the text and set text-decoration to none to remove underline.

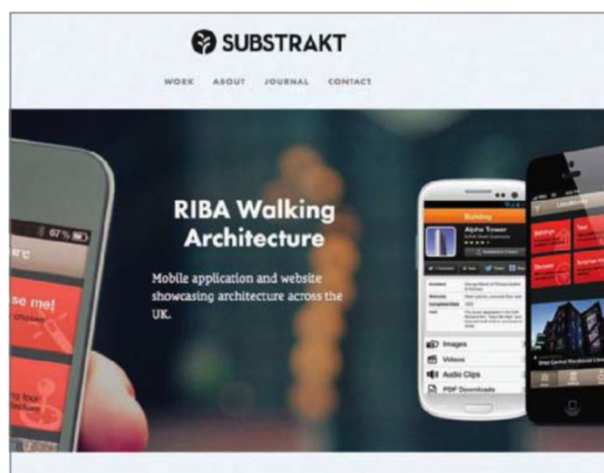
**03 Add underline**

The final step is to add the underline on hover. This is achieved by adding a bottom border, nav a:hover {border-bottom: #000 solid 3px;}. A designer has the option to modify all the settings - eg colour, width, style - to suit.

2

**Inspiration****Inspirational and imaginative**

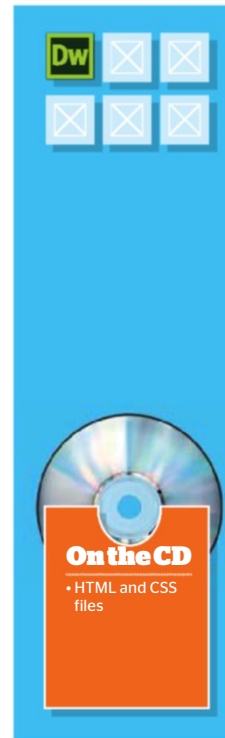
Image sliders are a popular addition to sites. The Substrakt slider stands out from the crowd due to a little imagination and a great combination of images and fonts. The slide is a layered affair that uses blurred background images to create the canvas and adds layers to create a sumptuous and engaging experience. Simple animations bring the text and in-focus image onto the canvas when the directional arrows are clicked.



# Interactive image captions using CSS3

CSS is now a fully-featured interactive tool that can add visual panache to your pages without the need for writing JavaScript

**tools | tech | trends** HTML editor (we used Dreamweaver, but any will do), CSS editor (we used Dreamweaver, but any will do)  
**expert** Sam Hampton-Smith



Not long ago, the web was a very static place to develop and deliver page designs. If you needed interactive elements to provide user feedback or aesthetic niceties, your options were limited to script, or a plug-in such as Flash.

With the advent of CSS3 there's a lot you can do without the need for any script at all. Take the humble image caption, for example. It provides useful information about the subject, but isn't always required. Perhaps you have a photo gallery where you want to showcase the images, but also provide additional information if the visitor is interested. By creating captions that only appear with mouse-overs, you can still showcase the photography.

The old way of doing this would have involved JavaScript, but here we'll show you how to use just CSS3. Not only will they appear when the mouse moves over the image, but we'll also use a number of CSS3 effects to make the caption transition into view, adding a nice bit of polish to the user interaction.

## 01 Create your HTML

We're using a basic HTML5 document with a simple unordered list as the method to deliver our image gallery. We'll show one image at a time, and animate through the list of images so that over time a different image will appear. The code for this step can be found on the resource disc.

## 02 Add a stylesheet

We're going to leave the HTML alone throughout, with all our changes happening in a stylesheet. Let's create that now by saving a new plain text document into the styles folder as 'screen.css'. Create a link to it from the HTML document with the code shown below.

```
001 <link rel="stylesheet" type="text/css"
href="styles/screen.css" />
```

## 03 Basic properties

We'll start by giving our article some basic styling to create a general look and feel of a photo gallery. Add the CSS rules below to your stylesheet document to set this up, and preview in your browser. We'll be making iterative changes throughout, so you'll need your browser on hand a lot to test during this tutorial.

```
001 body {
002 margin: 0;
003 padding: 0;
004 background: #333;
005 font-family: helvetica, arial, sans-serif;
```

```
006 color: #fff;
007 font-size: 62.5%;
008 }
```

```
001 #container {
002 position: relative;
003 width: 800px;
004 margin: auto;
005 overflow: hidden;
006 }
```

```
001 #container h1 {
002 font-weight: normal;
003 font-size: 4em;
004 text-align: center;
005 text-transform: uppercase;
006 text-shadow: 2px 2px 0px #000;
007 }
```

```
001 #container ul#photogallery {
002 margin: 0;
003 padding: 0;
004 height: 530px;
005 width: 3000px;
006 overflow: hidden;
007 }
```

```
001 #container ul#photogallery li {
002 margin: 0;
003 padding: 0;
004 list-style: none;
005 position: relative;
```

```
006 width: 760px;
007 }
```

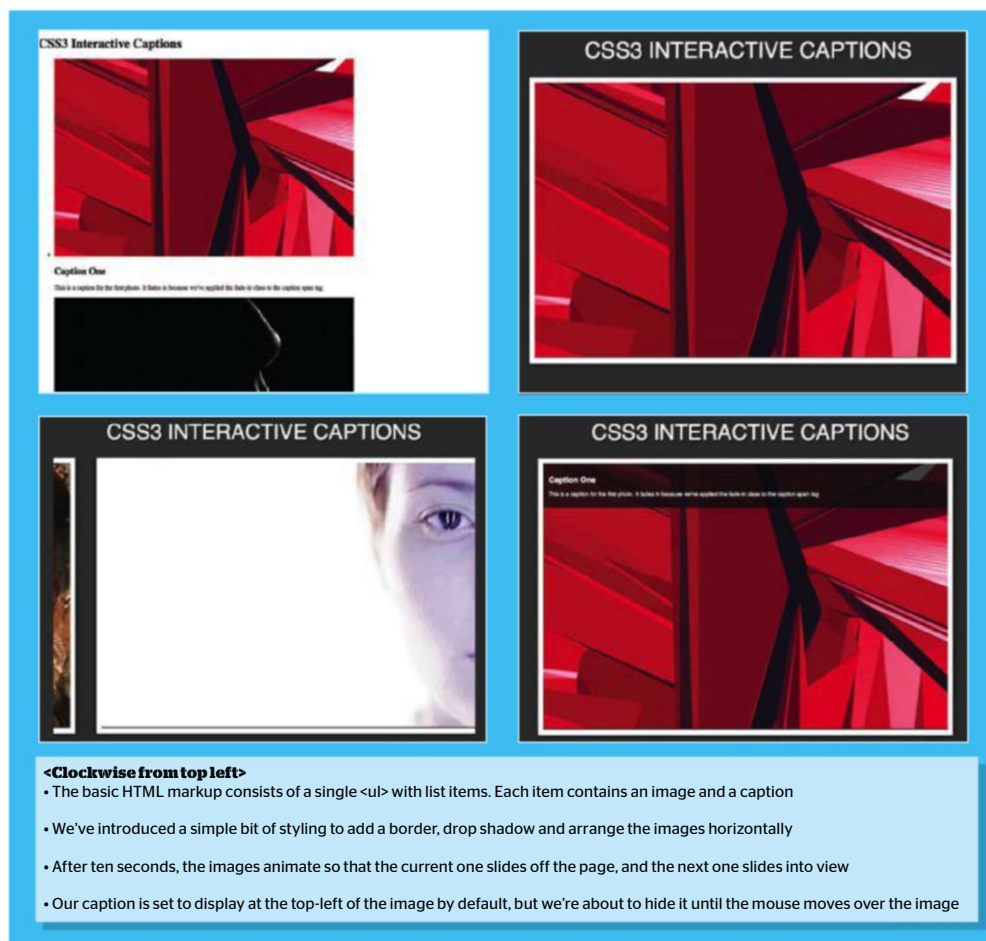
## 04 Add a border

To make our gallery of images feel a little bit more complete, we'll add a border to our images and a drop-shadow. This is entirely optional, and depending upon your own page design you might choose to treat your images in a different way - do what works for you!

```
001 body {
002 margin: 0;
003 padding: 0;
004 background: #333;
005 font-family: helvetica, arial, sans-serif;
006 color: #fff;
007 font-size: 62.5%;
008 }
```

```
001 #container {
002 position: relative;
003 width: 800px;
004 margin: auto;
005 overflow: hidden;
006 }
```

```
001 #container h1 {
002 font-weight: normal;
003 font-size: 4em;
004 text-align: center;
005 text-transform: uppercase;
006 text-shadow: 2px 2px 0px #000;
```



```
007 }
001 #container ul#photogallery
002 {
003   margin: 0;
004   padding: 0;
005   height: 530px;
006   width: 3000px;
007   overflow: hidden;
008 }
```

```
001 #container ul#photogallery li {
002   margin: 0;
003   padding: 0;
004   list-style: none;
005   position: relative;
006   width: 760px;
007   border: 10px solid #fff;
008   box-shadow: 0px 0px 10px #000;
009 }
```

## 05 Float them left

We're using an overflow: hidden container to hide everything apart from the first image in the stack, but we'll also use a little bit of script simply to animate the position of the stack so that we see the images changing over time. As the images will slide from right to left, we need to arrange our images horizontally.

```
001 body {
002   margin: 0;
003   padding: 0;
004   background: #333;
005   font-family: helvetica, arial, sans-serif;
006   color: #fff;
007   font-size: 62.5%;
008 }
```

```
001 #container {
002   position: relative;
003   width: 800px;
004   margin: auto;
005   overflow: hidden;
006 }
```

```
001 #container h1 {
002   font-weight: normal;
003   font-size: 4em;
004   text-align: center;
005   text-transform: uppercase;
006   text-shadow: 2px 2px 0px #000;
007 }
```

```
001 #container ul#photogallery
002 {
```

```
003   margin: 0;
004   padding: 0;
005   height: 530px;
006   width: 3000px;
007   overflow: hidden;
008 }
```

```
001 #container ul#photogallery li {
002   float: left;
003   margin: 0;
004   padding: 0;
005   list-style: none;
006   position: relative;
007   width: 760px;
008   margin-right: 40px;
009   border: 10px solid #fff;
010   box-shadow: 0px 0px 10px #000;
011   margin-bottom: 20px;
012 }
```

## 06 Add jQuery

Although we're not using any script to create the captions and their animation, we do need to use a little bit to create the automatically animating image gallery. We'll use the jQuery library for this, as it makes it very simple to put in place. Grab the library from [jquery.com](http://jquery.com) and add it to your page.

```
001 <script src="scripts/jquery.js"></script>
002 <script src="scripts/captions.js"></script>
```

## 07 Create a sliding script

With jQuery ready and waiting, add another script to your page and add the code shown to create the sliding effect. This works simply by waiting for ten seconds, and then sliding the entire <ul> element to the left the right amount to bring the second image into view. Once it's visible, we'll remove the first image, place it at the end of the stack and reset the margins.

```
001 $(document).ready(function(){
002   slidewidth = $("ul#photogallery li:first").width();
003   s = setInterval(function(){
004     $("ul#photogallery").stop().
005     animate({marginLeft:0-slidewidth-40},1000,function(){
006       $("ul#photogallery li:last").
007       after($("ul#photogallery li:first"));
008       $(this).css({marginLeft:0});
009     },1000);
010   });
```

## 08 Test and review

We're ready to test our page, so fire up your web browser and open the page. You should see a single

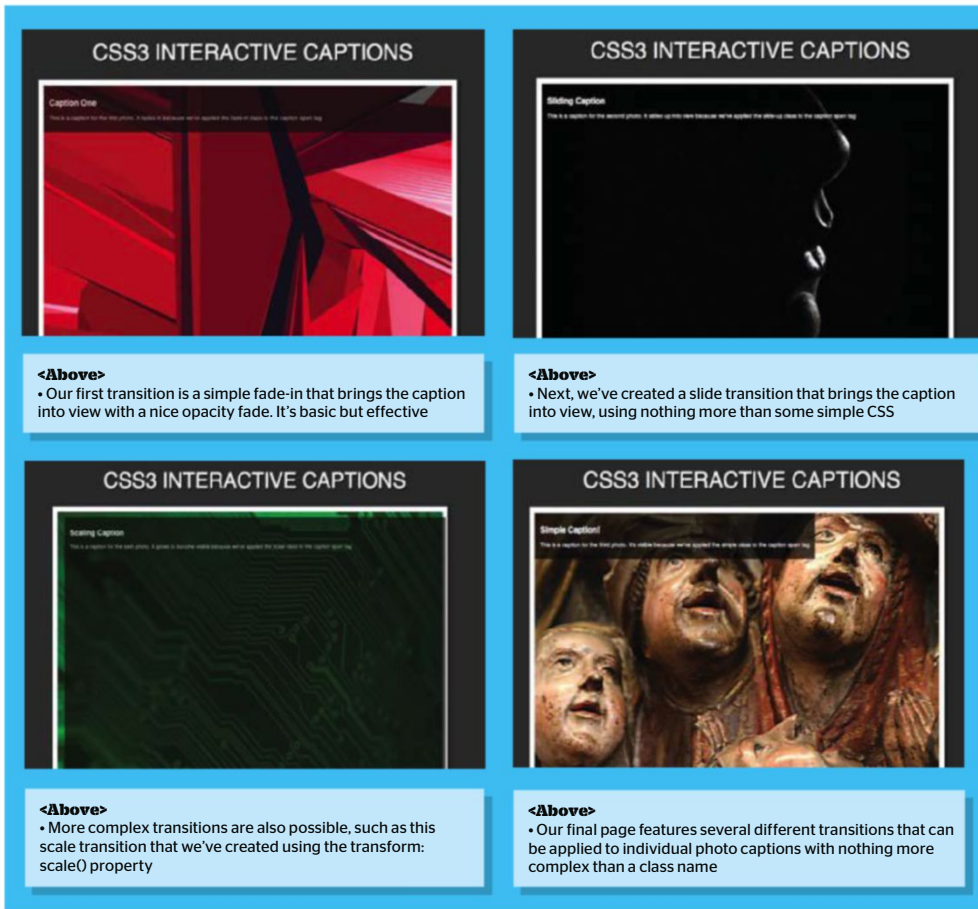


image with caption, ready for our CSS transitions. After ten seconds, the image should slide out to the left, and be replaced with the next one in the stack.

```
001 #container ul#photogallery li span.
caption
002 {
003 position: absolute;
004 top: 0;
005 left: 0;
006 height: auto;
007 display: block;
008 width: 740px;
009 padding: 10px;
010 background: rgba(0,0,0,0.7);
011 }
```

## 09 Hide the captions

We need to hide our captions until the mouse moves over them. We'll use a standard set of styles for the captions, and then apply a second class that determines the animation type that will be applied to the caption, ensuring that the right animation fires for each. Add the code shown to create the basic caption rules.

```
001 #container ul#photogallery li span.
caption {
002 position: absolute;
```

```
003 top: 0;
004 left: 0;
005 height: auto;
006 display: block;
007 width: 740px;
008 padding: 10px;
009 background: rgba(0,0,0,0.7);
010 }
```

## 10 Transition properties

In order to make the captions animate into view rather than simply appear, we need to apply the CSS transition property. This is gathering more mature support in common browsers, but we still need to apply vendor prefixes to be certain that we've picked up on all browser variants.

```
001 -webkit-transition: all 300ms ease-
out;
002 -moz-transition: all 300ms ease-out;
003 -o-transition: all 300ms ease-out;
004 -ms-transition: all 300ms ease-out;
005 transition: all 300ms ease-out;
```

## 11 Create a basic fade

The most basic reveal will be a simple fade into view. To create this, we'll need to add two new rules to our stylesheet. The first sets up the initial size, position

## CSS and 3D limitations

Some browsers don't support CSS 3D transitions yet, so keep in mind that the more sophisticated effects may be limited to users with up-to-date browsers that support these effects.

and opacity of the caption. The second provides the final state, and is set to use the pseudo :hover class.

```
001 #container ul#photogallery li span.fade-in
{
002 display: block;
003 opacity: 0;
004 }
```

```
001 #container ul#photogallery li: hover span.
fade- in {
002 opacity: 1;
003 }
```

## 12 Test again!

Now that we've got our first style in place, it's time to test again to make sure the transition is working and the caption is fading into view successfully. Reload your page in the browser, and try moving your mouse over the image. Remember that this rule will only apply to the photo with the fade-in class attached.

## 13 Sliding in

The next style of reveal we'll create will slide the caption into view. This is a really versatile effect that can be used in lots of different ways. For our version we'll simply slide it down into view from the top of the image, but you could play with different starting positions to suit. Add the code shown to set up the final state.

```
001 #container ul#photogallery li: hover span.
slide- up {
002 -moz-transform: translateY(0px);
003 -o-transform: translateY(0px);
004 -webkit-transform: translateY(0px);
005 transform: translateY(0px);
006 }
```

## 14 A starting point

As with the fade-in transition, we'll also need to create a starting position to animate from. Add the code shown to create this starting position, and then test in your browser again to make sure that this second transition is working as intended. Adjust the start and end positions to suit!

```
001 #container ul#photogallery li span.slide-up
{
002 display:      block;
003 -moz-transform: translateY(-200px);
004 -o-transform:  translateY(-200px);
005 -webkit-transform: translateY(-200px);
006 transform: translateY(-200px);
007 }
```

## 15 A simple option

We've now got two nice transitions that work well, but there's a lot more we can do! Let's create an even simpler transition than the fade-in option. Add the code below to create the final position and properties for our simple caption option. Again, this will only apply to captions with the class of simple added.

```
001 #container ul#photogallery li: hover span.
simple
002 {
003 width:      740px;
004 height:     auto;
005 overflow:   auto;
006 }
```

## 16 Starting rule and tests

By this point you're probably starting to get the idea that we need to create a starting set of properties to counter the final properties. Add the code shown and then test again to ensure everything is working as it should do. You've now got a total of three different transition effects!

```
001 #container ul#photogallery li span.simple
002 {
003 display:      block;
004 width:        100px;
005 height:       20px;
006 overflow:     hidden;
007 }
```

## 17 Go large

We need to repeat this simple two-step process for each transition we'd like to introduce. Let's add a full-size caption option that covers the entire photo. You can choose how to bring this into view, but we've opted for a basic slide similar to the slide transition we created earlier. Add the code shown to set this up.

```
001 #container ul#photogallery li span.full {
002 display:      block;
003 width:        740px;
004 height:       480px;
005 opacity:      0;
006 -moz-transform: translateY(-500px);
007 -o-transform:  translateY(-500px);
008 -webkit-transform: translateY(-500px);
009 transform: translateY(-500px);
010 }
011 }
```

```
001 #container ul#photogallery li: hover span.
full {
002 -moz-transform: translateY(0px);
003 -o-transform:  translateY(0px);
004 -webkit-transform: translateY(0px);
005 transform: translateY(0px);
006 opacity:      1;
007 }
```

## 18 Scale into view

As well as simple offset and fades, CSS3 transform properties allow us to set the scale and rotation of elements on the page. We can use this to create a scaling effect for our captions. Let's set that up by adding a zoom-up transition. We'll start by creating the initial state for the caption. Add the code shown.

```
001 #container ul#photogallery li span.scale {
002 display:      block;
003 width:        760px;
004 height:       500px;
005 opacity:      0;
006 -moz-transform: scale(0.1);
007 -o-transform:  scale(0.1);
008 -webkit-transform: scale(0.1);
009 transform: scale(0.1);
010 }
```

## 19 The final state

Next, we need to create the final state. You'll notice that we've used the transform: scale() property to set the initial state to a low percentage, and the same property to create the final full size version. The effect this produces is a zoom-up. Test to ensure it's working, keeping in mind cross-browser support isn't as good for transform as other CSS properties.

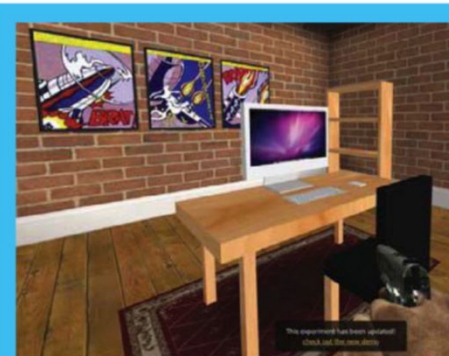
```
001 #container ul#photogallery li: hover span.
scale {
002 -moz-transform: scale(1);
003 -o-transform:  scale(1);
004 -webkit-transform: scale(1);
005 transform: scale(1);
006 opacity:      1;
007 }
```

## 20 Rotate in 3D

If your visitor is using a modern browser such as Safari or Chrome, we can use the same transform property to rotate our caption into view in 3D space! This effect uses the same basic principles as the other transitions we've created to this point, but it won't work at all in older browsers.

## 21 Rotated captions

We're setting up our caption to be behind the image, so that when the image rotates around the caption is revealed. To do this we'll need to ensure our caption sits behind the image, rotated about its Y axis to face away from the screen until it becomes visible.



## Understanding CSS 3D transformations

The CSS3 specification has been adapted over time to include some nifty 3D transformation options. These have been widely adopted by Apple on its iOS platform, leading to a wide userbase of compatible devices and browsers.

The basic principle is that elements can exist in a pseudo 3D environment, being rotated or positioned in 3D space using the transform property. Not all browsers support this yet though, so you need to be careful to avoid using 3D effects for anything that relies on the effect to communicate essential information.

You can see some excellent tech demos of CSS 3D transformations at the websites below, or check out some of our past issues which have featured tutorials on getting started with CSS3D effects.

### David DeSandro

[24ways.org/2010/intro-to-css-3d-transforms](http://24ways.org/2010/intro-to-css-3d-transforms)

### First-person shooter

[www.keithclark.co.uk/labs/3dcss/demo](http://www.keithclark.co.uk/labs/3dcss/demo)

### VR

[developer.apple.com/safaridemios/vr.php](http://developer.apple.com/safaridemios/vr.php)

### Safari showcase

[developer.apple.com/safaridemios/showcase/transitions](http://developer.apple.com/safaridemios/showcase/transitions)

## Get inspired

A lot of the effects we've created with CSS in this tutorial can be seen on the web already. It's worth keeping up to date with websites like [www.webdesignermag.co.uk](http://www.webdesignermag.co.uk) to get inspiration and new ideas for your own transitions.

## 22 Rotate the item

Finally, to bring it into view, we need to rotate the entire item so the image disappears and the caption appears. This works because of the code we added in the previous step. Test to make sure it works, and tweak the effect to suit your own page design and preferences.

# Using embedded tweets on your site

Increase your site's social media connectivity by adding and styling embedded tweets

**tools | tech | trends** Dreamweaver, Visual Studio, jQuery  
**expert** Pete Simmons



Embedding Tweets on your site is a great way of adding context to a post, or showing the source of information on a subject you may be talking about.

Twitter makes it very easy to do this, providing a simple copy and paste system, we will take a look at this

method, and how you can customize certain style elements, as well as ways to customise the raw tweet data using CSS and jQuery's getJSON method to update a div layer and not the built in widget.js rendering system.

One thing to note is that your tweet will not continue to show on your site if it is deleted by the author, so do not rely on this method if you are planning on embedding tweets that are not likely to stick around.

You may notice that Instagram media is not displayed when using the Embed Tweet option. This is not anything to do with your code being faulty, it is caused by Instagram removing support for embedded images in favour of users visiting the official Instagram site to view media. For more information about this issue, have a read of this blog [bit.ly/WMbNht](http://bit.ly/WMbNht).

## 01 Create a doc

The first thing to do is create a new HTML file in Dreamweaver and save it to a new folder in your htdocs folder. Then add the following line within the head section, to enable the latest minified version of jQuery. We will not be self-hosting jQuery for this, but you can if you want to.

```
001 <script src="//code.jquery.com/jquery.min.js"></script>
```

## 02 Get embed code

Open up a browser and visit a Twitter profile. Hover over the three dots on a tweet, and select Embed Tweet. You will be given a preview as well as the embed code. Paste this code into the body section of your HTML file.

```
001 <blockquote class="twitter-tweet"><p>A new favorite: John Farnham - You're the Voice (DJ Terrorfall Remix) by @<a href="https://twitter.com/terrorfall">terrorfall</a> <a href="http://t.co/9RgUqqK3" title="http://soundcloud.com/terrorfall/john-farnham-youre-the-voice">soundcloud.com/terrorfall/john-farnham-youre-the-voice</a></p><p>— Pete Simmons (@terrorfall) <a href="https://twitter.com/terrorfall/status/298147375724240896">February 3, 2013</a></blockquote>
```

## 03 Viewing the tweet

If you run the code now, you will see two things happen. First, the raw data of the tweet is outputted for a

short time, then the widget.js file parses the data and renders a styled version of it, complete with media preview. In above case we have the full SoundCloud track available from within the tweet.

## 04 Width and height

If your tweet is to be placed within another element of your site, you can specify both width and height options. The widget.js file will see these values and scale the embed to the correct size. Add the width variable to the blockquote HTML as follows; the same applies for height.

```
001 <blockquote class="twitter-tweet" width="650">
```

## 05 Dark Theme

You can change the entire look of the tweet you are embedding by adding the dark theme variable to your blockquote. This is good for a quick change of style, but we'll look into changing individual colours later on. Add the following variable to your blockquote for the dark theme.

```
001 <blockquote class="twitter-tweet" data-theme="dark">
```

## 06 Aligning blockquote

Another variable you can pass into your blockquote code is align. Like any other HTML align property, it will set the position of your blockquote to either left, right, or centre. This is done with the

standard HTML align attribute, like so. This does not affect the content of the embedded tweet.

```
001 <blockquote class="twitter-tweet" align="right">
```

## 07 Changing link colours

The final styling option we can apply changes the colour of any hyperlinks that are displayed within the tweet. This can be done on individual tweets or set as a global variable. To achieve this, add the following code to your blockquote along with a standard HTML color code.

```
001 <blockquote class="twitter-tweet" data-link-color="#cc0000">
```

## 08 Combining options

Your blockquote code can take in multiple options - just add them one after the other to combine effects. The below example will give you both the dark theme and red links, and it will also align the box to the centre of the page. You will still be limited to a select few options, but that will change later.

```
001 <blockquote class="twitter-tweet" data-link-color="#cc0000" data-theme="dark" align="center" width="600">
```

## 09 Setting global colours

If you are planning on embedding multiple tweets on one page, you can quickly set global options using meta tags. Adding the below will achieve this. Something to keep

**Embed this Tweet**

Add this Tweet to your website by copying the code below. Learn more

```
<blockquote class="twitter-tweet"><p>A new favorite: John Farnham - You're the Voice (DJ Terrorfall Remix) by @terrorfall</p></blockquote><script async src="//platform.twitter.com/widgets.js" charset="utf-8"></script>
```

☒ Include media

**Preview**

Pete Simmons @terrorfall

A new favorite: John Farnham - You're the Voice (DJ Terrorfall Remix) by @terrorfall [soundcloud.com/terrorfall/john...](https://soundcloud.com/terrorfall/john-farnham-youre-the-voice-dj-terrorfall-remix) on #SoundCloud

7:14 PM - 03 Feb 13

SoundCloud @SoundCloud

**<Top left>**

- The Embed Tweet link on any Twitter profile will provide the full embed code to copy and paste

**<Top right>**

- On clicking the Embed Tweet link, you will be shown a preview of how the tweet will look, along with media

**<Bottom left>**

- Our embedded tweet running in an empty webpage, but it can be placed within an existing template

**<Middle right>**

- Passing variables into the embed code allows us to alter the entire colour scheme very easily

in mind if you are using multiple embeds, is that you will only need to add the widget.js file to your page, once.

```
001 <meta name="twitter:widgets:link-color"
content="#cc0000">
002 <meta name="twitter:widgets:theme"
content="dark">
```

## 10 Tweet ids

We can also pull out the actual data of the tweet and display it exactly as we want using jQuery's `getJSON` option. In order to do this, you will need to know the ID of a tweet, obtain this by clicking on details on the Twitter timeline, the URL of the page, will contain a numerical ID.

```
001 $(document).ready(function() {
002 $('#map') gmap({ 'center':
```

```
003 endlocation, center,
'zoom': endlocation.
zoom, 'disableDefaultUI':true, 'callback':
004 function() {
005     themap = this;
006 });
```

## 11 getJSON quirks

`getJSON` is a jQuery method that allows you to pull JSON data from a URL and output the variables however you want to. There is a problem with requesting data from a different server to your own, but you can get around this by adding `"&callback=?"` to the end of any URL you request.

## 12 Getting data

The following code will request the same tweet we have been displaying and create an alert with the raw

## ?callback=? within the URL

As mentioned before, the `?callback=?` text is required in all `getJSON` calls, made to another server, this forced jQuery to use the JSONP call method.

HTML. Don't forget to add the `"&callback=?"` to the end of the URL or you won't get any data. Place this code anywhere in the body of your page.

```
001 <script type="application/JavaScript">
002 $.getJSON("https://api.twitter.com/1/
statuses/oembed.json?id=298147375724240896&call
```

## Embedded Tweets

View What's new

Updated on Fri, 2013-02-22 16:00

### Overview

Embedded Tweets make it possible for you take any Tweet and embed it directly in to th website. Tweets display with expanded media like photos, videos, and article summaries, retweet and favorite counts. Views embedded. Tweets are interactive and enable your use and reply, retweet, favorite all directly from the page.

This document explains how to use Embedded Tweets on your website, and also how to Embed Tweets in to their applications through our API. Here's an example:



How to Embed a Tweet on your Website

## Delving into the Twitter API to extend functionality

If you want to take the use of Twitter implementation on your website even further, it is probably a good idea to have a read through of the Twitter API ([dev.twitter.com](http://dev.twitter.com)). You'll be able to get a more in-depth idea about how the platform works, and how you can access data that is not available through the oEmbed framework.

A lot of the data that is surfaced through the Twitter API requires authorization. In order to obtain this, it is worth reading up on 3-legged OAuth authentication. This method allows you to obtain an authorisation token through a sign-in method on your website, you are silently redirecting users to the [twitter.com](http://twitter.com) domain and passing back a token that you can then call to get more in-depth data.

```
001 rss {
002   max-width: 960px;
003   margin: 0 auto;
004   font: 1em/1.5 'Helvetica
Neue', sans-serif;
005 }
006 channel > title {
007   font-size: 2em;
008   display: block;
009 }
```

### Pete Simmons

A new favorite: John Farnham - You're the Voice (DJ Terrorfall Remix) by @terrorfall soundcloud.com/terrorfall/joh... on #SoundCloud

— Pete Simmons (@terrorfall) February 3, 2013

### <Above>

• We need to ensure that the <script> tag is not included within the HTML JSON

## Implementing into a site

Due to the small size of the code in this tutorial, it makes it quite easy to implement it into an existing website framework.

```
back=?", null, function (result) {
003   alert(result.html);
004 });
005 </script>
```

### 13 Setting up divs

We'll now add some div layers to our HTML. These will hold content from the Twitter data we get via getJSON. Add the following above your script, but within the <body> section of your HTML. This will give you a pretty good idea to what information we will be displaying.

```
001 <div id="tweeter"></div>
002 <div id="tweet"></div>
003 <div id="metadata"></div>
```

### 14 Get tweeter

Within the function(result) section of our JavaScript, remove the alert(result.html); and add the following code. This will pull out the name of the tweeter and place it within the tweeter div layer. We will make this a clickable link that goes to the authors profile.

```
001 <function (result) {
002   $("#tweeter").html("<h1>" + result.
author_name + "</h1>");
003   };
```

### 15 Add profile link

Now we have the author name, we can add a link to their profile, by calling the author\_url property within our JSON. We will modify the previous step to make the author name clickable, but you can add this to a separate div if you want to.

```
001 $("#tweeter").html("<h1><a href='" +
result.author_url + "'" target='_blank'">" +
result.author_name + "</a></h1>");
```

### 16 Add the tweet

As per the previous step, we will add the content of the tweet into our tweet div. Add the following code under the previous step, ensuring that you stay within the function(result) curly brackets. You'll notice that the tweet is rendered rather than just displaying the text. We will address this in the next step.

```
001 $("#tweet").html("<h2>" + result.html + "</h2>");
```

### 17 Omit script

In order to stop our tweet data from being rendered through widget.js, we need to ensure that the <script> tag is not included within the HTML JSON. Fortunately, Twitter makes this really easy, and it's simply a case of adding &omit\_script=true to our URL within the getJSON call. Remember to keep &callback=? in place.

```
001 $.getJSON("https://api.twitter.com/1/
statuses/oembed.
002 json?id=298147375724240896&omit_
script=true&callback=?", null, function
(result) {
```

### 18 Add metadata

The last piece of data we will retrieve is the link to the original tweet. We do this in the same way as the previous steps, but call the result.url attribute. We then use the following code to add a hyperlink to our metadata div. Again, this code is added within the getJSON function.

```
001 $("#metadata").html("<a href='" + result.
url + "'" target='_blank'">Link to Tweet</a>");
```

### 19 Why no media?

As mentioned in the intro to this article, the Twitter oEmbed method provides a quick way for us to embed a tweet on our site. We have limited flexibility when it comes to what data is sent to us. If you want to display media without using the standard Twitter embed method, take a look at GET statuses/show/id in the Twitter API.

### 20 Styling our tweet

We'll now add some style to our raw tweet data. To start we'll create a new CSS file and add a link to it in the

A new favorite: John Farnham - You're the Voice (DJ Terrorfall Remix) by @terrorfall [soundcloud.com/terrorfall/joh...](http://soundcloud.com/terrorfall/john-farnham-youre-the-voice-dj-terrorfall-remix) on #SoundCloud

7:14 PM - 03 Feb 13

**<Top left>**

- The alignment of the tweet can also be controlled by passing through certain variables

**<Top right>**

- Custom link colours can also be passed through. This is easier than styling through CSS

**<Bottom right>**

- The raw data of our tweet being displayed as a browser alert window. Taking this data allows us to customise further

**<Bottom left>**

- Although we are taking the raw data, the tweet is still embedded because the widget.js file is being added

**<Middle>**

- Our finished custom styled tweet, complete with bounding box, custom link colours and drop-shadows

The page at localhost says:

```
<blockquote class="twitter-tweet"><p>Last night Keith did not disappoint on the choice of shoe or drink! Still the best Mexican in London, and... <a href="http://t.co/fuQ2acEQqQ" title="http://instagr.am/p/WBsE8bmFmg/">instagr.am/p/WBsE8bmFmg/</a></p>&mdash; Pete Simmons (@terrorfall) <a href="https://twitter.com/terrorfall/status/304869093452955648">February 22, 2013</a></blockquote><script async src="//platform.twitter.com/widgets.js" charset="utf-8"></script>
```

OK

<head> section of our HTML. Go ahead and create a blank .css file and save it in your development environment as 'style.css'. Then add the following line within the <head> section of your document.

```
001 <link rel="stylesheet" type="text/css"
href="style.css">
```

## 21 Body and links

It's now time to add some actual style. The following code will style the background and the links. Add this into your style.css file. You can customise this however you like, but this will give you a starting point. Installing Firebug in either Chrome or Firefox will allow you to tweak CSS on the fly.

```
001 body {
002   font-size: 11pt;
003   line-height: 1.5em;
004   font-family: 'Trebuchet MS', sans-serif;
005   color: #909090;
006   background-color: #999999;
007 }
008 a {
009   color: #cfcfcf;
010   text-decoration: underline;
011 }
```

## 22 Headings and tweet

The final step is to add some finishing touches to the tweet data. The following code will place the tweet within a bordered box, as well as adding a drop-shadow.

If your browser is out of date, the drop-shadow property might not work. Download the latest version of Chrome.

```
001 h1,h2,h3,h4 {
002   font-weight: normal;
003   color: #eaeaea;
004   text-shadow: 0 2px 1px #181818;
005 }
006 h2,h3,h4 {
007   font-size: 1.5em;
008   margin-bottom: 1em;
009   color: #ffffff; }
010 #tweet {
011   width: 600px;
012   border: #000000 2px solid;
013 }
```

# web workshop

## Apply individual styles on links

inspiration **bree.com**

**M**inimal sites that utilise light backgrounds lend themselves to splashes of colour and well-procured photography. This adds style, which in turn adds interest to a page. The Bree site pulls off this technique well with plenty of white space and subtle tones interspersed with well-constructed and well-shot imagery. It offers splashes of colour

with its product shots, but also adds subtle tones via its navigation menu. The hover effect is called into action, switching from a standard background shade to a block of colour with a change of text colour. Nothing particularly radical, but where it gets interesting is that each has a different colour background when the hover state is called into action.

### Transparent images

The photography and product shots in the image slider use the technique where elements of the image overlay the element in which it is contained. This is achieved with the help of a transparent PNG image. To complete the scene, there is precise placement of the background colour or image.

## 1 INSPIRATION Fashionistas

Fashion has its own persona, and a subjective nature, but presentation of fashion and its associated products, especially on the web, often follows the rule of less is more. This helps create an air of elegance and allows designers to strategically place product photos so they offer maximum impact. In this case, fashion is the product so that is the key feature the site needs to showcase. Bree follows this format very well and complements the style and photography with a contemporary, rounded font in the form of Pluto Sans. Bree makes great use of the Extra Light option, using upper-case characters to emphasise the important headlines.

The screenshot shows the Bree website interface with several annotations:

- 1** **ENTHUSIASTIC ABOUT IMPECCABLE DESIGN**: Points to the main headline.
- 2**: Points to the main image slider area.
- 3**: Points to the search field.
- Menu opacity**: Points to the top navigation menu, stating: "The menu in the top-right corner, with icons, uses RGB opacity to make the links grey. On rollover, the opacity is removed to reveal the icon's true black shade."
- Search style**: Points to the search field, stating: "The default styling for the search field is subtle and fits in perfectly with the overall design ethic. On rollover the background transforms to white with a border for added emphasis."
- Show and hide**: Points to the main menu, stating: "The main menu uses nth-child rollover effects (see technique), and when onclick is activated, a submenu slides into view and toggles between being visible and hidden."
- Fade effect**: Points to the "MORE" button, stating: "A translucent white cover is called into action when the cursor is placed on the box. The color property and the RGB settings have been adjusted to create this effect."
- Border effects**: Points to the "SPORTSWEAR MELBOURNE" box, stating: "What's Hot uses a border effect on rollover to emphasise the currently selected product. A subtle grey is used to keep with the toned-down ambience of the site."
- Image slider**: Points to the image slider, stating: "The image slider uses a centrally placed image set to a fixed width. The slider controls are responsive, sitting at the edge of the browser window - both left and right."



**<comment>**  
What our  
experts think  
of the site

## White space and great photography

"The minimalist nature and great use of white space are two key elements found on a lot of eCommerce sites. This focuses the user's attention on the core subject of the site - the product. The Bree site does a great job of utilising these elements and adds in great product photography and subtle tones to complete the experience."

Steve Jenkins, Web Designer features editor

3

## TECHNIQUE

### HTML5 form validation

HTML5 has added a whole new selection of input types for forms. These give better input control and validation and include date, time, email, telephone, URL and placeholder. This also cuts down on code and works on mobile.

#### SEE WHAT YOU CAN FIND

Start searching...

#### 01 Placeholder text

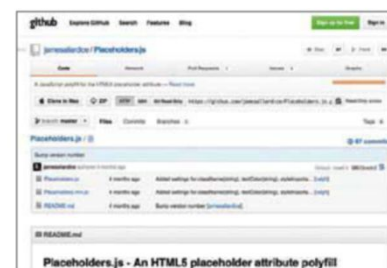
HTML5 introduced a number of new input types for forms that help cut down on code and validation. Placeholder text is the text that appears inside an input field, such as 'Type here' or 'Start searching'.

```
<h3>SEE WHAT YOU CAN FIND</h3>
<p><input type="text" placeholder="Start searching..."></p>
```

#### 02 Add text

The input type for placeholder text is the popular choice for adding text. Add the following code.

```
001 <input type="text"
placeholder="Start
searching..."></p> to add the
placeholder text. To style
simply include input {} and do
as you would with standard
CSS.
```



#### 03 Placeholder fallback

Some older browsers do not support HTML5 placeholder text. To compensate for the lack of support and provide fallback, use Placeholders.js - an HTML5 polyfill that doesn't require jQuery. Get more info at [bit.ly/HdUMqD](http://bit.ly/HdUMqD).

2

## TECHNIQUE

### Create custom colour links with nth-child

#### 01 Create navigation

The first step is to create the navigation system to be used on the site. For this, the <nav> tag will be employed. Add a set of opening and closing <nav> tags. Now populate the menu with the necessary text for the links. Wrap each link in an <a> tag and use the hash symbol to create an active link that does not redirect.

```
001 <nav>
002 <a href="#">NEW</a>
003 <a href="#">LADIES</a>
004 <a href="#">MENS</a>
005 <a href="#">COLLECTION</a>
006 </nav>
```

#### 02 Styling <nav> tag

The navigation system is going to include a top and bottom border and will define the font size and weight, plus any margins and padding. To save on space and add more efficient CSS, use the shorthand option. The font size has been set to 32px, but this can be modified to suit; the weight has been set to 200 to make it as light as possible.

```
001 nav {
002 margin: 10px;
003 float: left;
004 font-size: 32px;
005 font-weight: 200;
006 padding: 10px;
007 border-top: 1px solid #EEE;
008 border-bottom: 1px solid #EEE;
009 }
```

#### 03 Style links

The next step is to style the links inside the <nav> tags. By default, active text links are assigned an underline; to remove this, the text-decoration value is none. To space the links evenly a right margin is added. Adjust the size to suit the navigation system. Finally, apply padding to expand the link (use the same as for the <nav> tag).

```
001 nav a {
002 margin: 0px 20px 0px 0px;
003 text-decoration: none;
004 color: #999;
005 padding: 10px;
006 }
```

#### 04 Text colour

The text colour is determined via the 'nav a' selector. This is the colour that is used when a link is in a non-active state. As a hover background colour is going to be used, the text needs to be modified to work effectively on a darker background. For this the link hover state has the colour text set to white.

```
001 nav a:hover
002 {
003 color: #FFF;
004 }
```

#### 05 Individual background colour

To create a different background colour for each link, nth child is needed. The property will need to include the parent element and the link hover option with nth-child added. The number in the nth-child relates to each link, with the first being number 1, the second link being number 2, and so on. To complete the styling, pick the desired colour code.

```
001 nav a:hover:nth-child(1) {
002 background: #ffc60a; }
003 nav a:hover:nth-child(2) {
004 background: #d5b692; }
005 nav a:hover:nth-child(3) {
006 background: #394a97; }
007 nav a:hover:nth-child(4) {
008 background: #6f7072; }
```

# FASHION

NEW LADIES MENS

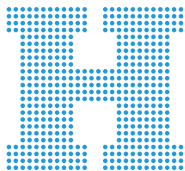
#### Bespoke link colours

Employing the nth-child selector allows the links to have individually coloured hover-states

# web workshop

## Illustrative web styles

inspiration <http://www.andyward.co.uk/>



heavily illustrated layout has become a real hit with creative web designers. Such appeal is attributed to the limitless imagination and creativity applicable within your design projects.

Creating blueprints for sites normally means that you will have to go against standard images, layouts and simple textures – thereby offering regular fresh challenges.

There is a no-holds-barred approach to style, which includes examples such as vector, photo-illustration, real world and mixed media. Designers are even able to experiment and renew retro looks, such as Web 2.0 and 8-bit. These are applied in subtle and inventive ways.

In essence, creating illustrative websites enables designers to have

fun. This also extends to the use of colour, which is equally liberating. Vibrant tones are often encouraged to enhance what is essentially a very playful style.

From a commercial point of view, even though numerous subcategories exist, illustration itself isn't likely to be going away any time soon. Therefore it has become a web trend that clients and audiences can trust as it continues to be contemporary.

In a nutshell, illustration gives the viewer a wholly memorable experience when visiting your website. Applying relative styles gives your website the personality to stand out from the crowd, which is always one of the most important factors.

In this Web Workshop we will be showing you how to produce exciting styles to achieve this aim using Adobe Photoshop.



### Play with Photoshop

"Photoshop provides a host of options that can produce illustrative looks. Some that are used more than others include the Pen tool, Layer Style options such as Gradient Overlay and Drop Shadow, and naturally the Type tool. Of course, there are plenty more. Just experiment and get creative."

Adam Smith

<comment>  
What our  
experts think  
of the site

### 3D type

There are several site elements that successfully reinforce a heavily illustrated layout. 3D illustrated type for one, which looks extra exciting with the vibrant colours used.

### Emphasis the brand

Adding an illustrative style makes complete sense when the brand itself is an illustrator (artist). Image thumbnails emphasis the creative header we see here.

### Site colours

Apart from the images and 3D type, as well as link colours, the site incorporates as much (white) negative space as it can, so not to assault the senses.



## 1 TECHNIQUE

### Pen Path illustration

The Pen tool and its two settings, Shape and Path, become essential when creating digital illustrations inside of Photoshop. Here we look at how to apply the Path setting to create open paths. Add a stroke to these to create line work. Of course, this means we also must set the correct brush settings, which we also reveal to you. We finish this effect by using our brush to colour our line art.



#### 01 Draw open paths

Create a new layer called 'Lines' then use the Pen Path tool to create an illustration outline. You can use paths to create line detail too. Just Cmd/Ctrl-click to close a path, then start a new one.



#### 02 Set brush style

Select Paths Panel > Create New Path and add line areas to one layer. Select Brush Presets > Brush Tip Shape (Angle at 45°, Roundness at 12%). Activate Shape Dynamics from the same options.



#### 03 Paint in colour

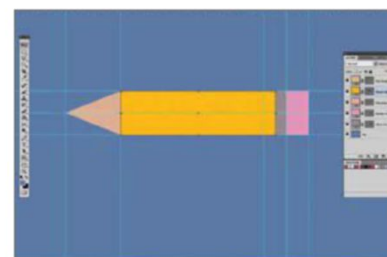
Shape Dynamics Size Jitter = 100, Control = Pen Pressure, Min Diameter 35, Angle Jitter 5. Cmd-click path, Stroke Path. Use same brush (10% Opacity, Shape Dynamics off) to add colour.

3

## TECHNIQUE

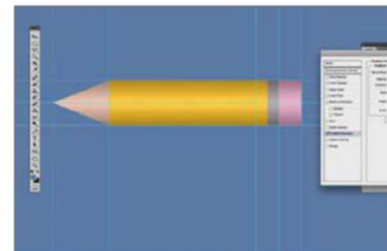
## Shapes, gradients and stroke lines

When creating vector illustration, there are three must-use tools to produce realism. These simulate 3D effects, creating form, surface and contour. We show you how to achieve convincing looks.



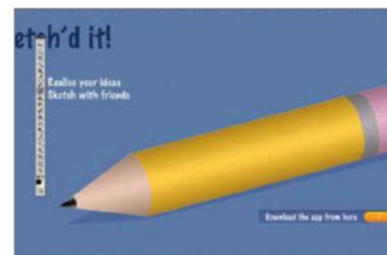
## 01 Pen Shape

Using the Pen Shape tool, we can create custom shapes. Always activate the Rubber Band options for better control of Bezier curves. Always layer shapes separately too.



## 02 Gradient overlays

Add these as a Layer Style or on a new layer, using the Gradient tool. Apply Radial Gradient to circular shapes, Reflected Gradient to cylindrical. Tweak colour, opacity and angle degree for the correct 3D look.



## 03 Stroked edges

Cmd-click a shape layer thumbnail and create a new layer above it. Select Paths>'Make work path from selection'. Cmd-click new path, select Stroke. Add small px white stroked outlines using layer masks.



## Illustrated header

This site's header scrolls through illustrated projects, never letting up in enforcing this as the cornerstone of the site's design.

## Font style

Not to over-egg effects, other font types are simple. This is so the page does not look corny, which in all honesty would discredit this designer's brand.

## Creative consistency

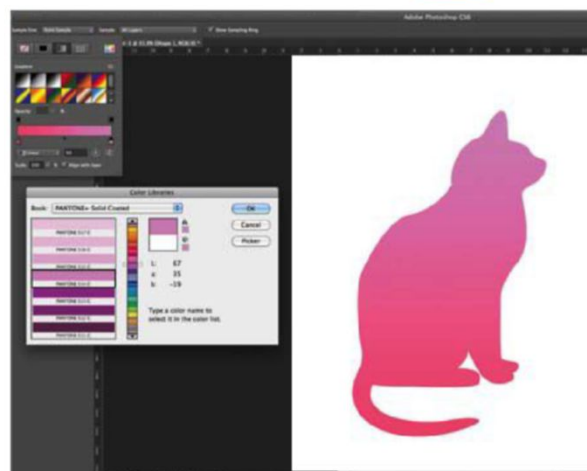
This website includes links to a blog and a store site, where the illustrative style from the homesite transfers across. This means that consistent branding is applied to all platforms and the websites never steer clear of exciting illustrative looks. It's clearly a brand to be proud of, thus prompting audiences to acknowledge it.

2

## INSPIRATION

## CS6 Vector shapes

Clean bold vector styles are in fashion, with many sites sporting vector-drawn mascots. You may think that Adobe Illustrator would be your choice tool, with its vector engine offering you resizable elements. But if you don't want to make the jump from Photoshop to another software package, you needn't. Version CS6 of Photoshop now includes its own vector engine, applied to Shape and Type tools.



# Make Waves on the Web

Find out how to make simple generative music with the new web audio API and turn your web browser into a digital composer

**T**he new web audio API - it's so new it's still being developed - gives you the tools you need to add intelligent interactive sound to your HTML5

pages. The good news is you can now do almost anything you want with audio, literally building synthesizers, sample players and drum machines into your webpages, capturing and processing audio from a microphone, or even linking audio and video together to trigger sounds from a webcam. The bad news is that many of the introductory web tutorials skip over some of the key details. And while there are some superb demos and examples available online, it's hard to work out what the code is doing if you don't understand the basics. So this tutorial is pitched midway between the two. It shows you how to load, play and process multiple samples to create an atmospheric audio bed that would work well for a game or a sci-fi series promo site. It also includes some simple tricks to make the music different every time the page loads. But it doesn't try to build a complete modular synthesizer or recording studio in your browser. Let's get started...

## 01 Make a start

Web audio projects start life as just a blank HTML5 page. We will use a free editor called Komodo Edit from Active State ([www.activestate.com](http://www.activestate.com)) on this project because it has some useful editing features that help you to write code. Select File>New File from Template..., choose the HTML5 template and then click Open.

## 02 Button it up

You'll see a bare-bones HTML document. Since this is an audio demo, we'll skip the usual !DOCTYPE details - you can always add them later - and add some basic page furniture and supporting functions. We'll add a couple of buttons to start and stop the audio, with dummy function references.

## 03 Funky functions

As you can guess from the name, the Play and Stop buttons call functions that start and stop the audio. We'll add placeholders for the functions for now - there's a lot more code to come later in this tutorial. Add paired <script></script> tags and sketch in the function bodies between them.

## 04 Ready for initialisation

Before we can do anything with web audio, we have to create a container called a context. You can create a context anywhere, but it's good to have it as soon as you need it. So we will add a window

initialisation function that runs when the window loads, like this:

```
001 window.addEventListener('load', init,
false); function init() {}
```

## 05 Lacking context

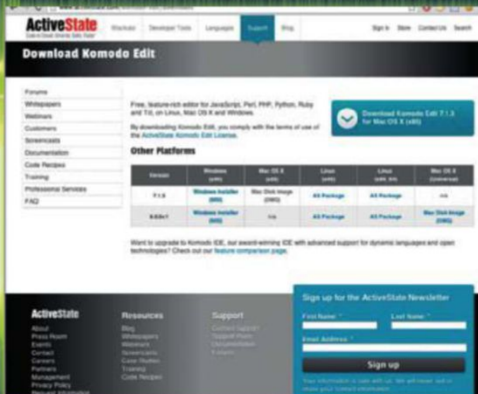
Web audio currently works on Chrome and Safari. Firefox is working towards support, but it's not available yet. To complicate things, the code for making a WebKit context and a standard context is slightly different. For now we'll assume we're working in a WebKit browser, and show an alert if not.

```
001 var context, buffer;
```

We'll use the buffer later.

```
001 window.addEventListener('load', init,
false); function init() {
002   try {
003     context = new webkitAudioContext();
004     //Use context = new AudioContext(); if
not web kit
005   } catch(e) {
006     alert('Web Audio is not available in
this browser');
007     return; //We're done
008   }
009   loadAudioFile(); //We'll define this next...
010 }
```

**The sound of silence**  
 Web music should be like movie music. Use it to enhance a page, but keep it unobtrusive. A web score on a shopping cart page is only going to annoy your users.



• ActiveState's Komodo isn't the best JavaScript editor you can find. But it includes code completion and bracket matching. And it's free



• The official web audio API spec is at [bit.ly/slrak5](http://bit.ly/slrak5). However, it's pretty much impossible to understand



• Don't try to download files from other sites. You can't, unless CORS is enabled – as described on various blogs online

## 06 Lock and load

We have to do a lot of work before we can play some samples. First we load the data, then we decode it, then we create a sample player, then we can play it. To start loading the data, create a new function called `loadAudioFile` with a URL parameter, and add an `XMLHttpRequest`.

```
001 function loadAudioFile () {
002   var request = new XMLHttpRequest();
```

## 07 Get you

The request uses a GET call to load the data from a URL, which is usually a file on your server. Setting 'true' after the URL makes the request asynchronous, which means the file loads in the background while your page does other things, without freezing. The data arrives as a binary blob in an `arrayBuffer`.

```
001 var loadAudioFile = (function (url) {
002   var request = new XMLHttpRequest();
003   request.open('get', 'test.mp3', true);
```

URL is hardcoded here.

```
004   request.responseType = 'arraybuffer';
```

## 08 Decoder ring

That code creates a request object, and tells it what to request. But we still need to define a callback that does something useful after the data loads. So we define a function for the request's `onload` method. And then we send the request. We also define a separate `make-some-noise` callback for the `decodeAudioData` method.

```
001 function loadAudioFile () {
002   var request = new XMLHttpRequest();
003   request.open('get', 'test.mp3', true);
004   request.responseType = 'arraybuffer';
005   request.onload = function () {
006     context.decodeAudioData(
```

```
007     request.response,
008     function(incomingBuffer) {
```

This function plays the audio. The code for it is defined below.

```
001     playSamples();
002   }
003   );
004 }
005   request.send(); //Get the
data
```

## 09 How to play

The code shown below will play the file once it loads. It says 'Make a sample player, load it with the audio file that we just downloaded, connect it to the sound card - the destination in web audio speak - and play it.'

```
001 var playAudioFile = function (buffer) {'
002   var source = context.
003   createBufferSource();
004   source.buffer = buffer;
005   source.connect(context.destination);
006   source.start(0); // Play sound immediately
007 };
```

## 10 Start and stop

So there we have our `playAudioFile` function. We can also stop audio by sending a stop message to the source buffer. Unlike all the other code, this is simple - however, there's a critical gotcha that we need to understand. Source buffers play once only. If we want to play a sound again, we have to repeat all the code in the play function.

```
001 function stopAudioFile () {
002   source.stop(0);
Stop the sound immediately.
003 }
```

## 11 The story so far

Let's recap. The request pulls a file from the server and decodes it into a buffer. We play it using a buffer source sample player, which reads the decoded buffer data. The audio is connected to the context destination to route it through a sound card. We now have enough code to load and play sounds!

## 12 Repeat, repeat

It's likely that we'll want to load more than one sound file. We could duplicate the code for each file, but it's more elegant to create a single buffer loader class, load all the files into an array at once, and create source buffers as necessary. The class can then be reused in other projects. Something like the following would be ideal:

```
001 bufferLoader = new BufferLoader(
//Using a custom buffer loader class context,
002 [
003   "file1.mp3",
004   //Add as many files as you like
005   "file2.mp3",
006   "file3.mp3",
007 ],
```

```
008   finishedLoading
009   //Custom callback function
010 );
```

```
011 bufferLoader.load();
012 //Load the files
```

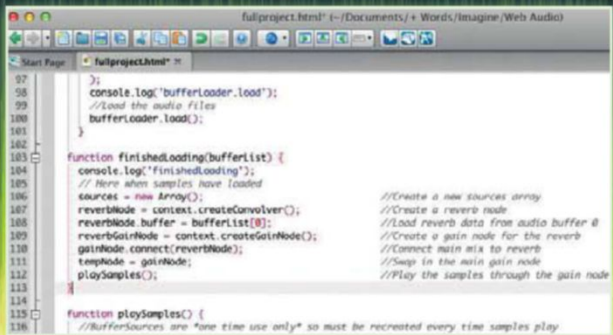
## 13 Make it yourself

It would be handy if the API included a pre-built buffer loader class. Unfortunately it doesn't, so we have to roll our own. There are three sections to the definition: the local variables and public interface, the main code prototype, and a prototype for a load method. The variables and interface are straightforward.

## MAKE WAVES ON THE WEB

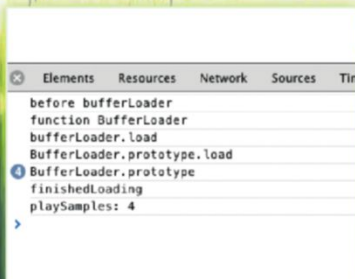
**<Below>** • The fullproject.html UI isn't much more complicated than simpleplayer.html. But there's a lot more happening behind the scenes

**<Right>** • You can't select a reverb type by name. Labelled impulse response files like these are the next best thing



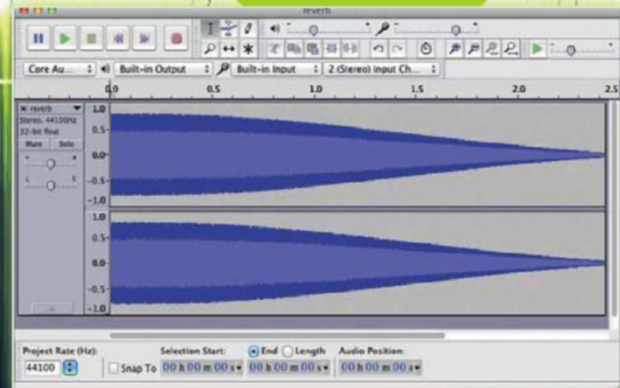
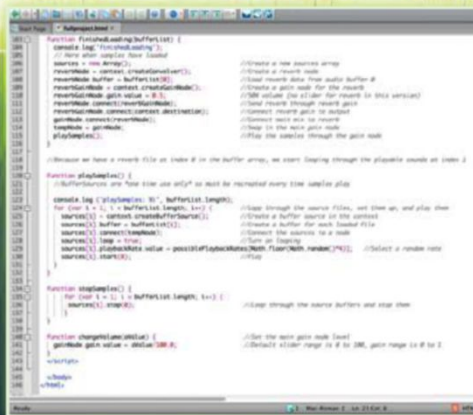
**The golden rule**

Audio samples are often WAV or AIFF files. To cut down load times, use an audio editor like Audacity or Audition to squash them into MP3s.



- You can use Chrome's console (View>Developer>JavaScript console) if you run into problems

- The finished version of the code includes extra comments and log messages so you can see what's happening in detail



- An audio editor like Audacity is useful for tuning samples and converting them to MP3s

```
001 var bufferList, sources;
//Arrays of decoded audio files and buffer
sources
002 function BufferLoader(context, urlList,
callback) {
003     console.log('function BufferLoader');
004     bufferList = new Array();
005     this.context = context;
006     this.urlList = urlList;
007     this.onload = callback;
008     this.loadCount = 0;
009 }
```

## 14 Heavy load

The main class prototype is an expanded and generalised version of the XMLHttpRequest code. There's some extra error checking and some alerts, and it loads the audio data into a slot in the buffer list array instead of a single buffer. But otherwise it's similar to the code we created earlier.

```
001 BufferLoader.prototype.loadBuffer =  
function(url, index) {  
002     var request = new XMLHttpRequest();  
003     request.open("GET", url, true);  
//Prepare an async request  
004     request.responseType = "arraybuffer";  
//Load data as binary
```

```
005 var loader = this;
006 request.onload = function() {
007     loader.context.decodeAudioData(
008         request.response,
009         function(buffer) {
010             if (!buffer) {
011 alert('error decoding file data: ' + url);
012             return;
013             }
014         bufferList[index] = buffer;
015 if (++loader.loadCount == loader.urlList.
length)
016     loader.    onload(bufferList);
017         }
018     );
019 }
020
021 request.onerror = function() {
022     alert('BufferLoader: XHR error');
023 }
024 request.send();
025 }
```

## 15 Load prototype

The code for the load method is simple. It just steps through the array of URLs that we defined in step 12, and calls the load buffer method on every item. That leaves us with one final job - defining the

finishedLoading function that processes and plays the files after they load. For more details about this, see the next step.

```
001 BufferLoader.prototype.load = function() {
002   for (var i = 0; i < this.urlList.length;
++i)
003     this.loadBuffer(this.urlList[i], i);
004 }
```

## 16 Ready to play

The finished `Loading` function is called when all the audio files have loaded and are ready to play. We could put the main play code here, but we want it to play audio when the page loads and also when the user pushes the Play button. Therefore we will offload the main play code to a function called `playSamples`, and run it from here.

```
001 function finishedLoading(bufferList)
002 {   sources = new Array();
003     //Create a new sources array
004     playSamples();
005     //Play the samples - somehow...
006 }
```

## 17 Play the array

Once you have an array of files, you can play

them independently - for example, to make a drum machine. For this project, we'll play them all together to make a big, big sound. And we'll also loop them so they keep repeating. The code is similar to step 9, with an extra loop to select the sounds.

```
001 /function playSamples() {
002   for (var i = 1; i < bufferList.length;
003 i++) { //Step through the sounds
004     sources[i] = context.createBufferSource();
005 //Make a buffer source for each
006     sources[i].buffer = bufferList[i];
007 //Load the source with a decoded sound
008     sources[i].connect(context.destination);
009 //Connect to the speaker
010     sources[i].loop = true;
011 //Turn on looping
012     sources[i].start(0);
013 //Play one of the sounds
014   }
015 //Etc...
```

## 18 Stop and start

To stop the sounds, we loop through the buffer list and call .stop on each buffer source. You can now go back to step 2 and plug the playSamples and stopSamples functions into the onclick methods of the Play and Stop buttons. Now, sounds start when the page loads, and buttons start it and stop it.

```
001 function stopSamples() {
002   for (var i = 1; i < bufferList.length;
003 i++) {
004     sources[i].stop(0);
005   }
006 }
007 //Turn on looping
008 sources[i].start(0);
```

## 19 Control the volume

To control volume, create a gain node and insert it between the sample players and the destination, so all the audio passes through it. Setting a gain node value of 0 to 1 controls the volume of the sample mix. First, we create a gain node in the window init function.

```
001 gainNode = context.createGainNode();
002 gainNode.connect(context.destination);
003 gainNode.gain.value = 0.5;
004 var tempNode = context.destination;
```

## 20 JavaScript doesn't know that play

Samples isn't called until the audio loads, so it thinks gainNode is a forward reference. We can fix this by adding a var called temporaryNode as a placeholder and swapping in the gain node before playback. We can also add a slider to the main HTML, and a changeVolume function to set the gain.

# Code library

## Waving, not drowning

Web audio code can get complex. But you can use variations of this load-and-play code for any sample-based project

The window initO function creates a gain node, connects it to the context destination, and loads some files.

```
001 window.addEventListener('load', init,
false); function init() {
002   try {
003     context = new webkitAudioContext();
004   } catch(e) {
005     alert('Web Audio is not available in this
browser');
006     return; //We're done
007   }
008   gainNode = context.createGainNode();
009   gainNode.connect(context.destination);
010   gainNode.gain.value = 0.5;
011   tempNode = context.destination;
012 //Set up the buffer loader
013   bufferLoader = new BufferLoader(
014     context,
015     [
016       "reverb.wav", //Reverb goes in slot 0
017       "drone1.mp3", //Other files are played
018       "drone2.mp3",
019       "drone3.mp3"
020     ],
021     finishedLoading
022   );
023 //Load the buffer loader
024   bufferLoader.load();
025 }
026 function finishedLoading(bufferList) {
027   sources = new Array();//A new array
028   reverbNode = context.createConvolver();
029   reverbNode.buffer = bufferList[0];
030   reverbGainNode = context.createGainNode();
031   reverbGainNode.gain.value = 0.5;
032   reverbNode.connect(reverbGainNode);
033   reverbGainNode.connect(context.destination);
034   gainNode.connect(reverbNode);
035   tempNode = gainNode;//Swap in the gai
036   playSamples();
037 }
038 function playSamples() {
039   for (var i = 1; i < bufferList.length; i++) {
040     sources[i] = context.
041 createBufferSource();
042     sources[i].buffer = bufferList[i];
043 //Create a buffer for each loaded file
044     sources[i].connect(tempNode);
044     sources[i].loop = true; //Looping on
045     sources[i].playbackRate.value
047     sources[i].start(0);
048   }
049 }
```

finishedLoading() runs automatically once the samples have loaded. It creates a reverb node, connects it, sets its volume, and plays the audio samples.

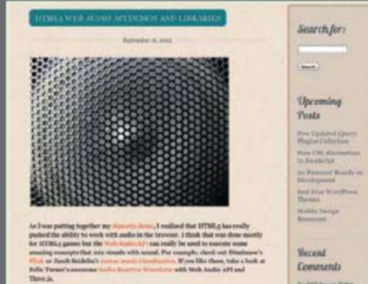
playSamples() plays all the samples, except the reverb file in slot[0], because you won't usually want to hear it.

```
050 function stopSamples() {
051   for (var i = 1; i < bufferList.length;
i++) {
052     sources[i].stop(0);
053   }
054 }
055 function changeVolume(aValue) {
056   gainNode.gain.value = aValue/100.0;
058 Default slider range is 0 to
059 }
```

To stop the sound, call the .stop method on the sample buffers. A time offset of 0 stops the sound immediately.

## Free, free, free

JavaScript security means you can't (usually) use GET to load MP3s from other sites. Copy all files to your server and load them from there.



## Making a connection

Once you understand how the node connection system works, the rest of the API makes a lot more sense. Sampler players are the simplest elements and give you the biggest bang for your coding buck. But if you have expert synthesizer skills, you can build your own sound and music networks out of oscillators, filters, delays and line generators. Oscillators make pitched sounds, filters control the tone and add squelch or fattiness, delays create echo effects, and line generators control how settings change over time. Game designers can also use positional audio to place sounds in a virtual space. If you make a complex network, the code can soon get fearsome, but there are plenty of libraries and examples online to get you started. There's an excellent list of resources at: [techslides.com/html5-web-audio-api-demos-and-libraries](http://techslides.com/html5-web-audio-api-demos-and-libraries)

```
001 function changeVolume(aValue) {
002 //Set the gain node level
003 gainNode.gain.value = aValue/100.0;
004 Default slider range is 0 to 100.0
005 }
```

## 21 Lost in space

Clap your hands in a live space and you'll hear reverb. A convolver node applies a recording of reverb - an impulse response (IR) - to audio. You can find IR files online, eg [www.voxengo.com/impulses/](http://www.voxengo.com/impulses/). To use a convolver node, load it with an IR file and connect it between the gain node and the context destination. We'll load the IR data into buffer slot 0.

```
001 function finishedLoading(bufferList) {
002 sources = new Array();
003 reverbNode = context.createConvolver();
004 reverbNode.buffer = bufferList[0];
005 gainNode.connect(reverbNode);
006 tempNode = gainNode;
007 playSamples();
008 }
```

## 22 Make it drier

100% reverb sounds mushy. It's better to have some of the original 'dry' sound, so we add another gain node just for the reverb to set its volume (fixed at 50% - we could control it with another slider, if we wanted to) and connect the gain node to the destination node so we can hear it.

```
001 function finishedLoading(bufferList) {
002 sources = new Array();
003 reverbNode = context.createConvolver();
004 reverbNode.buffer = bufferList[0];
005 reverbGainNode = context.createGainNode();
006 reverbGainNode.gain.value = 0.5;
007 //Fixed reverb volume
008 reverbNode.connect(reverbGainNode);
009 reverbGainNode.connect(context.
destination);
010 gainNode.connect(reverbNode);
011 tempNode = gainNode;
012 playSamples();
013 }
```

## 23 Changing play

Since we don't want to play the IR file - it doesn't sound very interesting - we'll modify our play and stop code to skip over it. Slot 0 in the buffer array holds the reverb data, and the other slots hold the audio files, as before. Change playSamples() so it begins playing the files in slot 1 and upwards. Likewise for stopSamples().

```
001 function playSamples() {
002 for (var i = 1; i < bufferList.length;
003 i++) { //Skip the reverb file in slot 0
```

```
004 sources[i] = context.
createBufferSource();
005 sources[i].buffer = bufferList[i];
006 //Create a buffer for each loaded file
007 sources[i].connect(tempNode);
008 //Connect the sources to a node
009 sources[i].loop = true;
010 //Turn on looping
011 sources[i].start(0);
012 //Play
013 }
014 }
015 }
016 function stopSamples() {
017 for (var i = 1; i < bufferList.length;
018 i++) { //Skip the reverb file in slot 0
019 sources[i].stop(0);
020 }
021 }
```

## 24 Slow it down

We'll make the samples play quarter-speed, half-speed, or normal speed. This makes the sound different every time playSamples is called. As generative digital composition goes, it's a very simple trick. But with the right samples, it's surprisingly good at creating different music on each play. And it's always in-tune.

```
001 var possiblePlaybackRates = [0.25, 0.5, 1];
002 //0.75 can work too
003 function playSamples() {
004 for (var i = 1; i < bufferList.length;
005 i++) {
006 sources[i] = context.
createBufferSource();
007 sources[i].buffer = bufferList[i];
008 //Create a buffer for each loaded file
009 sources[i].connect(tempNode);
010 //Connect the sources to a node
011 sources[i].loop = true;
012 //Turn on looping
013 sources[i].playbackRate.value
= possiblePlaybackRates[Math.floor(Math.
random()*4)];
014 sources[i].start(0);
015 //Play
016 }
017 }
```

## 25 Sample this

Now all we need is some samples; [freesound.org](http://freesound.org) has a huge collection of drones and atmospheres. Files with a 'CC 0' licence are public domain. Pick three or four samples with different loop lengths so the sound is always changing. If you're musical, pick samples with the same basic pitch. If not, random noises can be atmospheric too...

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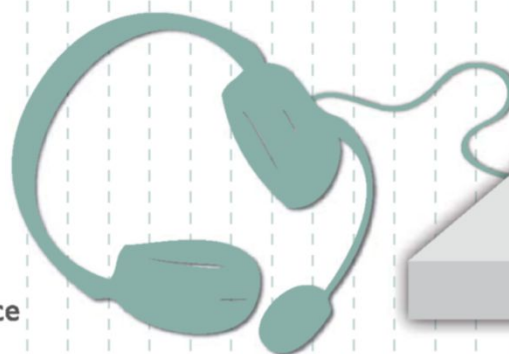
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# {web developer;

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## The Front-end developers guide

A must-have collection of 27  
tools for building pages with  
form and function

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# ESSENTIAL TOOLS FOR MODERN FRONT-END DEVELOPERS

As the web matures, so does the necessity for modern tools, frameworks and applications. Ever wondered what the pros use in their day-to-day workflows?

**W**hen you think about it, the phrase 'modern front-end development' is a relatively new thing! When compared to competing platforms and industries, the web is still in its infancy stage. That being said, one only needs to read a development-specific Twitter feed, or say hello on a few applicable

IRC channels to realise just how quickly our techniques and processes are advancing into a modern age of front-end development.

It's fun to reminisce back to the days, not too long ago, when the process of building a simple website involved little more than a text editor and a bit of HTML and CSS understanding. Not a fan of Internet Explorer 7? Well back then, in the late Nineties, we were wrangling Internet Explorer 3 into shape! Though the ecosystem wasn't nearly as mature as it is today, the process was simpler. Hand-code some HTML (in all caps, of course), add a touch of inline CSS, insert your favourite animated GIF and you're done! Upload that bad-boy to Geocities and wait for the traffic to come rolling in!

Ah, those were the days. Thankfully, though, the web has matured immensely since then. In fact, as a community, we've agreed upon a

plethora of best practices and tooling. We use version control to collaborate on open source projects. We embrace test-driven development for JavaScript (using tools like Mocha and Jasmine). We prevent 'reinventing the wheel'-itus, by instead harnessing our efforts into contributing to highly tested libraries, such as jQuery. We've broken free from untestable spaghetti code by evangelising the necessity for dedicated frameworks, such as Backbone and Ember. We've even applied the principles of object-oriented programming to our CSS (OOCSS)! Yes, ladies and gentlemen, it's a very good time to be a front-end developer!

While all of this may seem overwhelming at first (don't worry, it should; we've all felt that way at one point or another), all of the items listed above are prerequisites for building modern, cross-browser web applications. The only question is: in an ocean of tools, libraries, and frameworks, which ones should you use? Or, put more directly, how do you separate the abandonware from the cream of the crop? This article will provide a somewhat opinionated stance on what tools you should be using, along with a few alternatives for each category. So let's get started with those essential tools...

## EDITORS

Let's put it this way: if you don't know the ins and outs of your code editor, then you're doing it wrong. If you hold a position that virtually mandates eight hours a day of work within one code editor (let's be honest, it's way more than that), shouldn't you dedicate the necessary resources to optimise your workflow as much as possible? Even a five-second reduction to a task in your daily workflow can add up to a significant time saving over the course of a year.

If you've rested stagnantly on your laurels in the same editor for the last decade, perhaps it's time to consider some alternatives.

### SUBLIME TEXT 3

[www.sublimetext.com/3](http://www.sublimetext.com/3)

Even a few years ago, you'd struggle to find a developer who knew what Sublime Text was. Fast-forward to today and it's easily the most evangelised code editor in our industry. The reason why is obvious; while competing editors, such as TextMate and Coda, have either fallen by the wayside or disappointed their user base with underwhelming updates, the Sublime Text team (consisting of one person, believe it or not) focuses the bulk of its efforts on the most important aspect of your development workflow: speed. And, boy oh boy is Sublime fast. With a simple keystroke, you'll find yourself switching from file to file with such ease and finesse, to the point that you'll cringe at the thought of manually browsing through a file tree, like your former self once did.

As with most things in life, there's a reason for Sublime's popularity. Though not free, it's the best code editor available today. Period.

### LIGHTTABLE

[www.lighttable.com](http://www.lighttable.com)



■ Could LightTable surpass Sublime Text in 2013? We'll see

If Sublime Text offers the pinnacle traditional code editor, then LightTable hopes to completely revolutionise the coding experience. While it's still very much in an alpha state, the progress so far has been incredibly promising. Imagine having the ability to evaluate your JavaScript in real time, without ever leaving the editor. This level of real-time feedback is unprecedented. Combine the speed and configurability of Vim with the elegance that we've come to expect from modern apps; LightTable offers this

and more. Could it surpass Sublime Text in 2013? We'll have to wait and see! Until then, keep a close eye on this one!

### WEBSTORM

[www.jetbrains.com/webstorm](http://www.jetbrains.com/webstorm)



■ If you prefer a full IDE, WebStorm is well worth a look

While there's certainly been a movement away from full IDEs in recent years, nonetheless many continue to champion their benefits. Luckily, there's a variety of options to choose from! Most notably, the JetBrains team has been doing a wonderful job in recent years of maintaining a variety of platform-specific IDEs, including WebStorm, PhpStorm, and RubyMine.

If you're one who prefers such an IDE, place JetBrains' offering at the top of your 'to review' list. You won't be disappointed.

### VIM

[www.vim.org](http://www.vim.org)



■ Vim is a notoriously difficult editor to use

You might be thinking to yourself, "Why would Vim be included in a list of modern tools?" While Vim, or originally Vi, has, indeed, been around for decades, the truth is that it's very much a modern editor that remains in active development. In terms of sheer extendability and speed, it's difficult to top Vim. Keep in mind, though, that if you do give it a chance, you should plan on months of training. It's a notoriously difficult editor to use. However, once you do commit those keybindings to memory, you'll be unstoppable!

### BRACKETS

[brackets.io](http://brackets.io)

Brackets is unique in that it's an open source code editor developed by Adobe that takes HTML, CSS and JavaScript to the extreme: it's built with those very technologies! As a result, as long as you have a relatively basic understanding of JavaScript, you already have the necessary tools to extend the editor as you see fit. Front-end developers are doing this very thing every day, in fact.

Though it's still in need of some polish, Brackets is very much in active development. Expect to see this one give Sublime Text a run for its money this year!

## JAVASCRIPT FRAMEWORKS

As the industry continues to evolve, we're beginning to see widespread adoption of a new methodology for providing highly responsive experiences on the web: SPAs, or single-page web applications. While, in the past, an effort this ambitious would have required an overwhelming amount of code, luckily, thanks to various frameworks, the process is easier than it's ever been! The following tools will jump-start your process.

### BACKBONE

[backbonejs.org](http://backbonejs.org)



■ Backbone provides structure for sloppy spaghetti jQuery code!

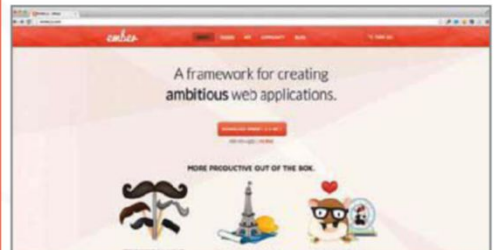
Currently the reigning champ of JavaScript frameworks (at least, in terms of popularity), Backbone provides structure for your sloppy spaghetti jQuery code!

Though it may require a bit of rethinking, when it comes to your understanding of a client-side MVC (or MV\*) framework (especially, if you're coming from a server-side framework, such as Rails or Laravel), once you fully grasp the essentials you'll find yourself writing clean, modular, downright elegant code.

Hoping for a crash-course in Backbone? Check out Tuts+ Premium and CodeSchool; they'll have you prepped in record time.

### EMBER.JS

[emberjs.com](http://emberjs.com)



■ If Backbone doesn't quite fit the bill, move up to Ember

Ember is the spiritual successor to SproutCore, a powerful open source JavaScript framework that attempted to port Apple's Cocoa user interface to the web. The reason for the name change stems from the fact that the code base was completely rewritten from scratch, in an attempt to break away from a

considerable amount of legacy code and some 'faulty' ways of thinking.

As the Ember team puts it, the success of Backbone proved to them that the development community indeed wanted the ability to build responsive, client-side apps. However, they also had years of experience crafting custom UIs with HTML and CSS. SproutCore's attempt to replace this, in favour of its Cocoa-like UI, wasn't the correct path.

From this failure came Ember, a new framework that's sparking its way through the development community at record speeds. If Backbone doesn't quite fit the bill, move up to Ember.

## ANGULARJS

angularjs.org



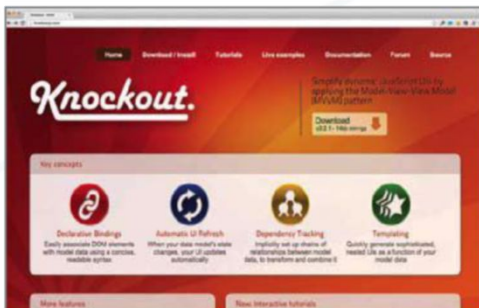
■ Angular extends HTML to manage dynamic views

Angular, developed and backed by Google, takes a different path, by providing the necessary tools you to extend HTML's vocabulary for your applications, as needed. While some feel that this sort of data binding makes for messy, non-separated code, others champion its flexibility and ease of development.

As the Angular team puts it, HTML was not designed to manage dynamic views. Angular fills in this glaring gap. What's your opinion?

## KNOCKOUT.JS

knockoutjs.com



■ Keep code to a minimum with Knockout

One of the original modern JavaScript frameworks, Knockout - which preceded Angular, too - advocates a data-binding approach for building responsive applications with a minimal amount of code.

While, again, countless developers have argued against this approach, there's no denying that it has its merits. What may require hundreds of lines of code in Backbone can be

accomplished with but a few dozen in Knockout.

The only question is: can you sleep at night, with all of that data binding in your HTML? There's no correct answer to this question. Only preference.

## METEOR

meteor.com



■ Imagine writing your entire application in nothing but JavaScript

Meteor is a new full-stack JavaScript, powered by Node.js. It will revolutionise the way that you approach writing highly responsive and dynamic web applications.

Imagine writing your entire application in nothing but JavaScript; not just the client-side, but the persistence layer as well! With every single API offered in one language, imagine the convenience and flexibility that this could provide!

While the framework has not yet reached version 1.0, as long as development remains active you should absolutely investigate this new approach to writing applications.

## MOCHA

visionmedia.github.com/mocha



■ Mocha was built by the same person who is behind Stylus and the Express framework: TJ Holowaychuk

As noted earlier, the front-end world has matured immensely in the last half-decade. At one point, the community cringed at the thought of writing even a single line of JavaScript. Fast-forward to today and not only is there a seemingly endless wave of JavaScript libraries and frameworks, but testing (and even the TDD pattern) has pushed to the front and centre.

While there are a variety of test frameworks to choose from, including Jasmine and QUnit, in this author's opinion you should experiment first with Mocha, which was created by the same person who is behind Stylus and the Express framework: TJ Holowaychuk.

# PREPROCESSORS

For years, the front-end community debated over whether CSS preprocessing was necessary. The language is a simple one; why are we complicating it? Thankfully, over time, and as the web stack matured, the majority of front-end developers came to terms with the fact that, until the language itself matures a bit more, preprocessing is a necessity for all but the most trivial of websites. Don't worry: many of these preprocessor conveniences are slowly but surely working their way into the language. These things simply take time.

## SASS

sass-lang.com



■ Sass makes CSS fun again

As its website so boldly declares, Sass makes CSS fun again. Variables, nesting, mixins... Sass has it all. More importantly, if your goal is to learn the most popular preprocessor available, as well as various frameworks built on top of it, such as Compass, Sass should be your choice.

Sass can even mould itself to fit your needs. If the indent-specific style of the original .sass syntax feels foreign to you, then simply switch to the alternate .scss format, and continue writing your stylesheets in the same fashion that you've done for years.

Chances are, if you join a development team in the near future, Sass will be their preprocessor of choice, and the one that you will be asked to learn.

## LESS

lesscss.org



■ Traditionally, LESS has appealed more to web designers than Sass

Mostly, you'll find that the three most popular CSS preprocessors - Sass, LESS and Stylus - are more or less the same. Only moderate syntax differences separate the three. In the past, LESS has been the more approachable option for web designers, as it offers a readable CSS-like

syntax (something that Sass did not originally offer). As an added bonus, one only needs to import a single JavaScript file to enjoy the flexibility of dynamic stylesheets.

## STYLUS

[learnboost.github.com/stylus](https://learnboost.github.com/stylus)



■ Configurability at its best

A relative newcomer to the scene, Stylus perhaps offers the most flexibility of all three preprocessors in this list. Prefer semicolons? Keep them. Hate using colons to separate properties and values? Remove them! The key is in the fact that Stylus provides you with the ability to customise your stylesheets how you see fit. Configurability at its best!

The only downside (and a significant one, at that) is that, due to its age, it's more than likely that members on your development team – or community contributors if you happen to be developing an open source application – will likely not yet be familiar with Stylus.

## COFFEESCRIPT

[coffeescript.org](http://coffeescript.org)



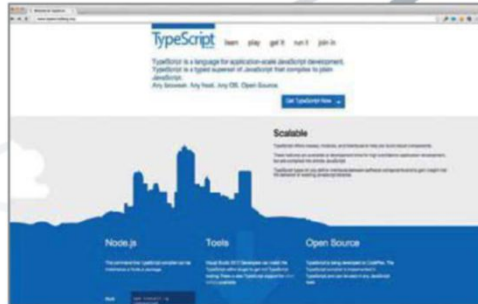
■ CoffeeScript makes JavaScript manageable

CoffeeScript, as many might put it, makes JavaScript manageable. It begins by removing the ugly bits. Semicolons? Gone. Braces? Those are stripped too. Parentheses? Let's make them optional. It then provides a number of features, which, for all intents and purposes, translates to syntactic sugar. Lexical scope, splats, array comprehension – CoffeeScript offers it all, while ultimately compiling down to vanilla JavaScript.

Thanks to increased adoption and improvements to source maps, many of the downsides to using such a preprocessor are rapidly becoming non-issues. If you question the need for yet another preprocessor, never fear; like Sass, many of CoffeeScript's innovations will be implemented into future versions of ECMAScript.

## TYPESCRIPT

[www.typescriptlang.org](http://www.typescriptlang.org)



■ TypeScript allows you to continue writing in a dialect of JavaScript, while embracing the latest additions to ECMAScript 6

For those who can't quite connect with CoffeeScript's Ruby-like syntax, TypeScript is an excellent alternative. It allows you to continue writing in a dialect of JavaScript, while embracing the latest additions to ECMAScript 6. Similar to CoffeeScript, ultimately, your code compiles down to simple JavaScript that can run in the browser.

## CODEKIT

[incident57.com/codekit](http://incident57.com/codekit)

CodeKit, created by the always funny Bryan Jones, exploded onto the front-end world in 2012 and is now used by such sites as BarackObama.com and Engadget. Like steroids for web developers, it merges various compilers, minifiers and optimisations into one beautiful Mac application. If the Terminal feels like a black box to you, limiting your ability to embrace and harness the previously mentioned preprocessors, then CodeKit is your solution.

## LIVERELOAD

[livereload.com](http://livereload.com)



■ LiveReload is available for both Mac and Windows

LiveReload is quite similar to CodeKit. In fact, disregarding some UI differences, and a few of CodeKit's unique features, both apps will equally allow you to get from point A to Z, so to speak.

Like CodeKit, LiveReload allows you to monitor a file system for changes, and perform the necessary preprocessing and compiling in response. It will also auto-update the browser upon saving each file.

Unlike CodeKit, however, LiveReload is available for both Mac and Windows. In translation, if you're a Windows user, LiveReload is, by default, your only choice. Don't worry; it's a good one!

# LIBRARIES

Chances are, prior to the success of jQuery, you viewed JavaScript in the same light as Voldemort. Refrain from speaking its name, and avoid it at all costs. While jQuery wasn't the first library to provide a solution for the various cross-browser issues that existed at the time, it was in fact the first library to offer a solution that appealed to the everyday front-end designer. Since then, countless developers have followed suit with their own excellent libraries.

## JQUERY

[jquery.com](http://jquery.com)



■ When it comes to manipulating the DOM, jQuery is still the best

What is there to note about jQuery that hasn't already been said? jQuery made JavaScript approachable and sparked a new generation of enthusiastic client-side developers. That's perhaps the greatest compliment that one could ever pay to a library. While it's certainly not the answer to every problem, when it comes to manipulating the DOM, there's no better tool.

## UNDERSCORE

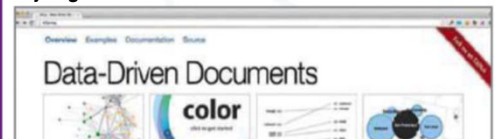
[underscorejs.org](http://underscorejs.org)

Have you ever felt that JavaScript lacked many obvious native functions, such as find, pluck or shuffle? If so, you certainly wouldn't be the first. Luckily, the popular Underscore library provides this missing functionality. Think of it as a utility belt that offers a few dozen helper functions that you would otherwise code from scratch, like for each new project.

If you happen to be using Backbone, then you're likely already familiar with Underscore, as it's a hard dependency of the framework.

## D3

[d3js.org](http://d3js.org)



■ D3 is a fantastic JavaScript-based data visualization library

D3 is a fantastic JavaScript-based data visualisation library that allows you to bind data to the DOM and then make transformations to the document. To learn more, refer to D3's GitHub repository for a massive gallery of examples for visualising various data sets.

# TOOLS AND UTILITIES

Once you optimise your coding workflow, it quickly becomes apparent that additional tooling and functionality might be necessary. Such tools include everything from module loaders to test runners.

## REQUIREJS

[requirejs.org](http://requirejs.org)

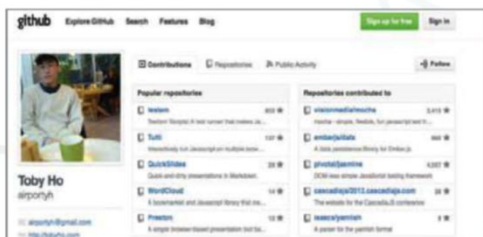


■ RequireJS is easily the most popular module loader available today

At some point, you'll surely begin to pull away from the idea of nesting all of your JavaScript within a single file. When this day occurs, you'll quickly come across RequireJS, which is a file/module loader. Unfortunately, though, switching to a modular approach to writing JavaScript is a more difficult process than one might hope for. After you understand the concept of AMD, you then have to decode the logistics: how do you set up RequireJS? What about non-AMD libraries? What about dependency management? What about configuration and optimisation? True, there is a learning curve involved, but it's absolutely worth it.

## TESTEM

[github.com/airportyh/testem](http://github.com/airportyh/testem)



■ Testem is a test runner that makes JavaScript unit testing fun!

One significant barrier to testing is the simple fact that it can sometimes take a considerable amount of setup to get up and running. The longer it takes, the more likely it is that the developer simply won't bother. That's why Testem is so fantastic: it makes testing as effortless as possible – and, more importantly, fun!

## GRUNT

[gruntjs.com](http://gruntjs.com)

At its core, Grunt is a simple task-based command-line tool for building JavaScript applications. Think of it as a

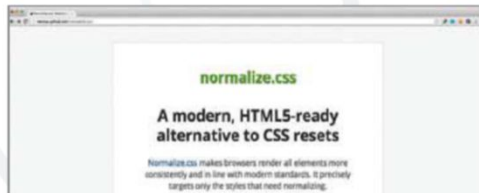
tool that can execute a variety of small, yet common operations. Compilation, minification, test running, deployment – each of these can and should be automated. With Grunt, lengthy processes such as this can be translated into a single command.



■ Grunt helps you to automate tasks with minimal effort

## NORMALIZE

[necolas.github.com/normalize.css](http://necolas.github.com/normalize.css)



■ Normalize makes browsers render elements in a consistent way

We've all experienced it; your website displays beautifully in Chrome and Firefox, but then you view it in Internet Explorer and come to terms with the fact that you'll be dedicating the next several hours to cross-browser support.

Normalize makes all browsers render elements in as consistent a fashion as possible. Have you ever experienced the annoyance of debugging a three-pixel input height inconsistency, from browser to browser? With Normalize, you'll never deal with that again!

## HTML5 BOILERPLATE

[html5boilerplate.com](http://html5boilerplate.com)



■ Kick-start your project with HTML5 Boilerplate

HTML5 Boilerplate is the product of years and years of experience and tinkering. It's the ultimate project kick-starter and is used by such companies as Google, Microsoft and NASA. The best part is that, even if you never fully embrace the project, it remains a fantastic resource, if only for copy and paste purposes.

## TWITTER BOOTSTRAP

[twitter.github.com/bootstrap](http://twitter.github.com/bootstrap)

While the development world often preaches the

necessity for reusable code, the truth is that when it comes to CSS, this advice is more often than not ignored. How many times have you found yourself writing the necessary styling for a blog post or message box? If only someone would provide a clean package with these reusable components, we could scaffold new applications with incredible speed!

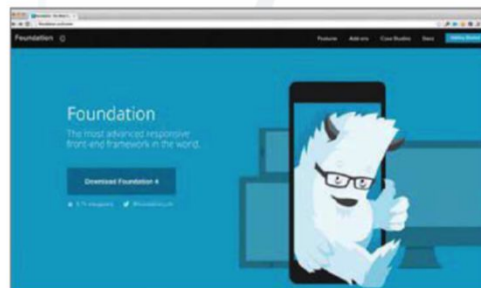
Enter Bootstrap. Developed by the team at Twitter, Bootstrap provides a plethora of components and classes (both CSS and JavaScript-based) to minimise the amount of boilerplate code that must be written for each new project. This includes everything from a reset stylesheet, to beautiful buttons, to JavaScript-activated modal boxes. Particularly for the non-designers among you, Bootstrap is a fantastic choice.



■ Bootstrap will minimise the amount of boilerplate code that you need to write for a new project

## FOUNDATION 4

[foundation.zurb.com](http://foundation.zurb.com)



■ The fourth edition of Foundation helps you to create smart code while saving a lot of time

If Twitter Bootstrap doesn't quite tickle your fancy, then your second choice should most definitely be Foundation 4, by the folks at Zurb. Similar to Bootstrap, Foundation offers a flexible grid, JavaScript plug-ins and various CSS components for rapid scaffolding. The truth is that you can't go wrong with either choice. Ultimately, it comes down to one thing: personal preference. Which one feels right to you?

## JUMP IN!

It's true: as our ecosystem matures, so does the necessity for continued education and experimentation with the latest tools and frameworks. But, hey, we signed up for this; no fussing allowed! We have the unique opportunity of being, in the grand scheme of things, the flagship development crew in the most revolutionary innovation in our history: the internet.

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# Build a Linux server with open-source software

Repurpose that old PC in the corner and turn it into your very own development or staging server

**tools | tech | trends** Ubuntu Server  
**expert** Matt Gifford



**U**pcycle – it's one of those buzz words that we hear a lot. If you have access to an old desktop machine lying around that you no longer use but don't want to throw away, why not upcycle it by converting it into your very own staging server, complete with the full LAMP stack?

Not only is it great for the environment (lets face it, there's only so much time before landfills become land-full), but it is also a great way to teach yourself some new tricks, while saving you money on buying something straight out of the box.

In the first part of this tutorial we will install the open-source Ubuntu Server operating system onto the machine, set up the new machine on the local network, and install Apache, MySQL and PHP5. We'll also add some extra security to the server and install a firewall with specific access rules to the ports we need. Next month we'll continue by adding multiple virtual hosts, continuous integration, and shell scripts to enhance your workflow.

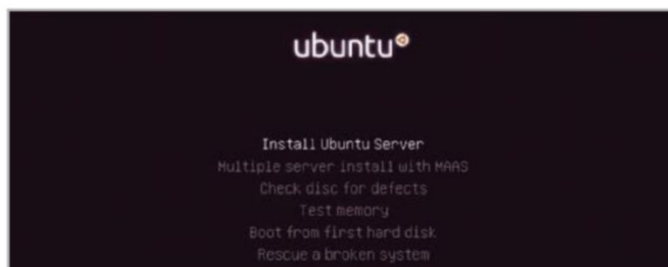
## 01 Download Ubuntu

To begin, head over to [monkeh.me/2513w](http://monkeh.me/2513w) to download the latest copy of the Ubuntu Server edition. You can choose between either the latest version or the latest long-term support edition. Burn the ISO image onto a CD-ROM, which you will need to use as a bootable media disc in your soon-to-be new server.



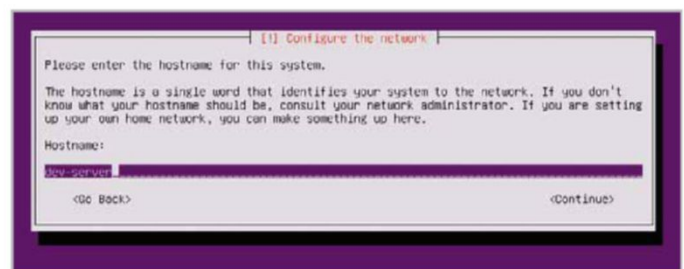
## 02 Start install

Ensure the server is connected to your home network – it will need access for updates during the installation. Insert the disc into your machine and begin the installation process. Select your preferred language and territory, then either have the keyboard layout detected automatically or select the layout yourself from a pre-defined list.



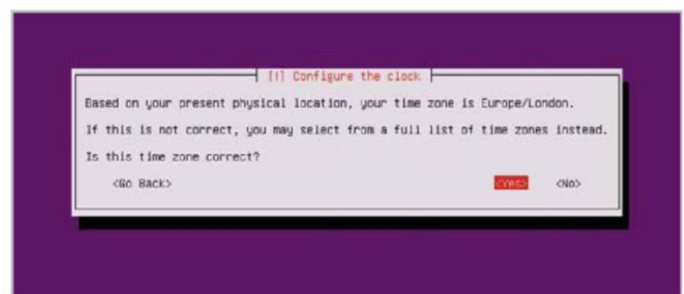
## 03 Set hostname

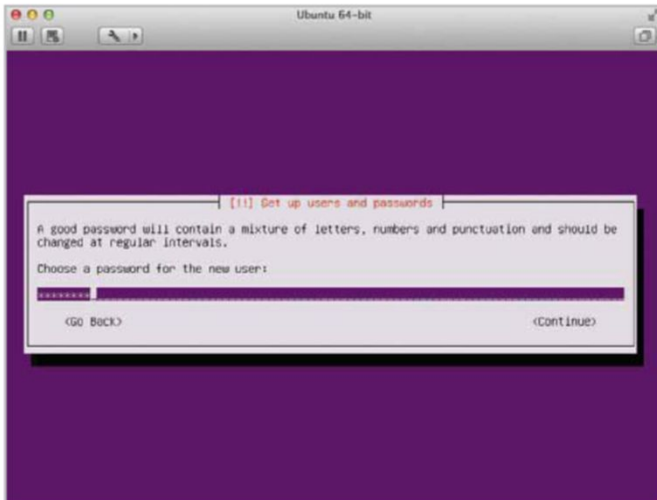
Enter your preferred hostname for the server for easy identification on your network. In this instance we're using dev-server. Continue and enter your full name to create a new user account, followed by the user name (typically your first name in lowercase). Finally, set a password for your user account and proceed.



## 04 What time?

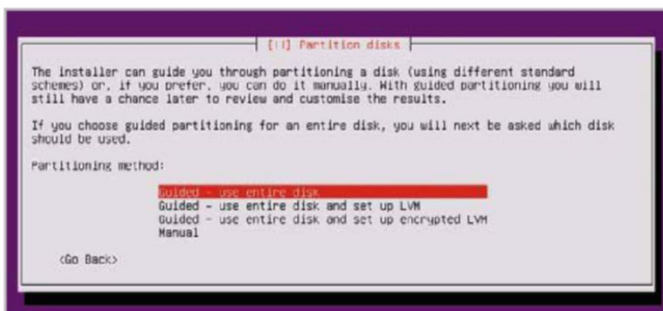
Choose whether or not encrypt your user's home directory on the server and proceed. You can now choose to alter the time zone for your server if you wish – the default is detected using your network connection. For sanity's sake, it's best to set it to your actual time zone – this will help when reading log files and reports.





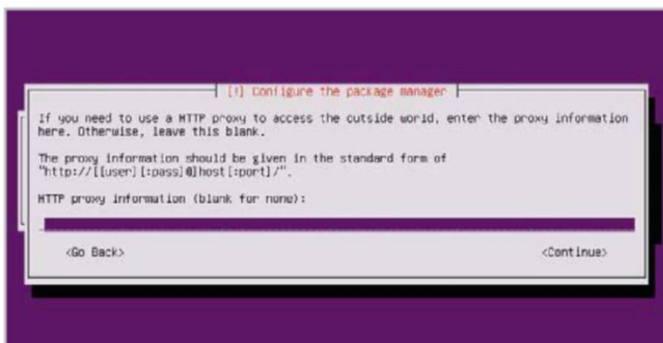
## 05 Disk partition

The installer will now give you options to partition the disk (assuming the drive is already formatted with another operating system). We want a clean server without partitions, so select the guided partitioning and use the entire disk. Confirm the disk selection and review the formatting changes. Once you're happy, continue to start the partition process.



## 06 HTTP proxy

The installer will now give you the chance to set up any required HTTP proxies for external access. If your server needs one to access the web, make sure you enter the details here, otherwise you can safely skip this option.



## 07 Security updates

We want our server to be up to date with the latest system security patches at all times. In this instance, choose to have the security updates automatically installed. The update processes themselves are fairly unobtrusive and pain free, unlike some other operating system updates. Proceed to the next step.

## Firewall rules in detail

```
001 HTTP/ACCEPT net $FW
```

### Web access

Our web server will be running and accessible on port 80 (the default). As such, we need to allow access to that port using the HTTP protocol.

```
001 SSH/ACCEPT net $FW
```

### SSH login

To administer the server via a remote SSH connection, we also need to grant access to all incoming requests over port 22.

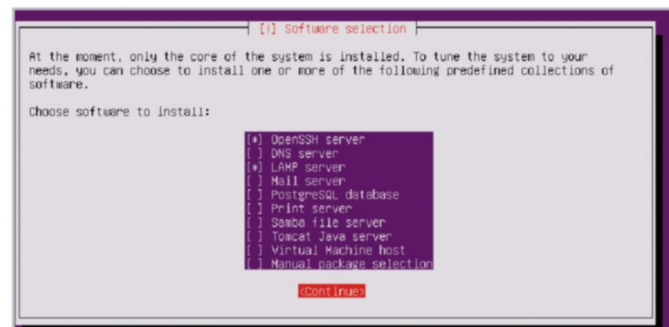
```
001 ACCEPT net $FW tcp 10000
```

### Extra access

You will need to add a new rule to the firewall rules configuration for every application running on an extra port, in this case the Webmin interface on port 10000.

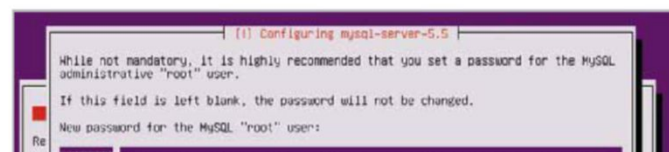
## Webmin Administration

Webmin provides a fantastic interface to help manage, update and administer the server and installed packages without having to delve into complex command-line processes.



## 08 Core packages

We can now choose the base packages for our server. Select an option using the Space key to set the asterisk next to it. Choose the OpenSSH server and LAMP server at the minimum. You can always install any other packages you may like to use once the server is up and running.

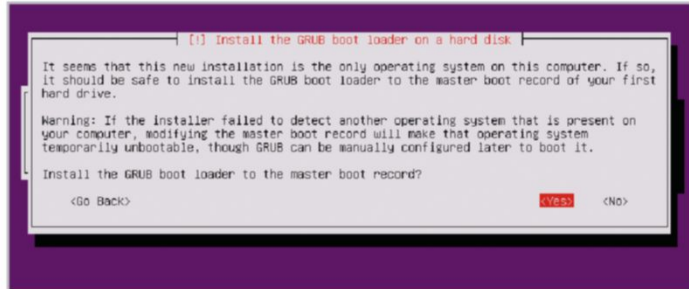


## 09 MySQL admin

As part of the LAMP stack, we need to set the password authentication for our MySQL admin user. Try to make this a different password from the user we created earlier. Always make a note of your

## Build a Linux server with open-source software (part 1)

passwords during the install process to make sure you don't forget them. You can always change them later on if you want to.



### 10 GRUB boot loader

Although you may be overwriting an existing operating system on the formatted disk drive, we want to install the GRUB boot loader to the master record. Wait for the installation to finish, at which point remove the CD-ROM and continue to restart the server to complete the operating system installation process.

### 11 Update and upgrade

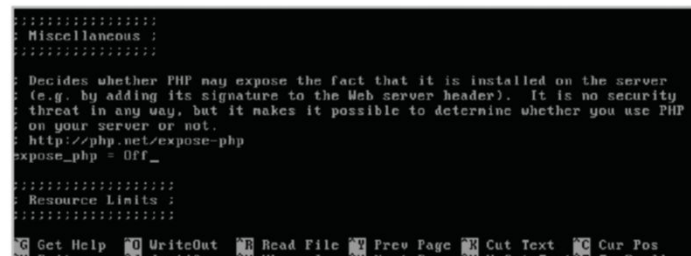
The server will restart, and following the output of the loading processes you will be presented with the login prompt. Enter the user details you defined earlier to access the server. Let's make sure all packages are up to date. Enter the commands shown here to update and upgrade any packages. When complete, reboot the server.

```
001 sudo aptitude update && sudo aptitude dist-upgrade
002 sudo shutdown r now
```



### 12 Web test

Let's make sure we can access the default webpages being served by Apache on the server. Find the server's IP address by typing `ifconfig` in the command line after logging back in. Make note of the inet address (typically 192.168.\*) and enter this into a browser of another machine connected to the network. You should now see the default Apache page.



### 13 Security considerations

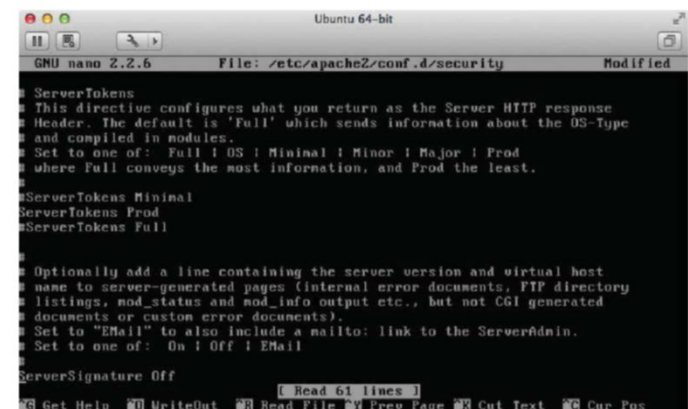
We want to obfuscate as much information about the server from public eyes as possible. There are many advantages to this, not least that it makes the everything cleaner and more secure. Make a backup copy of the `php.ini` file and then open the original file in the terminal window to make some amendments to it. Find the `expose_php` setting and change it from 'On' to 'Off'. Write the changes to the file and exit the editor.

```
001 sudo cp /etc/php5/apache2/php.ini /etc/php5/
    apache2/      php.ini.bak
002 sudo nano /etc/php5/apache2/php.ini
```

### 14 Apache security

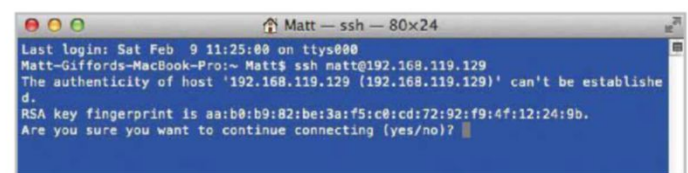
We also want to hide information about the Apache server. Make a backup copy of the security configuration file and then open the original to edit it. Change the `ServerTokens` value to `Prod` and the `ServerSignature` value to `Off`. Restart Apache to load in the changes to the configuration files.

```
001 sudo cp /etc/php5/apache2/php.ini /etc/php5/
    apache2/      php.ini.bak
002 sudo nano /etc/php5/apache2/php.ini
003 sudo /etc/init.d/apache2 restart
```



### 15 SSH access

We want to have remote admin access to our server, so let's check that we can reach it via SSH. Open a terminal window in a different laptop or machine and enter in `ssh your_username@192.168.119.129`. Accept the fingerprint to continue, at which point you should now be logged in remotely to the server.



### 16 Install Webmin

Download the latest version of Webmin. Once saved in your home directory, execute it. It will fail as we are missing required dependencies. To install the package *with* the dependencies, run the final command. This is easier than manually installing every required library prior to installation.

```
001 wget http://www.webmin.com/download/deb/webmin-
    current.deb
002 sudo dpkg i webmin-current.deb
003 sudo apt-get f install
```

### 17 Webmin browser

Once installed, we can access the Webmin interface in the browser. By default, Webmin is installed on port 10000 using the secure HTTP protocol: `https://192.168.119.129:10000`. From here you can manage your entire server, including package updates and installations, and the MySQL server, using a fairly intuitive front-end interface.



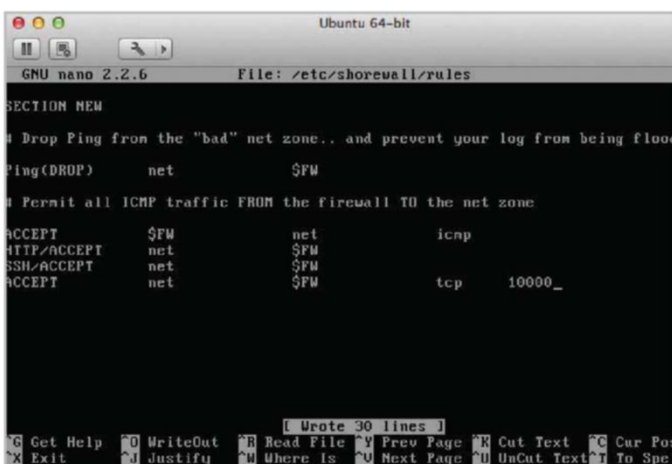
## 18 Install firewall

At the moment all ports on the server are open. When we make the server publicly-accessible we want to lock it down. To resolve this issue we'll install Shoreline firewall via the command line. Once installed, copy some example configuration files into the Shorewall directory and open a rule file to edit it and add new rules.

```
001 sudo aptitude install shorewall
002 sudo cp /usr/share/doc/shorewall/examples/one-
interface/* /etc/shorewall
003 sudo nano /etc/shorewall/rules
```

## 19 Add rules

In the rules file, scroll to the bottom of the page and add a new line for every rule. We want to access HTTP and SSH connections (ports 80 and 22) as standard. We also want to open up port 10000 so that we can still access the Webmin interface. The rules are available in a file in the accompanying tutorial download folder.



## 20 User permissions

To set the correct permissions to write to the web folders, we need to add our user to the correct group and set the permissions on the web folder to allow members of that group to write to it. Once complete, connect to the server via SFTP using a client like Cyberduck or Filezilla. Set the initial connection path to /var/www.

```
001 sudo usermod -g www-data your_username
002 sudo chown -R www-data:www-data /var/www
003 sudo chmod -R 755 /var/www
```



## Opening your server to the public using managed DNS providers

Although the server will be within your home network, you may want to access any hosted sites or the Webmin interface via the browser remotely. Without using nameservers to feed your chosen domain name through to your server, you will need to use a third-party service to manage your DNS on your behalf and point any requests to your domain through to your publicly accessible home network IP address. There are many companies out there that offer this service. We use NOIP ([www.noip.com](http://www.noip.com)), and for a small annual fee they will point my domain names through to the servers. It's quick and easy to set up and manage, and once complete it means that your clients or the general public can access any sites you host for approval or for their viewing pleasure.

## Port forwarding

If you do open your server publicly, you will also need to allow port forwarding on your home network router to transfer the requests through to the server's internal IP address.

## 21 Test PHP & Apache

With an SFTP connection made to the server, create and upload a simple PHP file that echoes the phpinfo() method. Once uploaded, browse to the web server on another machine where you should be presented with the output from the PHP script. Your server is up and running (albeit only within your internal network at the moment).



# Preload your app assets with PxLoader

Learn how to use PxLoader to download and manage assets that your HTML5 app relies on

**tools | tech | trends** PxLoader, JavaScript, HTML5, CSS  
**expert** Tim Stone



When making HTML5 apps and games, content preloading is a necessity, whether it's so that a layout doesn't look broken or to show something other than a blank screen before drawing images to canvas. To help this we're going to take a look at PxLoader, still in its infancy at 0.1 but full of features and stable enough to be used by some big names.

PxLoader is made by the developers of the addictive *Cut the Rope* game. In fact, it was a direct by-product that the creators have open-sourced and documented. Although it describes itself as a 'simple JavaScript preloader' it actually has some advanced functionality. It's able to load a variety of media types and is able to group and prioritise which assets are downloaded first.

To familiarise ourselves with PxLoader we're going to create an educational HTML5 app that shows dinosaurs and what they may have sounded like. This will involve preloading a large background image, sounds, and the image assets themselves. As we download assets we'll report back which file is being downloaded and show the percentage of files we've downloaded to give the user an indication of how much longer they have to wait.

## 01 Landscapes and metadata

To get started on our prehistoric landscape we're going to use canvas to display and interact with images. The HTML for this is incredibly simple, as the majority of the elements are to display metadata of our app loading. #loading and #sound-loading will be used to show the percentage of how much of our assets have been loaded.

```
001 <canvas id="landscape"></canvas>
002 <div id="metadata">
003   <p id="loading">Loading libraries&hellip;</p>
004   <p id="sound-loading">Loading libraries&hellip;</p>
005   <p id="file"></p>
006 </div>
007 <a class="btn start is-hidden">Start</button>
```

## 02 Scripts and dependencies

PxLoader is built with a plug-in architecture in mind. This means that the core file is very small and we add other files for the other types of content that we wish to load, we're going to be dealing with images and sounds, but there's also support for videos.

```
001 <script src="scripts/PxLoader/PxLoader.js"></script>
002 <script src="scripts/PxLoader/PxLoaderImage.js"></script>
003 <script src="scripts/soundManager/script/soundmanager2.js"></script>
004 <script src="scripts/PxLoader/PxLoaderSound.js"></script>
005 <script src="scripts/app.js"></script>
```

## 03 Setting the scene

We need to get a reference to our canvas element and get its rendering context. We're also going to set its width and height to that of the browser. The height is slightly different as we're going to check if it's larger than the background image's height itself, and go with whichever is smallest.

```
001 (function(PxLoader, soundManager)
002 {
003   'use strict';
004   var canvas = document.getElementById('landscape'),
005       ctx = canvas.getContext('2d');
006   canvas.width = window.innerWidth;
007   canvas.height = canvas.height = window.innerHeight
008 > 920 ? 920 : window.innerHeight;
009 })(PxLoader, soundManager);
```

## 04 Create a loader

With our canvas referenced and width and height set we can now think about the assets that we want to load. We'll create a new instance of PxLoader which we'll use to add images to - these aren't downloaded until we call loader.start(). The second argument is a tag, with which PxLoader can group and prioritise downloads.

```
001 var loader = new PxLoader(),
002     background = loader.addImage('images/background.
003 jpg', 'background'),
004     edmontia = loader.addImage('images/edmontia.png',
005 'image');
006
```

## 05 Progress Listener

PxLoader allows us to hook into an event listener called addProgressListener. This is fired each time it finishes dealing with a new asset (even if it fails to load it). This means that we can keep track and update the UI with an up-to-date display of how far through loading we are (somewhat essential for a preloader).

```
001 var lastPercentage = 0;
002 loader.addProgressListener(handleProgress
```

## 06 Handle Progress

If we've still got content to load then we'll calculate how much of a difference there is between the percentage now and the last reported percentage. We'll draw a dinosaur footprint for each percentile as well as updating the percentage to give the user something concrete to look at (counting footprints isn't everyone's cup of tea).

```
001 function handleProgress(event)
002 {
003     var percentage = Math.round(event.completedCount /
004 event.totalCount * 100),
005     difference = percentage - lastPercentage;
006     lastPercentage = percentage;
```

## 07 Work out differences

To add a touch of randomness and visual flair to our preloader we'll add a dinosaur footprint in a random location and at different angles all over our canvas. We'll also update our loading p tag with the new percentage of downloaded assets.

```
001 var print = new Image();
002 print.src = 'images/footprint.png';
003 while (difference-->0) {
004     drawRotatedImage(print, getRandomInt(0, canvas.
005 width), getRandomInt(0, canvas.height), getRandomInt(0,
006 360));
007 } document.getElementById('loading').innerHTML =
008 percentage + '%'; }
```

## 08 Generate random number

The getRandomInt function we reference above is a small function from the Mozilla Developer Network, we specify a range and get a random number between that range. We use this to get a random angle (between 0 and 360), and a random x and y co-ordinate for the image's placement on the canvas.

```
001 function getRandomInt(min, max) {
002     return Math.floor(Math.random() * (max - min + 1))
003 + min;
004 }
```

## 09 Draw rotated images

Full credit goes to Seb Lee-Delisle for this handy function to rotate an image and draw it to the canvas. Seb writes step-by-step details on this at [creativejs.com/2012/01/day-10-drawing-rotated-images-into-canvas](http://creativejs.com/2012/01/day-10-drawing-rotated-images-into-canvas), but it takes a snapshot of the canvas, rotates it, adds the image, and restores the image to its original orientation with the rotated image.

```
001 function drawRotatedImage(image, x, y, angle) {
002     ctx.save();
003     ctx.translate(x, y);
004     ctx.rotate(angle * Math.PI/180);
005     ctx.drawImage(image, -(image.width/2), -(image.
006 height/2));
007     ctx.restore();
008 }
```

## 10 Add completion listener

As well as ProgressListener, PxLoader also has a useful CompletionListener event listener. As the name may give away, it's called after



all assets are downloaded, or, if a tag is supplied then it's called whenever all assets with that tag are downloaded. After our files have finished preloading we're going to clear the canvas of footprints and hide the percentage count.

```
001 loader.addCompletionListener(function(event)
002 {
003     console.log('all images have finished loading!');
004     ctx.clearRect(0, 0, canvas.width, canvas.height);
005     document.getElementById('loading').style.display =
006 'none';
007 }, 'image');
```

## 11 Draw background

As all of our images have downloaded we can confidently draw our large background to the canvas without any nasty looking NS\_ERROR\_NOT\_AVAILABLE: Component is not available caused by premature drawing of images. Once canvas draws images to it they become BMPs and that's all so we'll need to work out a system to keep a reference to them to respond appropriately to clicks.


```
001 ctx.drawImage(background, 0, 0);
```

## 12 Audio files

Dealing with native audio on the web is a pain, there's no doubt about it. We have to make sure we've got every file in at least two formats (Ogg Vorbis and AAC) ([en.wikipedia.org/wiki/Html5\\_audio](http://en.wikipedia.org/wiki/Html5_audio)). PxLoader uses SoundManager to try to remove the pain with audio. We configure SoundManager before we can use it, this is the same configuration that PxLoader recommends.


### Travel Back In Time

Hear what a prehistoric time may have sounded like with this interactive experience.



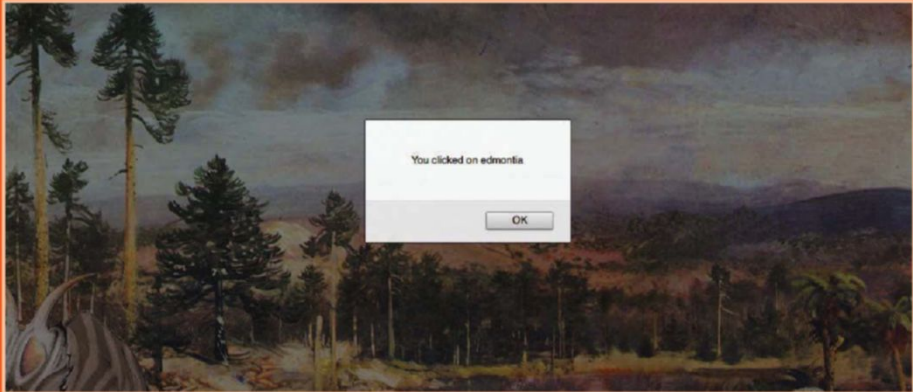
### Travel Back In Time

Hear what a prehistoric time may have sounded like with this interactive experience.



**<Clockwise from top left>**

- The background can now be added when we know it's not going to throw an error
- We've now got our images and sounds loading asynchronously so our whole app isn't dependent on SoundManager loading
- Every project (even simple ones) needs some form of error handling. Using `deferred.reject()`, here's ours
- The click handler is working and it even found the name of the object that we clicked on



```

001 soundManager.url = 'soundManager2/';
002 soundManager.useHighPerformance = true;
003 soundManager.flashLoadTimeout = 500;
004 soundManager.audioFormats.mp3.required = false;
005 soundManager.ontimeout(function() {
006     soundManager.useHTML5Audio = true;
007     soundManager.preferFlash = false;
008     soundManager.reboot();

```

### 13 Create sound preloader

We have a couple of options with how to treat this preloader. We could wait for SoundManager to load before preloading anything meaning we can use a single loader (you can't add new assets once you call `loader.start()`) but this seems wasteful. The alternative is to have two loaders, one for images and one for sounds, and wait for them to asynchronously complete.

### 14 Are we ready?

We can listen for when SoundManager is ready thanks to its `onready` function. Once SoundManager is ready we add sounds to our sound preloader. The first argument is its ID, the second is the path to the file (from the HTML file) and the third is a tag (as we saw before with images).

```

001 soundManager.onready(function() {
002     soundLoader.addSound('edmontia', 'sounds/edmontia.
003 wav', 'sound');
004     soundLoader.addSound('background', 'sounds/
005 background.wav', 'background');

```

## Minding your manners

When dealing with sound (especially looping sounds) it's polite to pause it when the user is not viewing your page; you can use the Page Visibility API to do this.

```

006     soundLoader.start(['background', 'sound']);
007 });

```

### 15 New progress listener

It would be silly to write a new `handleProgress` function to do mostly the same job as the image one so we'll adapt it to work with both images and sounds. The main difference will be which element is updated, `#sound-loader` or `#loader`. You could also have multiple progress listeners on the same loader to separate responsibilities.

```

001 soundLoader.addProgressListener(handleProgress);

```

### 16 Instance of?

To detect what type of resource was loaded we'll use `instanceof`. This comes back as either `true` or `false` and is the equivalent of asking is `x` an instance of `y`? We know that each sound added with `loader.addSound` will be created by `PxLoaderSound` so we can reliably check if something is a sound by using `instanceof`.

```
001 function handleProgress(event) {
002     var difference;
003     if (event.resource instanceof PxLoaderSound) {
004         difference = percentage -
005 lastPercentageSound;
006         document.getElementById('sound-loading').
007 innerHTML = percentage + '%';
008     }
}
```

## 17 Keeping DRY

We'll now do the same for images which share the same naming convention. If you were downloading video then you can just switch out PxLoaderImage for PxLoaderVideo. The aim of doing it like this is to keep our code as DRY as possible, to avoid typing out the same code multiple times.

```
001 } else if (event.resource instanceof PxLoaderImage) {
002     difference = percentage - lastPercentage;
003     document.getElementById('loading').innerHTML =
004 percentage + '%';
005 }
```

## 18 Get name

After we've worked out how much of a percentage increase occurred between the last time the progress listener was called and this time, we'll add the footprints and update #file with the name of the resource just loaded. This is a convenient function from PxLoader that makes it easy to track resources.

```
001 while (difference-->0) {
002     var angle = getRandomInt(0, 360);
003     drawRotatedImage(print, getRandomInt(0, canvas.
004 width), getRandomInt(0, canvas.height), angle);
005 }
006 document.getElementById('file').innerHTML = 'Loaded file:
007 ' + event.resource.getName();
```

## 19 Looping ambience

We're going to start the background ambience when the sound file has been loaded, we gave the sound a tag of 'background', so to listen for its completion we can simply add a completion listener with the tag of background. To play a sound in SoundManager we provide its sound ID and set it to loop when it finishes.

## 20 Check at interval

As we're using two preloaders we'll have to have our own way of listening for them to have both completed. We're using a setInterval to poll for when both percentages have reached 100 as an indicator we've finished loading. Once it has we want to hide the metadata and show the start button as well as adding an event listener which will start the app.

## 21 Initiate and click

Our init function will clear the canvas of muddy, prehistoric footprints, draw the background and add collision detection for each item that we'll put on the canvas. When it detects that the user has clicked on a dinosaur it will play the sound with the same ID as the dinosaur's name.

## 22 Draw images

The only remaining thing to do is add each image to an array and then iterate through it, drawing the clickable elements to the canvas. Now that we know our images and sounds are downloaded we can be certain that placing and clicking them won't throw up errors.



<Above>

• Our full, and very clickable, prehistoric landscape

## Code library

### The lifecycle of a preloader

There are four main stages to the preloader which we'll highlight in detail, in a nutshell: add, start, listen

First, we instantiate a new instance of PxLoader - this is the main loader object that we add assets to.

```
001 (function(PxLoader, soundManager) {
002     'use strict';
003     var loader = new PxLoader();
004     var edmontia = loader.addImage('images/
005 edmontia.png', 'image');
006     var print = new Image();
007     canvas.width = window.innerWidth;
008     canvas.height = window.innerHeight > 917 ?
009 917 : window.innerHeight;
010     print.src = 'images/footprint.png';
011     edmontia.name = 'edmontia';
012     soundManager.onready(function() {
```

Second, we add our assets with an ID, the path relative to the HTML file, and a tag (optional).

```
013 loader.addSound('edmontia', 'sounds/
014 edmontia.wav', 'sound');
015 loader.addSound('background', 'sounds/
016 background.wav', 'background');
017 loader.start(['background', 'sound']);
018 });
```

Third, we add the various listeners to react to the preloader's progress. These functions are known as callbacks.

```
019 soundLoader.addProgressListener(handleProg
ress);
020 loader.addProgressListener(handleProgress);
021 soundLoader.addCompletionListener(funci
on() {
022     function loop(sound) {
023         soundManager.play('background', {
024             volume: 20,
025             onfinish: function() {
026                 loop(sound);
027             }
028         });
029     }
030     loop('background');
031     }, 'background')
032 loader.start(['background', 'image']);
033 })(PxLoader, soundManager);
```

Calling start() causes the loader to start downloading the assets. The array determines the order that they are downloaded.

# Ivana McConnell

web [www.rational-animal.co.uk](http://www.rational-animal.co.uk)



**Current role** Full-time freelance front-end developer  
**Education** BA in Psychology – University of British Columbia, Canada  
**Expertise** Photoshop, Illustrator, HTML5/CSS3, WordPress, Bootstrap and Foundation frameworks  
**Clients** Knowillage, 15Five, Plus Digital, WhiskyWeb and quite a few local Edinburgh-based clients  
**Twitter** @IvanaMcConnell

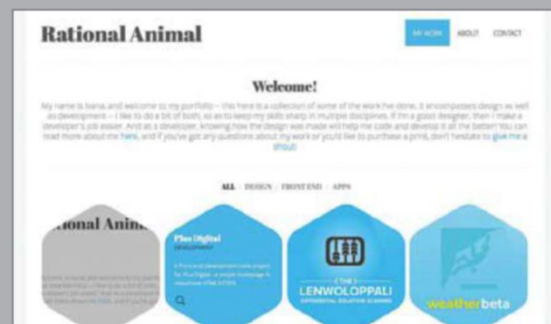
Ivana is a self-taught web designer and front-end developer who is currently based in Edinburgh, Scotland, after arriving several years ago from Canada for university and never leaving. She started dabbling with HTML at the age of 13, inspired by her dad, a self-taught software engineer. After going to university and graduating with a degree in psychology, doing research in neuroscience and working as a game tester, she finally decided to make a full-time career out of the hobby she'd loved since the age of 13.

What she loves most about web design is how quickly the community changes, and the

fast pace of development. There's always something new to learn and utilise in a new project. She also loves the process of designing something and then solving the puzzle and finding the best way to make that creativity look amazing on the computer, tablet or mobile phone. There's never time to get bored.

What inspires her most is reading typography journals – her favourites are Codex and 8Faces – and looking at the likes of Smashing Magazine, Designspiration and the Ubiquitous Dribbble.

Her goal is to constantly improve, and for her next project to always be better than the last.



02 [www.rational-animal.co.uk](http://www.rational-animal.co.uk)



03 [www.philbyrne.co.uk](http://www.philbyrne.co.uk)



04 [www.whiskyweb.co.uk](http://www.whiskyweb.co.uk)



05 [www.arlenemcconnell.com](http://www.arlenemcconnell.com)



01 [www.knowillage.com](http://www.knowillage.com)

## 01

Knowillage, an e-learning firm, came to Ivana for a new site. She used simple, neutral colours and a grid-based arrangement to make the site accessible for all.

## 02

Ivana's portfolio comes under the moniker of Rational Animal and the site uses hexagonal shapes to present her work in a responsive framework.

## 03

An internet marketing specialist, Phil needed a site that showed his enthusiasm for the web. Big taglines and bright red colours get across the desired message.

## 04

A logo and site for Whisky Web, a web conference that blends the old and the new – the message gets across with a subtle grunge texture and a simple illustration.

## 05

This online CV for a systems engineer uses *Space Invaders* and the Millennium Falcon for fun, but maintains a serious profile with the colours and font choice.

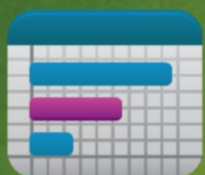
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# Janusz Rust/ Luke Taylor

web [www.pixeldotcreative.com](http://www.pixeldotcreative.com)



**Current role** Creative directors  
**Education** BA Industrial Design and Technology - Brunel University; BA Graphic Communication - Norwich University College of the Arts  
**Expertise** Branding, Graphic design, Adobe suite, HTML, CSS, WordPress  
**Clients** UPS, The Body Shop, Yell.com/Hibu, Stagecoach  
**Twitter** @pixeldotco

Janusz Rust and Luke Taylor are the co-founders of Pixeldot Creative, a creative agency from Brighton. Their ethos is to design to communicate, not just decorate. Rust and Taylor set up Pixeldot Creative at the beginning of 2012 after working on a number of projects together. They specialise in creating and developing brands to work online and offline. To achieve their goal they have an in-house team of specialists creating work with the aim to connect with people's hearts as well as minds.

The design process at Pixeldot is led by interaction with the client, a good understanding of the target audience and the consistent thinking that 'communication is king'. This way of working allows the team to develop

creative concepts quickly and help the client to feel fully involved.

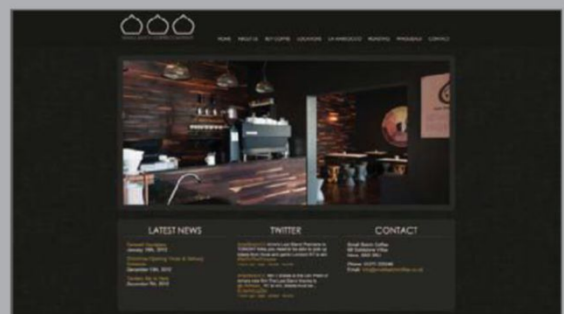
Pixeldot's passion is to work on projects which have a creative challenge, and to that end all team members have equal voices in the creative process to reach the right outcome. In their relatively short time together the agency have worked with swathes of clients, putting together a comprehensive portfolio that demonstrates their talents. Like all good creatives, they absorb inspiration from a host of sources and they are currently enjoying the delights of *Wallpaper* magazine, the undoubted talent of former executive creative director of Saatchi & Saatchi Paul Arden, and all being fuelled by Small Batch espressos.



02 [www.customfitting.co.uk](http://www.customfitting.co.uk)



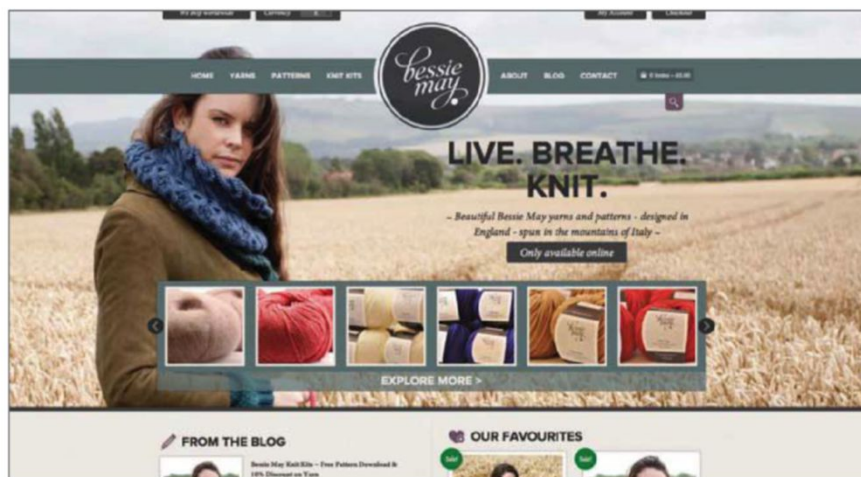
03 [www.meyerandmortimer.com](http://www.meyerandmortimer.com)



04 [www.smallbatchcoffee.co.uk](http://www.smallbatchcoffee.co.uk)



05 [www.wecangodutch.com](http://www.wecangodutch.com)



01 [www.bessiemay.com](http://www.bessiemay.com)

## 01

The idea was to appeal to a younger audience while retaining the traditional one. This was achieved by creating an emotive brand through nostalgic design.

## 02

A responsive design for a well-used blog. The challenge was to show multiple categories in a clear and concise way when viewed on any device.

## 03

The design had to give a modern twist to the 200-year-old Meyer & Mortimer brand and to show the quality and style of the famous tailors.

## 04

The coffee chain Small Batch oozes a clean, contemporary style reflecting the tactile nature of the product. The site has developed with the firm.

## 05

Pixeldot was asked to redesign and develop an exciting online crowd lifestyle funding website after creating the brand identity. The site integrates with various APIs.

# DOES NOT COMPUTE!

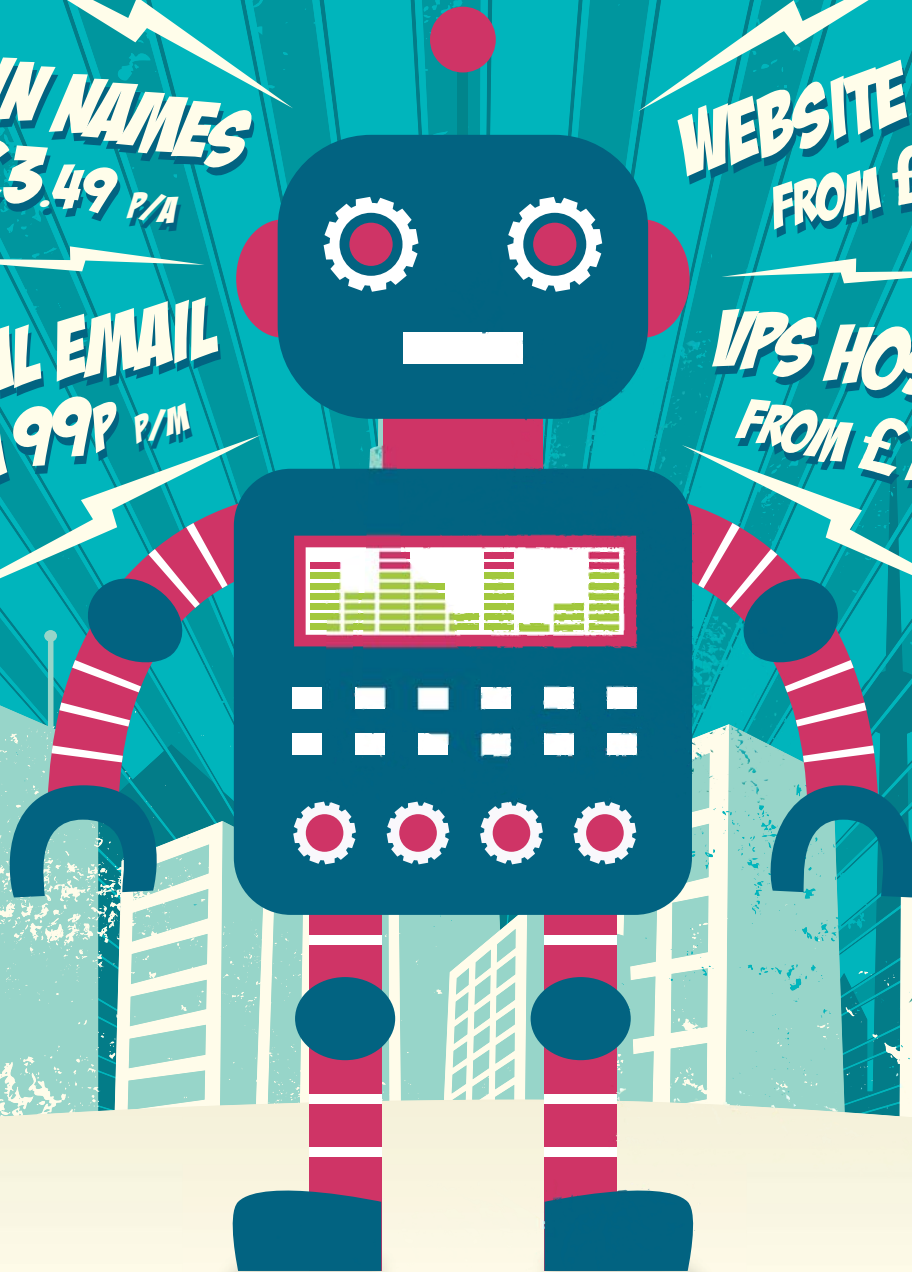
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## Subject WordPress eCommerce themes?

From Phil Storey



I'm a monthly subscriber to **Web Designer** mag – love it! Just a quick question - I've seen and used a number of WordPress templates that come with the CD each month; however I'm struggling to find an eCommerce one in my back catalogue. Would you be able to point me in the right direction for one or two of them?

WordPress eCommerce themes are becoming more common, but **Web Designer** hasn't had an

eCommerce one for a while, so we will make it our mission to get some on the disc. The last issue to feature an eCommerce-related theme was issue 201. This boasted the Kaboodle theme from WooThemes which includes styling for the freely available WooCommerce eCommerce plug-in. A few premium themes worth checking out are Boutique ([www.elegantthemes.com/gallery/boutique](http://www.elegantthemes.com/gallery/boutique)) and Shelflife ([www.woothemes.com/products/shelflife](http://www.woothemes.com/products/shelflife)).



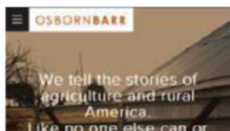
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## Subject Designing for a startup

From Zoltan



I've been toying around with Photoshop CS6 for a few weeks. A friend has liked my early works and has asked me to design a website for his startup! He will do the coding in HTML and CSS.

What size document shall I start designing in Photoshop?! How many pixels long/wide? What shall I set the DPI at? Shall I use pixels as a measurement at all?!

What is the general workflow? Design the stuff, then flatten the whole file at the end and slice it up afterwards and those will become the elements of the website?

How do I keep the quality of the final web elements [but also keep them at] the smallest size so that the websites will load quickly?!

First, find out what dimensions your friend intends to use. 960 pixels is a good choice – or if looking for a larger site, try 1180 pixels. The height is not so critical. Workflow is a matter of

preference; we suggest you design the whole document and keep layers, and then create a flattened version. Finally, images are typically 72dpi, though hi-res screens might need to be taken into consideration, depending on the design and the end-user. Typically, chose JPG or PNG for file formats. Hope that helps.

## Subject What, no Joomla or Drupal?

From Dan Bicknell



I have been a great fan of yours over the years... I have however noticed a lacuna in your articles over recent years. That is, you provide a great deal of WordPress articles but this seems to be the only content management system that you are aware of.

Yes, WordPress is usually listed as one of the top three CMSs for the LAMP platform but it is usually listed as number 3, falling behind Drupal and Joomla, depending on the author reviewing. In general, all three are good robust systems

and choosing between them is often a matter of personal preference. That said, Drupal and Joomla provide a great deal more functionality than WordPress. They are more enterprise-class solutions whereas WordPress is more suited for blogging and sites that are limited in scope.

Don't get me wrong, I do think that the WordPress articles are valuable, but I would certainly appreciate some occasional coverage of other prominent CMSs as well.

**While we do try to cover other CMSs, there are several reasons why WordPress gets the widest coverage. First, it is quick and easy to install. As enterprise solutions, the other systems you mentioned are more functional than creative. Web designers and developers have made WordPress their favourite platform. The system's popularity has in turn spawned thousands of simply beautiful themes, making it the best-looking CMS on the front-end.**

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	1&1 Standard (Linux)	0844 335 12 11	£59.88	50GB	Unlimited	3,000	✓	✓	✓	✓	✓	✓	✓	✗
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	Drupal Web Hosting Pack	N/A	£24	5GB	2GB	100	✓	✓	✓	✓	✗	✓	✓	✗
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	osCommerce Web Hosting Pack	N/A	£24	5GB	2GB	100	✓	✓	✓	✓	✗	✓	✓	✗
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2020Media ( <a href="http://www.2020media.com">www.2020media.com</a> )	JAVA Tomcat	0870 321 2020	£300	100MB	3GB	15	✓	✓	✓	✓	✓	✓	✓	✗
2020Media ( <a href="http://www.2020media.com">www.2020media.com</a> )	ASP.Net	0870 321 2020	£275	100MB	3GB	15	✓	✓	✓	✓	✓	✓	✓	✗
4D Data Centres ( <a href="http://www.4dhosting.com">www.4dhosting.com</a> )	Bronze Package	0845 166 8386	£40	10MB	500MB	2	✓	✗	✓	✓	✓	✓	✓	✗
4D Data Centres ( <a href="http://www.4dhosting.com">www.4dhosting.com</a> )	Silver Package	0845 166 8386	£64.99	20MB	2GB	10	✓	✗	✓	✓	✓	✓	✓	✗
4D Data Centres ( <a href="http://www.4dhosting.com">www.4dhosting.com</a> )	Gold Package	0845 166 8386	£79.99	50MB	2GB	50	✓	✗	✓	✓	✓	✓	✓	✗
4D Data Centres ( <a href="http://www.4dhosting.com">www.4dhosting.com</a> )	Titanium Package	0845 166 8386	£149.99	500MB	5GB	500	✓	✗	✓	✓	✓	✓	✓	✗
4D Data Centres ( <a href="http://www.4dhosting.com">www.4dhosting.com</a> )	Reseller Package	0845 166 8386	£299.99	1GB	10GB	1,000	✓	✗	✓	✓	✓	✓	✓	✗
Blackfoot Hosting Ltd ( <a href="http://www.blackfoot.co.uk">www.blackfoot.co.uk</a> )	Home	N/A	£40	500MB	5GB	5	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd ( <a href="http://www.blackfoot.co.uk">www.blackfoot.co.uk</a> )	Business	N/A	£50	1GB	20GB	100	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd ( <a href="http://www.blackfoot.co.uk">www.blackfoot.co.uk</a> )	eCommerce	N/A	£100	2GB	40GB	200	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd ( <a href="http://www.blackfoot.co.uk">www.blackfoot.co.uk</a> )	Professional	N/A	£150	3GB	60GB	300	✓	✓	✓	✓	✗	✓	✓	✗
<b>Blacknight</b> <a href="http://www.blacknight.com">www.blacknight.com</a>	Minimus	35359 918 3072	£45	10GB	200GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
	Starter Web Hosting Pack	35359 918 3072	£30	5GB	2GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
	Budget Web Hosting Pack	35359 918 3072	£12	1GB	1GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Starter Linux	N/A	£130	2,000MB	2,000MB	10	✓	✓	✓	✓	✗	✓	✓	✓
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Starter Windows	N/A	£20	2,000MB	2,000MB	10	✓	✓	✓	✓	✗	✓	✓	✓
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Business Linux	N/A	£45	4,000MB	4,000MB	4,000	✓	✓	✓	✓	✗	✓	✓	✓
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Business Windows	N/A	£45	4,000MB	4,000MB	4,000	✓	✓	✓	✓	✗	✓	✓	✓
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Ultimate Linux	N/A	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
Bravo14 ( <a href="http://bravo14.co.uk">http://bravo14.co.uk</a> )	Ultimate Windows	N/A	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
catalyst2 ( <a href="http://www.catalyst2.com/web-hosting">www.catalyst2.com/web-hosting</a> )	Mega Deal	0800 107 79 79	11.99	250MB	2GB	1	✓	✓	✓	✓	✓	✓	✓	✗
catalyst2 ( <a href="http://www.catalyst2.com/web-hosting">www.catalyst2.com/web-hosting</a> )	Mega Plus	0800 107 79 79	29.99	400MB	10GB	10	✓	✓	✓	✓	✓	✓	✓	✗
catalyst2 ( <a href="http://www.catalyst2.com/web-hosting">www.catalyst2.com/web-hosting</a> )	Power	0800 107 79 79	49.99	750MB	20GB	50	✓	✓	✓	✓	✓	✓	✓	✗
catalyst2 ( <a href="http://www.catalyst2.com/web-hosting">www.catalyst2.com/web-hosting</a> )	Power Plus	0800 107 79 79	89.99	1000MB	40GB	100	✓	✓	✓	✓	✓	✓	✓	✗
catalyst2 ( <a href="http://www.catalyst2.com/web-hosting">www.catalyst2.com/web-hosting</a> )	Power Xtra	0800 107 79 79	129.99	1500MB	80GB	150	✓	✓	✓	✓	✓	✓	✓	✗
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	Starter	0844 372 9848	£30	3GB	20GB	1,000	✓	✓	✗	✓	✗	✓	✓	✗
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	Home	0844 372 9848	£40	10GB	50GB	10,000	✓	✓	✗	✓	✗	✓	✓	✗

## Featured host of the month: **Netcetera** [www.netcetera.co.uk](http://www.netcetera.co.uk)



Getting more out of one of our quality listed hosting providers

Netcetera is a long-established and experienced hosting provider which has been around since 1996. It provides solutions with managed web hosting services, dedicated servers and cloud hosting services. The award-winning company boasts a 16,000-square-foot, ISO 27001-certified data centre facility located

in the Isle of Man. They offer a £1 Hosting trial for those who want to try before they buy. Developer packages are powered by the latest Microsoft ASP.NET 4.5 platform, and include 1GB of web space for just £2.99 a month. Ideal for newbies, designers and developers who want a quick, simple and cheap hosting solution.

NAME AND URL	PACKAGE	PHONE NUMBER	COST PER YEAR	WEB SPACE	MONTHLY BANDWIDTH	POP3 ACCOUNTS	DATABASE SUPPORT	SHOPPING CART	VIRUS FILTER	FIREWALL	PHONE SUPPORT	EMAIL SUPPORT	WEB CONTROL PANEL	SERVICE LEVEL AGREEMENT
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	Business	0844 372 9848	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	Windows Unlimited	0844 372 9848	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	Windows Home	0844 372 9848	£40	10GB	50GB	1,000	✓	✓	✓	✓	✓	✓	✓	✓
Designwasp ( <a href="http://designwasp.com">http://designwasp.com</a> )	CheapHost	0844 372 9848	£10	300MB	100MB	5	✓	✓	✓	✓	✓	✓	✓	✓
Digital Gibbon Ltd ( <a href="http://digitalgibbon.com">http://digitalgibbon.com</a> )	Personal	01865 589 990	£12	1GB	Unlimited	10	✓	✓	✓	✓	✓	✓	✓	✓
Digital Gibbon Ltd ( <a href="http://digitalgibbon.com">http://digitalgibbon.com</a> )	Personal Plus	01865 589 990	£48	Unlimited	Unlimited	50	✓	✓	✓	✓	✓	✓	✓	✓
Digital Gibbon Ltd ( <a href="http://digitalgibbon.com">http://digitalgibbon.com</a> )	Business	01865 589 990	£108	5GB	Unlimited	1000	✓	✓	✓	✓	✓	✓	✓	✓
Digital Gibbon Ltd ( <a href="http://digitalgibbon.com">http://digitalgibbon.com</a> )	Business Professional	01865 589 990	£132	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Domaincheck ( <a href="http://www.domaincheck.co.uk">www.domaincheck.co.uk</a> )	Bronze Linux	0191 261 2252	£30	100MB	1GB	5	✓	✓	✓	✓	✓	✓	✓	✓
Domaincheck ( <a href="http://www.domaincheck.co.uk">www.domaincheck.co.uk</a> )	Gold Linux	0191 261 2252	£100	500MB	5GB	25	✓	✓	✓	✓	✓	✓	✓	✓
Domaincheck ( <a href="http://www.domaincheck.co.uk">www.domaincheck.co.uk</a> )	Bronze Windows	0191 261 2252	£30	100MB	1GB	5	✓	✓	✓	✓	✓	✓	✓	✓
Domaincheck ( <a href="http://www.domaincheck.co.uk">www.domaincheck.co.uk</a> )	Gold Windows	0191 261 2252	£100	500MB	5GB	25	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Reseller Unix	0845 226 5566	£399.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Reseller Windows	0845 226 5566	£499.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Enterprise	0845 226 5566	£89.99	1GB	2GB	250	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Commerce	0845 226 5566	£179.99	2GB	5GB	500	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Designer	0845 226 5566	£119.99	1GB	2GB	250	✓	✓	✓	✓	✓	✓	✓	✓
Donhost ( <a href="http://www.donhost.co.uk">www.donhost.co.uk</a> )	Developer	0845 226 5566	£259.99	2GB	5GB	500	✓	✓	✓	✓	✓	✓	✓	✓
eHosting ( <a href="http://www.ehosting.com">www.ehosting.com</a> )	Starter	0844 999 4100	£23.88	1GB	25GB	10	✓	✓	✓	✓	✓	✓	✓	✓
eHosting ( <a href="http://www.ehosting.com">www.ehosting.com</a> )	Personal	0844 999 4100	£59.88	2.5GB	Unlimited	50	✓	✓	✓	✓	✓	✓	✓	✓
eHosting ( <a href="http://www.ehosting.com">www.ehosting.com</a> )	Expert	0844 999 4100	£95.88	5GB	Unlimited	250	✓	✓	✓	✓	✓	✓	✓	✓
eHosting ( <a href="http://www.ehosting.com">www.ehosting.com</a> )	Virtual	0844 999 4100	£227.88	50GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Equipphase ( <a href="http://www.equipphase.net">www.equipphase.net</a> )	Bronze	0121 314 4865	£30	200MB	2GB	10	✓	✓	✓	✓	✓	✓	✓	✓
Equipphase ( <a href="http://www.equipphase.net">www.equipphase.net</a> )	Silver	0121 314 4865	£42	400MB	5GB	20	✓	✓	✓	✓	✓	✓	✓	✓
Equipphase ( <a href="http://www.equipphase.net">www.equipphase.net</a> )	Gold	0121 314 4865	£72	800MB	10GB	100	✓	✓	✓	✓	✓	✓	✓	✓
Equipphase ( <a href="http://www.equipphase.net">www.equipphase.net</a> )	Platinum	0121 314 4865	£114	1,200MB	40GB	200	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com ( <a href="http://www.eurofasthost.com">www.eurofasthost.com</a> )	Email Only	02380 249 823	£40	1GB	2GB	10	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com ( <a href="http://www.eurofasthost.com">www.eurofasthost.com</a> )	Essential	02380 249 823	£75	2GB	5GB	10	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com ( <a href="http://www.eurofasthost.com">www.eurofasthost.com</a> )	Superior	02380 249 823	£140	5GB	10GB	25	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com ( <a href="http://www.eurofasthost.com">www.eurofasthost.com</a> )	Premium	02380 249 823	£250	10GB	25GB	100	✓	✓	✓	✓	✓	✓	✓	✓
Evohosting ( <a href="http://www.evohosting.co.uk">www.evohosting.co.uk</a> )	Starter	N/A	£29.99	500MB	1GB	3	✓	✓	✓	✓	✓	✓	✓	✓
Evohosting ( <a href="http://www.evohosting.co.uk">www.evohosting.co.uk</a> )	Home	N/A	£54.99	2.5GB	30GB	50	✓	✓	✓	✓	✓	✓	✓	✓
Evohosting ( <a href="http://www.evohosting.co.uk">www.evohosting.co.uk</a> )	Business	N/A	£79.99	6.5GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Evohosting ( <a href="http://www.evohosting.co.uk">www.evohosting.co.uk</a> )	eCommerce	N/A	£159.99	30GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓

 <b>Fasthosts</b> <a href="http://www.fasthosts.co.uk">www.fasthosts.co.uk</a>	Personal	0808 168 6777	£32.87	5GB	Unlimited	50	✓	✓	✓	✓	✓	✓	✓	✓
	Business Bronze	0808 168 6777	£58.38	50GB	Unlimited	500	✓	Option	✓	✓	✓	✓	✓	✓
	Business Silver	0808 168 6777	£76.39	Unlimited	Unlimited	Unlimited	✓	Option	✓	✓	✓	✓	✓	✓
	Business Gold	0808 168 6777	£101.89	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	WD Starter	0808 168 6777	£149.99	20GB	Unlimited	Unlimited	✓	Option	Option	✓	✓	✓	✓	✓
	WD Advanced	0808 168 6777	£199.99	Unlimited	Unlimited	Unlimited	✓	Option	Option	✓	✓	✓	✓	✓

Giacom ( <a href="http://www.giacom.com">www.giacom.com</a> )	Business Pro	0800 542 7500	£199	100MB	2GB	100	✓	✓	✓	✓	✓	✓	✓	✓
Heart Internet ( <a href="http://www.heartinternet.co.uk">www.heartinternet.co.uk</a> )	Starter Professional	0845 644 7750	£29.80	2.5GB	10GB	1,000	✓	✓	✓	✓	✓	✓	✓	✓
Heart Internet ( <a href="http://www.heartinternet.co.uk">www.heartinternet.co.uk</a> )	Home Professional	0845 644 7750	£89.99	Unlimited	Unlimited	10,000	✓	✓	✓	✓	✓	✓	✓	✓
Heart Internet ( <a href="http://www.heartinternet.co.uk">www.heartinternet.co.uk</a> )	Business Professional	0845 644 7750	£129.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Heart Internet ( <a href="http://www.heartinternet.co.uk">www.heartinternet.co.uk</a> )	Reseller Professional	0845 644 7750	£349.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Silver	0808 180 1880	£79.50	150MB	3GB	5	✓	Option	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Gold	0808 180 1880	£139.50	300MB	5GB	10	✓	Option	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Gold Plus	0808 180 1880	£189.50	450MB	10GB	30	✓	Option	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Platinum	0808 180 1880	£359.50	600MB	20GB	50	✓	Option	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Platinum Plus	0808 180 1880	£599.50	1.2GB	40GB	10	✓	Option	✓	✓	✓	✓	✓	✓
Hostway ( <a href="http://www.hostway.co.uk">www.hostway.co.uk</a> )	Email Plus	0808 180 1880	£49.95	50MB	N/A	5	N/A	N/A	✓	✓	✓	✓	✓	✓
ICUK ( <a href="http://www.icukhosting.co.uk">www.icukhosting.co.uk</a> )	Professional	0845 009 9175	£30	250MB	1GB	50	✓	✓	option	✓	✓	✓	✓	✓
ICUK ( <a href="http://www.icukhosting.co.uk">www.icukhosting.co.uk</a> )	Advanced	0845 009 9175	£50	2GB	2.5GB	150	✓	✓	option	✓	✓	✓	✓	✓
ICUK ( <a href="http://www.icukhosting.co.uk">www.icukhosting.co.uk</a> )	Enterprise	0845 009 9175	£80	2GB	500MB	Unlimited	✓	✓	option	✓	✓	✓	✓	✓
ICUK ( <a href="http://www.icukhosting.co.uk">www.icukhosting.co.uk</a> )	Professional Plus	0845 009 9175	£90	500MB	5GB	100	✓	✓	option	✓	✓	✓	✓	✓
ICUK ( <a href="http://www.icukhosting.co.uk">www.icukhosting.co.uk</a> )	Premium Plus	0845 009 9175	£150	1GB	12.5GB	500	✓	✓	option	✓	✓	✓	✓	✓



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**Continued...**

NAME AND URL	PACKAGE	PHONE NUMBER	COST PER YEAR	WEB SPACE	MONTHLY BANDWIDTH	POP3 ACCOUNTS	DATABASE SUPPORT	SHOPPING CART	VIRUS FILTER	FIREWALL	PHONE SUPPORT	EMAIL SUPPORT	WEB CONTROL PANEL	SERVICE LEVEL AGREEMENT
ICUK www.icukhosting.co.uk	Enterprise Plus	0845 009 9175	£300	2GB	20GB	Unlimited	✓	✓	option	✓	✓	✓	✓	✓
ICUK www.icukhosting.co.uk	Reseller Windows	0845 009 9175	£200	Unlimited	Unlimited	Unlimited	✓	✓	option	✓	✓	✓	✓	✓
ICUK www.icukhosting.co.uk	Reseller Linux	0845 009 9175	£200	Unlimited	Unlimited	Unlimited	✓	✓	option	✓	✓	✓	✓	✓
ICUK www.icukhosting.co.uk	Reseller Enterprise	0845 009 9175	£500	Unlimited	Unlimited	Unlimited	✓	✓	option	✓	✓	✓	✓	✓
JAB Web Hosting (www.jabwebhosting.com)	Mail - M105	0800 043 0153	£15.17	256MB	3GB	50	✓	✓	✓	✓	✓	✓	✓	✓
JAB Web Hosting (www.jabwebhosting.com)	Home - H25	0800 043 0153	£24.47	1GB	8GB	50	✓	✓	✓	✓	✓	✓	✓	✓
JAB Web Hosting (www.jabwebhosting.com)	Professional - P55	0800 043 0153	£45	2GB	15GB	75	✓	✓	✓	✓	✓	✓	✓	✓
JAB Web Hosting (www.jabwebhosting.com)	Reseller - R25	0800 043 0153	£97.88	2GB	30GB	250	✓	✓	✓	✓	✓	✓	✓	✓
JAB Web Hosting (www.jabwebhosting.com)	Reseller - R105	0800 043 0153	£271.60	4GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Blog	01438 342 490	£20	100MB	1GB	5	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Starter	01438 342 490	£30	1GB	1GB	10	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Starter	01438 342 490	£30	1GB	1GB	10	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Dynamic	01438 342 490	£50	2GB	2GB	20	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Premium	01438 342 490	£80	5GB	5GB	50	✓	✓	✓	✓	✓	✓	✓	✓
LCN (www.lcn.com)	Unlimited	01438 342 490	£120	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	LD Budget (Linux)	07891 235858	£11.88	1GB	1GB	500	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	LD Home (Linux)	07891 235858	£23.88	10GB	10GB	5,000	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	LD Pro (Linux)	07891 235858	£41.88	50GB	50GB	20,000	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	LD Unlimited (Linux)	07891 235858	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	Windows Home	07891 235858	£17.88	2GB	2GB	1,000	✓	✓	✓	✓	✓	✓	✓	✓
LD Hosts (http://ldhosts.co.uk)	Windows Unlimited	07891 235858	£60	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
 NameHOG www.namehog.net	EMAIL ONLY	01604 212 904	£11.99	2.5GB	15GB	10	✓	✓	✓	✓	✓	✓	✓	✓
	STARTER	01604 212 904	£36.99	10GB	150GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	HOME PRO	01604 212 904	£59.99	25GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	BUSINESS	01604 212 904	£109.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
 Netcetera www.netcetera.co.uk	DEVELOPER	0800 061 2801	£32.89	1GB	Unlimited	500	✓	✓	✓	✓	✓	✓	✓	✓
	ONE	0800 061 2801	£109.99	5GB	Unlimited	1000	✓	✓	✓	✓	✓	✓	✓	✓
	RESELLER	0800 061 2801	£274.89	Unlimited	Unlimited	1000	✓	✓	✓	✓	✓	✓	✓	✓
	VM500 Server	0800 061 2801	£300	20GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	2200DC Server	0800 061 2801	£720	160GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	3000DC Server	0800 061 2801	£1,200	2x500GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
 Tsohost www.tsohost.com	2600QC Server	0800 061 2801	£1,800	2x500GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	Lite Hosting (Linux)	0800 024 2931	£14.99	500MB	5GB	10	✓	✓	✓	✓	✓	✓	✓	✓
	Standard Hosting (Linux & MS)	0800 024 2931	£34.99	2.5GB	20GB	25	✓	✓	✓	✓	✓	✓	✓	✓
	Pro Hosting (Linux & MS)	0800 024 2931	£49.99	10GB	150GB	100	✓	✓	✓	✓	✓	✓	✓	✓
	Ultimate Hosting (Linux & MS)	0800 024 2931	£199.99	100GB	1000GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
	Ultimate Reseller (Linux & MS)	0800 024 2931	£299.98	100GB	1000GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓

## Golden rules to top hosting

We identify and explain the key criteria for success...

### 1 The best resources for you

Selecting your ideal package is largely determined by the kinds of resources and quantity of features you require from your hosting solution. Key criteria like web space and monthly bandwidth are important for those services likely to be subjected to heavy amounts of traffic, which is why package solutions for enterprise applications are typically much more expensive. The general rule of thumb is not to buy more than you need or underestimate potential requirements...

### 2 Competitive and reliable

The hosting market is big business and hosting providers do try to drive prices down in a bid to entice your custom. Use our chart to compare costs, but be sure to visit the vendor websites to keep track of the latest deals, as they change. Remember that low price should not always be a deciding factor and that paying a premium for a more reliable, trusted and experienced vendor can offer you much better value for money in the long term.

### 3 Putting you in control

Modern hosting is all about giving customers the power to set up, monitor and maintain their web space with minimal fuss. Most commercial vendors offer access to award-winning and intuitive control panels that enable you to log in remotely and intuitively tweak your account, without the need to relay complicated instructions down the phone. Be sure to find out from your potential host as much as you can about the control panel and request a demo.

### 4 Fantastic customer support

If all else fails and you need some extra help to get your hosting back online, then a commitment to future customer support is key. Many vendors offer a service-level agreement which outlines what you can expect here, however most will be more explicit about whether phone support is included or email contact is preferred. Think about what you need for peace of mind and factor good, comprehensive technical support against the price.

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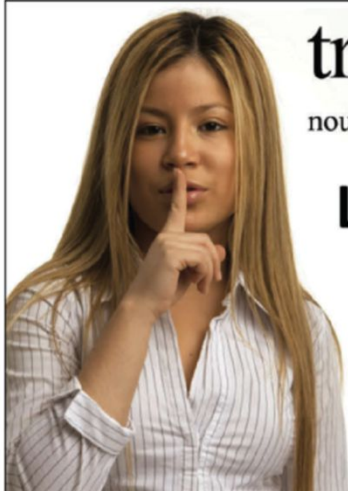
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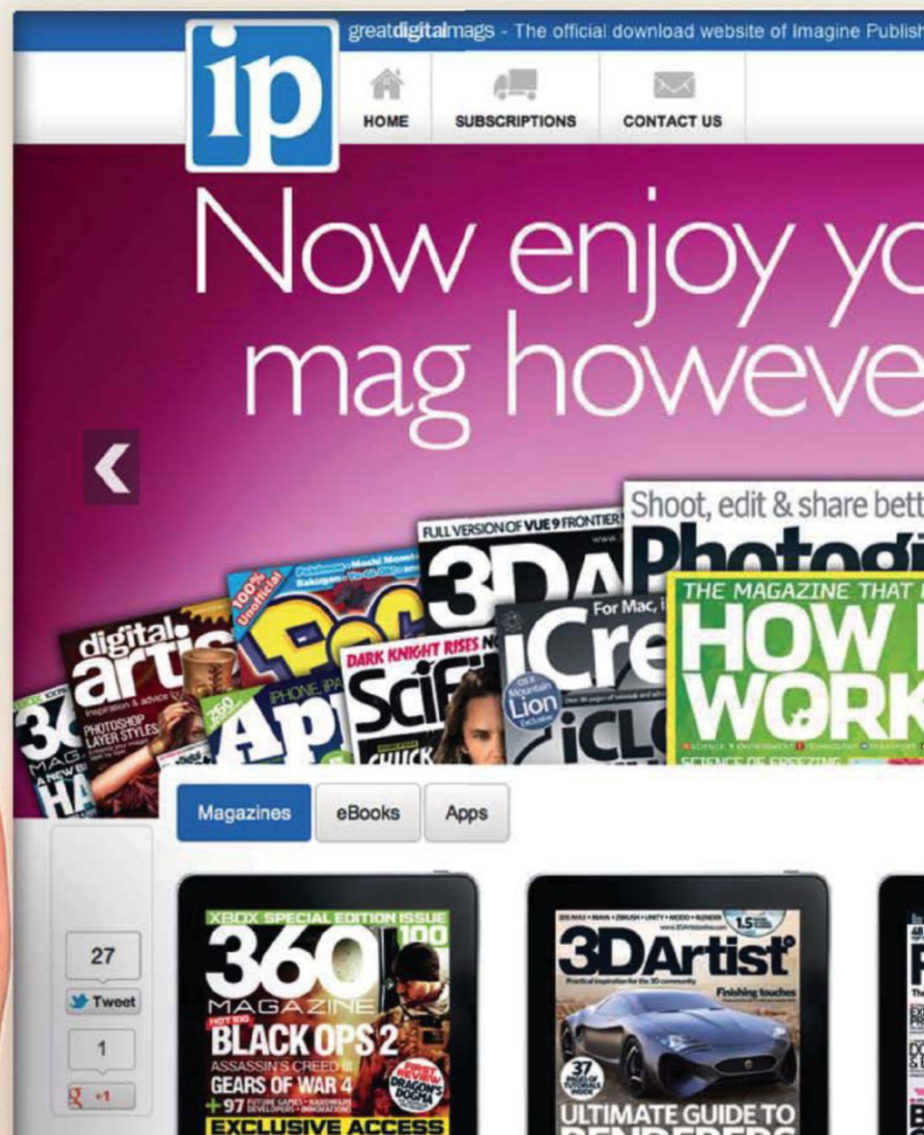
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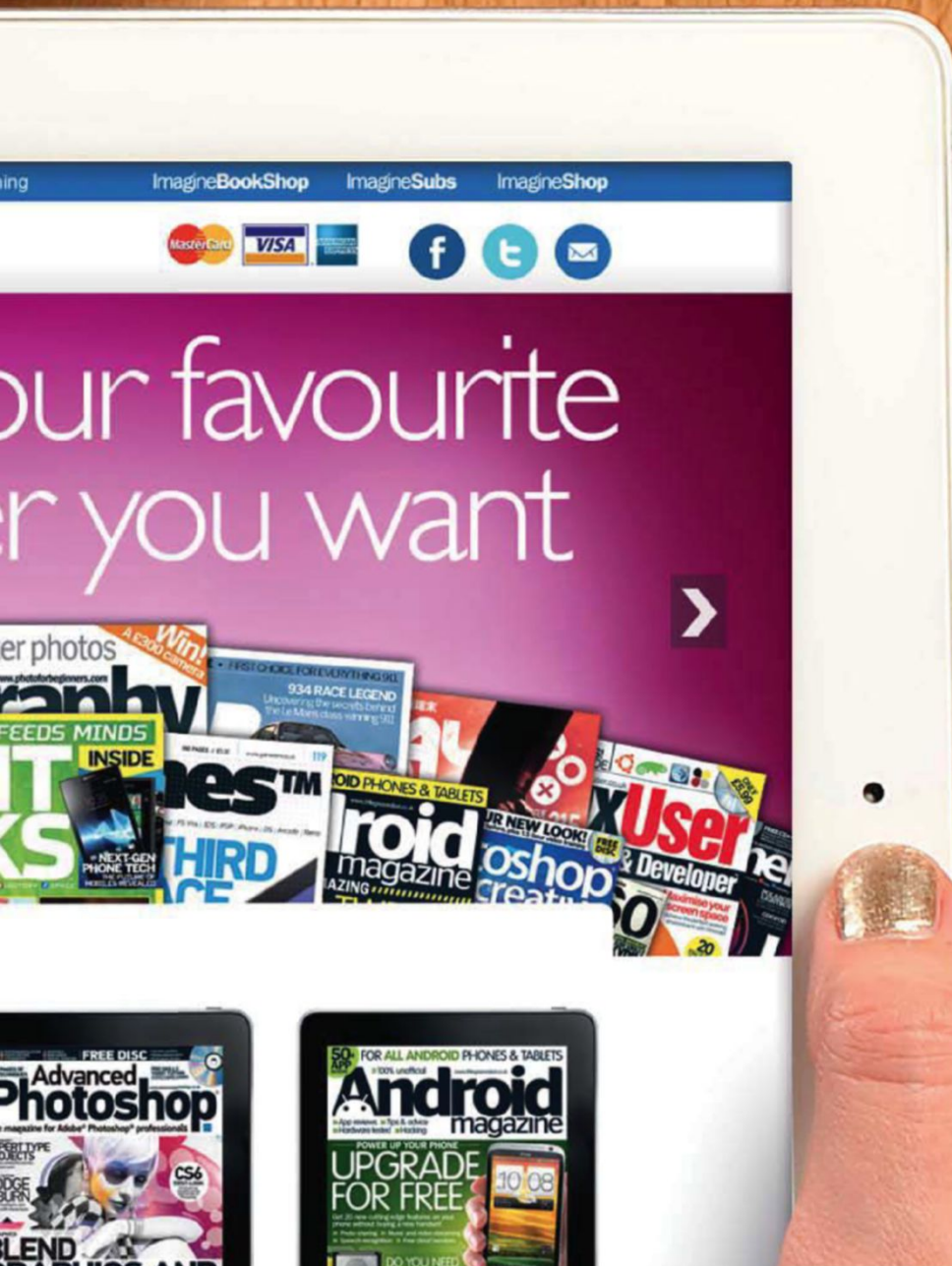
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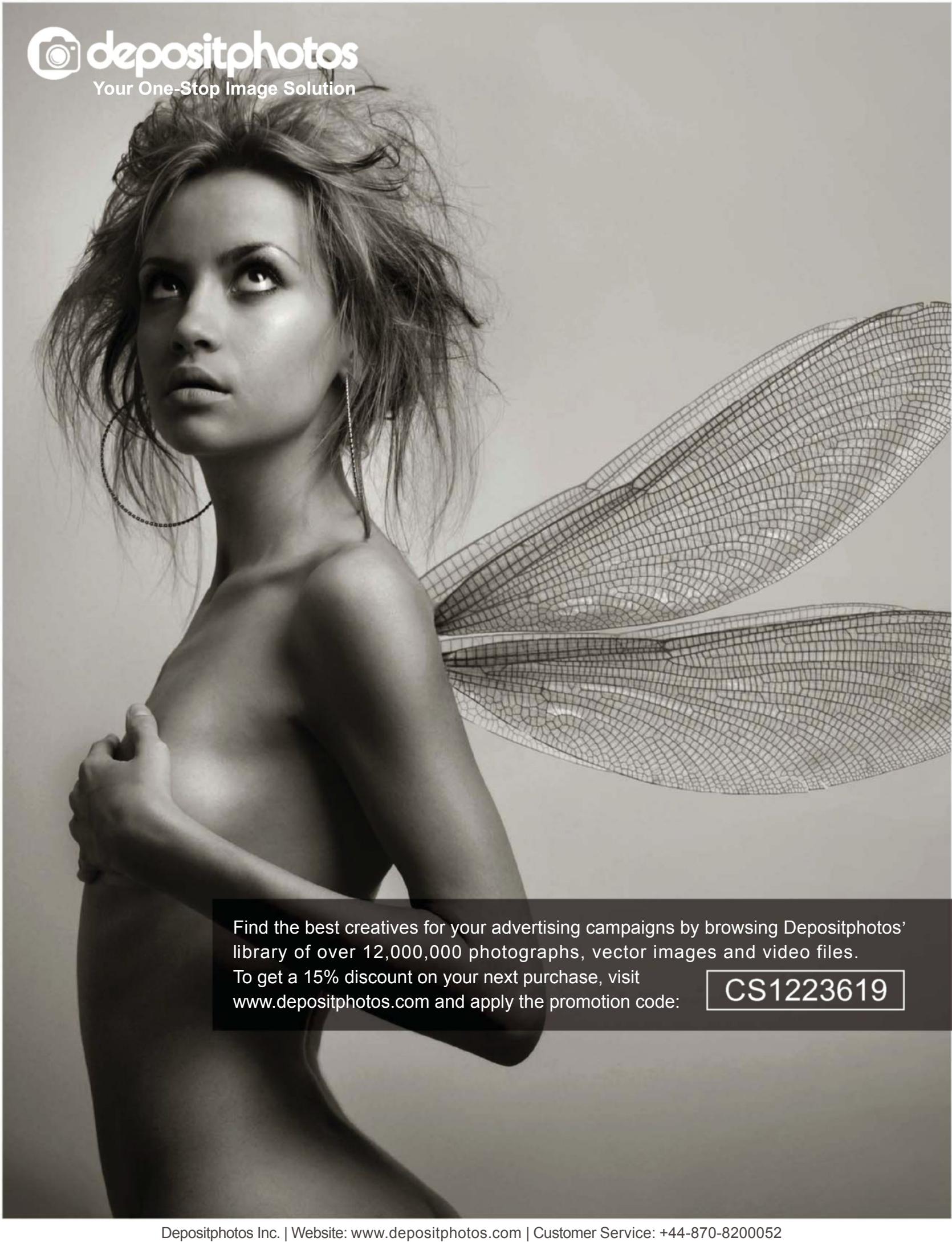
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