

/expert_advice

Web pros answer your questions

Spam filters

My store sends out special offer email promotions where the email is all image-based. Is this a problem for spam filters, since spammers use this approach?

From: Gareth

Dave Chaffey: Not necessarily, since spam filters use a number of signals to assess spammers and this is just one. The reputation of the IP address your list is sent from is far more important (based on the percentage delivered and complaints). I recommend checking yours at www.senderscore.org. I also strongly recommend updating your email template to make your promotion more prominent when images aren't downloaded (the default). Feature your promotion as HTML body text: large font sizes with a background tint often work best.

Benchmarking

I see Google Analytics now has a benchmarking capability. Is it worth setting it up?

From: Natalie

Dave Chaffey: I have, and the short answer is yes, but there are some things you should bear in mind. First, you're sharing data, but it's aggregated, so limited risk, and is limited to a handful of metrics for basic traffic

volume trends such as visits and page views. I think it's most useful for assessing your site's performance against seasonal trends and checking visitor engagement based on pages per visit and duration metrics. You can compare to all sites, or any of the standard categories, but only in sites of a similar size to yours with three size categories based on number of visits.

Frames query

A friend has a website that's in frames because they used a template from their hosting provider. Is it worth improving the title and adding in meta description and keywords, or is this just a waste of time because it's in frames?

From: minandmon

Dave Chaffey: Search engines are more capable at spidering frame-based sites than they were, so yes it's still worth updating the page metadata, although only the title tag will have a significant role in ranking. To ensure that the main pages of the site are indexed, links to these could be added in the <noframes> section of the index page. They should check which pages are indexed using the site:www.domain.com syntax in search engines. They should also look at adding JavaScript to each page that checks if a page

is loaded outside of the parent frameset, by doing a JavaScript test to determine if the parent is present – if (self.parent.frames.length == 0) – and then loading it, if not.

Slow PC

My PC has been really slow lately. I'm pretty sure it's not a virus though, because I've run up-to-date antivirus and I automatically update security patches. Any ideas on what it could be?

From: Marge

Carole Theriault: It's important to remember that computers are fallible, and that faults aren't always malicious attacks. I'd suggest the system might benefit from a little spring cleaning. First, take a look at all the things you have installed. People often download programs, use them for a bit, and then forget about them. These take up space and might be running at start-up and slowing things down. Properly uninstalling any programs you don't use or want any more will help make your system more efficient. Once you've done this, check which items you have running in your start-up. Do you really need to run all the items listed? Lastly, run a full antivirus scan with all the settings at paranoid levels, just to be sure that no infection is lurking in the depths of the system.

Focus on ... Data visualisations



Profile

Name Brian Suda
Job Software developer
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We live in a world of cheap plug-and-churn graphs from statistics software packages. If you can smell an Excel chart a mile away, so can your customers – and what does that say about your company? Spending the time to create beautiful visualisations demonstrates that you care.

Screen resolutions vary from 72-120dpi, whereas print can be 150-300dpi, so the density and clarity of information on a monitor is less. Despite this,

there are many advantages to visualisations on the web. Previously, visualisations were bound in two-dimensional space, printed in ink on paper. Now, they're alive on screen and can react to user or environmental feedback. They can be both live and historical representations simultaneously.

The ability to interact with visualisations on the web enables people to experiment and explore the data in new ways. By adjusting sliders, checkboxes and drop-down menus you can easily change the look and representation of the data. The information displayed can be from a single person's perspective – a relationship cloud of friends, a heatmap of favourite places or a graph of most emailed colleagues – or it could be a representation of larger group trends. The web inherently offers the ability to browse, merge, share and compare data from different sources. Adjusting and



Tourist trail The 'Dopplr Raumzeitgeist' plots where travellers went in 2007. The points form the silhouette of the continents, making further illustration unnecessary

customising this data in real-time is something that's not possible on paper.

Visualisations are language in themselves. They speak to us about forthcoming trends, remind us of

/your experts



Design
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Security
Carole Theriault
Senior security consultant

A well-known spokesperson, Carole is regularly quoted on the latest security threats. www.sophos.com

Sudden shutdowns

My laptop, which is now a few years old, keeps shutting down when I'm in the middle of something. To turn it back on, I need to unplug it and remove the battery. Do you think it's a virus?

From: Pete

Carole Theriault: Well, it could be malware, but the requirement to unplug the battery makes it sound like there's something physically wrong, rather than an infection. Still, I'd make sure you run a full scan to seek and destroy any nasties on the system.

Another potential reason is that your laptop is overheating. You can take it to a specialist, where they'll locate the access panel for the CPU and heatsink area and, using a cotton bud dampened with isopropanol alcohol, they'll remove the dust and gunk. They'll then let it dry before putting it all back together.

Infected websites

I keep hearing about websites being infected. Am I right to think that if a site is secure – and I can see the little padlock – it's safe?

From: Alexis

Carole Theriault: A secure site normally means the traffic between its user (you) and the web server is encrypted. This means that

past events, teach us complex ideas in a way we understand and help us to interpret data in a different way. They need to be thought out and written in the same manner as a novelist writes a book. They choose their words, situations and characters carefully and with meaning.

One of the best ways to learn more about good visualisation design is to observe interesting projects. Stamen design (stamen.com) produces excellent examples of visualisations for the web. Edward Tufte (edwardtufte.com) has written several books on the topic and is a passionate proponent of the need for well designed visual communication.

I recommend keeping a scrapbook of interesting visualisations. Newspapers and magazines are excellent sources of both good and bad examples. Tear out the pages and add them to your ideas pile. This enables you to go back through them, to remind yourself of what works and what to avoid in any future projects.

"It's still worth updating page metadata, although only the title tag will have a significant role in ranking"

Dave Chaffey

anyone intercepting the traffic to try to steal information, often referred to as 'sniffing a session', will come up empty handed as the latest security patches for all software on the system. To ensure sites are safe, there's little you can do aside from investing in web security software that prevents you from visiting sites hosted on infected web servers. But you're wise to stick to reputed sites. Don't give unknown or untrusted websites personal information such as bank details, addresses and so on.

What can you do? Make sure your computer is locked down, which means firewall, antivirus and installation of the latest security patches for all software on the system. To ensure sites are safe, there's little you can do aside from investing in web security software that prevents you from visiting sites hosted on infected web servers. But you're wise to stick to reputed sites. Don't give unknown or untrusted websites personal information such as bank details, addresses and so on.

Customer data

I hold some simple customer data on my laptop, which is protected with a standard firewall and virus package. But a bank account manager has told me I'm breaching the Data Protection Act, and that I need a secure online storage system for customer data. He went on to offer me this for £10 per month. I obviously don't wish to breach any data protection laws, but it's not something I want to get immediately unless I have to.

From: a184r

Struan Robertson: The Data Protection Act says that you have in place 'appropriate technical and organisational measures' to protect personal data against things like accidental loss or hacking. But the security you need will largely depend on the nature of what you hold. Customers of anti-depressants merit greater protection than customers of newspapers; card details need tighter security than names and addresses; one million records need greater security than 100 records. Also relevant is the likely harm caused if there's a security breach and the risk of a security breach. Before you assess all that, you should question whether or not you need to hold the customer data on a laptop

in the first place. If there is a sound reason for doing so, a firewall and virus package are not enough – even if that data only includes names and addresses rather than card details. There are plenty of security solutions available, so you should do some research.

Commercial music

I'm in the process of having a website built and would really like to have a handful of my favourite tracks available to be played on an audio player on the site. The site will be targeted at a very niche audience, so traffic won't be anything significant. Can you offer me some advice on the legalities involved.

From: elephant

Struan Robertson: You can't use commercial music for free. If you're streaming the music and your site is small, some licences are offered by MCPS-PRS (tinyurl.com/3neo4s). Prices begin at £120 per year for up to 45,000 streams. But that doesn't give you all the rights that you need. You also need to contact PPL (Phonographic Performance Ltd), which deals with the sound recording rights on behalf of record labels. Getting a licence from PPL is less straightforward. An alternative is to use royalty-free music.

Instant legal papers

I have a web project that isn't due for launch for some time yet. The paying customers are high street stores, pubs, hotels and restaurants. The users are general consumers like you and me. I have several interested parties and I'd like to approach them with two documents: a contract/SLA and a terms and conditions document. Is there such a thing as an off-the-shelf package/legal document where I could fill in the gaps relative to my business? Basically something that covers the legalities and that I tailor to my needs.

From: Wilf

Struan Robertson: Yes, there are such documents – but I wouldn't recommend them. That may not come as any surprise. Standard packages cannot reflect what is right for all businesses and there's



>> a strong chance that they'll be unsuitable for yours. Getting a good lawyer to provide these documents to you can give you commercial advantages as well as peace of mind on the legal issues.

Should I do a course?

I have a degree in graphic design and managed to find a job in that area, but I really feel like I need to know more about web design (at the moment I work more with the print side of things). At uni most of the web design stuff we did was designing the pages in Photoshop and cutting them up and stuff in Dreamweaver. Since then I've taught myself the basics of HTML and CSS through the w3schools site and other bits I've found, but I have no idea if I'm doing it right. Would doing a course be beneficial – or a waste of time?

From: Hanr

Steve Tucker: As a self-taught web developer I can't comment on the effectiveness of university courses. However I did go through the internet tutorials phase, as I think virtually all of us have at one point or another.

Unfortunately utilising internet tutorials for the purpose of learning a vast skill such as web design is likely to lead you into bad habits and practices, as there is no underlying standard of quality and many of the authors can be relatively new to web design themselves. Rather, I'd simply recommend buying a few good books. The top results on Amazon for 'web design' should do the trick. These books are written by ardent

professionals with plenty of knowledge and experience and you can be sure the content is generally of a higher standard than the majority of that you'll find littering the web.

What should I charge?

I've been asked to do a bit of contract work for a web design company. I'm fairly experienced in web design (good with XHTML, CSS, Photoshop and implementation, though not writing PHP and JavaScript). But I've never done it for an actual client and so I'm fairly clueless as to what is a reasonable charge for my time.

Having had a brief look at what freelancers are charging, the general consensus seems to be around £20-25 per hour, or £200-£250 for a smallish website of five to six pages. I don't want to get ahead of myself just yet, so I'm tempted to go in at a quote of £15 per hour of my time. Is this reasonable? Or am I selling myself short?

From: gorkle

Steve Tucker: This type of question is always difficult to tackle because every contractor/ employer is different. Some will prefer to hire freelancers for as little as possible and are willing to risk compromising the quality and reliability of the service they'll receive. Others, on the other hand, are quite happy to pay a greater sum for what they perceive as higher quality deliverables and reliable, punctual service.

In your circumstances, perhaps a flexible approach would be the most appropriate? You could inform the company in question

that you're happy to do their first two projects at a reduced cost per hour, then – once you've built up trust and a good reputation – you'll increase to your normal rate. That way you're likely to win the work, but in the long run not hang yourself with low charges.

Don't sell yourself too short, though. If I were outsourcing work then I'd personally be more weary of someone who charged just £15 per hour than someone who charged double or more, unless I'd seen a solid portfolio beforehand. Remember, your time is important, no matter how busy, skilled or experienced you are.

JavaScript textarea editor

For years my CMS has used htmlarea to provide formatting for the textarea field. Unfortunately though, this isn't Firefox-compatible, which obviously is becoming a big deal with alternative browsers becoming more popular. Can you recommend another that works in all browsers?

From: slippers

Tom Hughes-Croucher: I'd highly recommend the Yahoo User Interface (YUI) project's recently added Rich Text Editor. You can find it at developer.yahoo.com/yui/editor. Yahoo aims to support the wide number of browsers at developer.yahoo.com/yui/articles/gbs – this should cover all major operating systems and browsers that your users are likely to use. The YUI Rich Text Editor supports all these browsers to the extent that they allow rich text editing.

Editing an SWF

I've been given an SWF, which I cannot edit, but require my webpage to redirect to a URL after the movie is finished playing. Can this be done as a parameter of the movie object or in JavaScript?

From: Paul

“I'd be more weary of someone who charged just £15 per hour than someone who charged double or more” Steve Tucker

Expert tip of the month

Masthead image

I've got a masthead image that I want different on every page of my site. Do I reference this image in the HTML or in the CSS via a class on the body?

From: rabbitsfeat

Steve Tucker: The correct approach to inserting images into web pages is actually a common cause of confusion. Should they be inserted via the markup document or the style sheet? The answer actually depends upon the context of the image.

XHTML is your raw document. It contains the information content you're communicating, and is 'marked up' with tags to distinguish various elements from one another. Now, by information and content we don't just mean text. We mean images too, and if they're part of the context of the

document then they should be included within it. For example, let's say that your XHTML page is a tutorial on how to play the guitar, and that the image you're inserting depicts a hand playing a note; this image is part of the document and therefore should be inserted via the XHTML.

On the other hand there are design-based images – your masthead is a prime example. These images exist to give your web pages a colourful look and feel, a design. But they're not actually part of the document's content. Therefore we should use CSS, as the purpose of CSS is to separate design from content. Many people don't appreciate the importance of these choices, but choosing the correct approach to such problems is key to producing clean-cut, professional websites.



Heads up Whether you insert your masthead via the markup document or the style sheet depends on its context

Tom Hughes-Croucher: The method you describe isn't possible unless the movie has been authored to accept that parameter and handle the redirect.

Not to sound too much like the Microsoft Office paperclip, but 'You sound like you are trying to write a Flash intro movie'. Introduction movies are overrated. People have got used to the web providing services: rather than enjoying watching an intro, they see it as something that's stopping them achieving their goal. While I hope you can find a solution to your technical problem, you might find the best thing for your users is to do without it altogether.

Collaborating effectively

I'm a designer by nature, and pretty nifty with HTML and CSS. What I'm not so good at, however, is the dreaded back-end, namely PHP, MySQL etc. I've made several attempts to learn programming and back-end development but I just can't seem to fully absorb it. Guess I'm just not a coder/programmer by nature.

Basically my question is, what's the most efficient way for a designer and developer to work together on a project? I'd rather design everything then hand-code the HTML and CSS to get a fully functional site exactly the way I want it and then hand it over and have a good developer sort out all the programming and back-end.

Is this efficient, not only for myself but also for the developer/programmer? Or do programmers prefer to just receive the designs, in a PSD file for example? Then again this would be more work for you, not to mention that creating the CSS from the designs is still kind of 'designing'.

From: dazea

Tom Hughes-Croucher: The key to good collaboration is always communication. What works for some people won't work so well for others, but unless you talk a lot you'll never know. You seem to have asked two questions, so I'll start with programmers doing back-end stuff (PHP, MySQL etc).

On the whole a programmer will want more than just a design. They'll want a site architecture, to know what information is required on which pages, and how it fits together. Programmers want to create a structure for the information that will make it both efficient to maintain and access. Extracting such information from a set of designs is hard and requires a lot of guessing. If, however, you work with a programmer they can go over your designs with you and ask the extra information they need.

On the other hand if you just want to give your designs to someone to create the front-end (HTML, CSS, JavaScript, etc) then PSDs shouldn't be a problem. Again it comes back to communication: the more you consult people, the better the result you'll get. They'll be able to tell you of any design features that are unlikely to work in real code. It's better that they do that before the final design.

WWW. Send your questions to mailus@netmag.co.uk, or post them at forum.netmag.co.uk



Access all areas

This month, user experience guru Alastair Campbell discusses the pros and cons of accessibility checking tools

Last time we looked at preventing accessibility problems with a first-run accessibility test for templates. But which accessibility checking tool is best once you start fleshing a site out?

Unfortunately the (mis)use of automated tools has done a great deal of harm to the development of accessible websites. The fundamental problem is that many accessibility issues require human judgement. For example, this image could not be picked up as an issue by an automated check, even though it's completely inaccurate:

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The alternative text given to an image is dependant not only on its content, but the context it's used in as well. Other issues come from not using HTML structures, such as lists and headings, appropriately. Problems arise when people try to use automated tools to validate their work, in the same way as you validate HTML. If you rely on automated checks without understanding, you can do more harm than good.

It's natural to want to fix issues pointed out, but only five out of 65 checkpoints (from WCAG v1.0) can be fully checked automatically, and another eight that are 'one-way' checks, which means a tool can check whether something is missing but not whether it's suitable (see Gez Lemon's article at tinyurl.com/dsx98).

Some tools have tried to improve what they can catch, but unfortunately this approach often leads to false positives. The bottom line is that a tool can only tell you when a page isn't accessible; it can't tell you when it is.

Having said all that, though, automated tools can be great for finding problems. Often the first

step in an accessibility audit is to run a tool across the whole site. You can then scan down the top-line results looking for areas that are different.

If you run a site, you might know which areas are controlled from which template, and have control over the content. On the other hand, if other people contribute to the site, a tool can keep an eye on pages on your behalf.

Tools can also be useful for showing where in a page an issue is. It was once common to find link-name/target clashes (where the same location was linked to with different text), but not be able to work out which links were clashing. The 'Bobby' tool (now defunct) would tell you of the clash, but not which links were involved. There are now much better tools for visualising the locations. The example above is from the Truweb Online checker (checkwebsite.erigami.com/accessibility.html), one of several that can show you where the issue is, so that you can determine if it's a real issue or not.

The W3C keeps a good list of accessibility tools (www.w3.org/WAI/ER/tools/complete). The key is finding one or two that fit your needs.

WWW. Send us your accessibility queries at mailus@netmag.co.uk



Profile

Alastair Campbell is a founding member of Nomensa (www.nomensa.com) and is director of user experience. He has assisted British Gas, the AA and DirectGov in accessibility.