

Web Design and Usability Whitepaper: Bibliography

Graham, Paul. "The Other Road Ahead." September 2001.
<http://www.paulgraham.com/road.html> (September 29, 2005).

This article describes the direction that computer software is going. The article asserts that we are going to start seeing desktop applications start dying off. With the death of the desktop application, we will begin to see a lot more server-based applications, many of them with web interfaces. The article suggests that this is a very good idea as it makes the user experience so easy. They only need to have one program, their web browser, to do an assortment of tasks. With computers being found in more homes than ever before, there are a lot of users out there that have only a limited understand of how they work, and most, don't want learn much more than that. The article was written by Paul Graham. Graham is an innovator in web applications. He developed the first web application that Yahoo! now owns. Graham also described what is now the premise for most spam filters in 2002. Graham is also the author of several books.

Wikipedia. "Web Applications." September 26, 2005.
http://en.wikipedia.org/wiki/Web_application (September 29, 2005).

This is the Wikipedia entry for Web Applications. The entry discusses many of the important aspects of web applications and gives users an overall feel for what they can expect when writing or using web applications. The article goes into quite a bit of detail on the technical aspect of web applications, which is probably one of the more important areas. The entry discusses the advantages and disadvantages to using and writing web applications. Throughout the entry there are many internal links to other Wikipedia entries. The entry also discusses the common structure of web applications. It describes this structure as the "three-tiered" structure in which, the first tier is the web browser, the second tier is some sort of engine providing dynamic content and the third tier is normally a database of some sort. The article also mentions the concept of an application service provider, which is a company that allows you to use previously local or desktop applications via the web through your browser. This is a very common trend in the software industry today.

Gaffney, Gerry. "Why Consistency is Critical" February 25, 2005.
<http://www.sitepoint.com/article/why-consistency-is-critical>
(September 29, 2005).

This is an article written by Gerry Gaffney that discusses the need for consistency. Since my part of the paper is going to discuss CSS, which its firm staple is consistency, this article will help support a lot of the points I will make on why people should even start thinking about using CSS' in their designs. He does a pretty good job explaining where CSS and XML fit into the overall usability realms, and mentions plenty of ways they can aid your site design. The source seems pretty reputable since the writer is a Director of a

Usability Consulting firm. He basically gets paid to make sure sights are usable, and are down in a way that makes the most sense. Since our topic is usability, and people pay him for expertise in that area, I trust his judgment.

Moss, Trenton. "Secret Benefits of Search Engine Optimisation: Increased Usability"

November 15, 2005. <http://www.sitepoint.com/article/increased-usability> (September 29, 2005).

This is another article from the wonderful archives of Sitepoint. This editorial by Trenton Moss discusses the overall benefits of using various staples in the usability toolkit to make your site more searchable. Obviously the main goal of any web designer is to have their site come up first when it's google'd. I know that's my goal when I design. Anyways, he goes through many of the different points of web design and explains how each point not only aids in making your site more searchable or googleable but it also makes your site more usable to those viewing it. The main reason I picked it as a source is because he talks about how using CSS for your layout is a key way to make your site more searchable and usable. I felt since I wanted to concentrate mainly on the layout side of CSS this was a good idea.

New Riders Publishing. "Designing Web Usability" May 4, 2001.

<http://wdvl.internet.com/Authoring/Design/Usability/> (September 29, 2005).

This is an article from the Web Developer's Virtual Library entitled Designing Web Usability, by New Riders Publishing. This is a great illustration of a website broken down into it's basic parts and explained in detail about how to make each part usable. This should be a great way to look at each individual piece of the larger puzzle and be able to extract some valuable information on what exactly make a website usable. We could also break down the individual parts in a website and discuss what the most important parts of a website are, and how they can be improved. Not only could we do all that but maybe we can come closer to the ultimate answer which is why. Why make a website usable? Is there really much to be gained by doing that? What is the purpose and how did usability become such a big issue?

Roger E. Masse, "Guide to Usability for Software Engineers" November 17, 1998.

<http://www.otal.umd.edu/guse/> (September 30, 2005)

U Maryland's Usability guide for Software Engineers is a great resource because it is written for engineers - the ones who create the software. Engineers are, tragically, often not good designers. They know how to make the software work, just not how to make it work elegantly. Reading up on this resource can really help the poor engineers design something that is a bit more usable.

One example of great engineers creating difficult-to-use software is the open-source world. Many of the software applications out there are just as powerful as the commercial offerings, but Linux, for example, still isn't really taking off in desktop use. It just isn't as usable as, say, Mac OS X, which is based on open-source software, but is much more usable. Another great example is that of the Gimp vs. Photoshop - packing everything into the right-click menu (as it is in the Gimp) may have struck an engineer as a great idea, but is confusing to the user.

“The World Wide Web Consortium” September 30, 2005

<http://www.w3c.com> (September 30, 2005)

The World Wide Web Consortium (w3c) is a standards-creating body for the web. Basically, they define how to put material up on the web that is standardized - browser independent, operating system independent, all the independence that standards can provide. The only problem is that browser manufacturers historically haven't had a strong motivation to exactly adhere to these standards. They might add a new HTML tag that only works in their browser, causing pages to break in their competitor's browser. Then, their competitor's browser implements the nonstandard tag too so those pages will display in their browser. Hilarity ensues.

In all seriousness, standards are important. If you make a web page, you should, for the good of the internet, try to adhere as strictly as possible to standards. The w3c provides some validator tools that you can run on your page to make sure they conform to standards.

Jakob Neilson, “useit.com” September 30, 2005

<http://www.useit.com> (September 30, 2005)

Jakob Nielsen is the guru of web usability. He has been around since the beginning - telling people not to use the blink tag. Now he consults with businesses to make their sites more usable. Notice how his site is all text, and degrades very gracefully across browsers. Many people say his site is very ugly, but I think it has a kind of stark beauty in its useability: You know where everything is, it loads in a split second, and if I were blind, I'd appreciate being able to read everything on the page. He has also been a champion of using CSS to enhance usability - in the olden days before CSS, people used complicated HTML tables to lay out their pages - which really messed up screen readers or old browsers. In a browser that doesn't understand CSS, the page degrades gracefully and just loses formatting - it does not lose content.

Mullet, Kevin and Darrel Sano. Designing Visual Interfaces. Mountain View: Prentice Hall, 1995

According to the design weblog *Signal vs Noise*, this book "eloquently describes what the authors consider the six tenets of interface design: elegance and simplicity; scale,

contrast, and proportion; organization and visual structure; module and program; image and representation; and style."

The book came out before the commercial web (1994) so it is a little bit dated - it dissects CD-rom screens rather than web page screens - but the advice is drawn from the age-old art of page design, and still has some great, fresh advice about design. It has some great stuff on everything from architecture to interior design that still somehow applies to web design. The author, Kevin Mullet, besides having a wicked cool last name, worked for Macromedia as their user-interface design guru. As I recall, back in 1994, Shockwave-based CD-ROMS were all the rage, and Macromedia pretty much defined CD-based interfaces. The book also has some great nostalgia-invoking pictures of Sun computers circa 1994.

Data, Refnes, "W3Schools Online Tutorials", September 30, 2005
(September 30, 2005)

Considered one of the main sources for any web-building tutorials. The references at the site cover a wide range of web development languages, including HTML, XHTML, CSS and XML. The site facilitates for both novice/beginner web designers as well as for say, professional level developer people, who may just want to learn about a niche topic that may be a little hard to learn. One of the main advantages of w3schools, is that they have a great layout that helps to ease the process of learning new and sometimes hard to understand material. With each explanation of a language, they produce a small snippet that describes the history of the language and the standards that are expected to be followed for each. If a person were to make a conscious learn all their web development skills from this site, and be thorough, the results would most likely be preferable.

Garrett, Jesse James, "AJAX: A New Approach to Web Applications", February 18, 2005 (September 30, 2005)

AJAX is a new approach to web programming. Its actually pretty obvious, but can easily get really messy. Old school web applications based on asp and pure php had a really simple and clean approach: the user made selections, or typed in stuff and the stuff got sent to the server in the form of variables, the server thinks and spits the user back another page as the "next" step. This is just fine for basically anything, but recently AJAX is becoming the new trend.

AJAX is a combination of using CSS and javascript to display information. If you have used gmail, you might have noticed that its very responsive, as if it were an application on your own computer. In a sense, it is. When you log into gmail, your address book, recent conversations etc etc are downloaded to your computer and stored temporarily in javascript, and when you click on something, the javascript throws you some CSS to display it, without having to talk to the server. From my experience however, javascript passing variables back and forth between css and php can quickly get messy, this is why this approach has taken so long to start getting picked up on.