

Website Development on a Dime Toolkit

(Toolkit created by the Kansas Arts Commission and used by permission.)

What is a website

A website is a collection of web pages, images, videos or other digital assets that is hosted on one or more web servers, usually accessible via the Internet. A web page is a document, typically written in Hyper Text Markup Language (HTML). HTML is the language used to create pages or sites on the World Wide Web. All publicly accessible websites are seen collectively as the "World Wide Web."

Why is it important to have a website

The World Wide Web is the fastest growing source for information. According to a 2007 report by Netcraft, an Internet research company, there are 108,810,358 distinct websites that make up the World Wide Web. Without a website, your organization risks never being found by your audiences. Here some additional reasons why your organization should have a website:

- A web presence is a great way to compliment your existing communications.
- Websites can make your organization look and act bigger than it really is.
- The Web is two-way, interactive and quick communication.
- Websites can also help you educate your audiences.
- Having a website can provides 24/7 access to your organization.

If you don't have a website

If you don't have a website and you would like one, the following tips can help you determine your needs before you start developing a site.

- Create a short statement identifying two or three goals that include specific strategies around which the website will be designed.
- Identify the potential audience of your website so that you can structure the site design to meet their needs and expectations.
- Create a list of existing and needed content for the website.

Next, ask some important questions about the development and maintenance of the site:

- Who will develop the site? Will it be a staff person, volunteer, or a consultant?
- Who will provide the website content?
- Who will maintain the site and update content when needed?

- What browsers and operating systems should your site support? In other words, determine if your site will be best viewed in Internet Explorer, Netscape or a different web browser.
- Will the site be hosted by an in-house server or externally by an Internet Service Provider (ISP)? An Internet Service Provider is a company that provides access to the Internet. For a monthly fee, the service provider gives you a software package, username, password and access phone number. Equipped with a modem, you can then log on to the Internet and browse the World Wide Web and send and receive e-mail.
- How much bandwidth will be needed to support an average number of site visitors?

The term bandwidth is usually used to describe the total amount of files and data transferred from your server every month. The amount of data that can be transferred from your site will usually be restricted by your host provider.

The amount you'll use can be calculated fairly easily — if the elements of your homepage (HTML page, graphics, video, audio, etc.) add up to 50 kilobytes, then every time someone accesses that page, it'll burn up 50 kilobytes of your bandwidth allowance. So if a 100 people access your home page every day, you'd use up 5 megabytes worth of your bandwidth allowance (100 people x 50k). Multiple that by 30 days and you'll get a monthly total of 150 megabytes/month.

- How much will it cost to develop and maintain the site?
- Will additional hardware and software be needed to develop and maintain the site?

Create a mock-up of your site on paper

As an architect would develop detailed plans of how a building would be constructed, so should you as you design your website.

- **What will it look like?**
Make some rough sketches, on paper, of what your homepage and additional supporting pages might look like. A homepage is the first page that comes up when someone types in your website address.

Tip: Take a look at other organizations' websites. Make note of what you like and don't like in terms of layout, images, font, content areas, and links. Don't be afraid to "borrow" those ideas for your own website. Make sure your website is not a copy of another. Your website should have its own look and feel. Ideally it should match the look and feel of your organization.

- **How does the navigation function?**

Can you navigate through your website easily. Homepages often contain “links” to other web pages contained within the website. For example, you may have an “About Us” link on your homepage. If a visitor to your website clicks on “About Us,” they will expect your “About Us” page to provide information about the history of the organization, the organization’s mission, the organization’s board members and staff.

A website is easy to navigate when the information contained on the website is easy to find by the visitor.

Tip: Again, take a look at other sites. As a visitor, look and see how the web designer helps you navigate through the site. Click on different links. Do the links take you to the web pages that you expected. Did you have to click on several different links to find the information you were looking for? Take notes on what you like and don’t like, then incorporate those ideas into your website.

- **Create content sections**

Use your navigation menu to name the buckets and fill them with content. For example, an events section “contact section” might contain all the events you have this coming year.

Domain Name Registration and Web Hosting

A Domain Name is essentially a website address. For example, in www.americansforthearts.org, americansforthearts.org is the domain name.

The first step in registering a domain name is to choose a domain name. When selecting a domain name for your website, be sure to pick a domain name that will be easily remembered. If you are selecting a domain name for an organization, choose a domain that reflects the name of your organization. For example, Americans for the Arts chose americansforthearts.org

Once you have your domain name selected, research various web hosting companies to determine what kind of fees will be involved. Most often, web hosting companies will offer Domain Name Registration as a service. (Web hosting companies provide space for websites.)

A good place to start is with your local telephone and or cable company. If these are locally owned companies, try asking them to donate their monthly web hosting fees in return for a membership or media sponsorship.

Research online for web hosting companies as well. Most often companies such as Dream Host, Go Daddy, or Yahoo.com will charge one low monthly fee for domain name registration and web hosting. It is important to compare different web host providers, pricing options and to look at expert reviews. (see Appendix B for a list of numerous web host companies.) Also, speak with other “like-organizations” in your area to find what company hosts their website.

Web Development

If don't have the time or interest in developing and/or maintaining a website, you may want to consider hiring an intern, freelance designer or web design consultant. Also consider contacting your local chamber of commerce or city mayor's or manager's office.

- To find an intern, contact your local university or college art department. Specifically, contact the department chair and explain your needs. They will be able to then help connect you with an appropriate student. Instead of paying the student you may be able to, with university approval, offer course credit.
- To find a freelance designer, go to kcfreelanceexchange.com to find one for hire or post an ad seeking a web designer in your local paper or on craigslist.com. You can also find free help through volunteermatch.org or charityfocus.org. Volunteer Match is a nationwide list of volunteer opportunities and Charity Match connects small nonprofits with web volunteers who can help you set up a website.
- To find a web design consultant consult with like organizations to see who they use, ask your local chamber of commerce if they can recommend a local consultant or check with Kansas Arts Commission's Consultants Roster on the KAC website (<http://arts.ks.gov/consultants/roster.shtml>). When working with a consultant, be clear about what your needs are, and once you have determined that you want to hire a particular consultant, ask the consultant to provide a letter of agreement stating the project timeline, who is responsible for what components of the project and the consultant's fee.
- Additional options include contacting your local chamber of commerce. They may be willing to provide and design a page on their website for your organization. Also contact your local city mayor or city manager's office. Often, smaller sized communities are willing to provide a web page on the city website for your organization.

If you plan to develop the website yourself, you can create *and maintain* pages using website authoring software such as Dreamweaver, Nvue or Microsoft Expression Web (see Appendix C for examples of web authoring software).

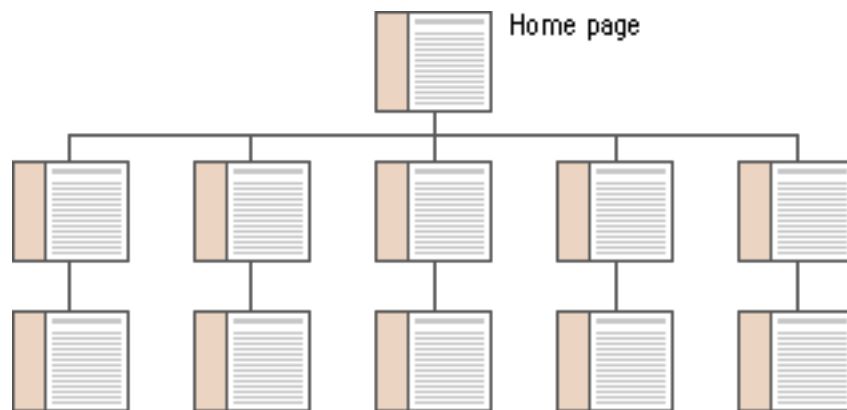
Web authoring software enables the user to create a website in a desktop publishing format. The software will generate the required HTML coding for the layout of the web pages based on what the user designs. Typically, the user can go back and forth between the web page they are creating and the page's HTML code.

Some programs provide templates for easy use to create your web pages. Also, many web hosting providers provide templates and occasionally programs that allow you to update your site.

Website Structure

Websites are built around basic structural themes. These fundamental architectures govern the navigational interface of the Website and mold the user's mental models of how the information is organized.

Because websites are usually organized around a single home page, hierarchical schemes are particularly suited to Web site organization. Hierarchical diagrams are very familiar in corporate and institutional life, so most users find this structure easy to understand. An example of organizing a site with a hierarchical scheme is listed below:



Web Design

Simple website design means focusing on the user experience, and creating the most direct, accessible website possible. Benefits of simple websites;

- Your viewers get the information they want quickly and easily.
- Search engines navigate your site and list it quickly and completely.
- You get a quick, cost-effective, easy to maintain solution.

Principles of simple website design:

- Use technology appropriately. Technology is appropriate when it adds value to your website. Never use a technology just because it is new.
- Users want to get information in the fewest possible steps. Follow the Three Click Theory as a guide — Don't make your visitor click any more than three times before bringing them to the action step desired.
- A clean layout that uses a lot of white space enhances a site's looks. Try to keep the focus on your content.
- Be consistent. Create a template and base your pages on that template. You'll simply need to update new content.

- Design with visual hierarchy in mind. Readers first see pages as large masses of shape and color, with foreground elements contrasting against the background field. Next they pick out specific information, first from graphics if they are present, and only then do they start parsing the harder medium of text and begin to read individual words and phrases.
- Contrast is essential. The most effective designs for general Internet audiences use a careful balance of text and links with relatively small graphics.
- Don't make your audience scroll. You can make long pages friendlier by positioning "jump to top buttons" at regular intervals down the page. That way the user will never have to scroll far to find a navigation button that quickly brings him or her back to the top of the page. All Web pages longer than two vertical screens should have a jump button at the foot of the page.

Screen Resolution

When designing your site, you want to make sure that it will fit any screen resolution so all your visitors see a visually appealing and professional site. The term "screen resolution" refers to the number of individual pixels that fit within a given space. The dimensions to set when designing web pages (for most audiences) is 1024x768 pixels. The number 1024 refers to the number of pixels that the monitor can display horizontally, while the number 768 refers to the vertical limit. These measurements can be set using web authoring software or previously established by a template.

Browser Compatibility

Make sure you check your site is "cross browser compatible." This means that you want to view your website in different web browsers to see how your audience might view your site from their computer. You want to make sure your site is compatible with Internet Explorer 5+, Mozilla Firefox 1.0, Opera 7.0 and Netscape Navigator 6+ as they constitute 95% of the world's browsers.

Web Pages

Home Page

The thirty square inches at the top of a home page comprise the most visible area of the Web site (this is called "the fold"). Most readers will be looking at your site on a 17- to 19-inch monitor, and the top four or five vertical inches are all that is sure to be visible on their screens.

The best visual metaphor here is to a newspaper page — position matters. It's nice to be on the front page, but stories "above the fold" are much more visible than those below. In sites designed for efficient navigation, most links should be located at the top of the home page.

Pages

On web pages the upper portion is especially important, because the top four inches of the page are all that is visible on the typical display screen. Use this space efficiently and effectively. For example, you can include information about your organization, important announcements, welcome message, etc. Think of each page in your site as a newspaper clipping, and make sure that it includes required information in the page header and page footer to determine that this is your website.

Each page should contain:

- A title (header)
- An author (footer)
- The name of the organization (header/footer)
- A revision date (footer)
- Copyright information (footer)
- Link to the home page of the site (header/footer)

Tip: Careful graphic design on page headers will give your Web site a unique visual identity. A "signature" graphic and page layout allows the reader to grasp immediately the purpose of the document and its relation to other pages. Graphics used within headers can also signal the relatedness of a series of Web pages.

Website Content

People read differently on the web. The online audience tends to skim web pages rather than read them word-by-word. Documents written for the web must be presented using short segments of text written in a clear, concise style and with ample use of titles and headers. Content appreciated by website audiences is broken into short "chunks" of information that can be located and scanned quickly. This method for presenting information translates well to the web for several reasons:

- Chunking can help organize and present information in a uniform format.
- Few web users spend time reading long passages of text on-screen. Most users either save long documents to disk or print them for more comfortable reading.
- Concise chunks of information are better suited to the computer screen, which provides a limited view of long documents. Long Web pages tend to disorient readers; they require users to scroll long distances and to remember what is off-screen.

Tip: Use headings, lists, and typographical emphasis for words or sections you wish to highlight; these are the elements that will grab the user's attention during a quick scan.

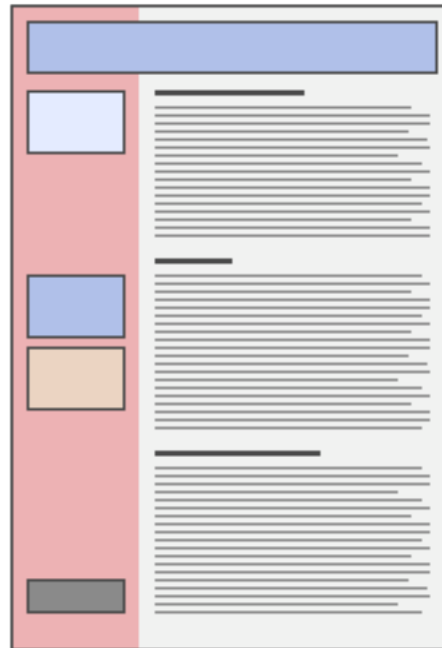
Text

Strong, legibility text depends on the visual contrast between one font and another and between text blocks, headlines and the surrounding white space. Nothing attracts the eye and brain of the reader like strong contrast and distinctive patterns, and you can achieve those attributes only by carefully designing them into your pages

Too patchy, inconsistent



Predictable modular structure



Fonts

Some fonts are more legible than others on the screen. A traditional typeface such as Times Roman is considered to be one of the most legible on paper, but at screen resolution its size is too small and its shapes look irregular. Typefaces such as Georgia and Verdana were designed specifically for legibility on the computer screen. These fonts offer excellent legibility for web pages to be read directly from the screen. In general use sans serif fonts over serif fonts for your website text. Serif fonts have a small decorative line added as an embellishment to the basic form of a character. Sans serif fonts do not have the embellishment.

Font Size

Setting the size of type is a matter of some controversy. The web is supposed to be a universal medium where users of all kinds have equal access to information. Unfortunately this is not the case with various browsers and subsequent settings.

If you are creating a website, you should consider using a larger font-size based on knowledge about your audience vs computer displays. Here are some examples of fonts and font sizes that you can work from:

- 12px Arial
- 11px Verdana
- 12px Tahoma (Windows pre-vista default font)

- 12px Lucida Grande (Mac OS X Default font)
- 12px Segoe UI (Windows Vista default font)

Emphasis

There are typographical devices for adding emphasis to a block of text, but be sure to use them sparingly. If you make everything bold, then nothing will stand out and it will seem as if you are shouting at your readers. A good rule of thumb when working with type is to add emphasis using one parameter at a time.

- **CASE — WORDS SET IN ALL UPPERCASE LETTERS SHOULD GENERALLY BE AVOIDED, EXCEPT PERHAPS FOR SHORT HEADINGS, BECAUSE THEY ARE DIFFICULT TO SCAN.**
- *Italics — Italicized text attracts the eye because it contrasts in shape from body text. Use italics within text for stressed or foreign words or phrases. Avoid setting large blocks of text in italics because the readability of italicized text, particularly at screen resolutions, is much lower than in comparably sized roman text.*
- **Bold — Boldface text gives emphasis because it contrasts in color from the body text. Section subheads work well set in bold. Boldface text is readable on-screen, though large blocks of text set in bold lack contrast and therefore lose their effectiveness.**
- **Colored text — Choose dark shades of color that contrast with the page background, and avoid using colors close to the default web link colors of blue and violet.**
- Underline — Avoid underlining text. It is too heavy, interferes with letter shapes and underlining typically means the link for users.

Background Colors

The web is riddled with pages whose legibility is marginal due to poorly chosen background color – text color combinations. Here are a few helpful guidelines:

- Text that is hard to read is a hindrance for a fully sighted reader, and certain color combinations make pages unreadable for colorblind users.
- Black text on a white (or very slightly tinted) background yields the best overall type contrast and legibility.
- Black backgrounds are significantly less legible than white backgrounds, even when white type is used for maximum contrast.
- Colored backgrounds can work as an alternative to plain browser-default gray if the colors are kept in very muted tones, and low in overall color saturation (pastels, light grays, and light earth tones work best).

- Avoid bold, highly saturated primary colors except in regions of maximum emphasis, and even there use them cautiously.

Graphics

Beware of graphic embellishments. Horizontal rules, graphic bullets, icons, and other visual markers have their occasional uses, but apply each sparingly (if at all) to avoid a patchy and confusing layout. The same consideration applies to the larger sizes of type on Web pages. Overuse of graphic emphasis leads to a "circus" effect in which everything is garish and nothing is emphasized.

GIF vs JPEG

The most widely supported web image graphic formats are GIF and JPEG. So when should you use GIF and when should you use JPEG? Depending on what you want to do with your images, you'll look for specific properties in an image editing software program such as PhotoShop.

The easy rule to remember:

- Use GIF format for graphics that you have created on your computer such as horizontal rules, buttons or animation.
- Use JPEG format when the images are scanned pictures or photographs.

Website Accessibility

For many organizations, providing equal access to web pages is critical, therefore, validate your designs and the content of your site during the development process to make your pages are accessible to all users. For more detailed information about this topic, the World Wide Web Consortium's Web Accessibility Initiative (<http://www.w3.org/WAI>) provides a list of resources.

Website Maintenance

Once your website is launched, the work is not over. Websites do need to be updated on a regular basis, if not to keep to the information current, to keep visitors returning to your site.

Some things to consider when maintaining your web site are traffic analysis or how many people are visiting your website. You can track the number of visitors through your Internet Service Provider or by inserting a web counter into your home page. Check your website's performance too. Do all of the links work, is the information up to date, are the pictures clear? Lastly, is your web host company providing the space and or technical support you need?

Website marketing

Your website should be an integral part of all marketing material. Include your website address on all correspondence including business cards, advertisements, direct mail campaigns, letterhead, press releases, posters, etc.

Tip: Keep your audience coming back to your website by updating your content regularly. Also provide your audience opportunities to interact with your organization on your website. For example, create a web page or pages that give visitors the opportunity to become a member or donor of your organization.

List your website on various Web indexes or search engines, such as google.com, yahoo.com, etc. This will help make your site easier to find by visitors.

To list your website on google.com:

- a. First bring up the google page by typing in the URL www.google.com.
- b. Click on the link: “About Google” (you’ll find it in the middle of the page, the third link to the right.) This will take you to a new page containing four different categories: Our Products, Our Company, For Site Owners, More Google.
- c. Under the heading, For Site Owners, click on the link: “Submit your content to Google” This will take you to a new page.
- d. At the top of the page you’ll find a link: “Add you URL to Google.” Click on it.
- e. Simply follow the directions, to add your site to the Google index.

If your Web site is aimed primarily at local audiences you should look beyond getting listed in standard Web indexes, such as Google and Yahoo (see Appendix A for a definition of Search Engine Optimization).

You may also find opportunities to cross-promote your site with affiliated businesses, professional organizations, broadcast or print media, visitor or local information agencies, real estate and relocation services, Internet access providers, and local city or town directory sites. Check with your local newspaper, radio stations, chamber of commerce, library, or like organizations in your area to see about listing your website on their websites.

Tracking and evaluation

Once you have your website posted online, it's important to know who is viewing your website. Your website host can track how many people (unique visitors) saw your site over a given time, how many pages were requested for viewing, and many other variables. Server logs can also give you information on the geographic location of your site readers. By analyzing this information you can develop data on the success of your site.

Tip: If creating a website still seems like a foreign language to you, check out webopedia.com, an online dictionary of computer and Internet terms and definitions. The dictionary will help you wade through the technical jargon and learn more about websites.

If you already have a website

If you already have a website, you may want to expand on its features and functionality. Unlike printed publications, websites can easily be changed and improved. Some things you can add to your site might include:

- A resources or links to related websites such as the Kansas Arts Commission or to websites in your community.
- A "what's new?" page to inform your audience about new organizational activities or events, staff changes.
- A "frequently asked questions" page to answer typical audience questions (how much does it cost to attend, where can I buy tickets, is there handicapped seating available).
- Posting your newsletter online for readers to download.
- A "location" page that contains maps, travel directions and parking information.
- Creating a blog where users can post reviews of events or guest performers can post about their experience in your community.
- Audio or video vignette of performers or past events.

Appendix A
Commonly Used Web Terms and Definitions

Commonly Used Web Terms and Definitions

From Webopedia.com, <http://www.webopedia.com>

Bookmark - (v) To mark a document or a specific place in a document for later retrieval. Nearly all Web browsers support a bookmarking feature that lets you save the address (URL) of a Web page so that you can easily re-visit the page at a later time.

Browser - Short for Web browser, a software application used to locate and display Web pages. The two most popular browsers are Netscape Navigator and Microsoft Internet Explorer. Both of these are graphical browsers, which means that they can display graphics as well as text. In addition, most modern browsers can present multimedia information, including sound and video, though they require plug-ins for some formats.

Domain Name - Domain names are used in URLs to identify particular Web pages. For example, in the URL <http://www.pcwebopedia.com/index.html>, the domain name is [pcwebopedia.com](http://www.pcwebopedia.com).

Every domain name has a suffix that indicates which top level domain (TLD) it belongs to. There are only a limited number of such domains. For example:

- gov - Government agencies
- edu - Educational institutions
- org - Organizations (nonprofit)
- mil - Military
- com - commercial business
- net - Network organizations
- ca - Canada
- th - Thailand

Dynamic Site - A dynamic Web page contains content that a user can interact with, such as information that is tied to a database. The user can request that the information, such as ticket availability or airline flight data, be retrieved from a database.

Static Site - Generally refers to elements of the Internet or computer programming that are fixed and not capable of action or change.

A website that is static can only supply information that is written into the HTML and this information will not change unless the change is written into the source code.

GIF - Short for Graphics Interchange Format, another of the graphics formats supported by the Web. GIF is better than JPG for images with only a few distinct colors, such as line drawings, black and white images and small text that is only a few pixels high. With an animation editor, GIF images

can be put together for animated images. GIF also supports transparency, where the background color can be set to transparent in order to let the color on the underlying Web page to show through.

JPG - JPG is an abbreviation for Joint Photographic Experts Group, the original name of the committee that wrote the standard. JPG is one of the image file formats supported on the Web. JPG images support 16 million colors and are best suited for photographs and complex graphics. The user typically has to compromise on either the quality of the image or the size of the file. JPG does not work well on line drawings, lettering or simple graphics because there is not a lot of the image that can be thrown out in the lossy process, so the image loses clarity and sharpness.

HTML - HTML is an abbreviation for Hyper Text Markup Language. HTML is the language used to create pages or sites on the World Wide Web.

Internet Service - Provider (ISP) Abbreviation for Internet Service Provider, a company that provides access to the Internet. For a monthly fee, the service provider gives you a software package, username, password and access phone number. Equipped with a modem, you can then log on to the Internet and browse the World Wide Web and send and receive e-mail.

Link - A link is a reference to another document. Such links are sometimes called hot links because they take you to other document when you click on them.

Meta Tag - A special HTML tag that provides information about a Web page. Most often meta tags provide information about which keywords represent the page's content. Many search engines use this information when building their indices.

Sans Serif Font - Pronounced SAN-SERR-if. A category of typefaces that do not use serifs, small lines at the ends of characters. Popular sans serif fonts include Helvetica, Avant Garde, Arial, and Geneva.

Serif Font - A small decorative line added as embellishment to the basic form of a character. Serif fonts include Times Roman, Courier, New Century Schoolbook, and Palatino.

Server - A computer or device that manages files. For example, a web server manages website files.

Source Code - Program instructions in their original form. The word source differentiates code from various other forms that it can have. Initially, a programmer writes a program in a particular programming language. This form of the program is called the source program, or more generically, source code. To execute the program, however, the programmer must translate it into machine language, the language that the computer understands. Source code is the only format that is readable by humans.

- Tags -** (n) A command inserted in a document that specifies how the document, or a portion of the document, should be formatted. Tags are used by all format specifications that store documents as text files. This includes SGML and HTML.
- Web Host -** A Web host is in the business of providing server space, web services and file maintenance for websites controlled by individuals or organizations that do not have their own Web servers. For example, America Online, will allow subscribers a small amount of server space to **host** a personal Web page.
- Web Page -** A page on the World Wide Web. Several web pages can make up a website.
- Website -** A site (location) on the World Wide Web. Each website contains a home page, which is the first document users see when they enter the site. The site might also contain additional documents and files. Each site is owned and managed by an individual, company or organization.
- URL -** Abbreviation of Uniform Resource Locator, also known as a website address.

Appendix B

Website Resources

Website Resources

Accessibility

Web Accessibility Initiative - <http://www.w3.org/WAI/eval/Overview.html>

The Web Accessibility Initiative (WAI) works with organizations around the world to develop strategies, guidelines, and resources to help make the Web accessible to people with disabilities.

Web Accessibility in Mind - <http://www.webaim.org>

WebAIM is a non-profit organization within the Center for Persons with Disabilities - external link at Utah State University. WebAIM's mission is to expand the potential of the Web for people with disabilities by providing the knowledge, technical skills, tools, organizational leadership strategies, and vision that empower organizations to make their own content accessible to people with disabilities.

Definitions

Webopedia - <http://webopedia.com>

Webopedia is a free online dictionary for words, phrases and abbreviations that are related to computer and Internet technology. Webopedia provides easy-to-understand definitions in plain language, avoiding the use of heavy jargon when possible so that the site is accessible to users with a wide range of computer knowledge.

Patron Technology E-Commerce

Patron Technology - <http://patrontechnology.com/marketing-services>

Patron Technology, Inc., an online marketing software and consulting company, serves the arts and not-for-profit industries with cutting-edge technology and e-marketing expertise.

Web Authoring Software

Nvu - <http://www.nvu.com> (free)

Nvu (which stands for "new view") makes managing a website a snap. Now anyone can create web pages and manage a website with no technical expertise or knowledge of HTML.

Tech Soup - <http://www.techsoup.org>

TechSoup.org offers nonprofits a one-stop resource for technology needs by providing free information, resources, and support. In addition to online information and resources, we offer a product philanthropy service called TechSoup Stock. Here, nonprofits can access donated and discounted technology products, generously provided by corporate and nonprofit technology partners.

Dreamweaver - <http://www.adobe.com/products/dreamweaver/>

Part of the Adobe collection. Software for website design. Can be quite expensive.

FrontPage - <http://office.microsoft.com/en-us/frontpage/default.aspx>

Part of the Microsoft Office Collection. FrontPage was discontinued in 2006, however Microsoft will continue to support those customers still using the program.

Microsoft Expression Web 2 -

<http://www.microsoft.com/Expression/products/overview.aspx?key=web>

Part of the Microsoft Collection. Software for website design and successor to FrontPage. Contact Microsoft for more information.

Site Spinner - <http://www.virtualmechanics.com/products/spinner/>

Software for website design. Do not need to know HTML. Can simply plug in information. Relatively inexpensive.

Web Hosting

Check with your local phone and cable company for web hosting fees.

Dream Host - <http://dreamhost.com/>

About \$6 a month, domain included.

Start Logic - http://www.startlogic.com/startlogic/special_promo.bml

About \$5 a month, domain included.

Host Monster - <http://www.hostmonster.com/>

About \$5 a month, domain included.

Dot 5 Hosting - http://www.dot5hosting.com/dot5/special_promo.bml

About \$4 a month, domain included.

Blue host - <http://www.bluehost.com/>

About \$7 a month, domain included.

Web Hosting Pad - <http://www.webhostingpad.com/>

About \$5 a month, domain included.

Yahoo Small Business -

<http://smallbusiness.yahoo.com/webhosting/hostingfeatures.php?AID=10441683&PID=2646591>

About \$12 a month, domain included.

IX Web Hosting - <http://www.ixwebhosting.com/index.php/v2/pages.dspmain>

About \$5 a month, domain included.

Host Papa - <http://hostpapa.com/>

About \$6 a month, domain included.

1&1 - <http://1and1.com>

About \$4 - \$10 a month, domain included.

Godaddy.com - <http://www.godaddy.com>

About \$4 - \$14 a month, domain included.

All About Your Own Website, A Guide to Free Web Hosting Options -

http://www.allaboutyourownwebsite.com/free_web_hosting.php3

This website provides UNBIASED content supported with internet hosted information pertaining to the decisions involved with web design, development, hosting, maintenance and marketing.

Best Web Hosting 2008 - <http://www.best-web-hosting-2008.com/>

We at Best Web Hosting 2008 are dedicated to bringing you the latest in reliable, feature-rich and affordable web hosting. Be sure to read our Top 10 Reviews and choose the company best equipped to meet your needs!

Hosting Review - <http://hosting-review.com/about.shtml>

We are here to provide you with an independent source for finding the best web host to match your needs. There are hundreds of web hosts available on the marketplace, and the choice can be very confusing. Hosting-Review is here to act as a complete source, and our professional webmasters regularly review hosting companies and their packages.

Hosting Reviews by Users - <http://www.hostingreviewsbyusers.com/>

This site is a collection of reviews from around the internet. We classify each as positive or negative and divide it into the type of hosting reviewed and if negative what the problem was. We mark it resolved if a representative or the forum community involved came to some sort of conclusion on the issue. If a review is submitted to us we check to make sure it is by a real person and not a stooge for the hosting company. We also try our best to get information out of people on why they were mad or why they are happy so that readers get the best reviews possible.

Website Statistics (*web host should be able to provide information*)

OneStat.com - <http://www.onestat.com>

OneStat.com provides web analytics for customer websites. Web statistics can be used to improve visitor experience and return on investments. OneStat.com is a privately held and a profitable company.

Additional Resources

CharityFocus.org – <http://www.charityfocus.org>

CharityFocus partners with small nonprofit organizations to build custom web-solutions. CharityFocus' unique model enables volunteers to deploy a broad array of expertise to help organizations better deliver services to their beneficiaries and more effectively reach their target audience. CharityFocus is completely volunteer run, and the services of its volunteers are absolutely free.

CNET.com - http://reviews.cnet.com/computer-software/?tag=df13_2&sa=500343
CNET.com shows you the exciting possibilities of how technology can enhance and enrich your life. We provide you with information, tools, and advice that help you decide what to buy and how to get the most out of your tech. The above link takes you to a software review page.

http://reviews.cnet.com/computer-software/?filter=500343_107346
The above link for CNET.com takes you to a web design software review page.

http://reviews.cnet.com/computer-software/?filter=500343_108475
The above link for CNET.com takes you to a video editing and productions software review page.

http://reviews.cnet.com/computer-software/?filter=500343_107341
The above link for CNET.com takes you to a music and sound creation software review page.

http://reviews.cnet.com/computer-software/?filter=500343_107339
The above link for CNET.com takes you to a multimedia authoring software review page.

Entheos Fress Resources - http://www.entheosweb.com/free_resources.asp
Offers free step by step tutorials for a number of popular website design software.

Freeplay Music - <http://freeplaymusic.com/>
Freeplay offers free music and sound effect. Freeplay's vision and continued mission is to expand the scope and depth of the Freeplay Music Library, and introduce additional offerings that set new standards as well as meet the production music needs of creative professionals and users around the globe.

Red Acorn - <http://www.redacorn.org/webdesign/>
Provides numerous website planning, design, and promoting resources

The Site Wizard - <http://www.thesitewizard.com/>
Numerous online articles about website design, hosting, e-commerce, etc.

Tips-tricks.com - <http://www.tips-tricks.com>
This site was created to help you design "a better web page". Information for various web design problems, including page design and layout, web hosting services and graphics.

Universal Usability - http://universalusability.com/access_by_design/index.html
Universal Usability launched on November 16, 2006, two days after World Usability Day. Its initial purpose is to provide access to the online version of the book, Access by Design: A Guide to Universal Usability for Web Designers by Sarah Horton. In the long term, I would like to broaden the scope of the site to include articles and input from others, and to provide access to more extensive resources for designers interested in adopting a universal design approach to web usability.

W3Schools Online Web Tutorials - <http://www.w3schools.com/>

At W3Schools you will find all the Web-building tutorials you need, from basic HTML and XHTML to advanced XML, SQL, Database, Multimedia and WAP.

Websites That Suck - <http://websiteshatsuck.com>

Information, tips and examples of what not to do on or with your website.

Web Style Guide - <http://webstyleguide.com/>

Step by step guide to creating a website.

Website Tips - [http://websiteshatsuck.com/](http://websiteshatsuck.com)

WebsiteTips.com is an educational website design and development resource especially for website owners, Web designers, Web professionals, webmasters, teachers and educators, students, and anyone wanting to learn about websites.

World Wide Web Consortium - <http://www.w3.org/>

The World Wide Web Consortium (W3C) is an international consortium where Member organizations, a full-time staff, and the public work together to develop Web standards. W3C's mission is: To lead the World Wide Web to its full potential by developing protocols and guidelines that ensure long-term growth for the Web.

Appendix C

Articles

Best Screen Resolution to Design Websites

Do It Yourself vs. Hiring a Professional

Domain Name Transfers

How Web Search Engines Work

Tools to Help Optimize Your Site for Top Search Engine Placement

What's The Best Font Size To Use In Website Design?

Best Screen Resolution to Design Websites

Hobo Internet Search & Marketing Solutions
<http://www.hobo-web.co.uk/tips/25.htm>

Jakob Nielsen - What Is The Best Screen Size

Your pages should work at any resolution, from 800x600 to 1280x1024 and beyond.

- Optimize for 1024x768, which is currently the most widely used screen size. Of course, the general guideline is to optimize for your target audience's most common resolution, so the size will change in the future. It might even be a different size now, if, say, you're designing an intranet for a company that gives all employees big monitors.
- Do not design solely for a specific monitor size because screen sizes vary among users. Window size variability is even greater, since users don't always maximize their browsers (especially if they have large screens).
- Use a liquid layout that stretches to the current user's window size (that is, avoid frozen layouts that are always the same size).

Optimizing for 1024x768 Screen Sizes

When we say "optimize" we mean that your page should look and work the best at the most common size. It should still look good and work well at other sizes, which is why I recommend a liquid layout using percentage widths to control layout. But it should be its best at 1024x768.

The three main criteria in optimizing a page layout for a certain screen size are:

- Web Page Initial visibility: Is all key information visible above the fold so users can see it without scrolling? This is a tradeoff between how many items are shown vs. how much detail is displayed for each item.
- Web Page Readability: How easy is it to read the text in various columns, given their allocated width?
- Web Page Aesthetics: How good does your page look when the elements are at the proper size and location for this screen size? Do all the elements line up correctly -- that is, are captions immediately next to the photos, etc.?

You should also consider all three criteria at the full range of sizes, continuously resizing the browser window from 800x600 to 1280x1024. Your page should score high on all criteria throughout the entire resolution range.

Your page should also work at even smaller and bigger sizes, though such extremes are less important. Fewer than half a percent of users still have 640x480. Although such users should certainly be able to access your site, giving them a less-than-great design is an acceptable compromise.

As the first criterion implies, scrolling is always a key consideration. Users generally don't like to scroll. So, when you design, you should consider how much users can see if they scroll only a screen full or two. Any more than five screen full's should be an indication to you that there is too much copy on the page.

Both scrolling and initial visibility obviously depend on screen size: Bigger screens show more content above the fold and require less scrolling. This is where you have to optimize for 1024x768: present your most compelling material above the fold at this resolution (while ensuring that the absolutely critical information remains visible at 800x600).

So, what about tiny screens, such as those found on mobile devices? A liquid design should scale all the way down to a phone, but don't assume that this is how you should deliver your company's mobile user experience. Mobile environments are special; to optimize for them, you must design a separate service that provides fewer features, is written even more concisely, and is more context aware.

Doing it Yourself vs Hiring a Professional

By Red Acorn Design (www.redacorn.org)

The Benefits of Doing It Yourself

If you design your whole site yourself you will have the benefits of full creative control and you will save a lot of money on designer fees—maybe. If it takes you a year or more to learn HTML and good design, or if you have to settle for a mediocre site, maybe not. But hiring a professional to do the whole thing can be expensive and changing or adding to the site can be a hassle.

But the halfway solution—hiring a professional to design the site and then updating and maintaining it yourself—could be the ideal solution for a small site.

Most designers charge from \$30-\$75 an hour. Some of what they do is worth paying for—like creating a professional image and designing the layout of your site. But editing and maintenance tasks do not necessarily require much specialized expertise. You hire a print designer to create a brochure; you do not want to pay them to photocopy it for you—but if it is complicated, you may need to hire a printer.

There are similarities between web publishing and print publishing, but there are also differences. When you design a brochure, you design it once, and then print it. But part of the beauty of websites is that they can be updated much more frequently than print media. But calling up your designer every three days to change a detail or add another page is not efficient—it takes too much time and it will add up quickly. So even if you do not want to or do not have the skills to design the webpage completely, it would be of great benefit to learn how to update your pages and create new pages.

Good Code is Good Design

Basically, HTML is not hard, but it takes a lot of time to learn how to do it right. The “language” is relatively easy, but the “customs” are hard—writing good code, designing an intuitive interface, manipulating images, learning the differences between how Explorer and Netscape display pages—making your page look good and work right takes a bit of time and some aesthetic ability. If you have a staff person or volunteer who is design-inclined and has a lot of free time, they might be enough. But there are pitfalls here. There is a reason web design is a profession, and it's not just the technical aspects that have to be learned—designing a page that is attractive, clean, and coherent—“professional-looking” is something that has to be learned as well.

The importance of design in print media is well understood—businesses are willing to pay for the services of a professional designer because they know it's worth it to project a professional image. Websites should be treated similarly.

Anyone with a printer and Word can print out labels and business cards on their home computer now, and anyone can buy FrontPage and start making their own website. But that doesn't mean that everyone suddenly has design skills and a sense of aesthetics.

Unfortunately, if you don't have this sense you don't always realize it's importance. When I was beginning to learn HTML and made my first webpage, it was hideous. A busy background made

the text hard to read and animations distracted the eye. But I was so proud of that thing. Several incarnations later, I showed my page (still very far from looking professional) to a friend and asked him what he thought of it. He said it didn't look very "professional". I was heartbroken—I'd worked so hard on that site! Coding HTML can be a time sink, especially when you first start—having spent so much time, I was sure I had made a beautiful site. But he showed me some sites that were made by professional designers, and showed me the coherent page navigation and the way the design elements worked together. He was right—I had yet to learn how to design well. But I kept at it and learned what makes bad sites bad and good sites good—and you can too, if you have the time.

The Halfway-Solution: Using Professional Templates

Templates are like letterhead for webpages. You can hire a designer to make a "template" once, and then you learn how to work with the template to edit your pages and create new pages. You save money, have control over your content, and your site has a consistent, professional appearance. You will still need to learn the following however:

- how to get your pages onto the server (this is called uploading, and is done via FTP using an FTP program. I use CuteFTP. FTP stands for "File Transfer Protocol", much as HTTP stands for "Hypertext Transfer Protocol")
- how to promote your site: getting it listed on search engines and improving your search engine ranking.
- how to arrange the navigation structure of your site. I recommend a clear hierarchical structure: this is easy to understand and is what all computer and web users are used to.
- and if you plan to use images on your site you will need to understand how they are displayed in browsers and obtain and learn how to use a graphic program to resize and optimize your graphics so they download quickly

When a Website is For More Than Just Information

The previous advice works fine if your site is primarily to display information about your organization, your activities, and relevant articles and information. This covers the majority of small nonprofit websites.

If you want your site to do more than that, you may have to hire a professional to help you out. For example, LBvision.org had a database of volunteer organizations in the local area. They wanted to create a website where people could search the database by location or interest and find volunteer opportunities. To accomplish this it is necessary to work with databases and actual programming, which is a lot more complicated to learn than HTML. Hiring a professional is well-advised.

I would also hire a professional to help you develop a content management system. These allow users to update their web pages without knowledge of HTML. These tools are used to automate updates of parts of the site that would need to be updated frequently, but are fairly standardized. For example, if you have an affinity linking campaign (exchanging your link with similar sites to help both of you in search engine results), you will want to add links to your site on a regular basis. If you have an online interface for this, it simplifies things greatly.

Domain Name Transfers

Domain name transfers is the act of designating a new registrar with the authority to add, modify, and delete information about the domain name. The usual process of a domain name transfer is:

1. The end user verifies that the admin contact info is correct, particularly the email address; obtains the authentication code from the old registrar, and removes any lock that has been placed on the registration.
2. The end user contacts the new registrar with the wish to transfer the domain name to their service, and supplies the authentication code.
3. The new registrar will contact the old registrar with this information.
4. The old registrar will contact the end user to confirm the authenticity of this request. The end user may have to take further action with the old registrar, such as returning to the online management tools, to re-iterate their desire to proceed, in order to expedite the transfer.
5. The old registrar will release authority to the new registrar.
6. The new registrar will notify the end user of transfer completion. The new registrar may have automatically copied over the domain server information, and everything may automatically continue to work as before. Otherwise, the domain server information will need to be updated with the new registrar.

After this process, the new registrar becomes one's designated registrar and all correspondence shall be done with them. The process may take about five days. In some cases, the old registrar may intentionally delay the transfer as long as allowable. After transfer, the domain cannot be transferred again for 60 days, except back to the previous registrar.

It is unwise to attempt to transfer a domain immediately before it expires. Because a transfer can in some cases take up to 14 days, the transfer may not complete before the registration expires, resulting in loss of the domain name registration and failure of the transfer. To avoid this, either transfer well before the expiration date, or renew the registration before attempting the transfer.

How Web Search Engines Work

From webopedia.com

Search engines are the key to finding specific information on the vast expanse of the World Wide Web. Without sophisticated search engines, it would be virtually impossible to locate anything on the Web without knowing a specific URL. But do you know how search engines work? And do you know what makes some search engines more effective than others?

When people use the term search engine in relation to the Web, they are usually referring to the actual search forms that searches through databases of HTML documents, initially gathered by a robot.

There are basically three types of search engines: Those that are powered by robots (called crawlers; ants or spiders) and those that are powered by human submissions; and those that are a hybrid of the two.

Crawler-based search engines are those that use automated software agents (called crawlers) that visit a Web site, read the information on the actual site, read the site's meta tags and also follow the links that the site connects to performing indexing on all linked Web sites as well. The crawler returns all that information back to a central depository, where the data is indexed. The crawler will periodically return to the sites to check for any information that has changed. The frequency with which this happens is determined by the administrators of the search engine.

Human-powered search engines rely on humans to submit information that is subsequently indexed and catalogued. Only information that is submitted is put into the index.

Key Terms To Understanding Web Search Engines

spider trap - A condition of dynamic Web sites in which a search engine's spider becomes trapped in an endless loop of code.

search engine - A program that searches documents for specified keywords and returns a list of the documents where the keywords were found.

meta tag - A special HTML tag that provides information about a Web page.

deep link - A hyperlink either on a Web page or in the results of a search engine query to a page on a Web site other than the site's home page.

robot - A program that runs automatically without human intervention.

In both cases, when you query a search engine to locate information, you're actually searching through the index that the search engine has created—you are not actually searching the Web. These indices are giant databases of information that is collected and stored and subsequently searched. This explains why sometimes a search on a commercial search engine, such as Yahoo! or Google, will return results that are, in fact, dead links. Since the search results are based on the index, if the index hasn't been updated since a Web page became invalid the search engine treats

the page as still an active link even though it no longer is. It will remain that way until the index is updated.

So why will the same search on different search engines produce different results? Part of the answer to that question is because not all indices are going to be exactly the same. It depends on what the spiders find or what the humans submitted. But more important, not every search engine uses the same algorithm to search through the indices. The algorithm is what the search engines use to determine the relevance of the information in the index to what the user is searching for.

One of the elements that a search engine algorithm scans for is the frequency and location of keywords on a Web page. Those with higher frequency are typically considered more relevant. But search engine technology is becoming sophisticated in its attempt to discourage what is known as keyword stuffing, or spamdexing.

Another common element that algorithms analyze is the way that pages link to other pages in the Web. By analyzing how pages link to each other, an engine can both determine what a page is about (if the keywords of the linked pages are similar to the keywords on the original page) and whether that page is considered "important" and deserving of a boost in ranking. Just as the technology is becoming increasingly sophisticated to ignore keyword stuffing, it is also becoming more savvy to Web masters who build artificial links into their sites in order to build an artificial ranking.

Tools To Help Optimize Your Site For Top Search Engine Placement

From About.com

http://personalweb.about.com/od/siteoptimizingtools/Tools_To_Help_Optimize_Your_Site_For_Top_Search_Engine_Placement.htm

Find out what you need to do to submit your site to search engines and other lists. Promote your site so other's can find it.

Submit Corner: META Tag Generator - <http://www.submitcorner.com/Tools/Meta/>

Get your Meta Tags made for you. Just fill in a description of your site and some keywords and it's done for you.

Meta Tag Scanner - <http://www.submitcorner.com/Tools/Metascan/>

META Tag Scanner, scans your site for meta tags and makes recommendations. Before firing off your site to search engines, make sure you verify your META tags are formatted correctly and optimized properly. Let our META Tag Scanner analyze your tags and make suggestions on how you can improve the common elements of your page(s).

Exact Seek - Site Ranking Explained - <http://www.exactseek.com/add.html>

Find out how your site ranks against other sites and then change your keywords so your site will rank better.

SEO SpyGlass Software Trial Version - <http://www.link-assistant.com/seo-spyglass/>

"SEO SpyGlass is an advanced Search Engine Optimization software that reveals the optimization strategy of any top-ranking competitor, for any keyword..."

Website SEO Score - <http://www.websitegrader.com/>

"Website Grader provides a grade of your website's marketing effectiveness and customized advice on how to improve your website for search engine optimization (SEO) and Internet marketing."

Word Tracker - Keywords for Search Engine Placement and Ranking -

<http://www.wordtracker.com/>

When you choose the right keywords your site soars to the top of a search for those keywords in the search engines. This tool will help you choose the right keywords.

What's The Best Font Size To Use In Website Design?

Hobo Internet Search & Marketing Solutions
<http://www.hobo-web.co.uk/tips/25.htm>

Well, there is no 'best font size'! Just don't 'fix' your font size absolutely.

Because of the wide range of settings and equipment that people might be using to access the World Wide Web, there is no "best font size". Font sizes should be specified using relative units like percentage or EM, (in external CSS files) since these will allow the user to adjust font sizes up or down to suit their own requirements. Avoid using graphics of text, as this locks the text size, and makes it impossible for users to change it.

Web Design; Best Font Sizes To Use In 2008

Unless you're a web designer, of course, a Windows, Macintosh, or other system will have only a handful of fonts installed. There is little overlap between the default installed fonts on these various systems. Already with many browsers, and increasingly in the future, readers will be able to decide on the fonts they want to view web pages with. With CSS, you can suggest a number of fonts, and cover as many bases as possible. But don't rely on a font being available regardless of how common it is.

More important still is font size. You may be aware that the same font, at the same point size on a Macintosh "looks smaller" than on most Windows machines. In a nutshell, this is because the "logical resolution" of a Macintosh is 72dpi, while the Windows default is 96dpi. The implications of this are significant. Firstly, it guarantees that it is essentially impossible to have text look identical on Macintoshes and Windows based systems. But if you embrace the adaptability philosophy it doesn't matter.

If you are concerned about exactly how a web page appears this is a sign that you are still aren't thinking about adaptive pages. One of the most significant accessibility issues is font size. Small fonts are more difficult to read. For those of us with good eyesight, it can come as a shock that a significant percentage of the population has trouble reading anything below 14 point times on paper. Screens are less readable than paper, because of their lower resolution.

Does that mean the minimum point size we should use is 14 pts? That doesn't help those whose sight is even less strong. So what is the minimum point size we should use? None. Don't use points. This allows readers to choose the font size which suits them. The same goes even for pixels. Because of logical resolution differences, a pixel on one platform is not a pixel on another.

You can still suggest larger font sizes for headings and other elements. CSS provides several ways of suggesting the size of text in such a way as to aid adaptability. We'll look at just one to get an idea.

With CSS you can specify font size as a percentage of the font size of a parent element. For example, headings are inside the BODY of the page. If you don't set a size for the text in the BODY, then the text of the BODY will be the size that the reader has chosen as their default size. Already we are aiding adaptability of our page, simply by doing nothing!

You might say “but the text looks too big” if I just leave it like that. Make it smaller then. But in your browser. And your readers will then have the option to make it bigger or smaller in their browsers too, depending on their tastes, or their needs.

We can make headings and other elements stand out using font size by specifying that headings of level 1 should be say 30% larger than the body text, level 2 should be 25% larger, and so on. Now, regardless of the size that the user chooses for their main text, headings will be scaled to be proportionally bigger than the main text. Similarly text can be scaled to be smaller than the body text, however, this can give rise to situations where the text can be illegibly small, so use with caution.

We’ve done very little really, just avoided using absolute font sizes, and used proportional sizes for headings, and we’ve already made our pages much more adaptable and accessible.
What's The Best Font To Use In My Website Design?

Survey statistics

These figures are the cumulative total of about 8 survey submissions per week since January 2003, 2633 total. The Windows applet-based survey was introduced on 21 April and is currently recording the frequency of 281 of the most common Windows fonts. These fonts can be found at <http://www.codestyle.org/css/font-family/sampler-WindowsResultsFull.shtml>

Jakob Nielsen's Readability Guidelines for Website Font Size

- Do not use absolute font sizes in your style sheets. Code font sizes in relative terms, typically using percentages such as 120% for big text and 90% for small text.
- Make your default font size reasonably big (at least 10 point) so that very few users have to resort to manual overrides.
- If your site targets senior citizens, use bigger default font sizes (at least 12 point).
- If possible, avoid text that's embedded within a graphic, since style sheets and font size buttons don't have any effect on graphics. If you must use pictures of text, make sure the font size is especially large (at least 12 point) and that you use high-contrast colors.
- Consider adding a button that loads an alternate style sheet with really big font sizes if most of your site's visitors are senior citizens or low-vision users. Few users know how to find or use the built-in font size feature in current browsers, and adding such a button within your pages will help users easily increase text size. However, because every extra feature takes away from the rest of the page, I don't recommend such a button for mainstream websites.
- Maximize the color contrast between the text and the background (and do not use busy or watermarked background patterns). Despite the fact that low-contrast text further reduces readability, the Web is plagued by gray text these days.'