

Web Page & Graphic Design Seminar

Academic Computer Center

Seminar homepage: <http://www.uic.edu/depts/adn/seminars/webdesign>

May 10, 1998 EdG

Web Page Design Tips

- ◆ **Meet site and audience objectives**
- ◆ **Design for your audience**

Take into account your users' browsers, computers and network bandwidth. Most people's monitors can only display 256 colors. As of summer of 1998, most people access the Internet from home at 14.4Kbps, which after factoring in communications overhead and compression translates into fewer than 6KBps. A 40 kilobyte Web page will take close to seven seconds to download.
- ◆ **Provide a consistent, clean and intuitive look and feel throughout your site**
- ◆ **Put emphasis on content and readership**

While design is very important, content is king. Make sure the information is valuable and up-to-date. In addition, reading on the Web is 25% slower. Most people skim Web pages, so keep paragraphs short and use headings and color to set information hierarchy.
- ◆ **Design for the screen**

Design for a 14" VGA screen, which has a resolution of 640 pixels wide by 480 pixels high. The typical inside browser window, where your hypermedia is displayed is typically no more than 600 by 315 pixels in size. While some scrolling down on a page is acceptable, scrolling horizontally is not. People just don't like it. Beware of using tables or graphics that are too wide for the screen.
- ◆ **Exploit the Web**

Design your first page to be short and sweet. It should serve as the entry point to your hypermedia, with a few categories and hyperlinks to your site. Avoid writing very long sequential pages; break the information into smaller documents and use links to connect them together, and to offer good navigation.
- ◆ **Provide effective page navigation, via iconic interface, menus, table of contents, etc.**
- ◆ **Author Web pages that download quickly**

On the average, your pages should be under 40KB; less (closer to 20KB) if most of your users will be accessing them via modems. At worst, a large page should be under 100KB.
- ◆ **Try very hard to stay away from browser or platform dependencies**

Avoid using non-standard HTML extensions or bleeding-edge Web technologies that are not supported by most browsers, or their versions on different computer systems. Adhere to World Wide Web Consortium (W3C) standards.
- ◆ **Develop hypermedia that is easy to maintain and keep up-to-date**

Web Graphics Design Tips

- ◆ **Keep image file sizes as small as possible**

Either reduce the size of the graphic, the number of colors, use image compression, or a combination thereof. Consider breaking huge graphics into smaller images as newer browsers can load multiple files at the time.

- ◆ **When to use GIF files**

Essentially, use GIFs for solid color and non-continuous tone artwork; typically, that includes text and background images, diagrams, lineart, logos, bullets, buttons and icons. GIFs may also be appropriate for small and simple photographs.

Transparent GIFs can be useful to achieve irregular or floating graphic effects. Animated GIFs can also serve to catch attention or to show simple animations or small slide shows.

GIF files can have, at most, 256 colors. You can reduce image file sizes by reducing the number of colors, saving GIFs without dithering or anti-aliasing, and by cropping images right up to the edges.

- ◆ **When to use JPEG files**

Use JPEG for continuous-tone images such as quality photographs, gradients and blends, or when requiring more than 256 colors. JPEG offers smooth color transitions and excellent variable compression of photographs.

When saving JPEG files, select first high compression and see its image quality. Reduce image compression until you get acceptable image quality. Highly compression, which gives smaller image size, usually comes at no cost to image quality.

- ◆ **Use browser-safe colors**

There are 216 so-called “browser-safe” colors, which display consistently on Netscape Navigator and Microsoft Internet Explorer browsers on Windows and Macintosh systems. If your images don’t require many colors, as is typically the case for graphics that can be saved as GIF files, consider using the colors from the browser-safe color palette. This will ensure that your images will look the same across browsers and platforms.

Don’t use the browser-safe color palette for photographs, gradients or blends. Before using the browser-safe color palette, you need to first download it from <http://www.lynda.com> and then add it to your image editing software.

- ◆ **Design color-coordinated Web sites**

You can help the overall look and feel of your Web pages by using color constantly. Well-designed color-coordinated Web sites can be achieved by carefully selecting a small number of colors that work well together for text and for some of the graphics, like background colors.

- ◆ **Avoid dithering and anti-aliasing**

Dithering is the arrangement of pixels in patterns to emulate colors that the computer can not display. It occurs when color-rich 24-bit graphics (millions of colors) are displayed on 8-bit monitors (256 colors), or when 24-bit photographs or images are saved as GIF files with 256 colors or less. The result can be unwanted dots or colors, which can particularly look bad within lineart or solid colors. To avoid them, use the browser-safe color palette and reduce the number of colors to those that can be displayed by the intended audience monitors. As for anti-aliasing, its process of smoothing graphic edges also introduces unwanted pixels.