

Web Page & Graphic Design Seminar

Academic Computing and Communications Center

UIC Instructional Technology Lab

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

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Web Page Design Tips

- ◆ **Meet Web 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 thousands of colors. As of winter of 2000, most people access the Internet from home at 28.8/56Kbps, which after factoring in communications overhead and compression translates into approximately 10 to 20KBps. A 40 kilobyte Web page will take between one to four seconds to download (an 80KBps page, twice that long).

- ◆ **Provide a consistent, clean and intuitive look and feel throughout your Web site**

- ◆ **Write for the Web**

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. **Keep paragraphs short. Write short continuous blocks of text and be succinct.** Use headings and color to set information hierarchy and to facilitate scannability.

- ◆ **Design for the screen**

Design for a 15" SVGA screen, which has a resolution of 800 pixels wide by 600 pixels high. The typical inside browser window, where your hypermedia is displayed is typically no more than 760 by 450 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 home page to be brief. 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 worse, 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 (<http://www.w3c.org>).

Web Page and Graphic Design Tips

- ◆ **Use Style Sheets**

Cascading Style Sheets (CSS) make it easy to separate presentation from content, and to facilitate consistency in the overall look-and-feel of a Web site. Define a small number of external style sheets, in a separate file and link them into your hypermedia. CCS can be easily created with Web authoring programs like Macromedia Dreamweaver or Adobe GoLive. CCS are supported by 4.0 browsers or newer. Remember to test them.

- ◆ **Develop hypermedia that is easy to maintain and keep up-to-date**

- ◆ **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 high compression, first, and see its image quality.** Reduce image compression (increase file size) until you get acceptable image quality. High compression, which gives smaller file sizes, usually comes at no cost to image quality.

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

You can help the overall look and feel of your Web pages by using color consistently. 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, navigational icons and graphic element 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.