Designing Effective Web Pages

Objectives	Develop understanding of web design principles.
Required Reading	• Lesson 2 - Preparing to Publish on the Web (Lemay, p. 25) • Lesson 16 - Writing Good Web Pages: Do's and Don'ts (Lemay, p. 499) • Lesson 17 - Designing for the Real World (Lemay, p. 533) • Chapter 3 - Planning the Site, Sklar, p. 69 • Chapter 4 - Planning Site Navigation, Sklar, p. 93 • Chapters 1 - 7, Krug
Assignment	Complete your Design Documents (please also refer to Design Document Template and Design Document Example located in **[Resources/4. Guidelines for Assignments/Final Project/Design Documents]).** - **Due July 6th, at 11:45 pm**

I. Important Concepts

Along with the Dos and Don'ts Lemay discusses, please **don't use "Under Construction" signs on your web pages.** If you are publishing a web page, it should be complete enough to display. If it's so unfinished that you need to label it as such, it should be left unpublished until it's ready.

It is relatively simple put together the mechanics of a web page with a little time and work. Yet there exists a multitude of poorly designed, just plain awful web pages out there. Keep in mind the principles of design and the impact on your audience as you make decisions about your web documents. Communicating, understanding, and learning don't just happen without good planning and thought behind the material that is presented. Continue to look critically at web sites as you develop a sense of what well-designed, purposeful pages, include -- and don't include.

Remember that the purpose of the web is to provide a hypermedia environment. The flexibility of a hypermedia environment offers great potential; however, web designers must be diligent about building in user support through clear navigation, logical layout, and justifiable use of the elements used on the web page.

By asking for feedback throughout the design process, you can gain insight into how intuitive your navigation is (e.g., do people seem to understand what is hyperlinked, where it leads, and how to get back), how your site displays on systems other than the one on which you designed it, and whether your content is adequate.

Steps in designing a web site
Web design begins with how your site will function. The look is important, but unless you have a well planned site, looks will get you nowhere.

- Conceptualize – think about the content/information that you want to put on the Web
- Design – use storyboard to plan your website
- Build
- Publish
- Promote
- Evaluate

Creator's Vision
Ask yourself these questions as you plan your site.

- What is the site's purpose?
- Who is the primary audience?
- What is my message and how do I most effectively convey it?
- How do I facilitate understanding and communication?
- What effect will different forms of media have?
- Can I reinforce a concept using more than one kind of media, e.g., text and a graphic?
- Do individual elements such as a graphic or animation enhance communication or detract from the message?
- Is this element necessary? Does it serve a real purpose or is it just glitz?

Macro-level (Global site decisions)

- Site Structure
- User control?
- How many levels?
- Navigation
- Audience
- Consistent look
- Color scheme
- Placement of major elements like navigation bars and banners or logos

Technical considerations might include how inclusive you want your site to be. Are you designing for the widest possible audience? If so, you'll need to keep in mind that older versions of browsers may not support design elements such as frames. If users access your site through a dial-up connection, loading times for graphics are a consideration. What about people using text-only browsers? Granted, they may be few, but if maximum accessibility is important for your purposes, you can't ignore them.

Micro-level (Individual page decisions)
Micro-level decisions include decisions about placement of individual elements on a page and the use of multimedia components like sound, graphics, and animation.

To scroll or not to scroll?
In the early days of webbery, folks treated browser windows like dialog boxes that display everything viewable at one time. (See Jakob Nielsen's "Changes in Web Usability Since 1994" at http://www.useit.com/alertbox/9712a.html) Since then, Neilsen's research has shown that we've figured out that web pages are more like word processing or other scrollable documents. For the initial home page screen, however, it's best to design a screen that fits into the browser window without scrolling. Remember that a long page can benefit from anchor links. These allow you to put a table of contents menu at the top of the page and let users jump to the various sections within the page.

Text and Readability
Jakob Nielsen also researched "How Users Read on the Web" (see http://www.useit.com/alertbox/9710a.html) and found that 79% of Web users scan text. It's a good idea to put the most important content near the top of your page, especially if the page is scrolling.

eFuse has interesting comments on background branding or including a recognition graphic a http://www.efuse.com/Plan/this_site_from_scratch_ii_-_de.html. They say, "background images can (and should) be quite compact. The ones on this site are around 8K, which, at 28.8, should take less than four seconds to download."

eFuse also discusses content framing, which eases readability by placing a white page of text on a darker background. Intentionally, their lines of text are set less than some screens would display them by default. As more people use higher resolution monitors (such as 800 x 600 or 1024 x 768), sites that have text running from one side of the screen to the other are increasingly difficult to read. They say,

"eFuse.com sets type at an optimal width of approximately 60 characters (at the default 12 point size, this translates to around 450 pixels wide). You can achieve this by creating a table with a set pixel width and putting text into the table.

Set type in black and white.
Why? It's easier to read and colored type often confuses readers by appearing to be a link. eFuse has a good section on Web Fonts written by a typographer at http://www.efuse.com/Design/web_fonts_basics.html. You'll find examples of different fonts and how they'll appear on a web page.

II. Basic Principles of Design – User Interface

2.1 Visual Considerations

Several basic design principles come into play when designing web pages. Adhering to these principles is a start toward creating elegant web pages that, along with good content, demonstrate your competence to viewers. Among these design principles are:

- Balance - Achieving equilibrium within a screen
- Rhythm - Movement by repetition of regulated visual elements.
- Contrast - A difference between elements
- Emphasis - The part that is noticed first on a screen. You may use contrast to achieve emphasis.
- Proportion - The size relationship of elements to each other and to the whole.

Although visual aesthetics are important to your web site, good navigation is essential. The following links provide useful information about both navigation and interface design in general.

- Navigation -- http://www.pointafter.com/tips-navigation.htm
- Interface -- http://athos.rutgers.edu/~shklar/www4/rmiller/rhmpapr.html

2.2 Graphics

- Use web safe RGB hexadecimal colors for background colors and text (see http://www.intuitive.com/coolweb/colors.html)
- Use ALT, height, width tags
- Use gifs for line art and large blocks of the same color; use jpgs for photographs and graphics with many variations between pixels
- Quality vs. file size
- What purpose does the graphic serve?

2.3 User testing

You will conduct formal user testing for your Evaluation Report. However, it is a good idea to conduct user testing as you go so that you can find problems early. Use the following types of questions to help you evaluate your web site and make needed changes:

- Describe the testers' computer system: processor speed, operating system, modem speed.
- How quickly did the pages load?
- Which parts, if any, loaded too slowly?
- Are any graphics missing?
- Was the color scheme pleasing?
- Were there any links that didn't work?
- Was the text easy to read?
- Did you find spelling or grammar errors?
- What, if anything, was confusing or distracting about the site?
- What is valuable about the site?
- How could it be improved?

2.4 Examples: The Good, the Bad, and the Just Plain Ugly

Web Pages That Suck.com - http://www.webpagesthatsuck.com/

2.5 Other Design Resources

- Ten Quick Tips for Better Site Design - http://www.graphicdesign.co.uk/topten/web
- Designing Information-Abundant Websites: Issues and Recommendations - By Dr. Ben Shneiderman - http://www.cs.umd.edu/projects/hcil/members/bshneiderman/ijhcs/main.html
- Testing Whether Web Page Templates are Useful - http://www.useit.com/alertbox/980517.html