WEB DESIGN CONSIDERATIONS

As with any medium, there are many challenges unique to designing for the Web. This document covers some of the special considerations that should be taken into account when developing a design for a web site. The following sections cover how visitors' expectations affect their experience with a web site, elements that make up an effective web site design, design preferences that may not immediately be apparent in the design, and some limiting factors when dealing with web design.

VISITOR EXPECTATIONS

A visitor's experience with a web site is largely shaped by his or her expectations. A visitor's expectations are shaped by his or her experiences with other web sites. What does this cycle of cause-and-effect mean? It means visitors want sites to basically act like other sites on the Internet. What about creativity, being unique, and standing out from the crowd? There's room for that too, but there are some elements that help a visitor have a positive experience on your site.

SCROLLBARS

Web surfers have become accustomed to having a vertical scroll bar on the right edge of the browser. Most mice now have a scroll wheel to allow users to traverse the vertical distance in a window quite easily. When a page contains more content than will fit on a page, visitors expect to scroll to see more. Some factors that may break this expectation are as follows.

- **Internal scrollbars** are commonly used in fixed-height designs to display additional content rather than the browser's scrollbar. Visitors do not expect to find scrollbars within the design and may not look for them there. This would prevent visitors from seeing all of the content. Allowing the page to grow vertically and utilize the browser's scrollbar will help maintain a visitor's experience.
- A **horizontal scrollbar** may appear if the design is too wide for the browser window. While visitors are accustomed to vertical scrolling, horizontal scrolling is relatively foreign. Small amounts of horizontal scrolling are especially frustrating, so care should be taken to assure that the design will fit within a browser window at the intended resolution.

BACK

The browser's Back button is an important tool for web surfers. Many mice now have a dedicated button to trigger the back function in web browsers. It is a way for visitors to get back to something they saw before, and provides an escape route for when things go bad. Breaking the Back button can quickly break the visitor's experience. Most issues that can break the Back button occur during implementation. However, some precautions during design can help prevent some of these issues.

- **Frames** were a common web technology used to split the browser window into multiple sections. In sites using frames, the Back button had varying usefulness depending upon the implementation. Furthermore, frames prevented visitors from easily finding a piece of content or sharing it with others. Frames were often used to separate content from decoration, but it is no longer needed for this effect.

- Certain **page redirection** implementations can prevent the Back button from working as expected. Rather than returning to the previous page, the visitor only goes back to the page that redirected them, causing them to end up back where they started. Using a simple, straight-forward content structure will help prevent the need for redirects, and help visitors find the content for which they are looking.

KEY AREAS

Many organizations have studied web surfers' eye movements on a web site. Trends in this eye traffic can help to identify the best locations for important elements of the site design.

- The **top of the page** is often the first stop for visitors' eyeballs. Visitors look to this area to figure out where they are. It is often a place for logos, slogans, mottos, breadcrumb links, and other identifying information.
- The **left side of the page under the header** is another common destination for eyes. Visitors will often scan down the left side of the page, at least as much as is displayed in the browser. Navigational elements are very common in this area. However, many sites have begun placing their content in this coveted area to draw more attention to it.
- The **right side of the page right under the header** is also a high-visibility area. This area is often used for ads since visitors tend not to focus on it, but still notice it. Other elements such as navigational elements or special content can also be found here.

DESIGN ELEMENTS

Easily finding key elements of a web site can help maintain a visitor's experience. Some basic elements should be present in all sites as visitors have come to expect them. Including additional features into the design can help draw attention to useful aspects of the site.

BASIC ELEMENTS

- **Organization or site identification** clarifies what site the visitor is viewing. Nondescript sites often trigger suspicion in visitors. This information is typically found at the top of the page.
- The **main content area** on a web site is the reason for having a web site. Successful web site designs are often built around the content of the site.
- A **site search** allows visitors to quickly find the information for which they are looking. Making the site search available on every page can help prevent visitors from becoming frustrated and having a bad experience.
- **Navigation** is a key component of any web site. Without navigation, a web site becomes simply a web page. Designs for navigational elements can indicate many things including if a page is within an area (levels), if a page is within the current area, if a page is the current page being viewed, and if the visitor has visited a page before.
- **Special content areas** can be used to call attention to certain small pieces of content. These may appear anywhere on the page including side columns, the header, or the footer.
- **Static information** such as copyright information, contact information, and other seldom-changed information may be included in the design. This information will be available on every page in the site.

ADDITIONAL FEATURES

- An **event or news listing** may be incorporated in the design if the site supports it. This can make fresh information available on every page in the web site.
- Placing a **login** in the design will make it easier for registered users to access their special features.
- An area showing **recent content updates** on the home page encourages return visits to the site as it helps return visitors stay up-to-date with the information on the site.

DESIGN PREFERENCES

Some design preferences may not be apparent from the design images. If preferences exist for an element that may not be immediately apparent, they should be specified in writing or in additional images.

- Styles for **headers**, **sub headers**, **content**, and **small content** should be specified. Utilizing these four content styles will help ensure a consistent experience.
- Any **additional content styles** to be used frequently should also be specified. This allows the same style to be reused rather than recreate it each time.
- Styles for the **normal**, **visited**, **hover** (mouse over), and **active** (clicked) state of links can help visitors distinguish where they have been and provide visual confirmation when they move their mouse over a link.
- Providing the **color palette** used in the design provides a basis for selecting colors of elements that have not been explicitly specified.
- **Additional content layouts** may be desired for certain pages. These layouts should be accounted for and illustrated in the design.

LIMITING FACTORS

The following factors should be considered when designing a web site. Each factor is broken down into why it is an issue (symptoms), why it occurs (causes), and what possible solutions exist (approaches).

COLOR

SYMPTOMS

- Established colors may not be recreated accurately
- Established colors may not be perceived accurately
- Visitors may lose meaning indicated by color

CAUSES

- Inconsistent color representation of monitors
- Visitors having color-deficient vision (partial or complete)
- Visitors utilizing a screen reader or other accessibility features

APPROACHES

- Select colors with appropriate contrast

- Utilize other indicators in addition to color
- View design on various monitors

TEXT

SYMPTOMS

- Smoothing effects of text aliasing may be lost
- Smaller fonts may become less legible
- Uncommon fonts may be replaced by more common counterparts

CAUSES

- CMS-generated text (content, navigation, forms, etc.) is not aliased by most browsers
- Static information may be presented as text to conserve file size and increase accessibility
- Font faces available to browser are limited to those installed on the computer

APPROACHES

- Turn off font aliasing for dynamic content areas to reflect final appearance more accurately
- Consider avoiding aliasing for informational text (addresses, phone numbers, etc.)
- Utilize common fonts for text
  (ex: Arial, Times New Roman, Courier New, Verdana, Arial Black, Comic Sans MS, Trebuchet MS, Impact, Georgia, Tahoma, Helvetica)

AVAILABLE AREA

SYMPTOMS

- Content larger than the available area will be cut off or require scrollbars
- Extra scrollbars may confuse or frustrate visitors

CAUSES

- The resolution of visitor's browser window is unknown
- The vertical space available for the page is reduced by browser's toolbars and status bars
- Constrained content areas (ex: horizontal navigation, fixed-height designs) do not allow the page to grow with the content

APPROACHES

- Design for the lowest common browser width (currently 800 pixels, allowing 760 pixels for the page)
- Design for the target demographics' typical browser width
- Account for toolbars, scrollbars, and other items that may occupy the browser window (borders and the scrollbar occupy up to 40 pixels of the browser window width)
- Allow content areas to grow with the content

TRANSLUCENCY

SYMPTOMS

- Aliased edges and shadows only appear correctly on a specific background
- Aliasing or shadows on top of changeable elements will need to be created as part of the content

CAUSES

- Web graphic formats do not support translucency (partial transparency)
- The appearance of shadows and aliasing is dependent on the background behind it

APPROACHES

- Avoid aliasing and shadows on dynamic elements
- If necessary, make aliasing or shadows on changeable elements easy to reproduce