

Text Appearance

There are several issues related to text

characteristics that can help ensure a website communicates effectively with users:

- Use familiar fonts that are at least 12-points;
- Use black text on plain, high-contrast backgrounds; and
- Use background colors to help users understand the grouping of related information.

Even though it is important to ensure visual consistency, steps should be taken to emphasize important text. Commonly used headings should be formatted consistently, and attention-attracting features, such as animation, should only be used when appropriate.

11:1 Use Black Text on Plain, High-Contrast Backgrounds

Guideline: When users are expected to rapidly read and understand prose text, use black text on a plain, high-contrast, non-patterned background.

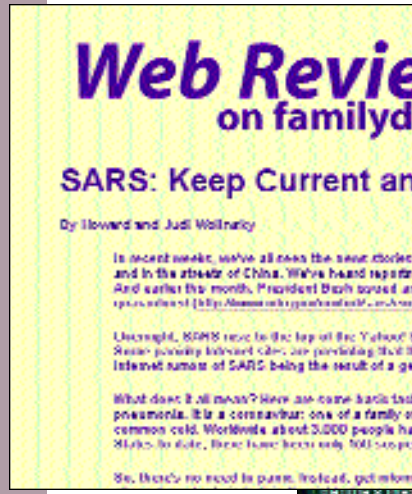
Comments: Black text on a plain background elicited reliably faster reading performance than on a medium-textured background. When compared to reading light text on a dark background, people read black text on a white background up to thirty-two percent faster. In general, the greater the contrast between the text and background, the easier the text is to read.

Sources: Boyntoin and Bush, 1956; Bruce and Green, 1990; Cole and Jenkins, 1984; Evans, 1998; Goldsmith, 1987; Gould, et al., 1987a; Gould, et al., 1987b; Jenkins and Cole, 1982; Kosslyn, 1994; Muter and Maurutto, 1991; Muter, 1996; Scharff, Ahumada and Hill, 1999; Snyder, et al., 1990; Spencer, Reynolds and Coe, 1977a; Spencer, Reynolds and Coe, 1977b; Treisman, 1990; Williams, 2000.

Example:

Relative Importance:
12345

Strength of Evidence:
12345



What Is the Difference Between Usability Engineering and Usability Testing?

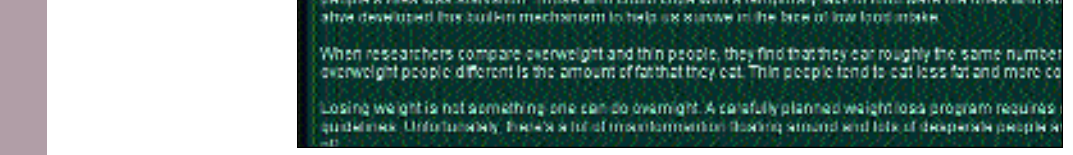
Usability engineering is a methodical approach to producing a Web site or any user interface. It is a practical and systematic way to deliver a product that works for users. Usability engineering involves several methods, each applied at appropriate times, including gathering requirements, developing and testing prototypes, evaluating design alternatives, analyzing usability problems, proposing solutions, and testing a site (or other interface) with users.

Usability testing is part of the process of usability engineering. Usability testing includes a range of methods for having users try out a site (or other system). In a typical usability test, users perform a variety of tasks with a prototype (or other system) while observers record notes on what each user does and says. Typical tests are conducted with one user at a time or two users working together. Testing may include collecting data on the paths users take to do tasks, the errors they make, when and where they are confused or frustrated, how fast they do a task, whether they succeed in doing the task, and how satisfied they are with the experience. The goal of most usability testing is to uncover any problems that users may encounter so those problems can be fixed.

Links to Related Articles

- [Usability Engineering for the Web](http://www.w3j.com/5/5/3.instone.html), Keith Instone, World Wide Web Journal
- [Usability Glossary](http://www.usabilityfirst.com/glossary/glossary.taf), Usability First

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See page xxi for detailed descriptions of the rating scales
12345

11:2 Ensure Visual Consistency

Relative Importance:
12345

Strength of Evidence:
12345

Guideline: Ensure visual consistency of website elements within and between Web pages.

Comments: Two studies found that the number of errors made using visually inconsistent displays is reliably higher than when using visually consistent displays. Visual consistency includes the size and spacing of characters; the colors used for labels, fonts and backgrounds; and the locations of labels, text and pictures. Earlier studies found that tasks performed on more consistent interfaces resulted in (1) a reduction in task completion times; (2) a reduction in errors; (3) an increase in user satisfaction; and (4) a reduction in learning time.

However, users tend to rapidly overcome some types of inconsistencies. For example, one study found that the use of different-sized widgets (such as pushbuttons, entry fields, or list boxes) does not negatively impact users' performance or preferences.

Sources: Adamson and Wallace, 1997; Adkisson, 2002; Badre, 2002; Card, Moran and Newell, 1983; Cockburn and Jones, 1996; Eberts and Schneider, 1985; Grudin, 1989; Nielsen, 1999d; Osborn and Elliott, 2002; Ozok and Salvendy, 2000; Parush, Nadir and Shtub, 1998; Schneider and Shiffrin, 1977; Schneider, Dumais and Shiffrin, 1984; Tullis, 2001.

Example:

An example of good visual consistency. Location and size of pictures, title bar, and font all contribute to visual consistency.



11:3 Format Common Items Consistently

Guideline: Ensure that the format of common items is consistent from one page to another.

Comments: The formatting convention chosen should be familiar to users. For example, telephone numbers should be consistently punctuated (800-555-1212), and time records might be consistently punctuated with colons (HH:MM:SS).

Sources: Ahlstrom and Longo, 2001; Engel and Granda, 1975; Mayhew, 1992; Smith and Mosier, 1986; Tufte, 1983.

Relative Importance:

 Strength of Evidence:

11:4 Use at Least 12-Point Font

Guideline: Use at least a 12-point font (e.g., typeface) on all Web pages.

Comments: Research has shown that fonts smaller than 12-points elicit slower reading performance from users. For users over age 65, it may be better to use at least 14-point fonts. Never use less than 6-point font on a website.

Traditional paper-based font sizes do not translate well to website design. For instance, Windows Web browsers display type 2 to 3 points larger than the same font displayed on a Macintosh. User-defined browser settings may enlarge or shrink designer-defined font sizes. Defining text size using pixels will result in differently-sized characters depending upon the physical size of the monitor's pixels and its set resolution, and presents accessibility issues to those individuals that must specify large font settings.

Sources: Bailey, 2001; Bernard and Mills, 2000; Bernard, Liao and Mills, 2001a; Bernard, Liao and Mills, 2001b; Bernard, et al., 2002; Ellis and Kurniawan, 2000; Galitz, 2002; Tinker, 1963; Tullis, 2001; Tullis, Boynton and Hersh, 1995.

Relative Importance:

 Strength of Evidence:

See page xxi
 for detailed descriptions
 of the rating scales

11:5 Use Familiar Fonts

Guideline: Use a familiar font to achieve the best possible reading speed.

Comments: Research shows no reliable differences in reading speed or user preferences for 12-point Times New Roman or Georgia (serif fonts), or Arial, Helvetica or Verdana (sans serif fonts).

Sources: Bernard and Mills, 2000; Bernard, Liao and Mills, 2001a; Bernard, et al., 2002; Bernard, et al., 2001; Boyarski, et al., 1998; Evans, 1998; Tullis, Boynton and Hersh, 1995; Williams, 2000.

Example: Using unfamiliar fonts may slow reading speeds.

Relative Importance:

 Strength of Evidence:



or Info New TV Scripts Film Scripts Film Transcripts Halku Writers Anime Links Cut Views Sub
 Contest Trade Search Contact

11:6 Emphasize Importance

Relative Importance:

Strength of Evidence:

Guideline: Change the font characteristics to emphasize the importance of a word or short phrase.

Comments: Font characteristics that are different from the surrounding text will dominate those that are routine. Important font characteristics include bolding, italics, font style (serif vs. sans serif), font size (larger is better to gain attention), and case (upper vs. lower). When used well, text style can draw attention to important words.

The use of differing font characteristics has negative consequences as well—reading speed can decrease by almost twenty percent, and thus should be used sparingly in large blocks of prose. Do not use differing font characteristics to show emphasis for more than one or two words or a short phrase. Do not use underlining for emphasis because underlined words on the Web are generally considered to be links.

Sources: Bouma, 1980; Breland and Breland, 1944; DeRouvray and Couper, 2002; Evans, 1998; Faraday, 2000; Foster and Coles, 1977; Lichty, 1989; Marcus, 1992; Paterson and Tinker, 1940a; Poulton and Brown, 1968; Rehe, 1979; Spool, et al., 1997; Tinker and Paterson, 1928; Tinker, 1955; Tinker, 1963; Vartabedian, 1971; Williams, 2000.

Example: Limited use of bolding effectively emphasizes important topic categories.

DoD Sites
 DoD on the World Wide Web Comment

- [Air Force](#)
- [Army](#)
- [Budget](#)
- [Business Opportunities](#)
- [Civilian Job Opportunities](#)
- [Coast Guard](#)
- [Combined Federal Campaign](#)
- [Dear Abby, Operation](#)
- [Defend America](#)
- [DeploymentLINK](#)
- [Enduring Freedom](#)
- [Environment](#)
- [Facts and Statistics](#)
- [Family](#)
- [Force Transformation \(03/27/2003\)](#)
- [Guard and Reserve](#)
- [Homeland Security](#)
- [Iraq](#)
- [Joint Chiefs of Staff](#)
- [Korea](#)
- [Marine Corps](#)
- [Navy](#)
- [Organization of DoD](#)
- [Pay](#)
- [Pentagon](#)
- [Recruiting](#)
- [Secretary of Defense](#)
- [Terrorism and Terrorists](#)
- [Tricare \(Military Health System\)](#)
- [Unified Combatant Commands](#)

See page xxi for detailed descriptions of the rating scales

11:7 Use Attention-Attracting Features when Appropriate

Relative Importance:

Strength of Evidence:

Guideline: Draw attention to specific parts of a Web page with the appropriate (but limited) use of moving or animated objects, size differential between items, images, brightly-colored items, and varying font characteristics.

Comments: Use attention-attracting features with caution and only when they are highly relevant.

Not all features of a website will attract a user's attention equally. The following features are presented in order of the impact they have on users:

- Movement (e.g., animation or 'reveals') is the most effective attention-getting item. Research suggests that people cannot stop themselves from initially looking at moving items on a page. However, if the movement is not relevant or useful, it may annoy the user. If movement continues after attracting attention, it may distract from the information on the website.
- Larger objects, particularly images, will draw users' attention before smaller ones. Users fixate on larger items first, and for longer periods of time. However, users will tend to skip certain kinds of images that they believe to be ads or decoration.
- Users look at images for one or two seconds, and then look at the associated text caption. In many situations, reading a text caption to understand the meaning of an image is a last resort. Parts of images or text that have brighter colors seem to gain focus first.

Having some text and graphic items in brighter colors, and others in darker colors, helps users determine the relative importance of elements. Important attention-attracting font characteristics can include all uppercase, bolding, italics, underlining and increased font size.

Sources: Campbell and Maglio, 1999; Evans, 1998; Faraday and Sutcliffe, 1997; Faraday, 2000; Faraday, 2001; Galitz, 2002; Hillstrom and Yantis, 1994; Lewis and Walker, 1989; McConkie and Zola, 1982; Nygren and Allard, 1996; Treisman, 1988; Williams, 2000.

Example:

The screenshot shows the CNN.com homepage with a search bar at the top, a navigation menu on the left, and several news articles. A prominent article about a U.S. grenade launcher is highlighted with a red border. Other elements include a 'SAMSUNG' advertisement, 'MORE NEWS' section, and 'ON THE SCENE' section.