Navigation

Navigation refers to the method used to find

information within a website. A navigation page is used primarily to help users locate and link to destination pages. A website's navigation scheme and features should allow users to find and access information effectively and efficiently. When possible, this means designers should keep navigation-only pages short. Designers should include site maps, and provide effective feedback on the user's location within the site.

To facilitate navigation, designers should differentiate and group navigation elements and use appropriate menu types. It is also important to use descriptive tab labels, provide a clickable list of page contents on long pages, and add 'glosses' where they will help users select the correct link. In well-designed sites, users do not get trapped in dead-end pages.

Guideline: Provide feedback to let users know where they are in the website.

Relative Importance:
①②③④⑤

Strength of Evidence:
①②○○○

Comments: Feedback provides users with the information they need to understand where they are within the website, and for proceeding to the next activity. Examples of feedback include providing path and hierarchy information (i.e., 'breadcrumbs'), matching link text to the destination page's heading, and creating URLs that relate to the user's location on the site. Other forms of feedback include changing the color of a link that has been clicked (suggesting that destination has been visited), and using other visual cues to indicate the active portion of the screen.

Sources: Evans, 1998; Farkas and Farkas, 2000; IBM, 1999; Lynch and Horton, 2002; Marchionini, 1995; Nielsen and Tahir, 2002; Spool, et al., 1997.

Example:

This box is used to designate the section of the website that is currently being viewed.

Color coding the pages and navigation menus provides effective feedback to the user about their location in the website.

Guideline: On long pages, provide a 'list of contents' with links that take users to the corresponding content farther down the page.

Relative Importance:
①②③④○

Strength of Evidence:
①②③○○

Comments: For long pages with several distinct sections that are not visible from the first screenful, add a short, clickable list of the sections (sometimes called 'anchor' or 'within-page' links) at the top of the page. 'Anchor links' can serve two purposes: they provide an outline of the page so users can quickly determine if it contains the desired information, and they allow users to quickly navigate to specific information.

Since 'anchor links' enable a direct link to content below the first screenful, they are also useful for getting users to specific information quickly when they arrive from a completely different page.

Sources: Bieber, 1997; Farkas and Farkas, 2000; Haas and Grams, 1998; Levine, 1996; Nall, Koyani and Lafond, 2001; Spool, et al., 1997; Spyridakis, 2000; Williams, 2000; Zimmerman, Slater and Kendall, 2001.

Example:

See page xxi for detailed descriptions of the rating scales
①②③④○

Guideline: Do not create or direct users into pages that have no navigational options.

Relative Importance:
①②③④○

Strength of Evidence:
①②○○○

Comments: Many Web pages contain links that open new browser windows. When these browser windows open, the Back button is disabled (in essence, the new browser window knows nothing of the user's past navigation, and thus is disabled). If the new window opens full-screen, users may not realize that they have been redirected to another window, and may become frustrated because they cannot press Back to return to the previous page. If such links are incorporated into a website, the newly-opened window should contain a prominent action control that will close the window and return the user to the original browser window.

In addition, designers should not create Web pages that disable the browser's Back button. Disabling the Back button can result in confusion and frustration for users, and drastically inhibits their navigation.

Sources: Detweiler and Omanson, 1996; Lynch and Horton, 2002; Spool, et al., 1997; Tullis, 2001; Zimmerman, Slater and Kendall, 2001.

Example:

The link for this document opens a new browser window that presents the user with a disabled Back button. This can confuse users.

Guideline: Clearly differentiate navigation elements from one another, but group and place them in a consistent and easy to find place on each page.

Relative Importance:
①②③④○

Strength of Evidence:
①②③④○

Comments: Create a common, website-wide navigational scheme to help users learn and understand the structure of your website. Use the same navigation scheme on all pages by consistently locating tabs, headings, lists, search, site map, etc. Locate critical navigation elements in places that will suggest clickability (e.g., lists of words in the left or right panels are generally assumed to be links).

Make navigational elements different enough from one another so that users will be able to understand the difference in their meaning and destination. Grouping reduces the amount of time that users need to locate and identify navigation elements.

Sources: Bailey, 2000b; Detweiler and Omanson, 1996; Evans, 1998; Farkas and Farkas, 2000; Koyani and Nall, 1999; Lynch and Horton, 2002; Nielsen and Tahir, 2002; Niemela and Saarinen, 2000.

Example:

Navigation elements are grouped (high-level topic areas across the top of the page) and consistently placed across the website.

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①②③④○

7:5 Use Descriptive Tab Labels

Relative Importance:
①②③④○

Strength of Evidence:
①②③○○

Guideline: Ensure that tab labels are clearly descriptive of their function or destination.

Comments: Users like tabs when they have labels that are descriptive enough to allow error-free selections. When tab labels cannot be made clear because of the lack of space, do not use tabs.

Sources: Allinson and Hammond, 1999; Badre, 2002; Koyani, 2001b.

Example:

These tab labels clearly describe the types of information a user can expect to find on the destination pages.

These tab labels are not as descriptive which leaves the user in doubt about the type of information available on the destination pages.

See page xxi for detailed descriptions of the rating scales
①②③④○

7:6 Present Tabs Effectively

Relative Importance:
①②③○○

Strength of Evidence:
①②③○○

Guideline: Ensure that navigation tabs are located at the top of the page, and look like clickable versions of real-world tabs.

Comments: Users can be confused about the use of tabs when they do not look like real-world tabs. Real-world tabs are those that resemble the ones found in a file drawer. One study showed that users are more likely to find and click appropriately on tabs that look like real-world tabs.

Sources: Bailey, Koyani and Nall, 2000; Kim, 1998.

Example: These clickable tabs look just like tabs found in office filing cabinets.

The design of these navigation tabs provides few clues to suggest that they are clickable until a user mouses-over them. Mousing-over is a slow and inefficient way for users to discover navigation elements.

7:7 Use Site Maps

Relative Importance:
①②③○○

Strength of Evidence:
①②③④○

Guideline: Use site maps for websites that have many pages.

Comments: Site maps provide an overview of the website. They may display the hierarchy of the website, may be designed to resemble a traditional table of contents, or may be a simple index.

Some studies suggest that site maps do not necessarily improve users' mental representations of a website. Also, one study reported that if a site map does not reflect users' (or the domain's) conceptual structure, then the utility of the map is lessened.

Sources: Ashworth and Hamilton, 1997; Billingsley, 1982; Detweiler and Omanson, 1996; Dias and Sousa, 1997; Farkas and Farkas, 2000; Farris, Jones and Elgin, 2001; Kandogan and Shneiderman, 1997; Kim and Hirtle, 1995; McDonald and Stevenson, 1998; McEneaney, 2001; Nielsen, 1996a; Nielsen, 1997a; Nielsen, 1999b; Nielsen, 1999c; Nielsen, 1999d; Stanton, Taylor and Tweedie, 1992; Tullis, 2001; Utting and Yankelovich, 1989.

Example:

This site map effectively presents the site's information hierarchy.

The use of headers, subcategories, and alphabetization make this site map easy to scan.

7:8 Use Appropriate Menu Types

Relative Importance:
①②③○○

Strength of Evidence:
①②③④○

Guideline: Use 'sequential' menus for simple forward-moving tasks, and use 'simultaneous' menus for tasks that would otherwise require numerous uses of the Back button.

Comments: Most websites use familiar 'sequential' menus that require items to be selected from a series of menus in some predetermined order. After each selection is made, another menu opens. The final choice is constrained by the sum total of all previous choices.

Simultaneous menus display choices from multiple levels in the menu hierarchy, providing users with the ability to make choices from the menu in any order. Simultaneous menus are often presented in frames, and are best employed in situations where users would have to make extensive use of the Back button if presented with a sequential menu.

Sources: Card, Moran and Newell, 1980a; Hochheiser and Shneiderman, 2000.

Example:
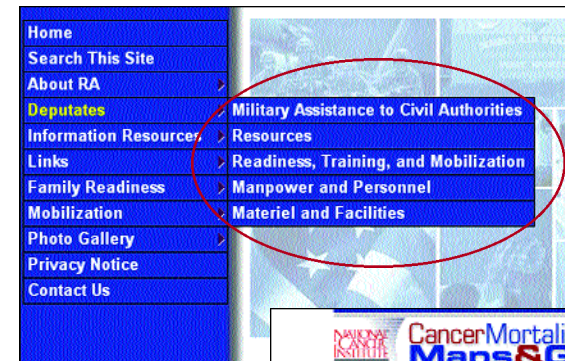
This is an example of a 'sequential' menu. In this case, mousing-over "Deputates" invokes the circled sub-menu.

This is a good example of when to use 'simultaneous' menus. The user can repetitively manipulate the many variables shown in the left panel and view the results on the map in the right panel without having to use the Back button.
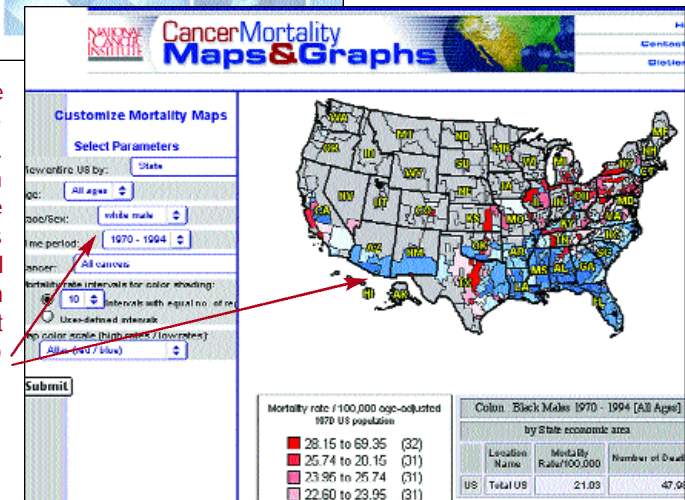
7:9 Keep Navigation-only Pages Short

Relative Importance:
①②○○○○

Strength of Evidence:
①②③④○

Guideline: Do not require users to scroll purely navigational pages.

Comments: Ideally, navigation-only pages should contain no more than one screenful of information. Users should not need to scroll the page, even a small distance. One study showed that users considered the bottom of one screenful as the end of a page, and they did not scroll further to find additional navigational options.

Sources: Piolat, Roussey and Thunin, 1998; Schwarz, Beldie and Pastoor, 1983; Zaphiris, 2000.

Example: Users can view all of the information on this navigation page without scrolling.

7:10 Use 'Glosses' to Assist Navigation

Relative Importance:
①○○○○

Strength of Evidence:
①②○○○

Guideline: Provide 'glosses' to help users select correct links.

Comments: 'Glosses' are short phrases of information that pop-up when a user places his or her mouse pointer close to a link. It provides a preview to information behind a link. Users prefer the preview information to be located close to the link, but not placed such that it disturbs the primary text. However, designers should not rely on the 'gloss' to compensate for poorly labeled links.

Sources: Evans, 1998; Farkas and Farkas, 2000; Zellweger, et al., 2000.

Example:

When a user places his or her mouse pointer over one of these links ("News," "Information," etc.), a 'gloss' appears to the right that provides information about the content contained under that particular link.

When a user mouses-over the "Office of Trust Records (OTR)" link, the circled text appears.

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①②③④○

Navigation