

Links

Linking means that users will select and click on

a hypertext link on a starting page (usually the homepage), which then causes a new page to load. Users continue toward their goal by finding and clicking on subsequent links.

To ensure that links are effectively used, designers should use meaningful link labels (making sure that link names are consistent with their targets), provide consistent clickability cues (avoiding misleading cues), and designate when links have been clicked.

Whenever possible, designers should use text for links rather than graphics. Text links usually provide much better information about the target than do graphics.

10:1 Use Meaningful Link Labels

Relative Importance:

1 2 3 4 5

Strength of Evidence:

1 2 3 4 0

Guideline: Use link labels and concepts that are meaningful, understandable, and easily differentiated by users rather than designers.

Comments: To avoid user confusion, use link labels that clearly differentiate one link from another. Users should be able to look at each link and learn something about the link's destination. Using terms like 'Click Here' can be counterproductive.

Clear labeling is especially important as users navigate down through the available links. The more decisions that users are required to make concerning links, the more opportunities they have to make a wrong decision.

Sources: Bailey, Koyani and Nall, 2000; Coney and Steehouder, 2000; Evans, 1998; Farkas and Farkas, 2000; IEEE; Larson and Czerwinski, 1998; Miller and Remington, 2000; Mobrand and Spyridakis, 2002; Nielsen and Tahir, 2002; Spool, et al., 1997; Spyridakis, 2000.

Example:

'COOL' refers to an application that allows users to search for all jobs within the Department of Commerce (not just the Census Bureau.) This link does a poor job in explaining itself. The other circled links aren't as descriptive as they could be.

The screenshot shows the Bureau of the Public Debt website. The navigation bar includes links for 'Bills, Notes, Bonds & TIPS', 'Savings Bonds', 'TreasuryDirect', 'Federal Investments', 'SLGS', and 'The Public Debt'. The 'SLGS' link is circled in red. On the left sidebar, 'Auction and TAAPSLink', 'Treasury Hunt', and 'FOIA' are circled in red. In the main content area, a 'COOL:' link is circled in red. A red line points from this 'COOL:' link to a 'Jobs @ Census' advertisement. The advertisement features a photo of people working and lists job opportunities for 'Professional: Student, Entry, & Mid-Career' and 'NEW EMPLOYEE: Pre-Appointment Package, Benefits, Special Forms'. Other job categories listed include 'Opportunities for All U.S. Citizens', 'Nationwide', 'Postdoctoral', and 'Senior Executive Service (SES) Vacancies Filled by Field Offices'. At the bottom right, there is a 'Open your account today.' button with a 'go' link.

10:2 Link to Related Content

Guideline: Provide links to other pages in the Web site with related content.

Comments: Users expect designers to know their Web sites well enough to provide a full list of options to related content.

Sources: Koyani and Nall, 1999.

Example:

Avian Influenza (Bird Flu)

Influenza (Flu) <ul style="list-style-type: none">> Avian Flu> What You Should Know> Key Facts> Current Situation> Infection in Humans> Q & A> Specific Topics<ul style="list-style-type: none">> The Virus & Its Spread> Prevention> Outbreaks> Info for Specific Groups> References> Related Links> Seasonal Flu> Pandemic Flu	<h4>Related Links on Avian Influenza (Bird Flu)</h4> <p>E-mail this page Printer-friendly version</p> <h4>U.S. Resources</h4> <p>U.S. Department of Health and Human Services (HHS)</p> <ul style="list-style-type: none">• PandemicFlu.gov Official U.S. government website for pandemic influenza<ul style="list-style-type: none">• HHS Congressional testimony on pandemic and avian influenza• Transcripts of HHS press conferences on pandemic and avian influenza• HHS National Vaccine Program Office: Pandemic Influenza <p>U.S. Department of Agriculture (USDA)</p> <ul style="list-style-type: none">• USDA Avian Influenza website Information on USDA efforts to protect the nation's poultry supply
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Related Government Agencies & International Organizations

- [European Copyright User Platform](#)
- [Federal Communications Commission](#)
- [Government Printing Office Access](#)
- [U.S. Patent & Trademark Office](#)
- [WIPO](#) (World Intellectual Property Organization)

[Home](#) | [Contact Us](#) | [Legal Notices](#) | [Freedom of Information Act \(FOIA\)](#) | [Library of Congress](#)

U.S. Copyright Office
101 Independence Ave. S.E.
Washington, D.C. 20559-6000
(202) 707-3000

The cloud of Iraq

Rove repeated later in the ques war was having a widespread d

"The war looms on all political Americans are not sour on the circumstances are good; they're are.... They're worried about the long haul," he added, and specifically they're worried about globalization and Social Security.

CLICK FOR RELATED STORIES

- [Curry: What would a Democratic majority do?](#)
- [Fineman: Rove revamps the Republican strategy](#)

Evidence of voter happiness, according to Rove: the University of Michigan's consumer confidence survey has relatively high readings. He cited a study from some political scientists (whom he didn't

See page xxii
for detailed descriptions
of the rating scales

12340

10:3 Match Link Names with Their Destination Pages

Guideline: Make the link text consistent with the title or headings on the destination page (i.e., target) page.

Comments: Closely matched links and destination targets help provide the necessary feedback to users that they have reached the intended page.

Relative Importance:

1 2 3 4 ○

Strength of Evidence:

1 2 3 4 ○

If users will have to click more than once to get to a specific target destination, avoid repeating the exact same link wording over and over because users can be confused if the links at each level are identical or even very similar. In one study, after users clicked on a link entitled 'First Aid,' the next page had three options. One of them was again titled 'First Aid.' The two 'First Aid' links went to different places. Users tended to click on another option on the second page because they thought that they had already reached 'First Aid.'

Sources: Bailey, Koyani and Nall, 2000; Levine, 1996; Mobrand and Spyridakis, 2002.

Example: Link text in the left navigation panel is identical to the headings found on the destination page.

The image shows a navigation menu on the left with the following items: EPA Newsroom, Browse EPA Topics, Laws, Regulations & Dockets, Where You Live, Information Sources, Educational Resources, About EPA, Programs, Business Opportunities, Jobs, Recursos en Español, and Explorers' Club For Kids! The menu items are linked to two destination pages. The top page is titled "U.S. Environmental Protection Agency Browse EPA Topics" and contains a search bar and a list of topics: Alphabetical List of all Topics, Industry, Air, Acid Rain, Global Warming, Emissions..., Cleanup, International Cooperation, and Border Issues, Technical Assistance... The bottom page is titled "U.S. Environmental Protection Agency Recursos en Español" and contains a search bar and a list of resources: Vida Diaria, Vida Profesional, Protegiendo a los Niños, Emergencias en el Medio Ambiente, Leyes y Tratados en Español, Otros Recursos en Español, and Explorers' Club For Kids! The red arrows indicate that the link text in the menu matches the page titles.

10:4 Avoid Misleading Cues to Click

Relative Importance:



Strength of Evidence:



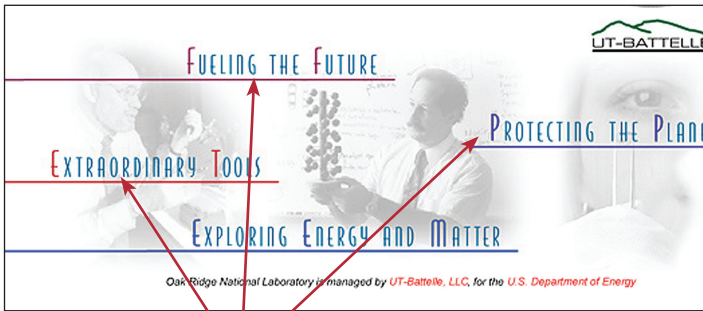
Guideline: Ensure that items that are not clickable do not have characteristics that suggest that they are clickable.

Comments: Symbols usually must be combined with at least one other cue that suggests clickability. In one study, users were observed to click on a major heading with some link characteristics, but the heading was not actually a link.

However, to some users bullets and arrows may suggest clickability, even when they contain no other clickability cues (underlining, blue coloration, etc.). This slows users as they debate whether the items are links.

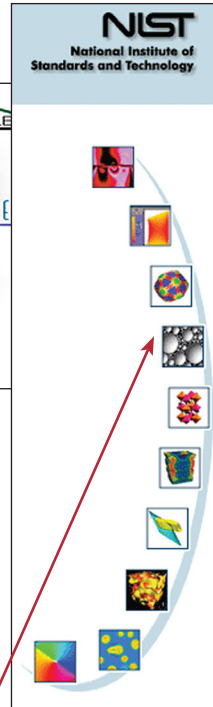
Sources: Bailey, Koyani and Nall, 2000; Evans, 1998; Spool, et al., 1997.

Example:



These items appear clickable, but are not. This design may confuse users because the items are underlined and are demonstratively different, and thus attract the users' attention.

This is a good example of misleading the user—blue text and underlined text placed at the top center of the page, and yet none of these are clickable.



Two of these graphics are not clickable—if a user mouses over one of them, they are likely to think that they are all not clickable. If one graphic is clickable, they should all be clickable.



10:5 Repeat Important Links

Relative Importance:

1 2 3 4 0

Strength of Evidence:

1 2 3 4 0

Guideline: Ensure that important content can be accessed from more than one link.

Comments: Establishing more than one way to access the same information can help some users find what they need. When certain information is critical to the success of the Web site, provide more than one link to the information. Different users may try different ways to find information, depending on their own interpretations of a problem and the layout of a page. Some users find important links easily when they have a certain label, while others may recognize the link best with an alternative name.

Sources: Bernard, Hull and Drake, 2001; Detweiler and Omanson, 1996; Ivory, Sinha and Hearst, 2000; Ivory, Sinha and Hearst, 2001; Levine, 1996; Nall, Koyani and Lafond, 2001; Nielsen and Tahir, 2002; Spain, 1999; Spool, Klee and Schroeder, 2000.

Example:

Multiple links provide users with alternative routes for finding the same information.

If the user misses the 'Hours' link in the left panel, they still have a chance to find the header in the content panel.

The screenshot shows a website layout for the Smithsonian Institution. On the left is a sidebar with a green header 'Visitor Information'. Under this header, there are several menu items: '- Hours' (circled in red), '- Maps', '- Directions', '- Tours', '- Museum Stores', '- Dining', '- Tips for Visiting', '- Security and Policies', 'Visitor Information for:', '- Kids & Families', '- Groups', '- Visitors with Disabilities', '- Foreign Language Speakers', and 'Visiting'. The main content area has a header 'Visitor Information' and a sub-header 'Everything under the Sun'. Below this is a large image of a person's face. To the right of the image is a paragraph of text. At the bottom of this text block, the word 'Hours' is circled in red. A red line connects the 'Hours' link in the sidebar to the 'Hours' link in the main content area.

Types of Cancer

[What You Need To Know About™ Cancer Index](#)

Information about detection, symptoms, diagnosis, and treatment of many types of cancer.

* Common Cancers

- * [Bladder Cancer](#)
- * [Breast Cancer](#)
- * [Colon Cancer](#)
- * [Endometrial Cancer](#)
- * [Head and Neck Cancer](#)
- * [Leukemia](#)

- * [Lung Cancer](#)
- * [Melanoma](#)
- * [Non-Hodgkins Lymphoma](#)
- * [Ovarian Cancer](#)
- * [Prostate Cancer](#)
- * [Rectal Cancer](#)

* Childhood/Pediatric Cancers

- * [Childhood Cancers Home Page](#)

* Cancers by Body Location/System

- * [AIDS-Related](#)
- * [Bone](#)
- * [Brain](#)
- * [Breast](#)
- * [Digestive/Gastrointestinal](#)
- * [Endocrine](#)
- * [Eye](#)
- * [Genitourinary](#)
- * [Germ Cell](#)
- * [Gynecologic](#)
- * [Head and Neck](#)

- * [Hematologic/Blood](#)
- * [Leukemia](#)
- * [Lung](#)
- * [Lymphoma](#)
- * [Musculoskeletal](#)
- * [Neurologic](#)
- * [Pregnancy and Cancer](#)
- * [Respiratory/Thoracic](#)
- * [Skin](#)
- * [Unknown Primary](#)

Alphabetical List of Cancers

A B C D E F G H I J **K** L M N O P Q R S T U V W X Y Z

See page xxii for detailed descriptions of the rating scales

1 2 3 4 0

10:6 Use Text for Links

Relative Importance:

1234○

Strength of Evidence:

1234○

Guideline: Use text links rather than image links.

Comments: In general, text links are more easily recognized as clickable. Text links usually download faster, are preferred by users, and should change colors after being selected. It is usually easier to convey a link's destination in text, rather than with the use of an image.

In one study, users showed considerable confusion regarding whether or not certain images were clickable. This was true even for images that contained words. Users could not tell if the images were clickable without placing their cursor over them ('minesweeping'). Requiring users to 'minesweep' to determine what is clickable slows them down.

Another benefit to using text links is that users with text-only and deactivated graphical browsers can see the navigation options.

Sources: Detweiler and Omanson, 1996; Farkas and Farkas, 2000; Koyani and Nall, 1999; Mobrand and Spyridakis, 2002; Nielsen, 2000; Spool, et al., 1997; Zimmerman, et al., 2002.

Example:

The meaning of these three images are fairly clear, even if the accompanying text was not present.

By Mail:
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585
Metro: Smithsonian station

By Phone:
1-800-dial-DOE
People Locator

By E-mail:
Contact Us

By Fax:
202-586-4403

For Hearing and/or Speech Impaired:
Telephone Communication

The meanings of these two image links are not obvious at first glance.

10:7 Designate Used Links

Relative Importance:

12340

Strength of Evidence:

12000

Guideline: Use color changes to indicate to users when a link has been visited.

Comments: Generally, it is best to use the default text link colors (blue as an unvisited location/link and purple as a visited location/link). Link colors help users understand which parts of a Web site they have visited. In one study, providing this type of feedback was the only variable found to improve the user's speed of finding information. If a user selects one link, and there are other links to the same target, make sure all links to that target change color.

One 2003 study indicated a compliance rate of only thirty-three percent for this guideline; a 2002 study showed a compliance rate of thirty-five percent.

Sources: Evans, 1998; Nielsen and Tahir, 2002; Nielsen, 1996a; Nielsen, 1999b; Nielsen, 1999c; Nielsen, 2003; Spool, et al., 2001, Tullis 2001.

Example:

Opportunities

- [Access America for Seniors](#)
- [Government Benefits](#)
- [Nonprofit Gateway](#)
- [Procurement](#)
- [Small Business Opportunities](#)
- [Technology Transfer](#)
- [USDA /1890 National Scholars Program](#)
- [USDA Debarment and Suspension Contacts](#)
- [U.S. State and Local Gateway](#)

Employment:

- [USDA](#)
- [Intern Programs](#)
- [All Federal Government](#)
- [USDA Telework Center](#)
- [Senior Executive Service Candidate Development Program](#)

A poor design choice. Unvisited links are in green, whereas visited links are in blue—users expect blue to denote an unvisited link.

Schools / IMSOs -- Air Force

- [Advanced Airlift Tactics Training Center](#), St Josep
- [Air Command & Staff College](#), Maxwell AFB AL
- [Air Education and Training Command](#), Randolph
- [Air Force Institute of Technology](#), Wright-Patterson
- [Air University](#), Maxwell AFB AL
- [Air War College](#), Maxwell AFB AL
- [Altus AFB OK](#)
- [College for Enlisted Professional Military Educati](#)
- [Columbus AFB MS](#)
- [Fairchild AFB WA](#)
- [Goodfellow AFB TX](#)
- [Inter-American Air Forces Academy](#), Lackland AF
- [Joint Special Operations University](#), Hurlburt Field
- [Keesler AFB MS](#)
- [Lackland AFB TX](#)
- [Little Rock AFB AR](#)
- [Luke AFB AZ](#)
- [Randolph AFB TX](#)
- [School of Aerospace Medicine](#), Brooks AFB TX
- [Sheppard AFB TX](#), [IMSO](#)
- [Squadron Officer School](#), Maxwell AFB AL
- [Tyndall AFB FL](#)
- [Vance AFB OK](#)
- [Wright-Patterson AFB OH](#)

A good design choice—unvisited links are shown in blue, and visited links are shown in purple. Note the conventional use of colors for visited and unvisited links.

10:8 Provide Consistent Clickability Cues

Guideline: Provide sufficient cues to clearly indicate to users that an item is clickable.

Relative Importance:

12300

Strength of Evidence:

12000

Comments: Users should not be expected to move the cursor around a Web site ('minesweeping') to determine what is clickable. Using the eyes to quickly survey the options is much faster than 'minesweeping.' Similarly, relying on mouseovers to designate links can confuse newer users, and slow all users as they are uncertain about which items are links.

Be consistent in your use of underlining, bullets, arrows, and other symbols such that they always indicate clickability or never suggest clickability. For example, using images as both links and as decoration slows users as it forces them to study the image to discern its clickability.

Items that are in the top center of the page, or left and right panels have a high probability of being considered links. This is particularly true if the linked element looks like a real-world tab or push button.

Sources: Bailey, 2000b; Bailey, Koyani and Nall, 2000; Farkas and Farkas, 2000; Lynch and Horton, 2002; Nielsen, 1990; Tullis, 2001.

Example:

A bulleted list of blue, underlined text. These are very strong clickability cues for users.

With at least seven non-traditional colors for links, the clickability cues for users might lead to confusion as to which links have been visited or not.

The screenshot shows a grid of links with various colors and styles. The links are organized into sections: 'Climate', 'Emissions', 'Actions', 'Resource Center', 'Where You Live', 'Chemical Engineering', and 'Chemistry'. The 'Chemical Engineering' section contains a bulleted list of blue, underlined text. The 'Chemistry' section contains a bulleted list of blue, underlined text. The other sections contain links with different colors (green, yellow, blue) and styles (underlined, not underlined, with images).

Chemical Engineering

- [Analytical Chemistry](#)
- [Basic and Applied Sciences](#)
- [Batteries](#)
- [Environment, Safety and Health](#)
- [Fuel Cells](#)
- [Nuclear Technology](#)
- [Process Chemistry and Engineering](#)

Chemistry

- [Carbon Chemistry](#)
- [Chemical Dynamics in the Gas Phase](#)
- [Cluster Studies Group](#)
- [Directed Energy Interactions](#)
- [Heavy Element and Separation](#)
- [Photosynthesis](#)
- [Radiation Chemistry and Photochemistry](#)

See page xxii
for detailed descriptions
of the rating scales

12340

10:9 Ensure that Embedded Links are Descriptive

Guideline: When using embedded links, the link text should accurately describe the link's destination.

Relative Importance:



Comments: Users tend to ignore the text that surrounds each embedded link; therefore, do not create embedded links that use the surrounding text to add clues about the link's destination.

Strength of Evidence:



Sources: Bailey, Koyani and Nall, 2000; Bernard and Hull, 2002; Card, et al., 2001; Chi, Pirolli and Pitkow, 2000; Evans, 1998; Farkas and Farkas, 2000; Mobrand and Spyridakis, 2002; Sawyer and Schroeder, 2000; Spool, et al., 1997.

Example: These embedded links are well designed—because the entire organization name is a link, the user does not have to read the surrounding text to understand the destination of the embedded link.

the Intelligence Community and exercises the powers of the Director when the Director's position is vacant or in the Director's absence or disability.

The Associate Director of Central Intelligence for Homeland Security, Office of the Director of Central Intelligence, ensures the flow of intelligence in support of homeland defense. The current director is [Winston P. Wiley](#).

The Executive Director of the Central Intelligence Agency is [A.B. Krongard](#). Assisted by an Executive Board that counts among its membership five mission centers with duties that enable the Agency to carry out its mission--Chief Financial Officer, Chief Information Officer, Security, Human Resources and Global Support, the EXDIR manages the CIA on a day-to-day basis.

The Directorate of Intelligence, the analytical branch of intelligence analysis on key foreign issues. The current director is [Jami A. Misck](#).

The Directorate of Science and Technology creates a mission. The current director is [Donald M. Kerr](#).

The Directorate of Operations is responsible for the operations of the Agency. The current director is [Paul Pavitt](#).

The Center for the Study of Intelligence maintains the Agency's historical materials and promotes the study of intelligence as a legitimate and serious discipline. The current director is [Paul Johnson](#).

The Directorate of Intelligence, the analytical branch of intelligence analysis on key foreign issues. The current director is [Jami A. Misck](#).

The Directorate of Science and Technology creates a mission. The current director is [Donald M. Kerr](#).

In this example, the user must read the surrounding text to gain clues as to the link's destination. In many cases, users will not read that text.

the economy, efficiency, and effectiveness of the federal government through financial audits, program reviews and evaluations, analyses, legal opinions, investigations, and other services. GAO's activities are designed to ensure the executive branch's accountability to the Congress under the Constitution and the government's accountability to the American people. GAO is dedicated to good government through its commitment to the core values of [accountability, integrity, and reliability](#).

[From the Comptroller General](#)
David M. Walker, Comptroller General of the United States
 Selected Speeches, Writings, and Press Statements. GAO Press Statement, February 7, 2003 *New!*

[GAO's Performance and Accountability Report 2002, Highlights, and related materials](#) including the Strategic Plan 2002-2007

[GAO Reports](#)
Updated daily. "Today's Reports," [Highlights](#), Special Collections including [Desert Shield and Desert Storm Reports](#) and Testimonies: 1991-1993, [Homeland Security](#).

investigations, and other services. GAO's activities are designed to ensure the executive branch's accountability to the Congress under the Constitution and the government's accountability to the American people. GAO is dedicated to good government through its commitment to the core values of [accountability, integrity, and reliability](#).

appropriations, and other processes, and major federal agency reorganizations. GAO's Bid Protest Docket - Information about current and recently closed bid protests. [GAO Policy and Procedures Manual for Guidance to Federal Agencies](#)

Federal Agency Issues Highlighting GAO products specifically

10:10 Use 'Pointing-and-Clicking'

Relative Importance:



Strength of Evidence:



Guideline: 'Pointing-and-clicking,' rather than mousing over, is preferred when selecting menu items from a cascading menu structure.

Comments: One study found that when compared with the mouseover method, the 'point-and-click' method takes eighteen percent less time, elicits fewer errors, and is preferred by users.

Sources: Chaparro, Minnaert and Phipps, 2000.

Example: The below site relies on users to mouse over the main links to reveal the sub-menu links (shown extending to the right in purple and black). The use of these mouseover methods is slower than 'pointing-and-clicking.'



See page xxii for detailed descriptions of the rating scales



10:11 Use Appropriate Text Link Lengths

Guideline: Make text links long enough to be understood, but short enough to minimize wrapping.

Relative Importance:



Strength of Evidence:



Comments: A single word text link may not give enough information about the link's destination. A link that is several words may be difficult to read quickly, particularly if it wraps to another line. Generally, it is best if text links do not extend more than one line. However, one study found that when users scan prose text, links of nine to ten words elicit better performance than shorter or longer links. Keep in mind that it is not always possible to control how links will look to all users because browser settings and screen resolutions can vary.

Sources: Card, et al., 2001; Chi, Pirolli and Pitkow, 2000; Evans, 1998; Levine, 1996; Nielsen and Tahir, 2002; Nielsen, 2000; Sawyer and Schroeder, 2000; Spool, et al., 1997.

Example:

Text links should not wrap to a second line. They should be used to highlight a particular word or short phrase in a sentence, not an entire sentence.

The screenshot shows the EPA website with several annotations. Red circles highlight long text links that wrap onto multiple lines. Red lines connect these links to the guideline text on the left. The highlighted links include:

- 'Whitman Announces Partnership to Help Prevent Skin Cancer and Promote Sun Safety in Arizona' (EPA, along with SHADE Foundation founder Shonda Schilling and her husband, Arizona Diamondback pitcher Curt Schilling, announced a new sun safety partnership with the Arizona Department of cancer and other health er is the most common children in the U.S. will
- 'Spotlight on Colorectal Cancer Awareness' (CDC promotes increased knowledge of colorectal cancer and emphasizes the importance of screening.
- 'Cancer, Registries/ Surveillance' (in the Topic Areas sidebar)
- 'Featured scientific articles from the CDC' (in the Science sidebar)

Whenever possible, text links should only cover one line.

See page xxii for detailed descriptions of the rating scales

10:12 Indicate Internal vs. External Links

Guideline: Indicate to users when a link will move them to a different location on the same page or to a new page on a different Web site.

Relative Importance:



Strength of Evidence:



Comments: One study showed that users tend to assume that links will take them to another page within the same Web site. When this assumption is not true, users can become confused. Designers should try to notify users when they are simply moving down a page, or leaving the site altogether.

Sources: Nall, Koyani and Lafond, 2001; Nielsen and Tahir, 2002; Spool, et al., 1997.

Example:

Add URL addresses below links to help users determine where they are going. By seeing .gov and .com the user is also alerted to the type of site they will visit.

Web Site Guidelines

[Research-Based Web Design & Usability Guidelines](http://usability.gov/guidelines)
http://usability.gov/guidelines

- Provides guidelines for improving Web design, navigation, functionality
- Includes findings from Web design and usability literature identified by the National Cancer Institute and provides references

[Web Design Guidelines: Design in Action](http://www-3.ibm.com/ibm/easy/eou_ext.nsf/Publish/572)
http://www-3.ibm.com/ibm/easy/eou_ext.nsf/Publish/572

- Provides guidelines on Web site planning, design, production, and maintenance
- Offers guidelines on e-commerce

[Web Publishing Guide](http://www.ieee.org/web/developers/style/)
http://www.ieee.org/web/developers/style/

- [Acid Rain Sourcebook](#)
This site is a student's first source book including activities, information about acid rain.
- [Become an IPM Super Sleuth](#) **EXIT disclaimer** >
- [Best Management Practices for Soil Erosion software](#)
This downloadable program provides information about soil erosion worldwide, including what causes soil erosion.

design, including planning, maintenance
'Exit disclaimer' graphic informs user that the link will take them to a new Web site.

Clicking an outside link leads to this 'interim' page that warns users of their imminent transfer to a non-whitehouse.gov Web site.

You are exiting the White House Web Server

Thank you for visiting our site.

You will now access <http://www.achp.gov/>

We hope your visit was informative and enjoyable.

To comment on this service, send feedback to the [Web Development Team](#)

10:13 Clarify Clickable Regions of Images

Guideline: If any part of an image is clickable, ensure that the entire image is clickable or that the clickable sections are obvious.

Relative Importance:



Strength of Evidence:

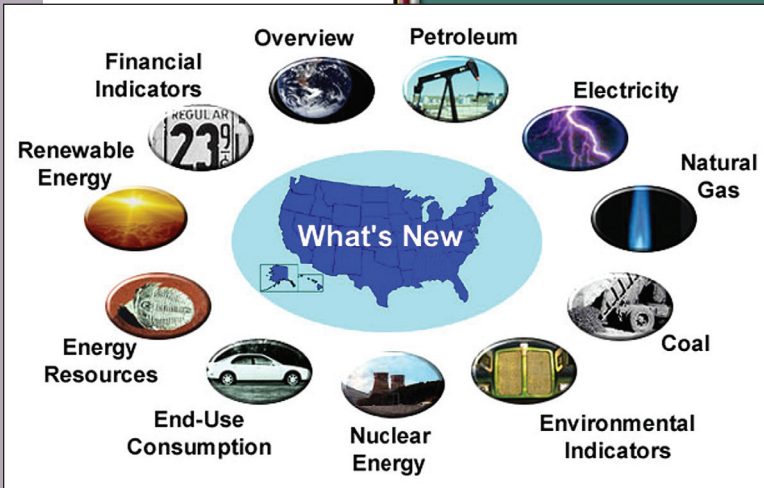
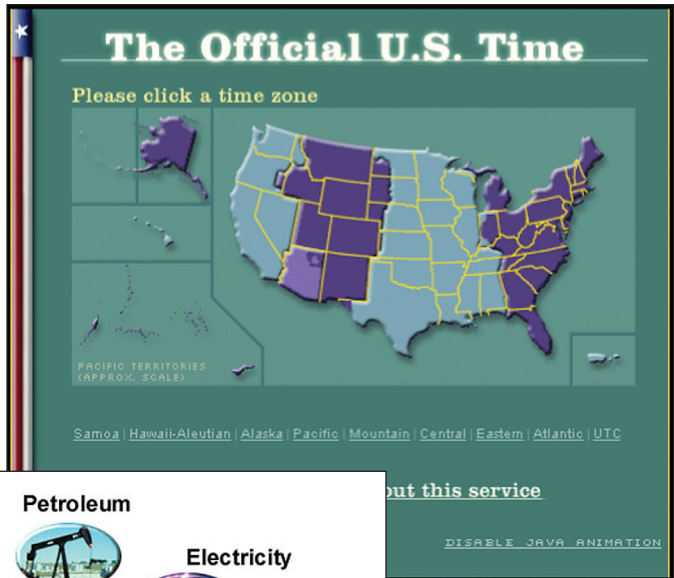


Comments: Users should not be required to use the mouse pointer to discover clickable areas of images. For example, in a map of the United States, if individual states are clickable, sufficient cues should be given to indicate the clickable states.

Sources: Detweiler and Omanson, 1996; Levine, 1996; Lim and Wogalter, 2000.

Example:

Dramatically different colors delineate clickable regions.



out this service

DISABLE JAVA ANIMATION

The use of white space between clickable regions in this image map define the boundaries of each individual 'hot' area.

10:14 Link to Supportive Information

Relative Importance:

12300

Strength of Evidence:

12000

Guideline: Provide links to supportive information.

Comments: Use links to provide definitions and descriptions to clarify technical concepts or jargon, so that less knowledgeable users can successfully use the Web site. For example, provide links to a dictionary, glossary definitions, and sections dedicated to providing more information.

Sources: Farkas and Farkas, 2000; Levine, 1996; Morrell, et al., 2002; Zimmerman and Prickett, 2000.

Example:

Tests that examine the breasts are used to detect (find) and diagnose breast cancer.

If an abnormality is found, one or all of the following tests may be used:

- [Ultrasound](#): A test that uses sound waves to create images of areas inside the body. The sound waves are bounced off internal [tissues](#) and organs. The echoes are changed into called [sonograms](#). The doctor can identify [tumors](#) by looking at the sonogram.
- [Mammogram](#): A special [x-ray](#) of the breast that may find tumors that are too small to see. A mammogram can be performed with little risk to the [fetus](#). Mammograms in pregnancy appear negative even though cancer is present.
- [Biopsy](#): The removal of [cells](#), tissues, or organs to check for disease.

Clicking on a highlighted word brings up a 'pop-up' box which provides the user with the definition of the selected word.

The highlighted links below direct the user to a page with a definition of the word.

Definition

sonogram (SON-o-gram):

A computer picture of areas inside the body created by bouncing high-energy sound waves (ultrasound) off internal tissues or organs. Also called an ultrasonogram.

[Dictionary](#)

[Print this page](#)

Today's featured picture



The **International Space Station** is located in a [low Earth orbit](#), approximately 360 km (220 miles) high. The station has a capacity for a crew of three and there have always been at least two people on board. It has been visited by astronauts from a large number of countries and was also the destination of the first three [space tourists](#).

Photo credit: NASA

[Archive - More featured pictures...](#)