

CGS 3175: Internet Applications Fall 2009

Web Site Design – Part 1

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Web Site Design

- Web sites are designed around the needs of its audience. You need to clearly define the audience. Why did they come to your site? What are they looking for?
- A Web site needs a clear and specific list of purposes. The list should include broad long-term goals as well as specific measurable objectives.
- A Web site should take advantage of the technologies that help it serve the needs of the audience, including text, images, sound, video, and interactivity.



Determining Your Site's Purpose

- Once you know **who** will be using your site, you need to think about **what** they will use your site for, and **why**.
- Part of the site's purpose will be determined from the user's reasons for visiting the site and is thus determined by the audience definition. The rest of the purpose is based on the organization's reasons for publishing the site.
- For example, consider the hypothetical Mark's Bike Web site:
 - The purpose of the Mark's Bike Web site is to increase the direct online sales of high-end bike equipment by 30% over the next three quarters. The site will display sixty key items from our line, with two types of color photos: the piece of equipment itself and the equipment installed on a bike. The site will make it easy for customers to find the equipment that best meets their needs and will make it easy for them to purchase the equipment online with a credit card.



Determining Your Site's Purpose

- The goals state the desired long-term results, such as “to increase the direct sales of high-end bike equipment by 30% over the next three quarters.”
 - Goals are often organization centered, but they can be user centered as well such as “ to provide a wider range of services to online readers of the newspaper.”
- Objectives include specific means and methods used on the site to accomplish the goals, such as” to display 60 key items from our line....”
 - Objectives are often stated in user-centered terms.



Web Site Design

- As a web site visitor, you have probably found that certain Web sites are appealing and easy to use while others seem awkward or just plain annoying.
- What separates the good from the bad?
 - Site organization
 - Site navigation
 - Page design
 - Text design
 - Graphic design
 - Accessibility considerations



NASA - Home - Windows Internet Explorer

http://www.nasa.gov/

File Edit View Favorites Tools Help

Google G Go Bookmarks 89 blocked Check AutoLink AutoFill Settings

NASA - Home


HOME NEWS MISSIONS MULTIMEDIA ABOUT NASA

en Español Help and Preferences

Username Log In Sign Up Search

For Public | For Educators | For Students | For Media | For Policymakers | For Employees | MyNASA Bookmark

Spacewalkers Attaching Science Experiments to Columbus Module



Spacewalkers Rex Walheim and Stanley Love are outfitting the newly installed European Columbus lab on the mission's final spacewalk. Visit Shuttle Section Post Comments

SHUTTLE & STATION MOON AND MARS

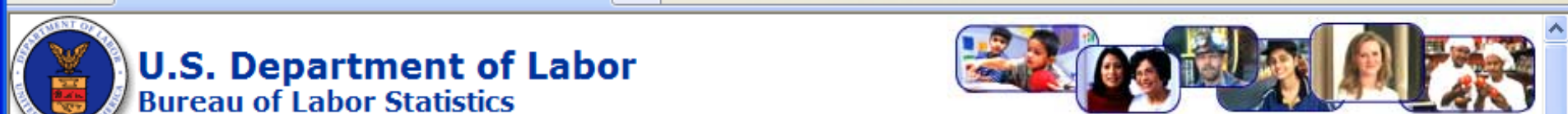
SOLAR SYSTEM UNIVERSE

AERONAUTICS EARTH

TECHNOLOGY NASA IN YOUR LIFE

javascript:submitPopUpEmail(); Internet 100%





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International



Latest Numbers

CPI:
 +0.4% in Dec 2007

Unemployment Rate:
 4.9% in Jan 2008

Payroll Employment:
 -17,000(p) in Jan 2008

Average Hourly Earnings:
 +\$0.04(p) in Jan 2008

PPI:
 -0.1%(p) in Dec 2007

ECI:
 +0.8% in 4th Qtr of 2007

Productivity:
 +1.8% in 4th Qtr of 2007

Employment & Unemployment

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[U.S. Economy at a Glance](#) • [Regions, States, and Areas at a Glance](#) • [Industries at a Glance](#)

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[Occupational Outlook Handbook](#) • [Monthly Labor Review Online](#) • [Compensation and Working Conditions Online](#) • [Occupational Outlook Quarterly](#) • [The Editor's Desk](#) • [Career Guide to Industries](#) • [Economic News Releases](#) • [More »](#)



U.S. Bureau of Labor Statistics - Windows Internet Explorer

http://www.bls.gov/

File Edit View Favorites Tools Help

Google G roxio Go 109 blocked Check AutoLink AutoFill Send to Settings

U.S. Bureau of Labor Statistics

U.S. Department of Labor

www.bls.gov Search: All BLS.gov for: Search

Bureau of Labor Statistics

Newsroom | Tutorials | Release Calendar

Home Subject Areas Databases & Tables Publications Economic Releases A - Z Index | About BLS

SUBJECT AREAS

- INFLATION & PRICES
- SPENDING & TIME USE
- UNEMPLOYMENT
- EMPLOYMENT
- PAY & BENEFITS
- PRODUCTIVITY
- WORKPLACE INJURIES
- INTERNATIONAL
- REGIONAL OFFICES
- PROGRAMS A-Z

Latest from BLS

Common Misconceptions about the Consumer Price Index: Questions and Answers

Economic News Releases

Mass Layoffs (Monthly)

September 23, 2008
August mass layoff events, at 1,772 seasonally adjusted, reached a program high for the month, while associated

Spotlight on Statistics

Older Workers

Workers age 65 and over are changing the face of the American workplace. This

Latest Numbers

Consumer Price Index (CPI):
-0.1% in Aug 2008
News Release
Historical Data

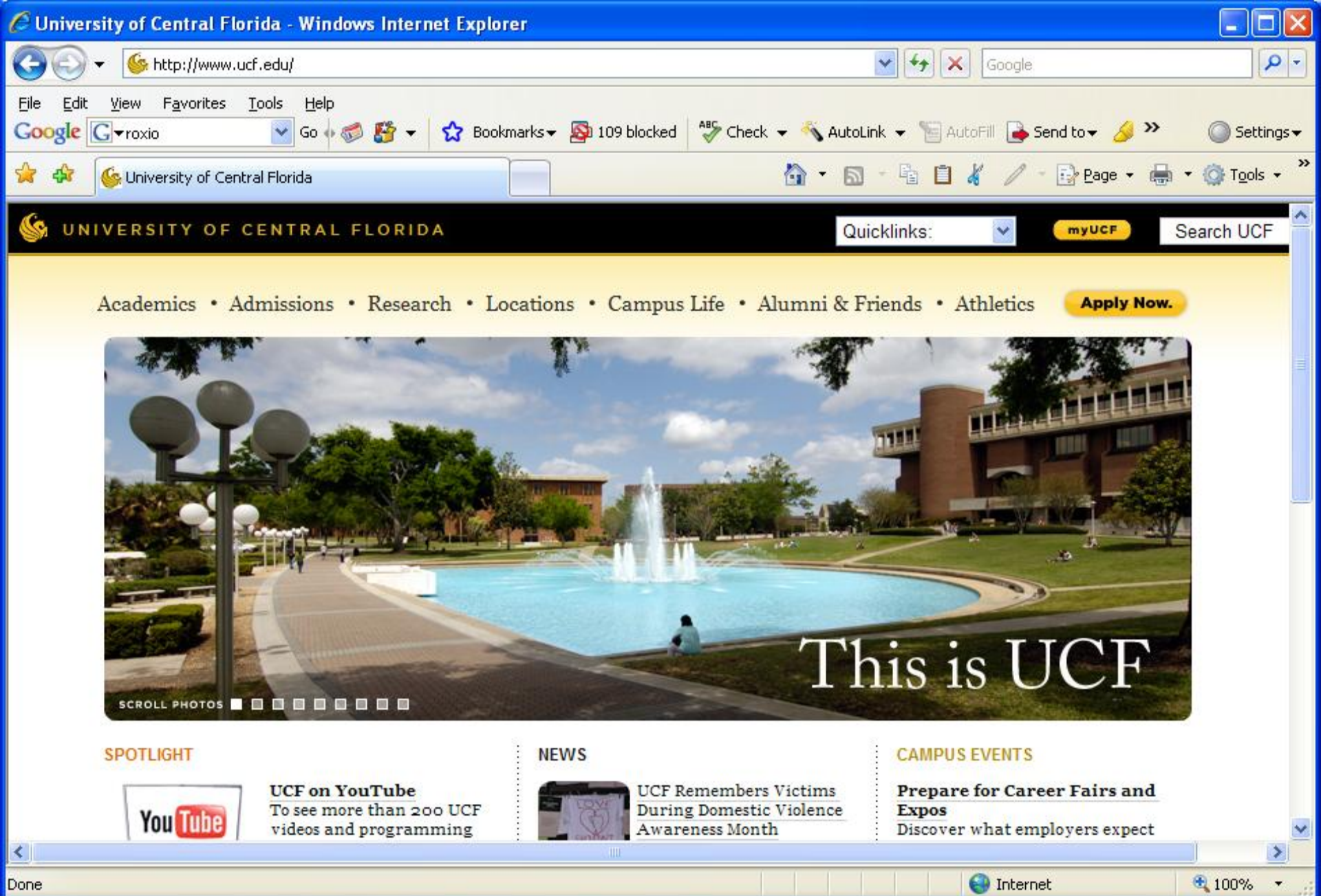
Unemployment Rate:
6.1% in Aug 2008
News Release
Historical Data

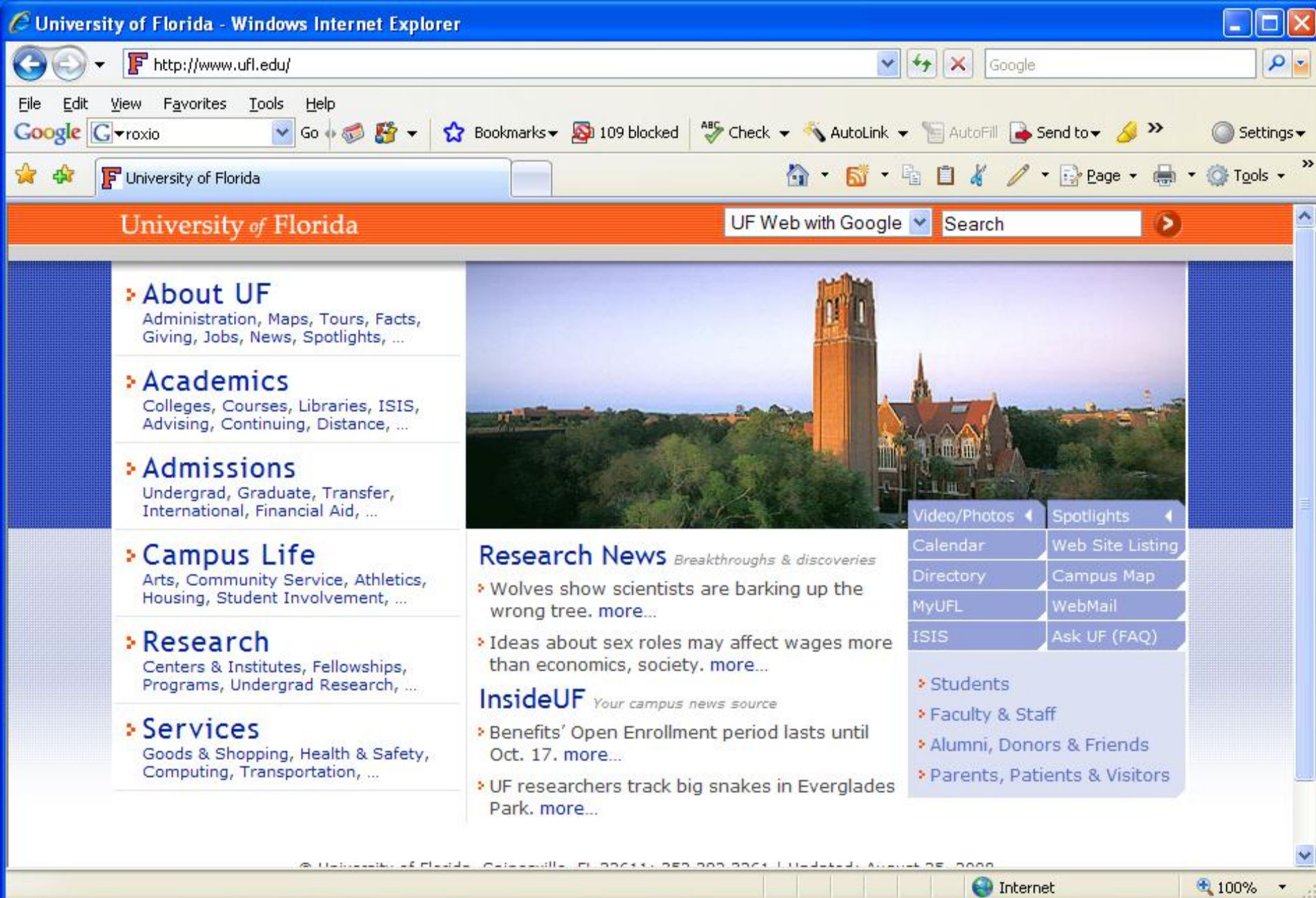
Payroll Employment:
-84,000(p) in Aug 2008
News Release
Historical Data

Average Hourly Earning:
+\$0.07(p) in Aug 2008
News Release

Done Internet 100%







Amazon.com: Online Shopping for Electronics, Apparel, Computers, Books, DVDs & more - Windows Internet Explorer

http://www.amazon.com/

File Edit View Favorites Tools Help

Google G Go 89 blocked Check AutoLink AutoFill Send to Settings

Amazon.com: Online Shopping for Electronics, Appare...

amazon.com Prime

Hello, Mark Llewellyn. We have [recommendations](#) for you. (Not [Mark?](#))

Mark's Amazon.com Today's Deals Gifts & Wish Lists Gift Cards Your Account | Help

Search Amazon.com GO Cart Your Lists

Shop All Departments

- Books
- Movies, Music & Games
- Digital Downloads
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- Home & Garden
- Grocery
- Toys, Kids & Baby
- Apparel, Shoes & Jewelry
- Health & Beauty
- Sports & Outdoors
- Tools, Auto & Industrial

Introducing Kindle: Amazon's Revolutionary Wireless Reading Device



Amazon is excited to introduce Kindle—a wireless, portable reading device with instant access to more than 100,000 books, blogs, newspapers, and magazines. Whether you're in bed or on the train, Kindle lets you think of a book and get it in less than a minute.

[Learn more](#)


amazonkindle

Check This Out

Amazon Breakthrough Novel Award Discover the next

MP3 Artist Spotlight: Mary J. Blige






Amazon Daily BLOG 3 posts since yes Posts for Mar

Pepsi Stuff: Get MP3 Downloads &

PEPSI STUFF amazonmp3 Drink Pepsi, [register with Pepsi Stuff](#), choose from mill MP3 downloads your favorite artists and other great

Download Movies and TV S



Done Internet 100%



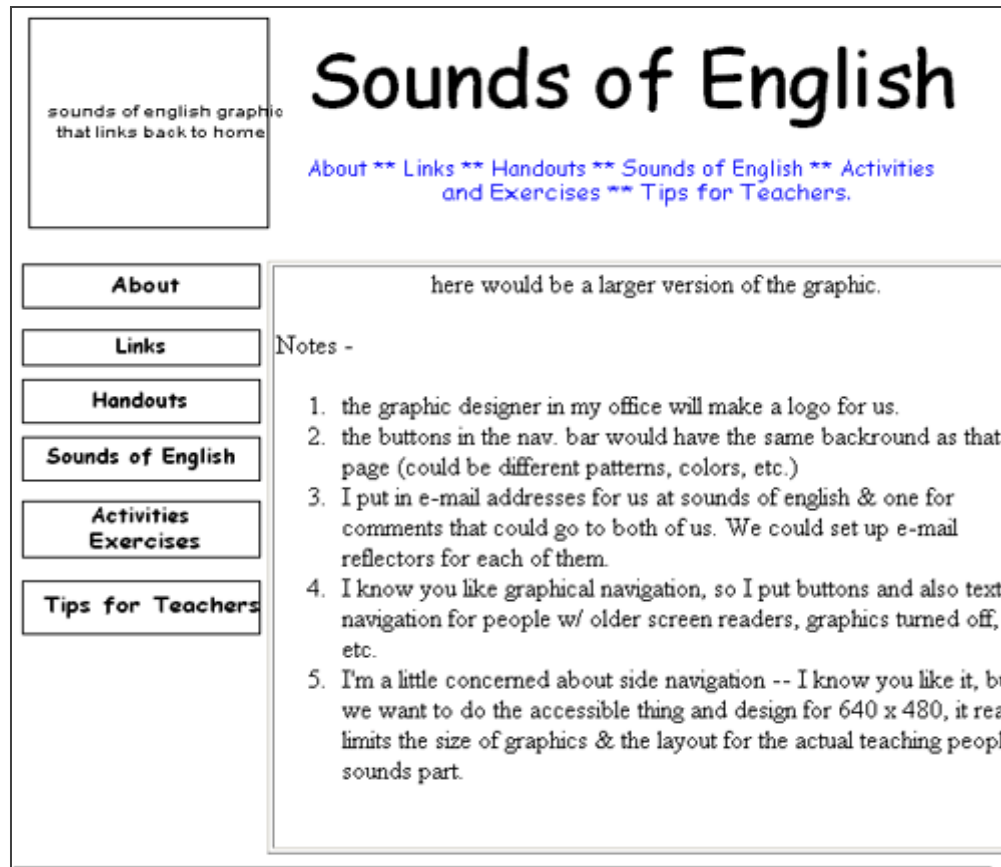
Web Site Organization

- How will visitors move around your site? How will they find what they need?
- The answers to these questions are largely determined by your Web site's organization or architecture.
- There are three common types of Web site organization:
 - Hierarchical
 - Linear
 - Random (sometime called Web organization)



Web Site Organization

- A diagram of the organization of a Web site is called a site map or storyboard. Creating the site map is one of the initial steps in developing a Web Site. Here is a sample storyboard.

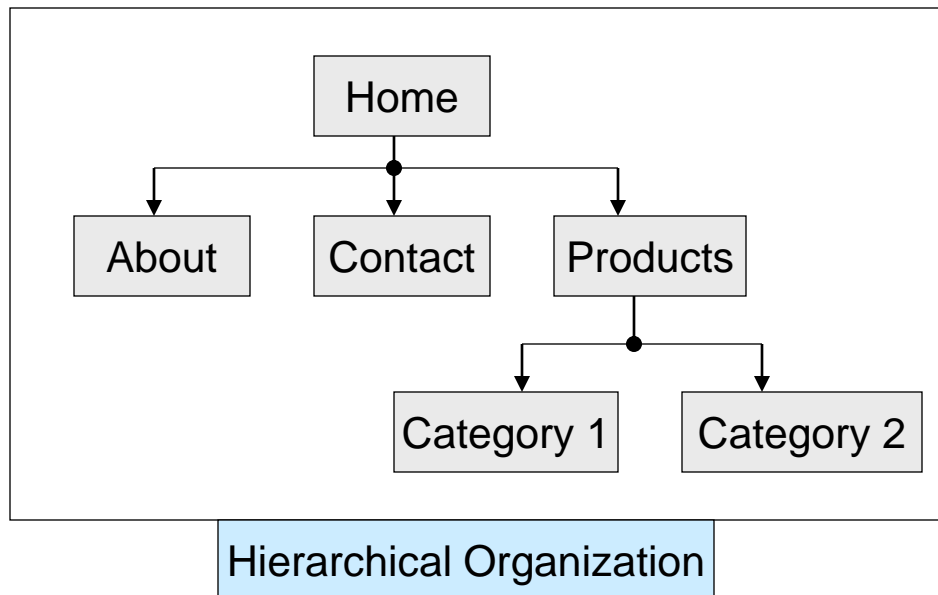


A typical storyboard



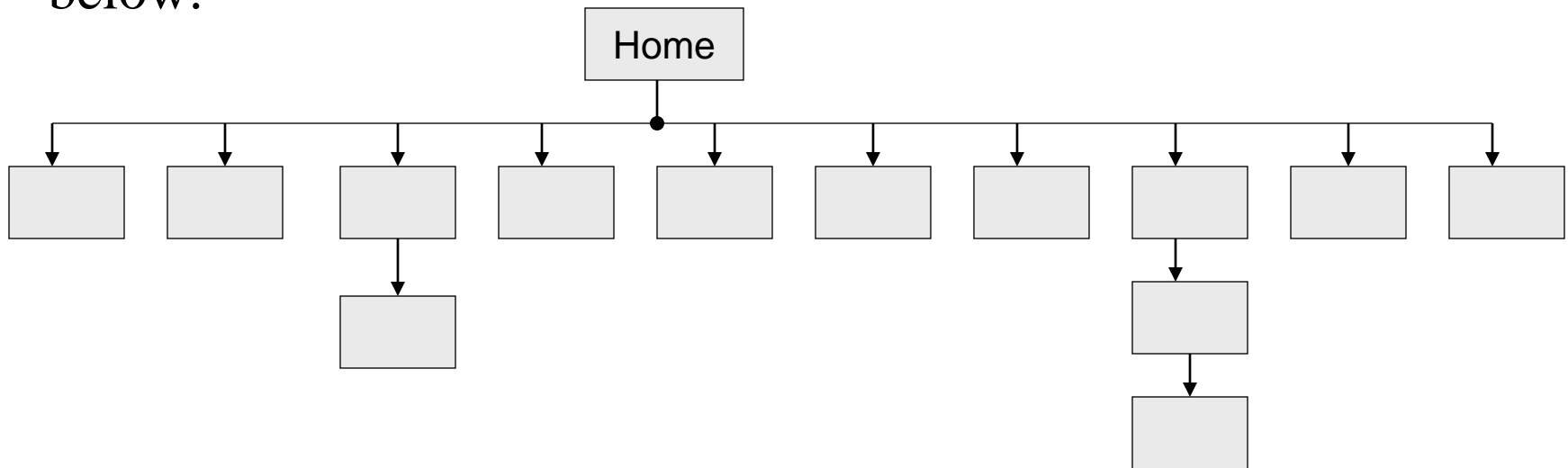
Hierarchical Organization

- Most Web sites use **hierarchical organization**.
- A site map for hierarchical organization is characterized by a clearly defined home page with links to major site sections. Web pages within sections are placed as needed.



Hierarchical Organization

- Care should be exercised with this design to avoid making the hierarchy too shallow – meaning that there are too many major sections. An example of a very shallow hierarchy is shown below.



- Such a design should be broken down into small, easily managed topics or units, a process called **chunking**. For most Web page designs, each unit of information is a page.



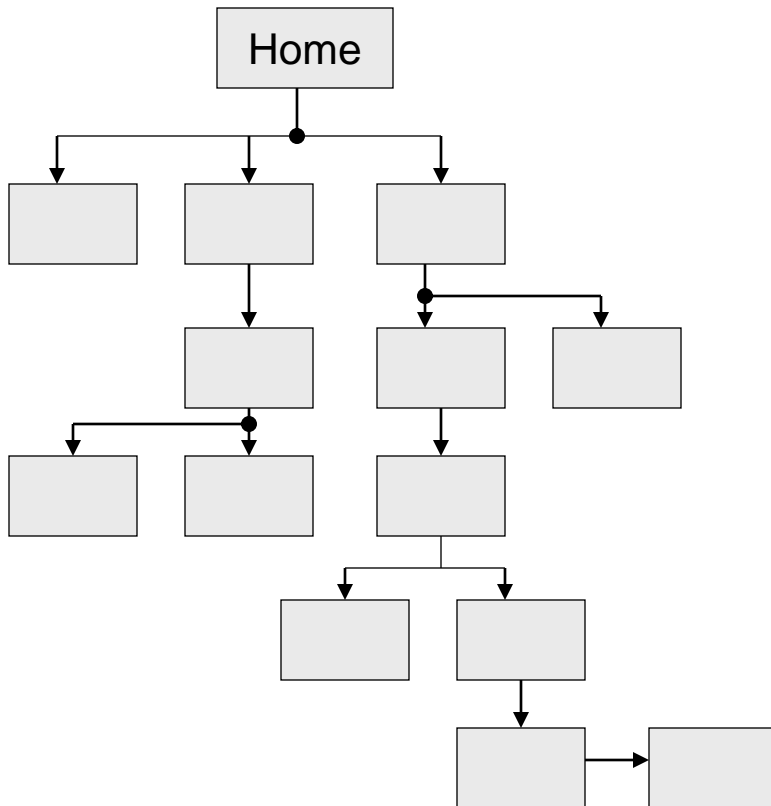
Hierarchical Organization

- Research psychology has determined that most humans can store only five to nine chunks of information at a time in short-term memory. This is often referred to in HCI (and other disciplines) as the “7 plus or minus 2 principle”.
- Web designers adhering to this principle will try not to place more than nine major navigation links on a page, unless they are creating a very large site. Even then, they may try to chunk the navigation links into visually separate sections on the page with each group having no more than nine links.



Hierarchical Organization

- Care should also be exercised with hierarchical designs to avoid making the hierarchy too deep – meaning that there are too many links to follow to get to various major sections. An example of a too deep hierarchy is shown below.

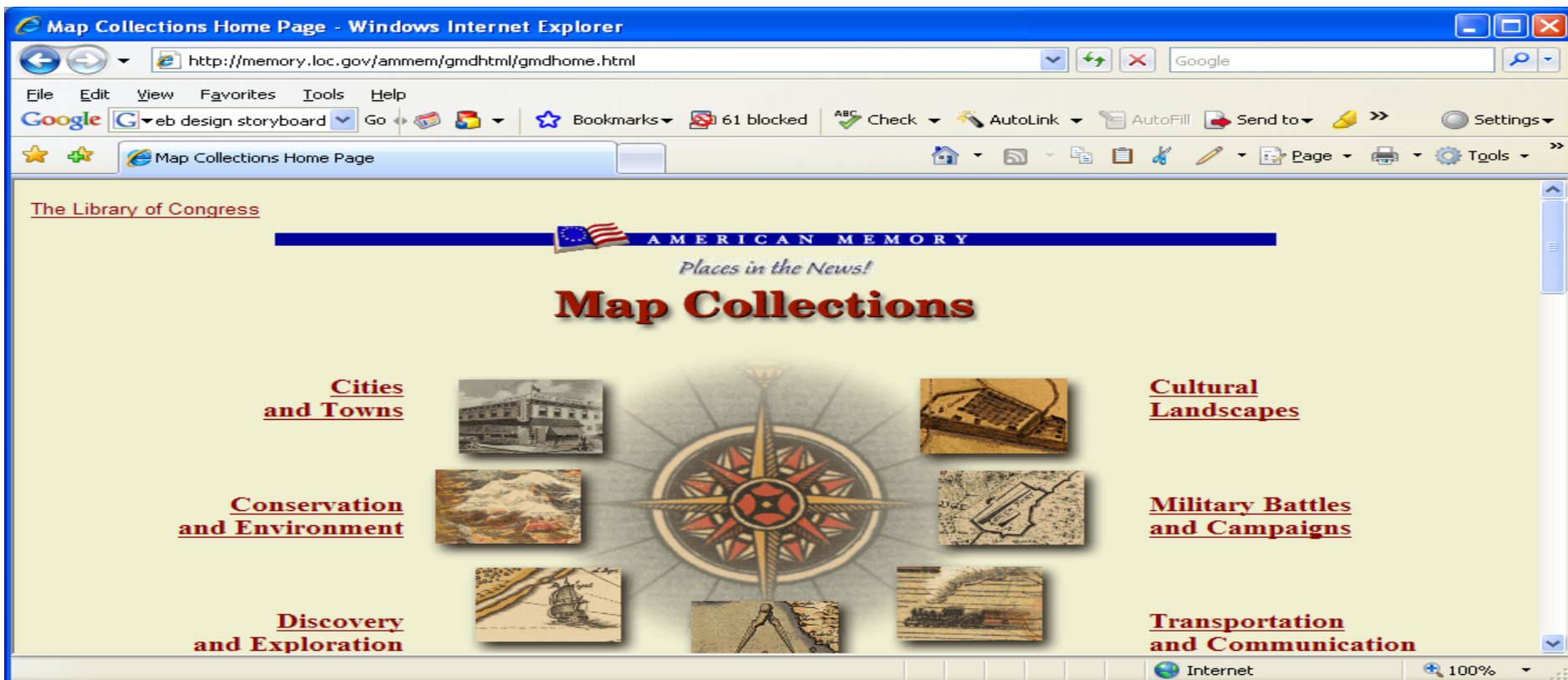


- The interface design “three click rule” says that a Web page visitor would be able to get from any page on your Web site to any other page on your Web site with a maximum of three hyperlinks. In other words, a visitor who cannot get what they want in three mouse clicks will begin to feel frustrated and may leave your site.
- This rule may be very difficult to satisfy on a large site, but in general the goal is to organize the site so that your visitor can easily navigate from page to page within the site structure.



Hierarchical Organization

- An example of hierarchical organization is the Map Collections area of the Library of Congress site at:
<http://memory.loc.gov/ammem/gmdhtml/grndhome.html>.
- The Map Collections Home Page contains the navigation to the main map areas. It functions as a map to the site and it is intentionally different from the content pages (see next page).




```
gmdhome[1] - Notepad
File Edit Format View Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html40/loose.dtd">

<html>
<head><title>Map Collections Home Page</title>
<link rel="stylesheet" href="/ammem/css/colhome.css" type="text/css">
<meta http-equiv="content-type" content="text/html; charset=iso-8859-1">
<script type='text/javascript' src='/global/triggerParams.js'></script><script type='text/javascript' src='/g

<body bgcolor="#efefd0" link="#850000" alink="#003366" vlink="#002939">
<!-- BEGIN AMMEM HEADER -->
<SPAN class="lclink"><A HREF="http://www.loc.gov">The Library of Congress</A></SPAN>
<DIV ALIGN="CENTER"><A HREF="/ammem/amhome.html">

<MAP name="squares">
<AREA SHAPE=rect coords="33,36,118,98" HREF="/ammem/gmdhtml/cityhome.html" ALT="Cities and Towns Maps">
<AREA SHAPE=rect coords="20,113,105,176" HREF="/ammem/gmdhtml/cnsvhome.html" ALT="Conservation and Environment
<AREA SHAPE=rect coords="43,198,129,262" HREF="/ammem/gmdhtml/dsxphome.html" ALT="Discovery and Exploration Ma
<AREA SHAPE=rect coords="172,227,259,290" HREF="/ammem/gmdhtml/gnrlhome.html" ALT="General Maps">
<AREA SHAPE=rect coords="295,197,381,260" HREF="/ammem/gmdhtml/trnshome.html" ALT="Transportation and Communic
<AREA SHAPE="RECT" ALT="6" COORDS="319,114,407,177" HREF="/ammem/gmdhtml/milhome.html" ALT="Military Battles a
<AREA SHAPE="RECT" ALT="7" COORDS="310,34,397,98" HREF="/ammem/gmdhtml/setlhome.html" ALT="Cultural Landscapes
<!--# circle--><AREA SHAPE=circle coords="208,112 299,225" HREF="/ammem/gmdhtml/mapcapimg.html" ALT="link to c
</MAP>

<table border="0" align="CENTER" CELLPADDING="0" CELLSPACING="0" WIDTH="100%">
<tr>
<td COLSPAN="3" align="center" valign="top">
<a href="http://www.loc.gov/today/placesinthenews">
</TD>
</TR>

<tr>
<td width="25%" align="right" valign="center" height="101"><p><font size="+1"><a href="/ammem/gmdhtml/cityhome

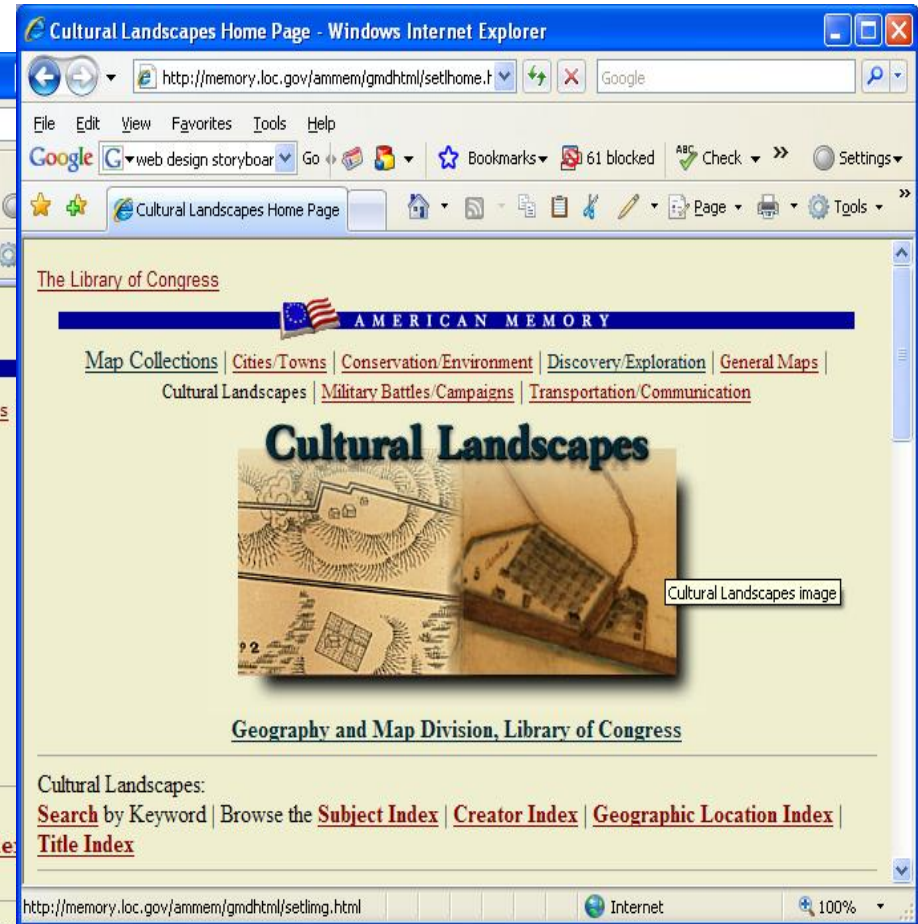
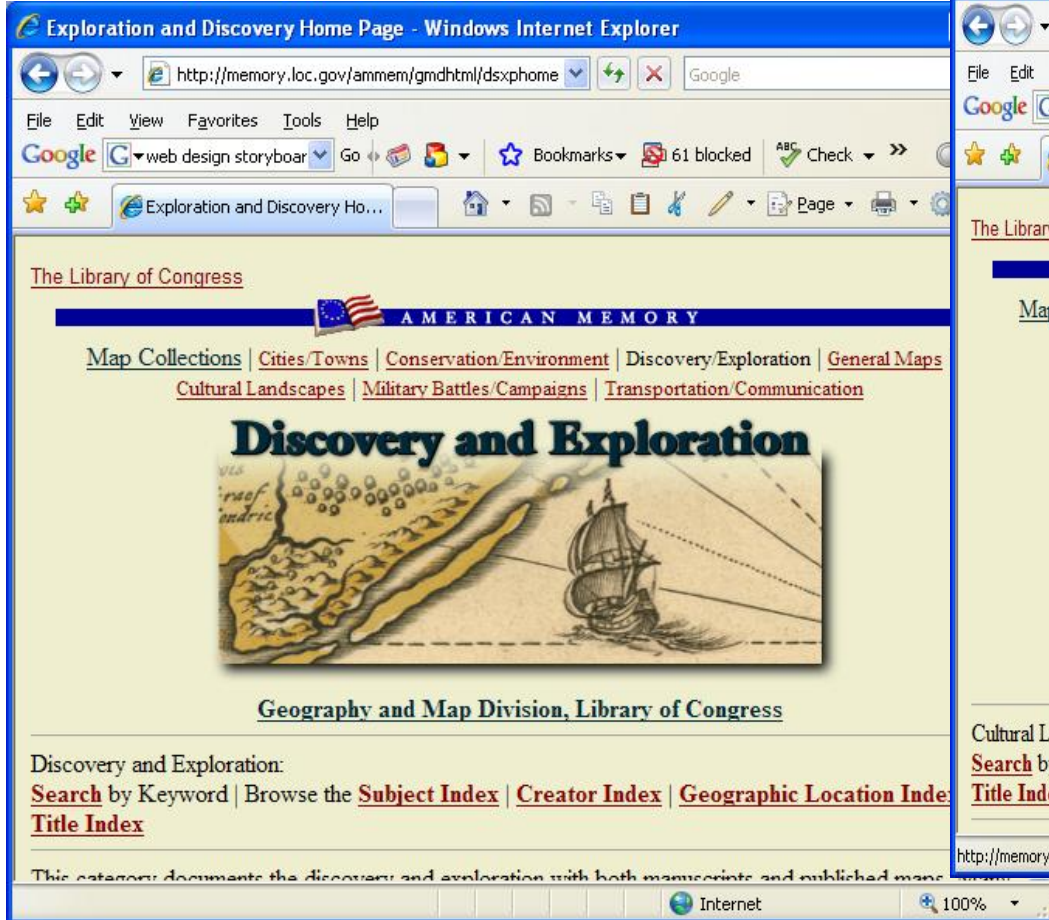
<td rowspan="3" align="center" valign="center" WIDTH="426" HEIGHT="305"><p><font size="+1"><a href="/ammem/gmdhtml/setlhome.html"><b>Cult
</tr>

<tr>
```



Hierarchical Organization

- The main content pages of a site usually have a similar look and feel. Two content pages from the Map Collections are shown below. Notice how similar the pages look.



```
dsxphome[1] - Notepad
File Edit Format View Help

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html40/loose.dtd">

<!-- Oct-19-98 -->
<!-- Aug-04-2000 automated additional items list-->

<html>
<head><title>Exploration and Discovery Home Page</title>
<link rel="stylesheet" href="/ammem/css/colhome.css" type="text/css">
<script type="text/javascript" src="/global/triggerParams.js"></script><script type="text/javascript" src="/global/stdLa
<body bgcolor="#efefd0" link="#850000" alink="#003366" vlink="#002939">
<!-- BEGIN AMMEM HEADER -->
<span class="lclink"><a href="http://www.loc.gov">The Library of Congress</a></span>
<div align="center"><a href="/ammem/amhome.html">
<div align="center"><a href="gmdhome.html">Map Collections</a> |
<font size=-1><a href="cityhome.html">Cities/Towns</a></font> |
<font size=-1><a href="cnsvhome.html">Conservation/Environment</a></font> |
<font size=-1><a href="Discovery/Exploration">Discovery/Exploration</font> |
<font size=-1><a href="gnrlhome.html">General Maps</a></font> |</div>
<div align="center"><font size=-1><a href="setlhome.html">Cultural Landscapes</a></font> |
<font size=-1><a href="milhome.html">Military Battles/Campaigns</a></font> |
<font size=-1><a href="trnshome.html">Transportation/Communication</a></font></div>
<div align="center"><a href="dsxping.html"><a href="http://lcweb.loc.gov/rr/geogmap/gmpage.html"><b>Geography and Map Division, Library of Cong

<hr>Discovery and Exploration:<br>
<a href="/ammem/dsxpmquery.html"><b>Search</b></a> by Keyword | Browse the <a href="/ammem/gmdhtml/dsxpmasubjindex1.h
<a href="/ammem/gmdhtml/dsxpmasubjindex1.html"><b>Creator Index</b></a> | <a href="/ammem/gmdhtml/dsxpmasubjindex1.htm
<hr>
This category documents the discovery and exploration with both manuscripts and published maps. Many of these maps refl

<!-- BEGIN MISSION STATEMENT -->
<hr>
<font size=-1>The mission of the Library of Congress is to make its
resources available and useful to Congress and the American people and to sustain
and preserve a universal collection of knowledge and creativity for future
generations. The goal of the Library's National Digital Library Program is to
offer broad public access to a wide range of historical and cultural documents as
a contribution to education and lifelong learning.

<p>The Library of Congress presents these documents as part of the record of
the past. These primary historical documents reflect the
attitudes, perspectives, and beliefs of different times. The Library of Congress
does not endorse the views expressed in these collections, which
may contain materials offensive to some readers.

Ln 1, Col 1
```



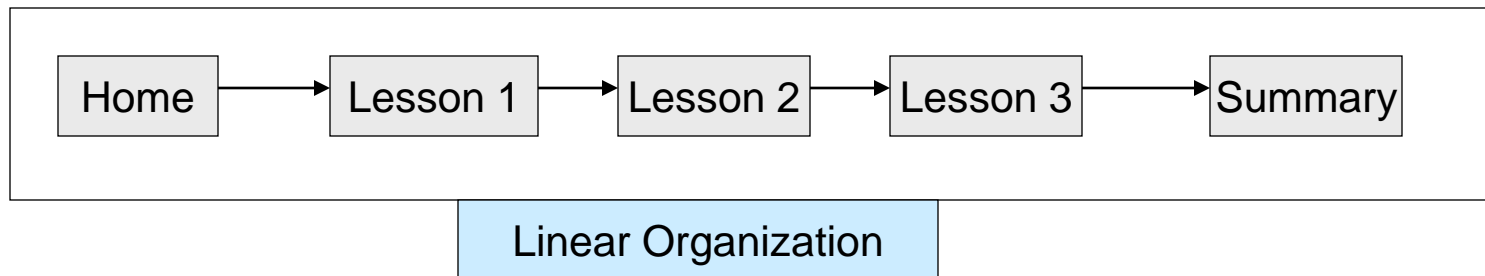
Hierarchical Organization

- Each main section may have one or more subpages.
- Some sites with hierarchical organization may use a consistent design for the home page and the content pages (unlike the Map Collections case). Either method is acceptable practice.
- Most commercial sites, such as Amazon and eBay use hierarchical organization.



Linear Organization

- When the purpose of a site or series of pages on a site is to provide a tutorial, tour, or presentation that needs to be viewed in a sequential fashion, **linear organization** is most useful.



Linear Organization

- Some Web sites use hierarchical organization in general, but with linear organization in a few small areas.
- An example of this type of organization is the National Library of Medicine site at: <http://www.nlm.nih.gov>. The main site organization is hierarchical with linear organization used for tutorials.



National Library of Medicine - National Institutes of Health - Windows Internet Explorer

http://www.nlm.nih.gov/

File Edit View Favorites Tools Help

Google G Go 89 blocked Check Look for Map AutoFill Settings

National Library of Medicine - National Institutes of Health

United States National Library of Medicine
National Institutes of Health

Trusted Health Information

Health Information
Library Catalog & Services
History of Medicine
Online Exhibitions & Digital Projects

Human Genome Resources
Biomedical Research & Informatics
Environmental Health & Toxicology
Health Services Research & Public Health
Health Information Technology

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Grants & Funding
Training & Outreach
Network of Medical Libraries

On Exhibit at NLM

Especially for:

- The Public
- Health Care Professionals
- Researchers
- Librarians
- Publishers

Current Health News

[Obsessive-Compulsive Disorder Psychotherapy Causes Brain Changes](#) (02/15/08)

[U.S. Seeks to Limit Animal Testing of Toxic Chemicals](#) (02/15/08)

[CDC Study Warns of Deaths Due to the "Choking Game"](#) (02/15/08)

[More Health News](#)

Contact NLM | Site Map | FAQs

Search NLM Web Site

Go

List of NLM Databases and Resources

PubMed
Biomedical journal literature from MEDLINE/PubMed
[VISIT SITE](#)

MedlinePlus
Health and drug information for patients, family and friends
[VISIT SITE](#)

Done

Internet 100%



Linear Organization

The "Next" link is the link to the next page in the linear presentation.

Overview

- Overview
- Using PubMed
- Working with Search Results
- Feature Tabs
- My NCBI
- Links
- PubMed Services
- Search Field Descriptions
- Final Review

Previous Next

Glossary

Index

Back to PubMed


PubMed Tutorial

Introduction PubMed Overview MeSH Vocabulary

Welcome!

Welcome to the "PubMed Tutorial", the Web-based learning program that will show you how to search PubMed®, the National Library of Medicine's (NLM®) journal literature search system.

NOTE: The PubMed Tutorial has moved to <http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/>. Please update your links. We apologize for the inconvenience.

For brief tutorials on specific topics, see also the [PubMed Quick Tours](#) 

This tutorial was last updated in January 2008 and reflects changes to PubMed through December 2007. To see a list of recent PubMed changes, go to PubMed's [New/Noteworthy](#).

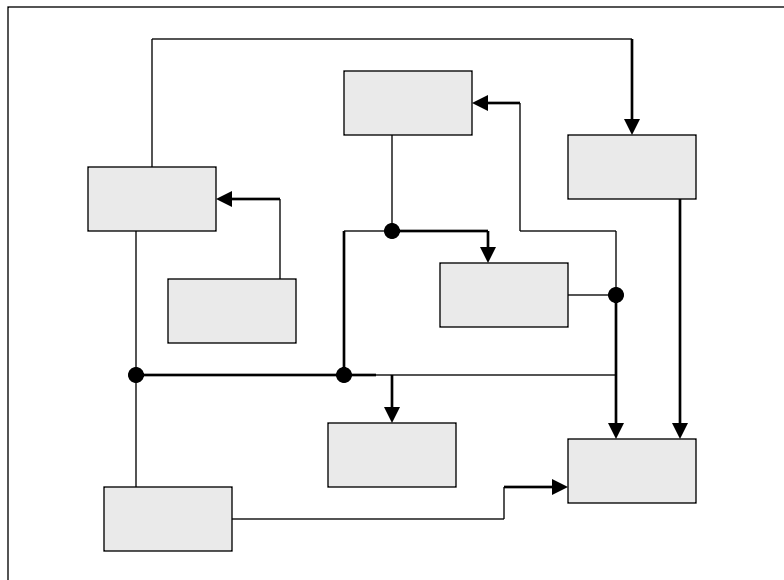
Using the Tutorial

The tutorial was designed to work on Windows® Operating Systems with Microsoft Internet Explorer® version 6+ or with Netscape™ version 7+, and works best on Macintosh® computers using Mozilla Firefox™ or Opera™ 8+. It contains animated demonstrations of procedures, for which you will need the Adobe® Flash™ player. The Flash player can be [downloaded](#) and installed at no cost from Adobe®. You may not be able to view the animated demonstrations if you are using another browser, such as Netscape version 6 on Windows or IE on Mac. For detailed documentation of the system requirements and known incompatibilities, please see the [Tutorial FAQ](#).



Random Organization

- **Random organization** (also sometimes referred to as Web organization) offers no clear path through the site. There is often no clear home page and no discernable structure.
- Random organization is not as common as hierarchical or linear organization and typically found only on artistic sites or sites that strive to be especially different.
- This type of organization is typically not used for commercial Web sites.



Random Organization



Web Site Navigation

- Sometimes Web developers are so close to their sites that they can't see the forest for the trees. A new visitor will wander into the site and not know what to click or how to find out what it offers.
- Clearly labeled navigation on each page is helpful and it should be in the same location on each page for maximum visibility. You don't want the visitor to feel lost in the site.
- Larger sites will often provide **breadcrumb trails** which are personalized to show each visitor where they currently are in the site and how they got to that location. You've probably seen these at some sites you've visited before, but a good example of this can be found at <http://www.fdic.gov> (see next page).



Web Site Navigation

The screenshot shows a Windows Internet Explorer browser window displaying the FDIC Consumer Alerts page. The address bar shows the URL <http://www.fdic.gov/consumers/consumer/alerts/index.html>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar shows various icons for navigation and utility. The FDIC logo is prominently displayed at the top left of the page content, with the text "FEDERAL DEPOSIT INSURANCE CORPORATION" below it. A navigation menu contains links for HOME, DEPOSIT INSURANCE, CONSUMER PROTECTION, INDUSTRY ANALYSIS, and REGULATION & EXAMINATIONS. Below this menu, a breadcrumb trail is shown: [Home](#) > [Consumer Protection](#) > [Consumer Resources](#) > Consumer Alerts. A red arrow points to the "Consumer Alerts" link in the trail. The main heading of the page is "Consumer Alerts". Below this, there is a section titled "E-Mails Claiming to Be From the FDIC". The text in this section discusses phishing and provides information on how to report fraud. A red-bordered text box on the right side of the page contains the following text: "This 'breadcrumb trail' shows that the visitor has arrived at this page by coming from the home page to the consumer protection page followed by the consumer resources page and are currently at the consumer alerts page. These are hyperlinks which allow the user to rapidly return to any page along the trail." The status bar at the bottom of the browser window shows "Internet" and a zoom level of "100%".

FDIC: Consumer Alerts - Windows Internet Explorer

http://www.fdic.gov/consumers/consumer/alerts/index.html

File Edit View Favorites Tools Help

Google web design storyboar Go 61 blocked Check AutoLink AutoFill Settings

FDIC: Consumer Alerts

FDIC FEDERAL DEPOSIT INSURANCE CORPORATION

HOME DEPOSIT INSURANCE CONSUMER PROTECTION INDUSTRY ANALYSIS REGULATION & EXAMINATIONS

[Home](#) > [Consumer Protection](#) > [Consumer Resources](#) > Consumer Alerts

Consumer Alerts

E-Mails Claiming to Be From the FDIC

Con artists know that people trust the FDIC name. That's why they may use fraudulent e-mails trying to obtain valuable information from consumers and b scams are commonly referred to as "phishing." Con artists use fake Web sit valuable personal information from consumers.

The FDIC does not send out unsolicited e-mails or ask for detailed per Additionally, the FDIC does not ask people for the PIN numbers, passwords information for their credit card, bank or other financial accounts. If you get this sort of e-mail appearing to be from the FDIC, you should assume that it is fraudulent.

To report a fraud, send an e-mail to the FDIC financial crimes unit at alert@fdic.gov or call the FDIC toll-free at 1-877-ASK-FDIC (1-877-275-3342)

This "breadcrumb trail" shows that the visitor has arrived at this page by coming from the home page to the consumer protection page followed by the consumer resources page and are currently at the consumer alerts page. These are hyperlinks which allow the user to rapidly return to any page along the trail.

Internet 100%



Navigation Bars

- Navigation bars, either graphic or text-based, make it obvious to your users where they are and where they can go next.
- The U.S. Department of Justice site uses a vertical text-based navigation bare down the left side of the page. You can see this at: <http://www.usdoj.gov>. This is shown on the next page after clicking the Jobs link. Notice that the “Current Vacancies” link is shown on a contrasting background to provide a visual cue that the visitor is at that location. The page header and page title also display the text “Current Vacancies”. The navigation bar indicates other choices available to the Web site visitor.



Navigation Bars



Navigation Bars

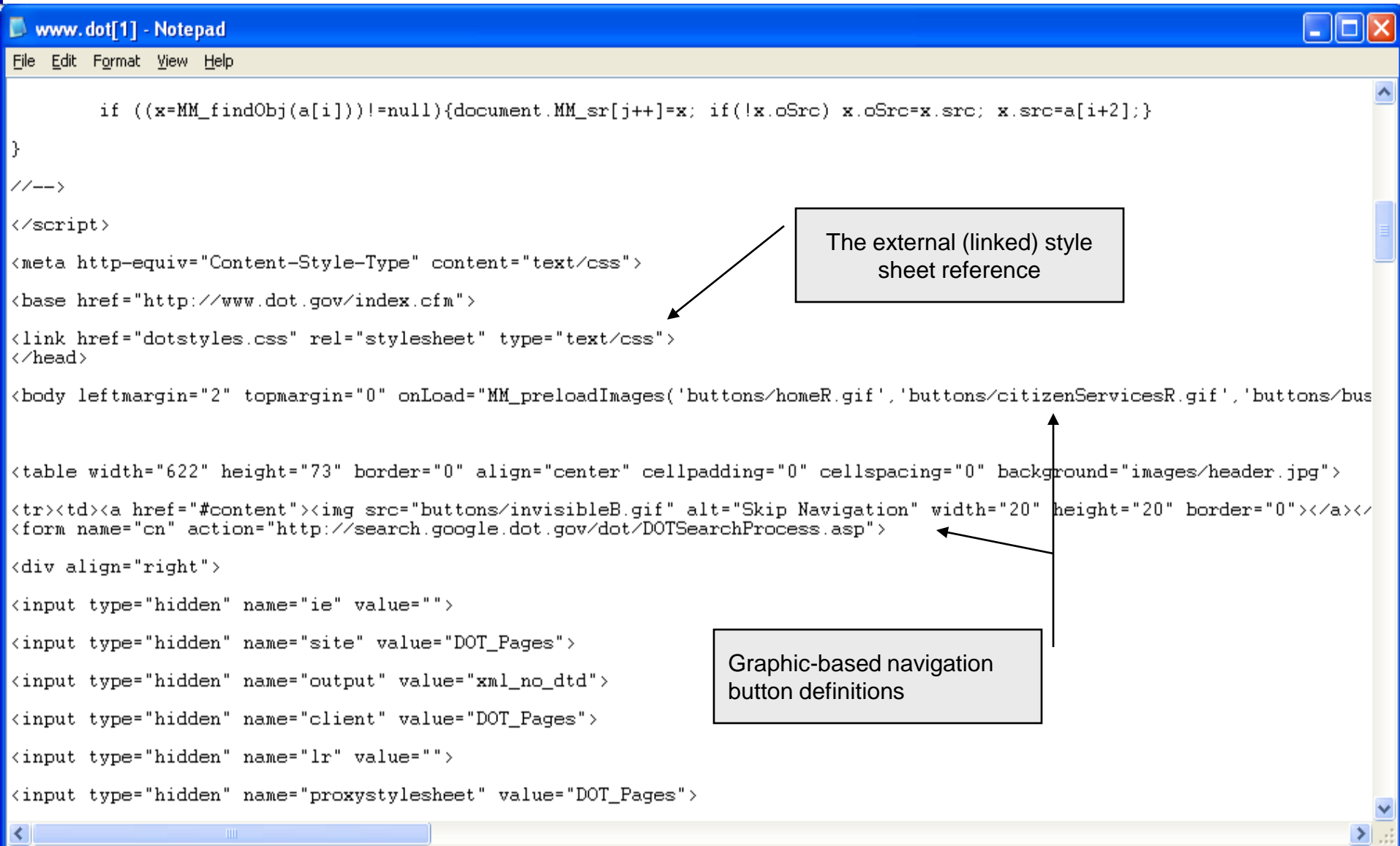
- Sometimes graphics are used to convey navigation, as is the case in the Web site for the U.S. Department of Transportation at <http://www.dot.gov>.
- The tabs provide horizontal graphics-based navigation on this site. The “text” for the navigation is actually stored in image files. This technique of placing text in navigation images is used to create interactive Web pages. In this case, Javascript (we’ll learn this later in the semester), is used to detect when the visitor has placed the mouse over an image of text which then displays an alternate image.



Navigation Bars



Part of the HTML file for the DOT Site



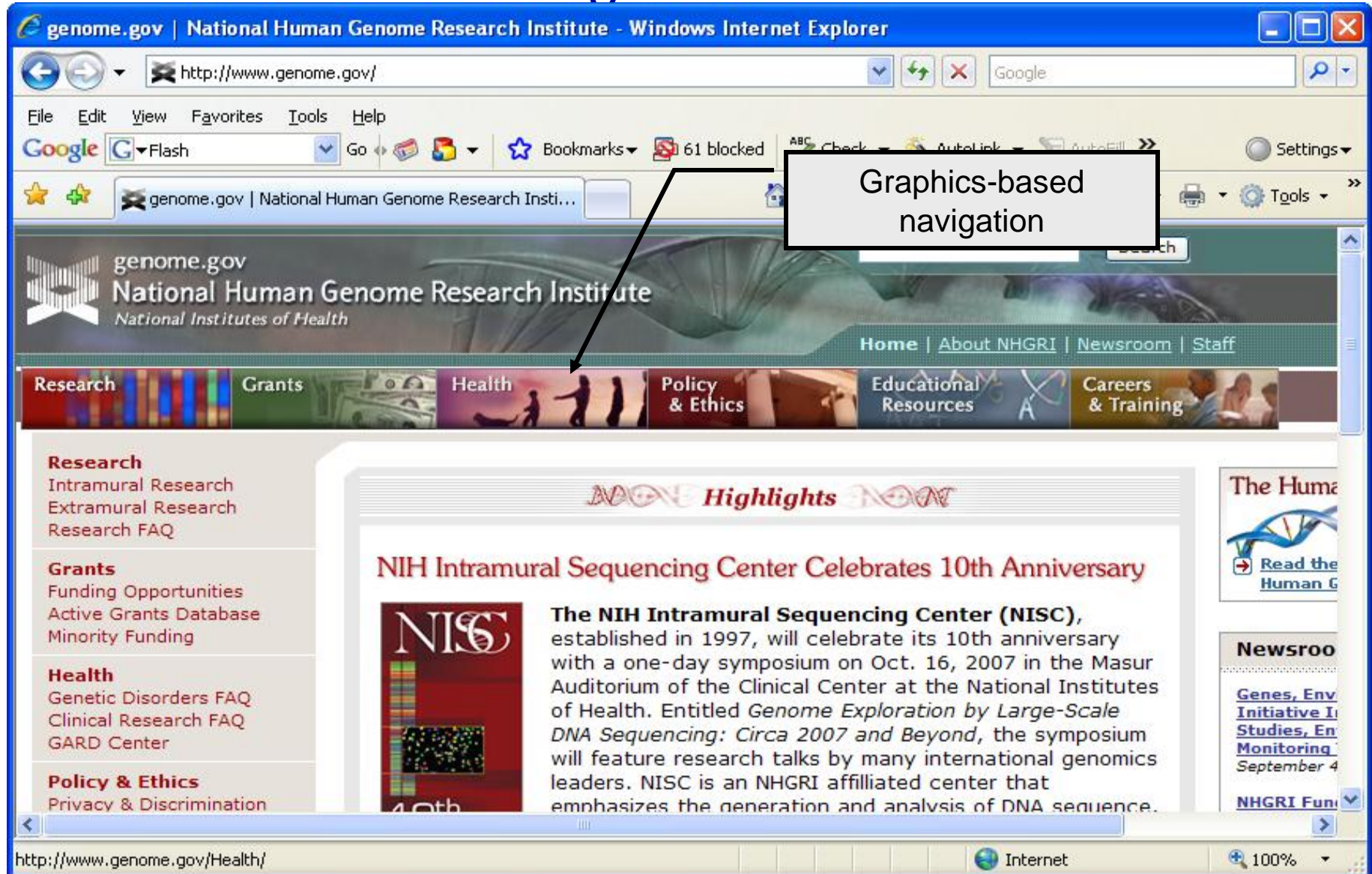
```
if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src; x.src=a[i+2];}
}
//-->
</script>
<meta http-equiv="Content-Style-Type" content="text/css">
<base href="http://www.dot.gov/index.cfm">
<link href="dotstyles.css" rel="stylesheet" type="text/css">
</head>
<body leftmargin="2" topmargin="0" onLoad="MM_preloadImages('buttons/homeR.gif','buttons/citizenServicesR.gif','buttons/bus
<table width="622" height="73" border="0" align="center" cellpadding="0" cellspacing="0" background="images/header.jpg">
<tr><td><a href="#content"></a></
<form name="cn" action="http://search.google.dot.gov/dot/DOTSearchProcess.asp">
<div align="right">
<input type="hidden" name="ie" value="">
<input type="hidden" name="site" value="DOT_Pages">
<input type="hidden" name="output" value="xml_no_dtd">
<input type="hidden" name="client" value="DOT_Pages">
<input type="hidden" name="lr" value="">
<input type="hidden" name="proxystylesheet" value="DOT_Pages">
```

The external (linked) style sheet reference

Graphic-based navigation button definitions



Navigation Bars

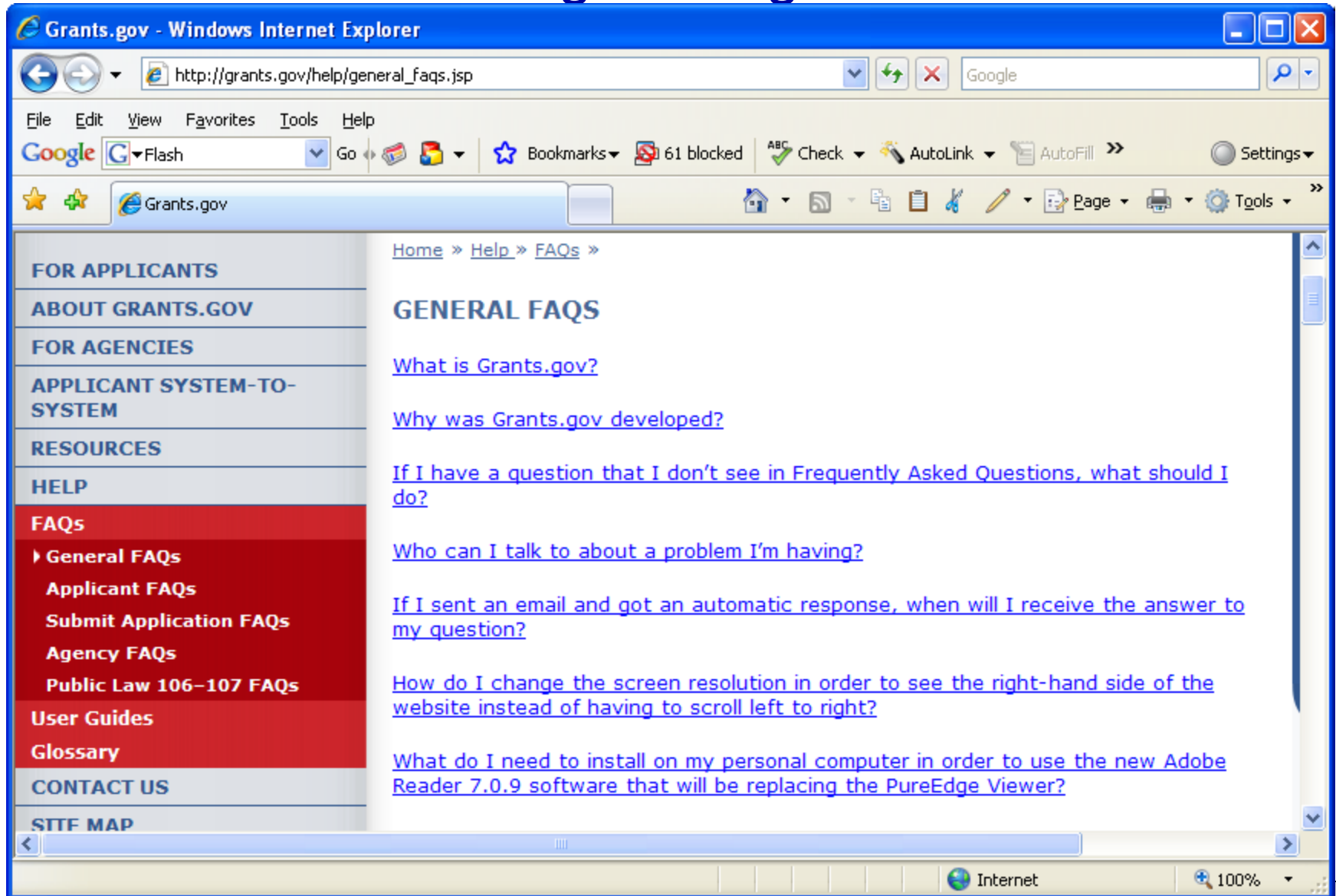


Page Design

- **Short Pages** – A Web page is considered long if it is three or more screen lengths. Long pages are usually slower to load. Most visitors will only be interested in portions of a long page, so consider breaking a long page into multiple short pages – possibly using linear organization to link the ideas.
- **Table of Contents** – When a long Web page must be kept in a single file, a table of contents or bulleted list at the top of the page can provide links to specific parts of the page (we saw some of this capability with our footnote example in XHTML – Part 2). This helps the visitor find exactly what they need. Lots of examples of this abound, but you can see one at http://grants.gov.help.general_faqs.jsp that's pretty representative of this technique.



Page Design



Design Principles

- There are four visual design principles that you can apply to the design of just about anything: **repetition**, **contrast**, **proximity**, and **alignment**. These design principles help to create the “look and feel” of your project, whether it be designing a Web page, a button, a logo, a CD cover, a brochure, or a software interface.
- Using these principles properly will ensure that your message is effectively communicated.



Repetition

- When applying the principle of repetition, the designer repeats one or more elements throughout the product.
- The repeating aspect ties the work together.
- Take a look at the homepage of National Pro Fastpitch Softball at <http://www.profastpitch.com>. The repetition of the “tab” icons helps to unify the navigation areas. Page content areas are divided using a number of similar shapes – again repeating the shape.



Repetition

THE OFFICIAL WEB SITE OF
NATIONAL PRO FASTPITCH

NPF

Home | Tickets | Own a Team | Schedule | Players

NEWS

- SUPPORT SYSTEM
- ABOUT NPF
- FAN ZONE
- STATISTICS
- TEAMS
- PLAYER ZONE
- CONTACT US

**FAN REGISTRATION
CLICK HERE**

NPF Teams

TOP NEWS

SARA LARQUIER

WASHINGTON GLORY

NPF HIGHLIGHTS

MORE VIDEO **Player Zone**

STANDINGS **LEADERS**

AVG
Wilkerson, Kellie
Philadelphia Force
407

http://profastpitch.com.ismmedia.com/ISM3/std-content/repos/Top/Multimedia/GAME%206%20INNING%201%2

Internet 100%



Contrast

- When applying the principle of contrast, the designer should make elements very different (add contrast) in order to make the design interesting and direct attention.
- When designing Web pages, good contrast should be present between the background color and the text. Notice how the navigation bars pop out on the previous page due primarily to the contrast change in background color. In general, this site uses dark text on a light background. This provides good contrast and makes for easier reading for the visitor.
- As a point of comparison consider the site shown on the next page. Which has better contrast? Look particularly at the navigation links on the next page.



Contrast

http://www.mycbfl.com/

File Edit View Favorites Tools Help
Google G roxio Go
Bookmarks 109 blocked
Check AutoLink AutoFill Send to Settings

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[Privacy Policy](#)



Citizens
BANK of FLORIDA
Independent Thinking. Independent Banking

[Personal Accounts](#)
[Business Accounts](#)
[Investment Accounts](#)
[Forms](#)
[Loan Services](#)
[Residential Mortgage Loans](#)
[Current Rates](#)
[Products & Services](#)

Shari



Have You

Shared

Your Friend With Us Yet? MEMBER FDIC

Internet Banking Login

Access ID:

Passcode:

[forgot passcode?](#)

[Log In](#)

Welcome to mycbfl.com!

Each of us at Citizens Bank of Florida welcomes you to our website. Within these pages you will have access to a host of information along with the capability of conducting transactions at your fingertips. While we designed this site to provide convenience, this website cannot begin to reflect the

2007 Annual Report



Young New Doors

Done
Internet
100%



Proximity

- When applying the principle of proximity, the designer should place related elements physically close together. Unrelated items should have space separating them.
- The placing of interface items together gives visual clues to the logical organization of the information or functionality.
- Notice how the navigation links in the profastpitch site (shown on page 37) are close together on the left hand side of the page. This creates a visual group on the page and makes navigation easier to use.



Alignment

- When applying the principle of proximity, the designer should organize the page so that each element placed has some alignment (vertical or horizontal) with another element on the page.
- Looking again at the profastpitch site on page 40, notice how both vertical and horizontal alignment have been used on the site.



Things to Try Yourself

- Visit some of your favorite Web sites and determine if they use hierarchical, linear, or random organization. Do any of these sites provide a site map?
- Pick three of your favorite sites and list for each of them three things you really like about the design and three things that you either don't like or feel could use some improvement.

