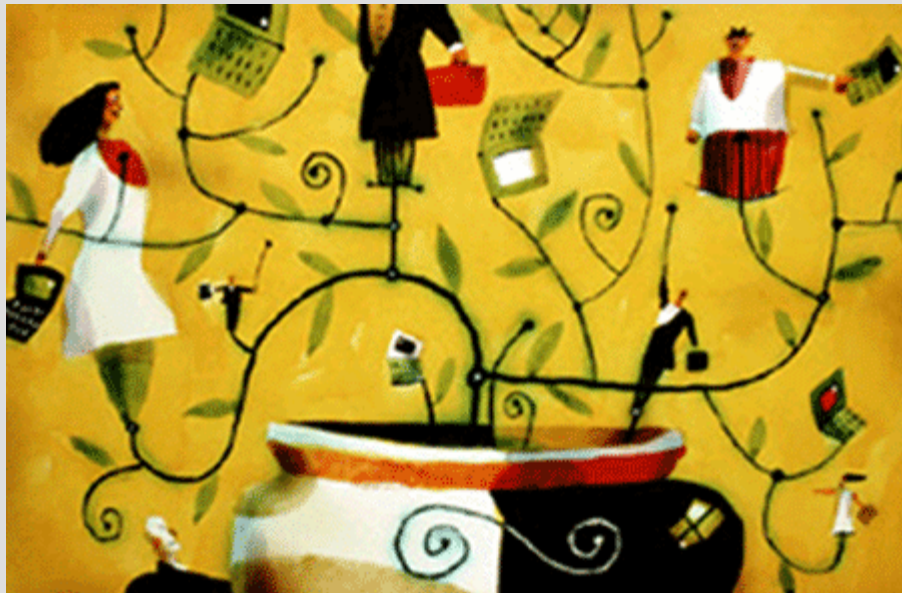


# User-Centered Website Development: A Human-Computer Interaction Approach





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PowerPoint slides by Dan McCracken, with thanks  
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College



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## 6. Navigation Design

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In this chapter you will learn about:

- ◆ Site-level navigation: making it easy for the user to get around the site
- ◆ Page-level navigation: making it easy for the user to find things on a page



# Navigation: connections

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- ◆ Good navigation builds on good content organization (Chapter 4)
  - ⊕ Choose a navigation system that reflects the content's organizational structure
- ◆ Visual design (Chapter 5) and navigation design are interrelated
  - ⊕ Choose visual navigation elements that build context for a user
- ◆ A navigational system is a visual representation of an organizational structure



# Three types of navigation systems

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- ◆ Hierarchical
  - ⊕ Derived from hierarchical organizational structure
- ◆ Ad hoc
  - ⊕ Hyperlinks
- ◆ Database
  - ⊕ Search engines
- ◆ The most common is hierarchical, with many ad hoc links added



## Rare to use only one

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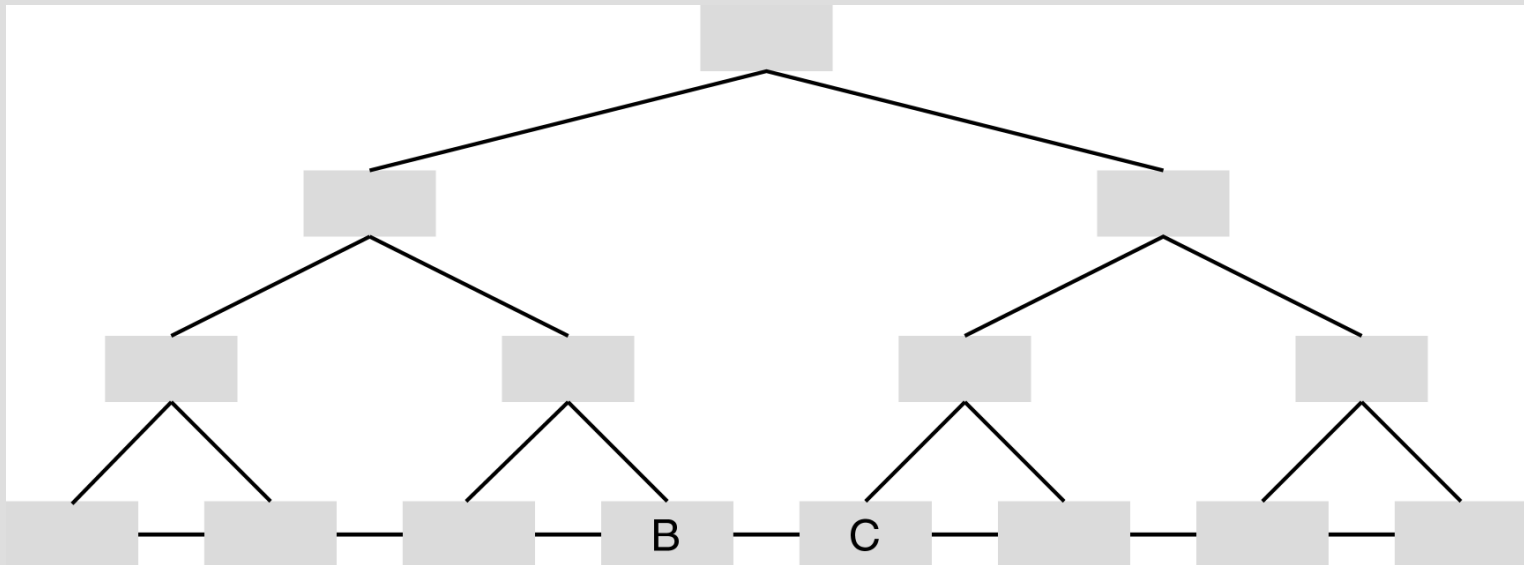
- ◆ Most websites build on a judicious combination of these three, with one dominant theme
- ◆ Hierarchical plus hyperlinks very common



## A pure hierarchy is rare

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We add links to facilitate moving around the hierarchy without going all the way to the top; note extra links at bottom level





# Global navigation

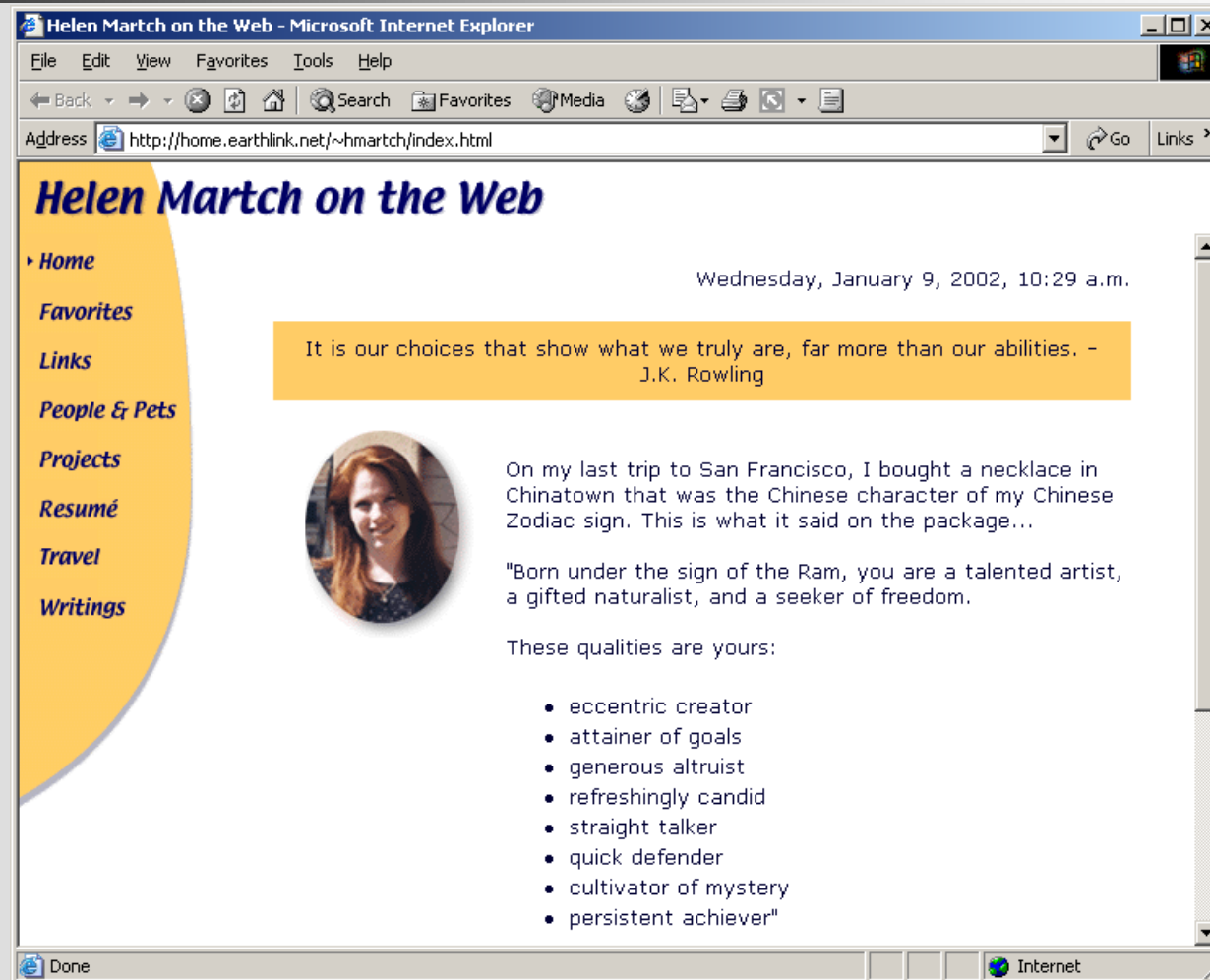
- ◆ For a small site, it may be possible to show the major links on every page



Global  
navigation

# Global navigation bar can be vertical

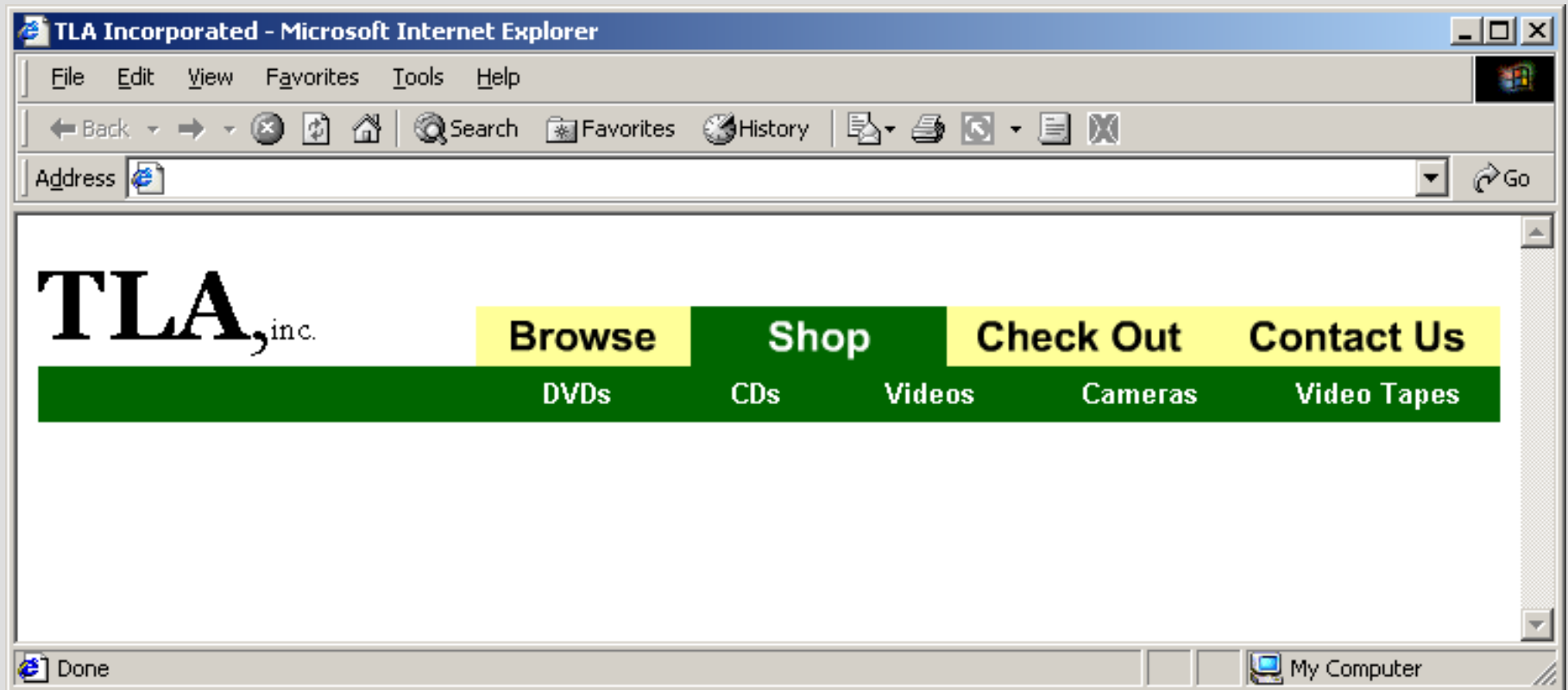
Global  
navigation



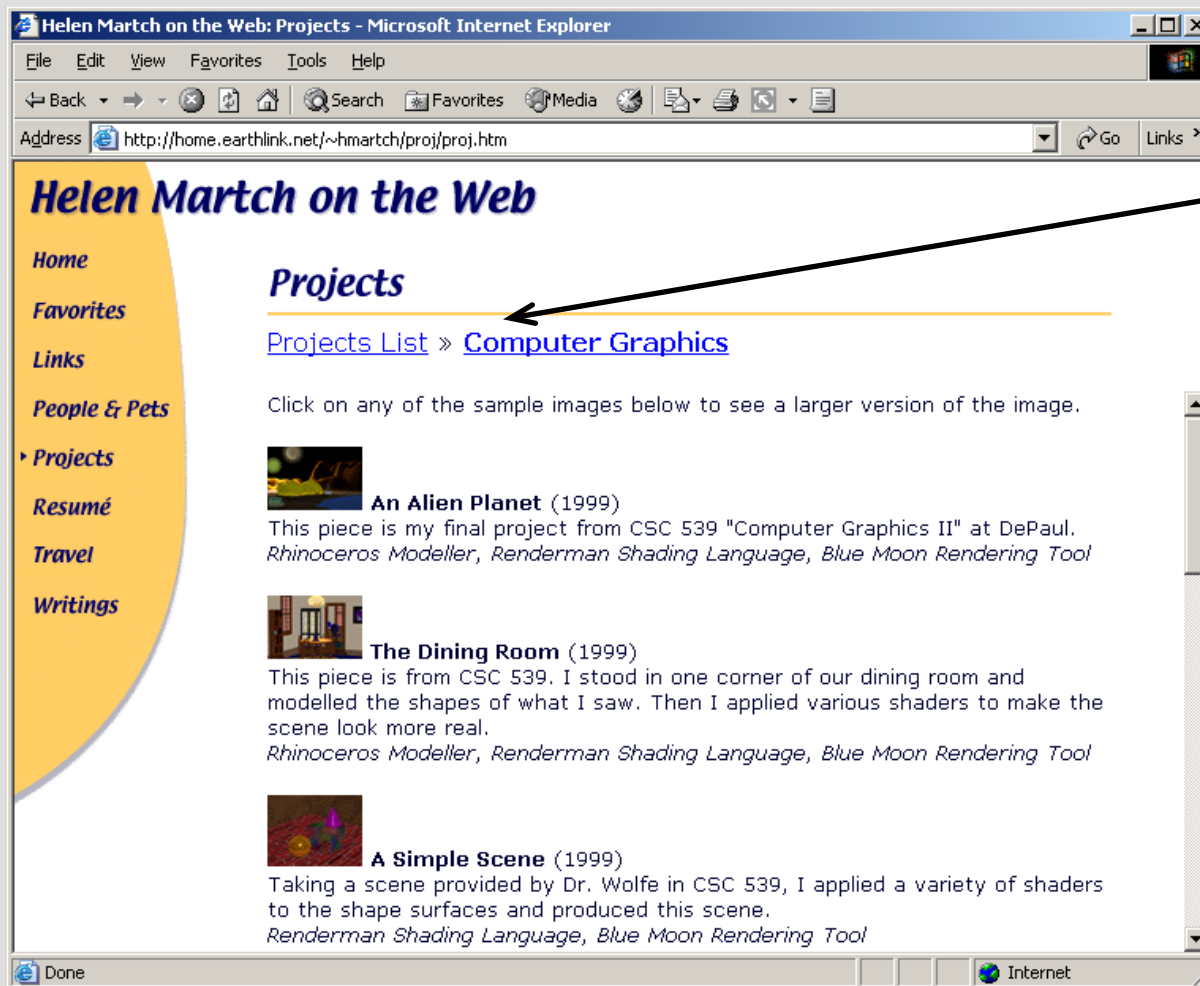


## Showing more levels in the hierarchy

- ◆ Drop-downs or pull-outs can show the next level



*Breadcrumbs* show user "This is where you are how you got here"



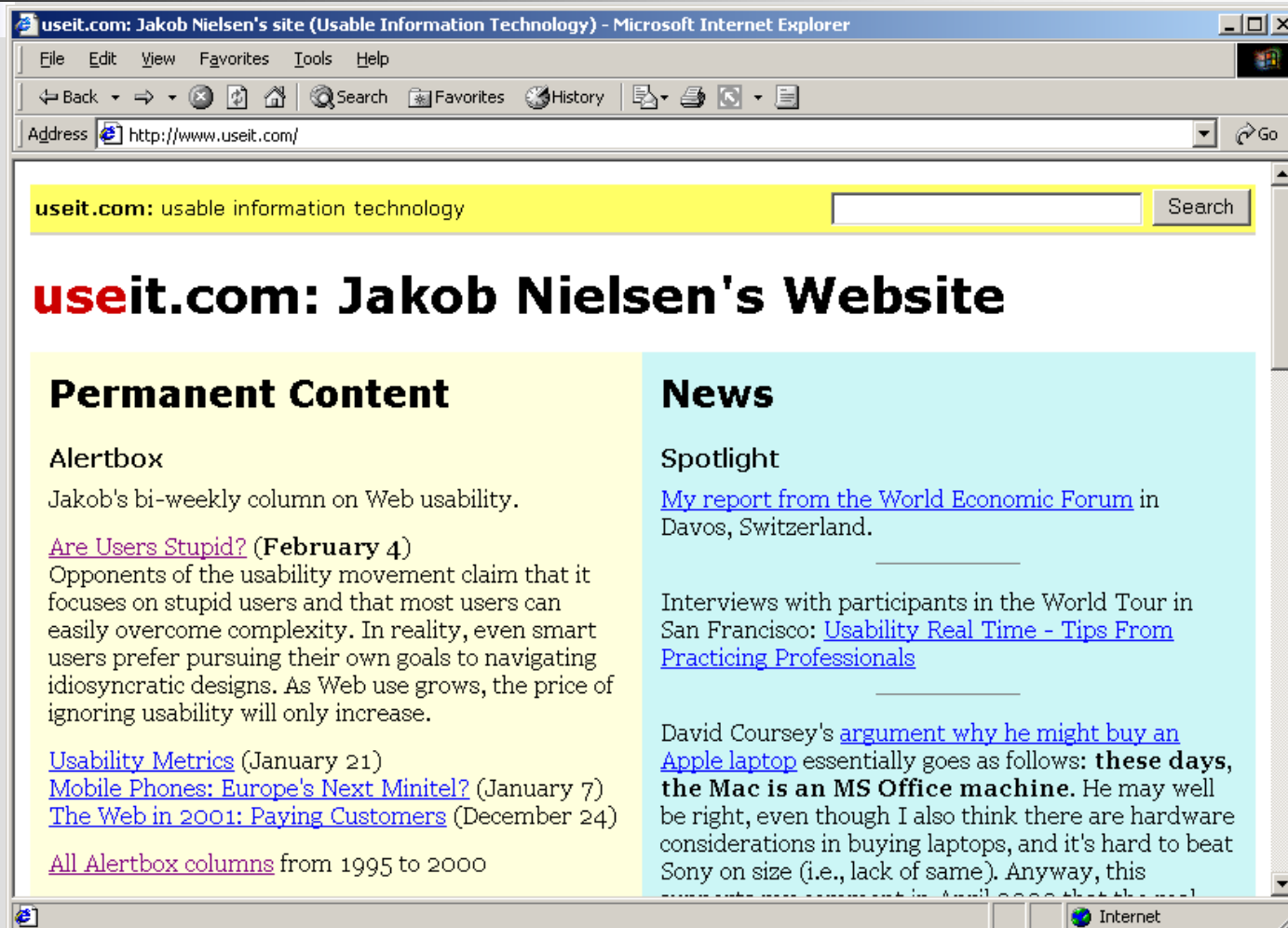
Breadcrumbs

# Many sites have subsites

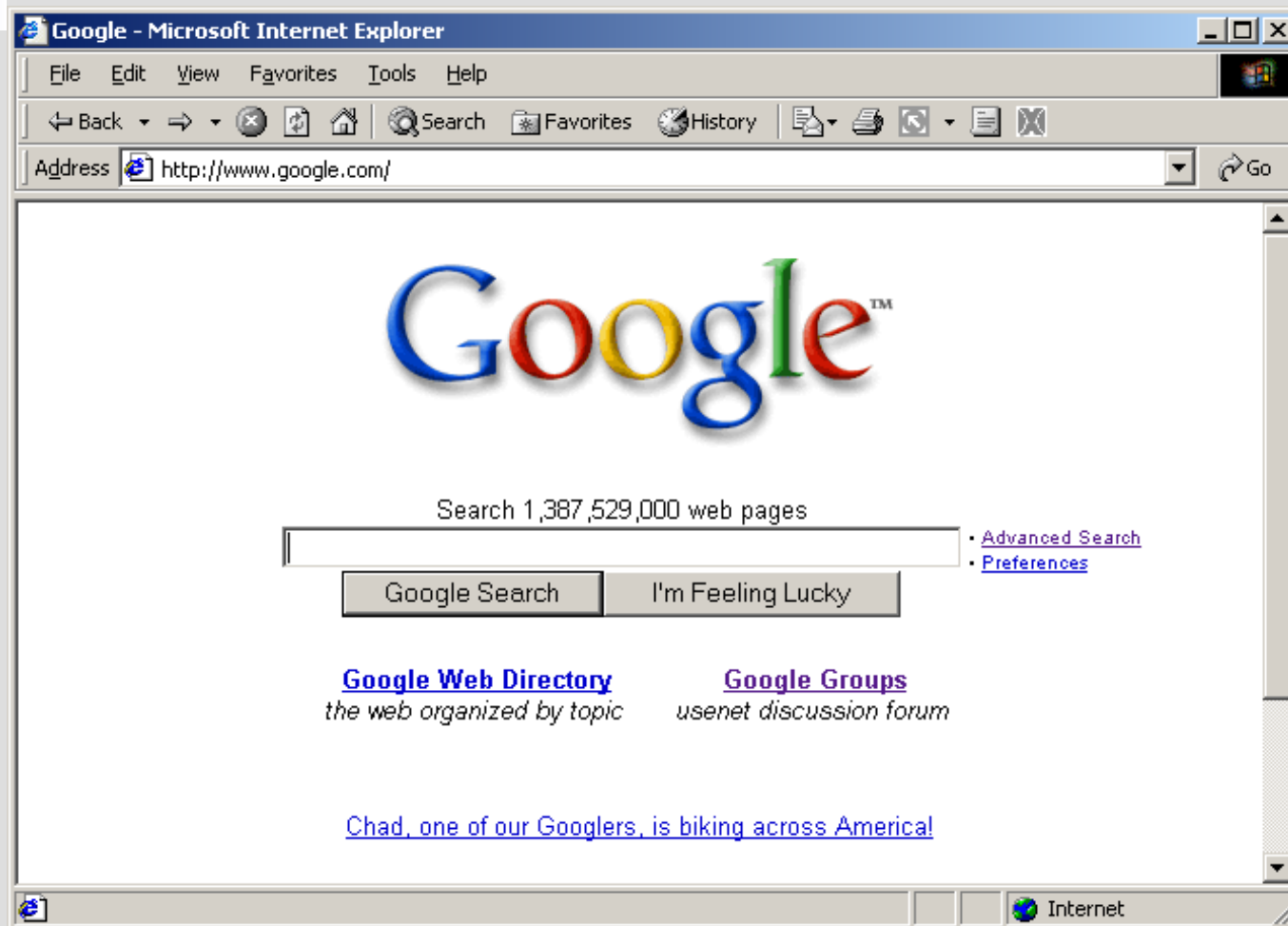
Subsites

The screenshot shows the drugstore.com website in a Microsoft Internet Explorer browser window. The browser title is "drugstore.com - online pharmacy & drugstore, prescriptions filled". The website features a navigation bar with links like "VIEW CART", "WISH LIST", "YOUR ACCOUNT", and "HELP". Below this is a category menu with "WELCOME", "BOOKS", "ELECTRONICS", "TOYS & GAMES", "DVD", "MUSIC", "KITCHEN & HOUSEWARES", and "HEALTH & BEAUTY". A banner for "Health and Beauty" from drugstore.com and beauty.com is displayed. The main navigation bar includes "home", "medicine cabinet", "beauty & spa", "nutrition & wellness", "personal care", "pharmacy", "specialty shops", and "your store". A search bar is present with a "go" button. The left sidebar contains "ways to shop" (store directory, shop by brand, your list, gift wizard), "your shopping bag" (no items in bag), and "pharmacy directory" (drug prices, your prescriptions, preferred health care plans, eMedAlert). The main content area has a "Welcome to our store!" message, a "FREE standard shipping" offer, an "Anniversary! Celebrate with Special Offers" banner, and a "SAVE with our pharmacy" promotion. The bottom section lists "personal care", "beauty & spa", and "customers' favorite departments".

# Ad hoc links are very common



# The most familiar example of database navigation: Google



# Graphical navigation bar



**Vegetables**

**Flowers**

**Herbs**

**Accessories**

**Resources**



**Vegetables**

**Flowers**

**Herbs**

**Accessories**

**Resources**



**Vegetables**

**Flowers**

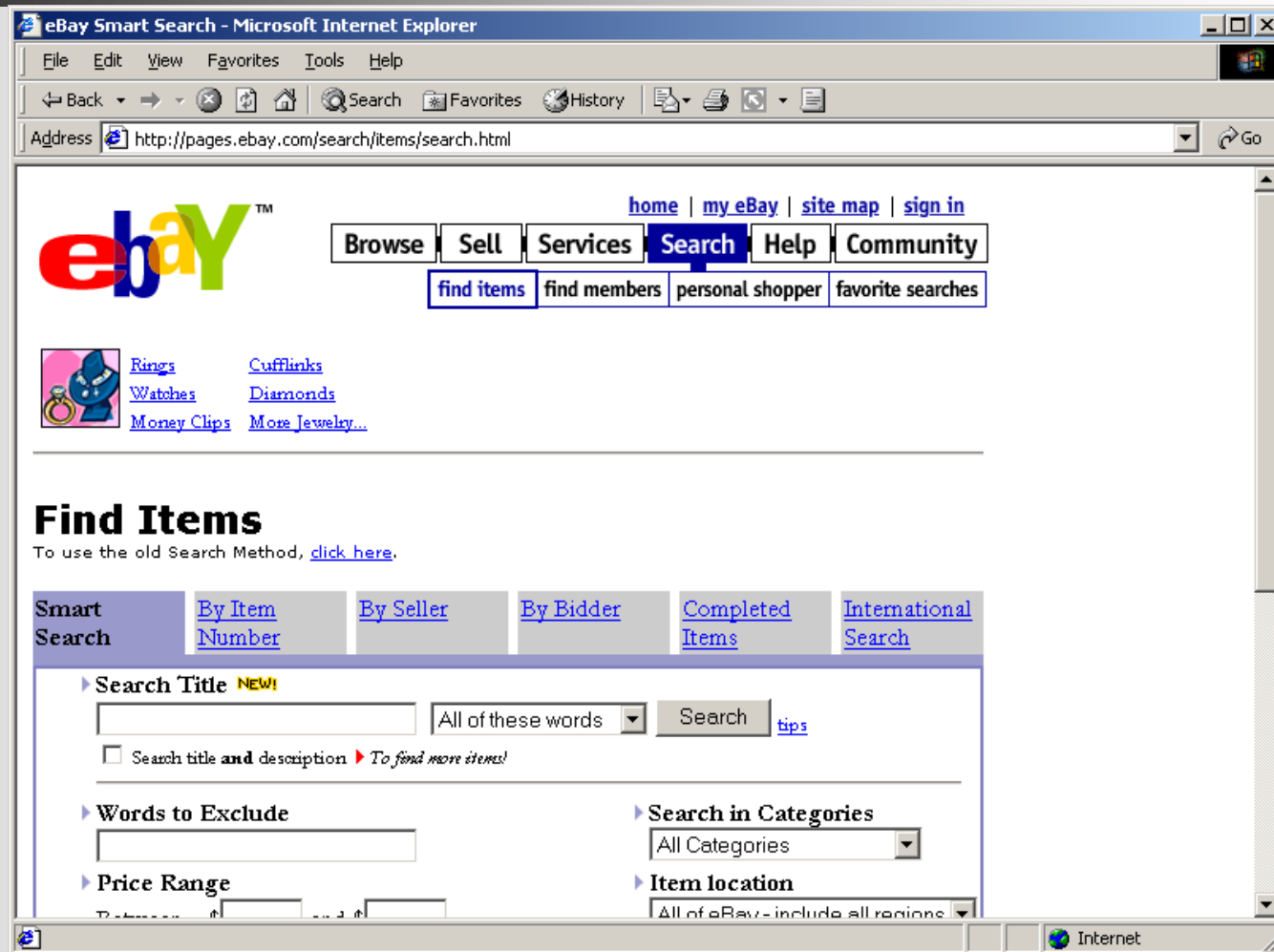
**Herbs**

**Accessories**

**Resources**



# Building context for the user with navigation bars





# Be careful with metaphors: what do these mean?

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*Test Users' Interpretations:* World, global view, planet, the world, Earth.



*Test Users' Interpretations:* Health field, money, health care is expensive, Clinton's health plan, hospital, don't know, benefits.



*Test Users' Interpretations:* TV set, video, TV, TV, TV.

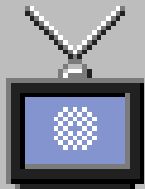
# Intended meanings. Moral: add words, too!



*Intended Meaning:* Geographic view of the company (branch offices in different locations).

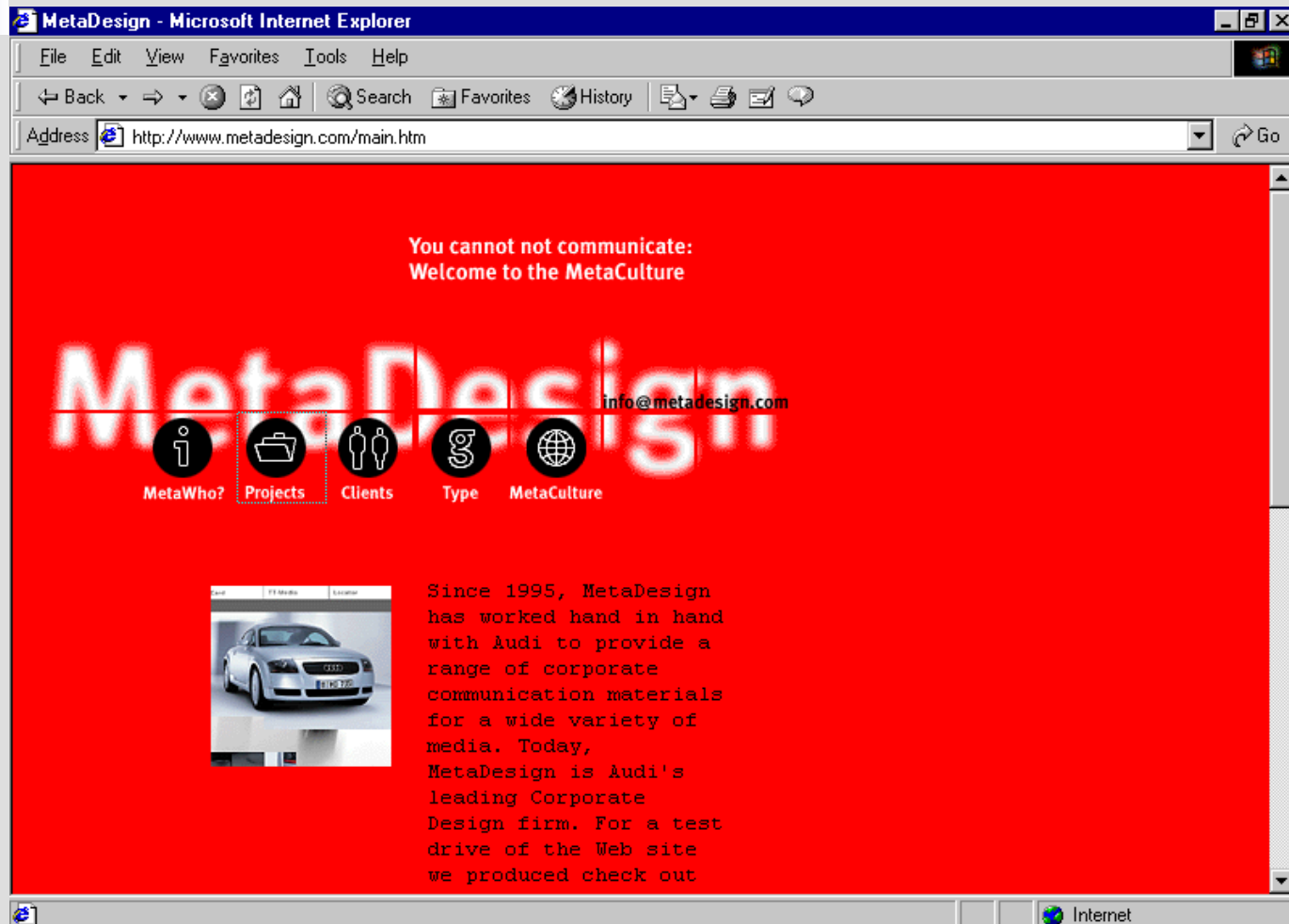


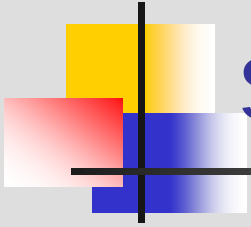
*Intended Meaning:* Benefits.



*Intended Meaning:* Public relations (TV with commercial).

# So add words!





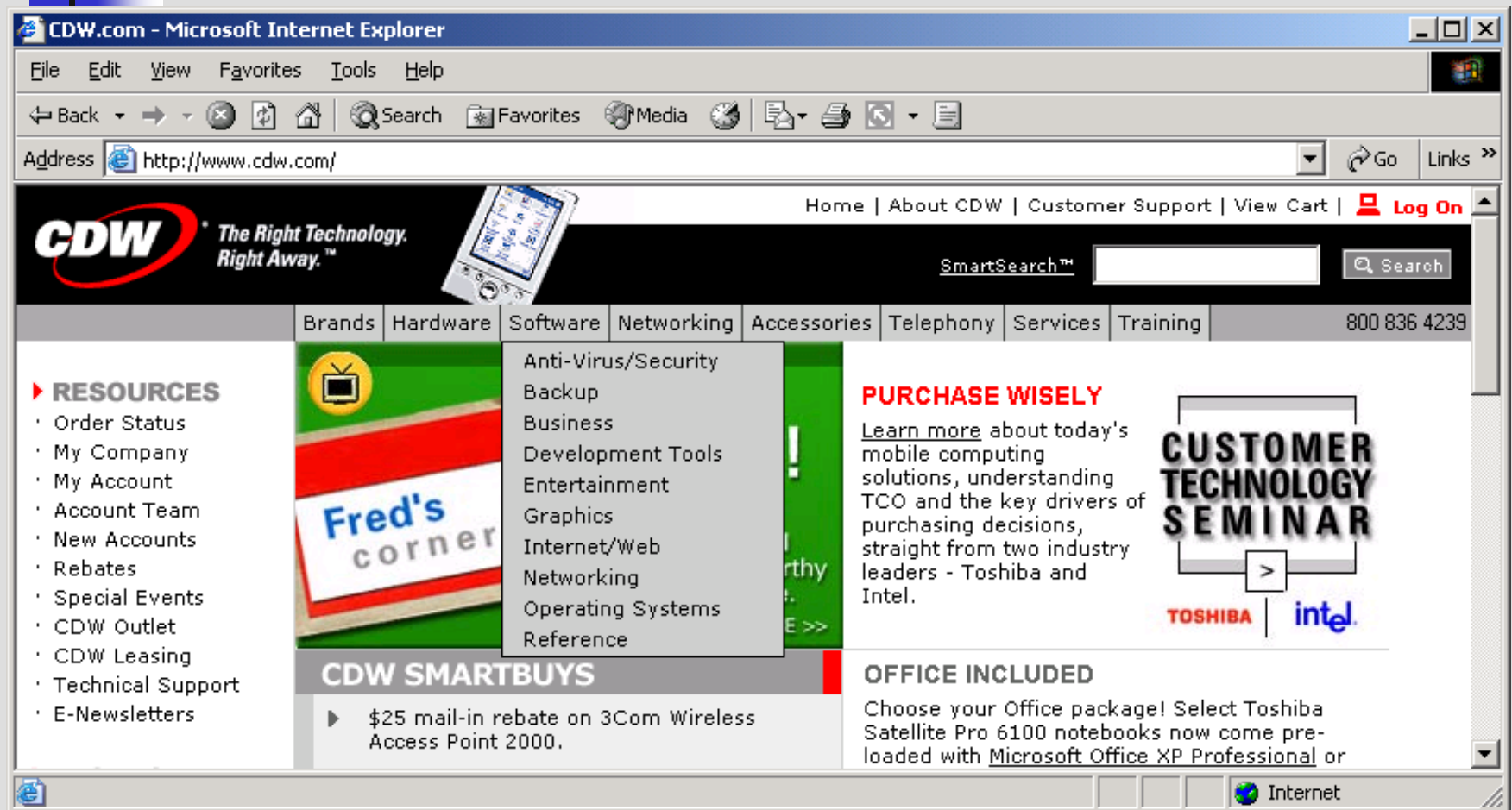
# Some standard meanings

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## Label and meaning

- ◆ Home: the main entry point of a Web site, generally containing the top-level links to the site
- ◆ Search: find related pages by supplying a word or a phrase
- ◆ About Us: information about the company that created the site
- ◆ Shop: browse for merchandise
- ◆ Check Out: supply shipping and billing information, complete transaction

Menus pack in a lot of information; note the dropdown from Software



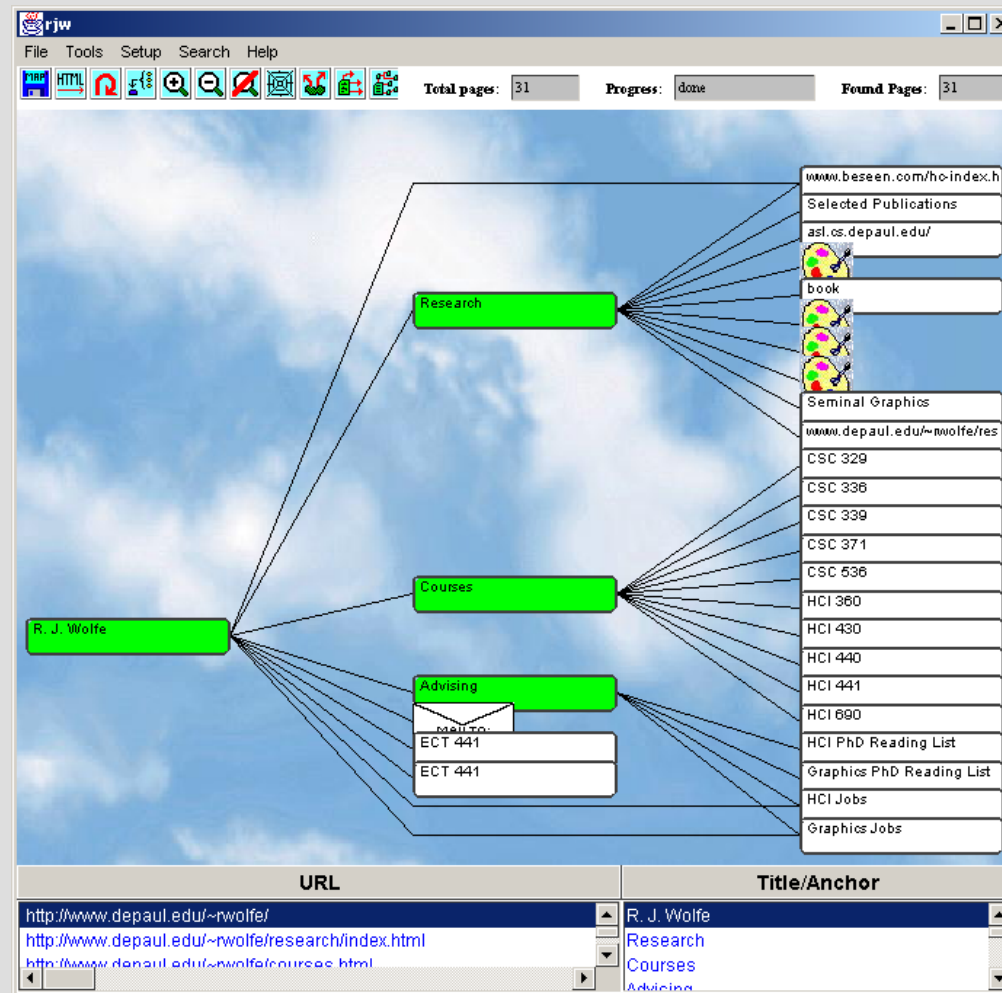


# Site maps

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- ◆ Textual
  - ⊕ Takes work
  - ⊕ For a big site, must be selective
- ◆ Graphical
  - ⊕ Cool—for a small site.
- ◆ A site map is no substitute for good navigation

# Graphical site map example



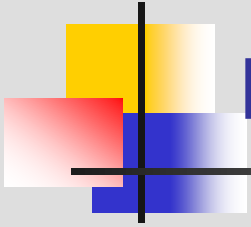




# Frames

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- ◆ A frame is an area of the browser window that stays visible as the user moves from page to page
- ◆ A simple way to provide global navigation
- ◆ But hogs screen real estate: you can't do anything else with that space
- ◆ May not print
- ◆ Hard (impossible?) to bookmark
- ◆ Used much less often than formerly
- ◆ See Jakob Nielsen, "Why Frames "Suck (Most of the Time)"



# Built-in browser services

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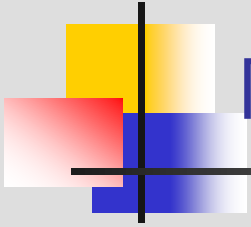
- ◆ History of pages visited
- ◆ Back button
- ◆ Forward button
- ◆ Color coding of links
  - ⊕ Unvisited
  - ⊕ Visited
  - ⊕ Active
- ◆ Don't mess with the convention that blue is an unvisited link.



## Page-level navigation aids

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- ◆ Remember proximity, alignment, consistency: make the layout obvious
- ◆ Make size of text box appropriate to the amount of data
- ◆ (How many forms have you filled out where some box is MUCH too small for what you have to enter? What were those people thinking?)
- ◆ Show which fields are required, with \* or **Required**
- ◆ Make button placement consistent: before or after its associated text



## Make error reports clear

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- ◆ Say explicitly what the problem was
- ◆ Perhaps change the color of the offending box
- ◆ Show as many errors as possible on one page; don't make user correct one error per attempt to send the data
- ◆ Don't make user re-enter correct data
- ◆ Sounds obvious, huh? Then why are so many forms terrible?
- ◆ Sales are lost at this point, in big bad quantities



# Summary

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In this chapter you have learned that:

- ◆ Effective navigation is a combination of good content organization and good visual organization
- ◆ The main navigational system is hierarchical, with a lot of hyperlinks added
- ◆ You can learn from all the bad sites you've suffered with