Navigation

CS 4640
Programming Languages for Web Applications

[Jakob Nielsen and Hoa Loranger, “Prioritizing Web Usability,” Chapter 6]
Outline

• Am I there yet?
• Match the site structure to user expectations
• Navigation: Be consistent
• Navigation: Beware the coolness factor
• Reduce clutter and avoid redundancy
• Links and label names: Be specific
• Vertical dropdown menus: Short is sweet
• Multilevel menus: Less is more
• Can I click on it?
• Direct access from the homepage

Good navigation requires clear structure, controls, and links
Am I There Yet?

• Four key “findability” problems cause huge problems
  1. Navigation and menus
  2. Category names
  3. Links
  4. Information architecture (How the information space is structured)

• Good navigation design …
  • Shows users where they are
  • Shows users where things are located
  • Shows users how to access things in a methodical way

Navigation is a map
Poor navigation is the worst problem in websites today
Match the Site Structure to User Expectation

• Design for users, not builders (or managers!)
  • Do not show internal corporate organization
    • Users do not care about your org charts
  • Arrange products by user attributes, not brand
    • Example: Escalade sports

• Proper categorization example : City of San Diego
  • Optimized for ordinary citizens
Navigation: Be Consistent

- **Consistency** is fundamental to good navigation

- Prime **offenders** : Large sites with subsites or affiliates
  - Any university!

- Pretty **good** example : Pixar

- Check out [https://www.yale.edu/](https://www.yale.edu/) and search for Yale School of Art
Navigation: Beware the Cool Factor

• Save your **creative juices** for areas of site users care about
  - **Moving menus** is annoying and decreases user’s subjective satisfaction

• **Minesweeping**
  - Definition: Moving mouse in **search** of something clickable
  - Some **young children** enjoy minesweeping
  - Most users **hate** it

• **Reduce clutter and avoid redundancy**
  - Example: [US Postal Service](#) (2003) vs [US Postal Service](#) (now)
  - Note: Options in middle **identical** to links at top
Navigation: Beware the Cool Factor

• Make sure your users understand your labels
  • Honda: 2006 vs. Now
  • What are the different car types? Pictures help a lot!

• Be brief
  • Users do not want to scan

• Start with keywords or information words
  • Do not use labels with redundant prefixes
  • Do not use “Here” or “Verify Here” or “More”
Menus

• Vertical drop down menus: Short is sweet
  • The longer the menu is, the harder it is to control
  • The farther users travel, the more they get lost

• Multilevel menus: Less is more
  • Limit fly-out menu to two levels (American Pearl)
  • Three levels is usually bad; four levels is a disaster
  • Avoid unpredictability of which menu items fly out

• Always a usability problem if menu disappears or is replaced by a different menu

Limit 1: 7 +/- 2
Limit 2: A mouse is hard to use
Can I Click It?

• Users should always know what is clickable
  • Blue is the default: Do not use blue for nonclickable text
  • High-lighting on mouse-over helps
    • But may require minesweeping
  • Standard button shapes imply clickability
  • Do not rely on the “hand” pointer
    • Novice users think arrow and hand pointer are identical

• Affordances: Whatever can be done with an object
  • Perceived affordance is crucial to design
  • Clickable objects need a perceived affordance of clickability
  • Unclickable objects should not look clickable

Doors should look like doors and walls should look like walls
Direct Access From The Homepage

- Directly link just a few high priority operations
  - Need to balance with other goals of homepage
  - Setting stage for site and informing users of full range of options

- Nielsen suggests 3 to 5 direct links from any specific area of homepage

- Good example: Chrome

Maximize what users want without overwhelming
Navigation within Pages

• Try to avoid horizontal scrolling

• Navigation buttons should always be visible
  • Top and bottom of the page

• Action buttons should always be visible
  • Top and bottom of the page

• Put most important content on the top

• Logos and headers should not use too much space

• Use intra-page links to help users keep their hands on the mouse
  • (“home” button is on the keyboard)
Navigation Anchors

• Make clickable items **obvious**
  • Use standard color (blue) and underline

• **Do not use blue and underline for emphasis**
  • Users will get confused

• **Highlight** clickable items with mouseover

• Navigation should be on the **top or the left**

• Navigation buttons should not use much space
Connecting with the World

• Remember that users do not always come in through the “front door”
  • Bookmarks, URLs emailed from friends, search engines

• Each page should have:
  • Clear identifiers to indicate its context
  • Titles that are meaningful without the context
  • Navigation to other pages in the website

• Every page must have a meaningful <TITLE> tag

• Clearly indicate non-HTML links

• Add last modified notes – remember that creation is fun, but maintenance is hard
Summary

• Getting the structure and navigation right is very hard
• Maintenance and evolution are even harder!