Announcements

- Midterm next week
- Cover up to (including) usability
Usability

- Measure of how easy is the interaction between the user and the web site
- Major aspects
  - **Speed** – How fast users can accomplish a task
    - Factors: configuration of the web site and page loading time
  - **Learnability** – how easy is to learn to interact with the site
  - **Efficiency** – how many errors the user makes while completing a task
  - **Memorability** – how easy users remember how to use the site once they have learned it
  - **User Preference** – how much the user enjoys using the interface
Guidelines for a Usable Web Page

- Create Predictable Links
  - Link should stand out from the rest of the code
  - Visited and unvisited colors should be easy to tell apart (users want to know what they have visited!)
  - Removing underline from links makes user confuse links with text
  - Links should have descriptive names
  - If using images for links, distinguish them from the text and indicate they should be clicked.

- Use Descriptive Titles
  - Title should describe site they are (e.g., notreal.com) and the page user is on.
  - Titles are used as bookmarks names thus a descriptive name will help identify each bookmark
Guidelines for a Usable Web Page

- **Page Width**
  - Avoid a page width that will force horizontal scrolling
  - Horizontal scrolling can be avoided by using relative widths (e.g., percentages) rather than fixed widths.

- **Page Length**
  - Long pages should be avoided

- **Size of a page**
  - Smaller the better
  - Images are the largest contributor to page size. Reduce their size as much as possible

- **Layout**
  - The page layout should indicate exactly how to accomplish the main task associated with the page. No elements (e.g., ads, graphics, etc.) should draw attention from components that perform the main task associated with the page.
  - Good layout example: Google
Guidelines for a Usable Web Page

- **Legibility**
  - Make your pages legible
  - Font and color are two aspects to take into consideration
    - Use Times or Arial fonts
    - Smaller fonts can cause trouble
    - Black text on white background is preferable

- **Cross-Platform and Cross-Browser Compliance**
  - Check your pages work on Windows, Macs, and Unix OS, using different versions of each possible browser
  - Do not use browser specific features
  - Do not assume standard HTML and CSS will work the same across platforms
Usability: Frames

- Frame
  - Allows to view several HTML documents in the same window
  - A page can be loaded in a frame while other stay constant
  - **Example:**
    - [http://java.sun.com/j2se/1.5.0/docs/api/index.html](http://java.sun.com/j2se/1.5.0/docs/api/index.html)

- Causes big problems from a usability point of view
  - Bookmarking will not work as expected
  - Search engines have difficulties with frames
  - Printing can be problematic

- Effects associated with frames can be achieved via CSS positioning and `<div>` tag
Guidelines for an Usable Web Site

- **Visual Consistency** - When a new page is selected in a site it should be easy to identify it belongs to the same site
  - You can achieve consistency by
    - Using logos or banners
    - Keeping a consistent layout and configuration of elements. For example:
      - Navigation bar is consistent in its placement and appearance
      - Consistent coloring
  - If layout is not consistent you can use identical colors and shape elements to make pages appear consistent

- **Navigation** – For an easily navigable site users should be clear about:
  - where they will go when selecting a link
  - where they are in the site
  - how to get back to a recognizable starting place
Guidelines for an Usable Web Site

- Navigation: Approaches to organize a site
  - **Sequential Organization** – Pages follow a certain order and are linked to one another in order. Appropriate for scenarios where:
    - Sequence of steps needed to complete a task are described
    - A story is told
    - Chronological information is presented
  - **Hierarchical Organization** – Appropriate for sites with a very large number of pages. A main page has categories with subcategories, etc. Users should know their position in the structure
  - **Web-based Organization** – Most common organizational structure.
    - Web-like structure (should not force one of the organizations previously discussed)
    - Pages link to one another based on content
      - A page could be accessible only from one particular page
      - A page can connect many pages
      - Etc
Guidelines for an Usable Web Site

- **Links**
  - Links names should be descriptive and indicate where the links go.
  - Rather than next, prev, up, down add a description of the nature of the page that will be reached.
    - “next: Weather in the USA”
    - “up: Courses at UMCP”

- **Search**
  - Search tools for an entire web site can help users find what they need.
  - The search should search the web site by default.