Web Page Design
Browser Compatibility

- Web pages do NOT look the same in all the major browsers
- Test with current and recent versions of:
  - Internet Explorer
  - Firefox, Mozilla
  - Opera
  - Safari
- Progressive Enhancement:
  - Website functions well in browsers commonly used by your target audience
  - Add enhancements with CSS3 and/or HTML5 for display in modern browsers
Website Organization

- Hierarchical
- Linear
- Random

*(sometimes called Web Organization)*
Hierarchical Organization

- A clearly defined home page
- Navigation links to major site sections
- Often used for commercial and corporate websites
Be careful that the organization is not too shallow.
Too many immediate choices → a confusing and less usable website.
Group, or “chunk”, related areas
Many web designers try not to place more than about six (6) major navigation links on a page or in a well-defined page area
Hierarchical: Too Deep

- Be careful that the organization is not too deep.
  - This results in many “clicks” needed to drill down to the needed page.
  - User Interface “Four Click Rule”
    - A web page visitor should be able to get from any page on your site to any other page on your site with a maximum of four hyperlinks.
Linear Organization

- A series of pages that provide a tutorial, tour, or presentation.
- Sequential viewing
Random Organization

- Sometimes called “Web” Organization
- Usually there is no clear path through the site
- Most often used with artistic or concept sites
- Not typically used for commercial sites
Visual Design Principles

- Repetition
  - Repeat visual elements throughout design

- Contrast
  - Add visual excitement and draw attention

- Proximity
  - Group related items

- Alignment
  - Align elements to create visual unity
Design “Easy to Read” Text

- Use common fonts:
  - Arial, Helvetica, Verdana, Times New Roman
- Use appropriate text size:
  - medium, 1em, 100%
- Use strong contrast between text & background
- Use columns instead of wide areas of horizontal text
More Text Design Considerations

• Carefully choose text in hyperlinks
  • Avoid “click here”
  • Hyperlink key words or phrases
  • Do not hyperlink *entire sentences*

• Chek yur spellin (Check your spelling)
Using Color on Web Pages

- Computer monitors display color as intensities of red, green, and blue light
- RGB Color
- The values of red, green, and blue vary from 0 to 255.
- Hexadecimal numbers (base 16) represent these color values.
Hexadecimal Color Values

- # indicates a hexadecimal value
- Hex value pairs range from 00 to FF
- Three hex value pairs describe an RGB color
A collection of 216 colors

Display the most similar on the Mac and PC platforms

Hex values: 00, 33, 66, 99, CC, FF

Color Chart: http://webdevbasics.net/color
Making Color Choices

How to choose a color scheme?

- **Monochromatic**
  - [http://www.0to255.com](http://www.0to255.com)

- **Choose from a photograph or other image**
  - [http://www.colr.org](http://www.colr.org)

- **Begin with a favorite color**
  - Use one of the sites below to choose other colors
    - [http://www.colorschemedesigner.com](http://www.colorschemedesigner.com)
Use of Graphics & Multimedia

- File size and dimension matter
- Provide for robust navigation
- Provide alternate text
- Use only necessary multimedia
Images

- Inserted into a web page using the `img` tag
  - `<img src="filename.ext">`

- Common graphics file extensions:
  - `.jpg` or `.jpeg`
  - `.gif`
  - `.png`

- Often image files are kept in a separate subfolder, for better organization
  - `<img src="images/somepic.jpg">`
Image Tag Attributes

- **src**
  - defines the **source** of the image – the file path and name
  - `<img src="images/somepic.jpg"/>
  - always needed with the img tag

- **width, height**
  - specified as a percentage or in actual pixels
  - `<img src="no1.gif" width="50%" height="50%"/>
  - `<img src="no2.gif" width="275" height="150"/>
  - optional attributes -- don’t have to be used
More Image Tag Attributes

• alt
  • defines text that will be displayed if for some reason the image can’t be displayed by the browser
  • `<img src="pic03.png" alt="A waterskiing squirrel"`>
  • good to use for accessibility – screen readers used by the visually impaired will use the alt text to explain an image verbally
Images as Hyperlinks

- surround the `<img>` tag with `<a>` and `</a>` tags

- Example from W3Schools.com:

- **Try It! Image as Hyperlink**
Navigation Design

- Make your site easy to navigate
  - Provide clearly labeled navigation in the same location on each page
  - Most common – across top or down left side

- Consider:
  - Navigation Bars
  - Breadcrumb Navigation
  - Using Graphics for Navigation
  - Dynamic Navigation
  - Site Map
  - Site Search Feature
Image Files and Copyright Law

- It is very easy to copy and download images from websites.
- However, in most instances, it is illegal to place someone else’s work in one of your files.
- Only publish web pages, images and other media that you have personally developed or that you have obtained permission or license to use.
Image Files and Copyright Law

- All work is copyrighted by default, even if there is no copyright symbol and date on the material.
- Using copyrighted material that you are not authorized to use for commercial purposes is very dangerous.
  - you are asking for a lawsuit!
Many works have been developed by people and released for general use as open source material.

Open Source materials are free from license restrictions or fees:
- usually the only requirement is that you credit the creator of the work.

That’s why we used the OpenClipArt site for Assignment # 3 – images are free to use.
There are times when students and educators can use portions of another’s work and not be in violation of copyright law.

“Fair Use” is the use of copyrighted work for purposes such as criticism, reporting, teaching, scholarship or research.

So if you use a photo of Yo-Yo Ma for a class web project, for example, it’s ok even if it’s copyrighted.
Fair Use Criteria

- The use must be educational rather than commercial
- The amount copied must be as small a portion of the work as possible
- The copy does not impede the marketability of the original work