Usability & Accessibility

Web pages for all

Aspects of Usability & Accessibility

- Can the audience get the information they need?
  - Readability
  - Find-ability
  - Alternatives
  - Proper structural elements used
  - Style sheets for design & layout
  - Sizing gracefully
  - Simplest solutions used

Aspects of usability - Readability

- Text should always be readable.
  - Not readable -> message not received
- Background and text colors should have high contrast.
  - If using background graphics, they should not detract from readability of text.

Readability - Fonts on Web Pages

- Fonts are copyrighted
  - Can not be copied to audience's computers.
  - HTML 5 allows downloading open source or public domain fonts
    - Downloading of fonts slows the loading of the page
- No fonts = web browsers use default fonts
  - Reader can specify one they prefer
  - Defaults can be boring, though
- Use standard font sets to ensure readability
  - Standard fonts come with operating system
    - Each operating system has different set

Font Sets

- Font sets are listing of several possible fonts
  - The browser tries the first font. If the font is missing, the next font is tried, and so on.
  - List a generic font type at the end of the font set
    - Serif
    - Sanserif
    - Monospace
    - Cursive
    - PANTER
  - If none listed, browser may substitute any font
    - Might not be as readable
More on Readability
- Can the audience understand what is written?
  - Use clear and concise writing
- Use headings to make it easier to scan
  - People tend to scan web pages until they get to the information they want.
  - Remember heading should be act as an outline for your page.
  - For accessibility, audio browsers can be set to read the headings first
    - Audience selects what to listen to

Aspects of usability – Find-ability
- Can the audience find what they need?
  - Clearly Organized
  - Keep most pages within 3 clicks of the main page.
  - Clearly & appropriately labeled navigation
  - Consistent navigation
    - All pages on a site have navigation that displays in the same ways.
  - All links should work
  - Consider offering search options
  - Avoid confusion – underlines for links only
    - Don't use underlines for text style
    - Use emphasis

Aspects of usability – Page layout
- Avoid distractions
  - Too many choices in navigation
  - Repeating animation – pulls reader from content
  - Too busy – eyes are pulled ever which way
- Use white space to break up layout
- Keep it simple
- Accessibility factors:
  - Use tables for data only (not for layout!)
  - Use CSS for layout!
    - Allows pages to transform gracefully

Main page
- The main page of a site is the page that opens whenever your domain or web address is entered.
- Special usability concerns
  - Fast loading – if the site takes too long to load, readers may move on to another site
  - Informative & inviting – the audience should want to read more of the site.
    - Brief description of what site is about
    - Don't overwhelm with choices
    - Visually appealing
    - Easy to use and accessible navigation

Accessibility
- Video intro
  - http://youtube.com/watch?v=U2VVxrWun6A

Why is Accessibility Important?
- Not everyone’s abilities are the same
- Some of your audience may have
  - Visual difficulties or blindness
  - Hearing difficulties or deafness
  - Movement difficulties
  - Cognitive disorders
  - Other problems such as
    - Reading disabilities
    - Epilepsy
    - Many other differences can effect web site accessibility
## Accessibility laws
- Laws governing accessibility
  - American Disabilities Act
  - Section 508 Rehabilitation Act
  - American Disabilities Act.
- Required by law
  - Government agencies
  - Organizations receiving federal monies
- Even if not required by law, it’s a good idea!
  - Sites that are more accessible are often easier for everyone to use

## Making a site accessible
- Provide alternatives.
  - Alternative text for graphics
    - Short description of graphic
    - Use a space for decorative or spacing graphics
  - Long descriptions of videos and some graphics
  - Transcripts of audio
  - Alternate methods of accessing
    - Make top item in a pull down list clickable
    - Provide text in addition to image maps

## Making a site accessible
- Don’t rely on color alone to transmit information
  - Graphics should be understandable without color
  - Provide alternatives to color coded text
- Use proper structural markup
  - Use Headings
    - Don’t just increase font size
    - Headings are like an outline
  - Paragraphs, blockquotes, lists used appropriately
- Use style sheets for design and layout

## Sizing Graceful
- When possible allow pages to size gracefully to the user’s equipment and preferences
  - Specify text sizes as percentages or ems instead of points or pixels
    - Don’t specify size of normal text
    - Use % or em for headings
    - Specify line height as % or em
  - Avoid horizontal scrolling
    - Specify widths of elements

## Use the simplest possible solution
- For both usability & accessibility
  - Use the simplest possible method to achieve a result.
  - Don’t use scripting if the same thing is available in simpler mark-up or style sheets.
    - Example why use Javascript to do roll-over changes when the same thing can be achieved through CSS.
- Simplicity is best!

## Testing for usability
- Self test site
  - various screen resolutions, monitor widths, change browser widths, browsers and computer types
    - Do any differences detract from usability?
- Make observations of users
  - Have several people try your site
    - Are they able to use the site without problems
    - Can they find specified information.