Accessibility for All

CSCI-101
What is Accessibility?

• Access
• Physically able to access the Internet
• Able to use the content
What Limits or Prevents Access?

• Nearly 20% of US adults do not use the Internet
  – This translates to ~60 million users
  – Most are elderly or poor

• Only 72% of Americans have home Internet access

• “Access” for many may involve borrowing or using a public computer

The Digital Divide

• Reportedly two main reasons people don’t use the Internet
  – Economics
    • The expense of hardware and access fees
    • Approximately 46% of households with household income < 30K have home access; 87% access if household income is >75K.
  – Feel they don’t need it
    • Can get info elsewhere
    • It infringes on privacy

What are Americans Missing?

“Per the Commerce Department, Internet use has a measurable impact on employment, income, consumer welfare and civic engagement. So closing the digital divide would not only benefit individuals on the wrong side of it, but also the economic and civic society as a whole.”

What About the Rest of the World?

- Worldwide, it is reported that 1/3 of the world’s population does not have Internet access.
- One billion people still do not own a mobile phone.

What is Society’s Role?

• On the news: Announcer instructs viewers to go online for more information
• Utility bills: Discount if customer goes online to pay the bill
• New product: Go to website to register product, or for customer service
• ... What do you do if you are one of the 20% without Internet access?
The Other Side of Accessibility

• Physical limitations
  – Injury or medical conditions resulting in limited motion, tremors, weak fine motor skills
  – Difficult websites – some examples
    • Require extensive scrolling
    • Use small components
    • Provide links physically located too close together
The Other Side of Accessibility

• Visual
  – Most Internet content is visual – text, video, other media; be certain all visitors can view
  – Difficult websites – some examples
    • Small fonts
    • Bad color choices
    • Scrolling text, or text that changes position on the page
• User may be trying to use a screen reader – requires specific tags embedded in the page
• Look at webaim.org, especially http://webaim.org/articles/visual/lowvision
The Other Side of Accessibility

• Auditory
  – Sites increasingly use video
    • Not all visitors have the equipment, the software to support the media, and can hear the content
  – The visitor may be trying to view a video in a “quiet” environment and may also need to view captions

• Be sure any content is captioned
The Other Side of Accessibility

• Cognitive
  – Users may lack the mental ability to read and process the information
  – Users may become confused with blinking ads, popups
  – “Get lost” with too many links
• Difficult websites – some examples
  • Too much text on a page
  • Difficult to follow layout
  • Sites that require several navigation links to get to the content
  • Other issues already mentioned such as small fonts, bad color choices, scrolling text, or text that changes position on the page
Two Poorly Designed Sites

- This is a local news site. Numerous popups (I tell my browser to block them) clutter the screen, and mouse-overs launch even more. There are so many ads crammed in with the text, it is difficult to follow
  - [http://www.mpnnnow.com/](http://www.mpnnnow.com/)

- *Top Design* magazine named this site on its top 20 list:

- [http://arngren.net/](http://arngren.net/)
Helpful Sites

• http://www.w3.org/TR/media-accessibility-reqs/
• http://webaim.org/