MMI 1

Accessibility

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Types of Impairments

- hearing impairments
- visual disabilities
- physical disabilities
- speech disabilities
- cognitive and neurological disabilities
- multiple disabilities
- aging-related conditions

Pick one topic!
- -> Research guidelines for design
- -> Research tools for checking your website design
- -> Find good and bad examples
Accessibility scenarios

• Online shopper with color blindness - user customized style sheets
• Reporter with repetitive stress injury - keyboard equivalents for mouse commands, access keys
• Online student who is deaf - captioned audio from multimedia
• Accountant who is blind - appropriate table markup and alternative text
• Student with dyslexia - use of supplemental graphics, freezing animated graphics, multiple search options
• Retiree with aging-related conditions managing personal finances – screen magnification, stopping scrolling text, avoiding pop-up windows
• Supermarket assistant with cognitive disability - clear and simple language, consistent design, consistent navigation options, multiple search options
• Teenager who is deaf and blind seeking entertainment – accessible multimedia, device-independent access, appropriate table markup

from: http://www.w3.org/WAI/intro/people-use-web
Examples

⇒ Movie Session!
Example I: Visual Disabilities

- Deep is an over
- last thing
- life is not what
- everybody that
taste of time-
- you make it. I
- everybody that
- out of 2
- The
- and other fine
- you that de
- through's come
- from Ben My
- your gift is my so

Images from http://webaim.org/articles/visual/lowvision
Example I: Visual Disabilities

Screenreader:
http://webanywhere.cs.washington.edu/wa.php

Close your eyes and listen! What website is this?
Example 1: Visual Disabilities

Color Blindness

Check iPhone availability at your local Apple Store

California Stores

San Diego, UTC
San Francisco, Stonestown
San Francisco, San Francisco
San Jose, Oakridge
San Luis Obispo, Higuera Street
Santa Clara, Valley Fair
Santa Monica, Third Street Promenade

Examples for color blindness from http://www.colourlovers.com/web/blog/2010/03/17/be-kind-to-the-color-blind
Example I: Visual Disabilities

Color Blindness

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Example I: Visual Disabilities

Color Blindness

The colors show the latest breakdown by The New York Times of which states are considered to be in play in the presidential election. Ratings are based on a variety of factors, including polling, previous elections results and the political landscape in the state. Click on a state for more information.

Examples for color blindness from http://www.colourlovers.com/web/blog/2010/03/17/be-kind-to-the-color-blind
Example II: Aging-Related Conditions

Test how it feels to be old (e.g. can't move fingers because of Arthritis)

Image from http://www.at.ford.com/SiteCollectionImages/2011_FordOfEurope/April/Large/Third_Age_Suit_FFA-combi.jpg
Example II: Aging-Related Conditions

Design Guidelines

• Provide large targets, e.g., larger clickable graphics, for the mouse pointer.

• To reduce the number of clicks, do not require double clicking, use pull-down menus, nor have a deep hierarchy.

• When text must be read or scanned, use 12-14 point sans, serif (Helvetica, Arial) black text on a white background.

• The text should have appropriate, large headings in 14-16 sans serif font.

• ...

=> Can you think of more?
More Infos

W3C Web Accessibility Initiative
http://www.w3.org/WAI/intro/people-use-web

Videos: People using Assistive Technology
http://www.uiaccess.com/accessucd/resources_videos.html