



CSIT226/826 Human Computer Interaction

Week 7 Tutorial - Handout

DISCUSSION OF KEY TERMS (WITH UX QUESTIONS)

As a class you will discuss the key terms from week 6.

- Visual impairments (including: blindness, low vision and color blindness)
 - How can visual interfaces be transformed into intuitive and efficient nonvisual interfaces?
 - What are the current models of interaction independent from graphical and spatial presentations available?
- Hearing disabilities
 - How can computers be used to translate written or spoken English to sign language? (note Sign Languages are different to verbal and written languages and different in different countries ~ even which speak English)
- Speech impairments
 - How can we support conversation in systems? (typically between 110-160 words per minute)
- Mobility impairments
 - How can efficient interaction be supported without the use of a standard keyboard or mouse?
 - What software tools can be provided to minimize the use of difficult devices such as phones, paper, and environmental controls?
- Cognitive impairments
 - How can interfaces be adapted to suit different cognitive levels? (typically this is considered from a novice and expert user perspective)

Additional key terms and guidelines:

- Assistive Technologies
- WCAG 2.0
- WAI-ARIA 1.1

WCAG2.0 - WEB CONTENT ACCESSIBILITY GUIDELINES

In small groups you are to select a popular website (you can choose the site to review) and conduct a review of the site against WCAG 2.0 and present the results to the class.

<https://www.w3.org/WAI/WCAG20/glance>

- Perceivable
 - Provide text alternatives for non-text content.
 - Provide captions and other alternatives for multimedia.
 - Create content that can be presented in different ways, including by assistive technologies, without losing meaning.
 - Make it easier for users to see and hear content.
- Operable
 - Make all functionality available from a keyboard.
 - Give users enough time to read and use content.
 - Do not use content that causes seizures.
 - Help users navigate and find content.
- Understandable
 - Make text readable and understandable.
 - Make content appear and operate in predictable ways.
 - Help users avoid and correct mistakes.
- Robust

WEEKLY QUESTIONS - ACCESSIBILITY

1. Review the following two (2) government guidelines on accessibility
 - a. <http://www.australia.gov.au/accessibility>
 - b. <https://www.finance.gov.au/publications/wcag-2-implementation/>
 - i. Are these guidelines going far enough?
 - ii. What else could be done by the Australian government to improve accessibility?
2. The Sydney 2000 Olympics Case: <https://www.w3.org/WAI/bcase/socog-case-study>
 - a. Read the case study, what are your thoughts on the case and the result?

GROUP MEETING

- Is there the potential that you will need to consider accessibility in the design of your groups system?
- How are your initial ideas going to be modified to include the aspect of 'accessible' in your designs?
- Consider (<https://www.w3.org/WAI/bcase/Overview.html>) – Developing a Web Accessibility Business Case for Your Organization: Overview. As a group review your answers above under the factors of: social; technical; financial; and legal and policy.

