

Human-Computer Interaction

Week 3 Lecture 3D

Designing for disabilities

COMP 3900 & COMP 6390

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Case study in design thinking

Designing for people with disabilities is an important area of interaction design. We will also use this topic as a case study to help us focus on issues of design thinking, design principles and paying attention to the needs and circumstances of our users.

Sharp, Preece and Rogers (2015) discuss the two issues of accessibility and usability (page 18) and they cite a web article by Whitney Quesenbery at

<http://www.uxmatters.com/mt/archives/2009/02/usable-accessibility-making-web-sites-work-well-for-people-with-disabilities.php>

Inclusive design

1. <https://www.action.act.gov.au>

This website has a section called NXTBUS

Example: The baby in the pram with the shopping

2. Hearing loss

Stella Young speaking at TedXSydney 2014

Watch Stella Young's TEDX talk on:

<https://tedxsydney.com/talk/inspiration-porn-and-the-objectification-of-disability-stella-young/>

Recent “Enabled Technology” workshop

Held in Canberra in May 2016.

Several attendees with disabilities spoke about individual specific things that they would like technology to help them to do

- Haptic amplification for grasping and other actions
- Ocean swimming
- Deep-sea fishing

[Observation about driving electric wheelchairs]

Inclusive design

Web Content Accessibility Guidelines (WCAG) 2.0

<https://www.w3.org/TR/WCAG20/>

Australian Government

<http://www.australia.gov.au/accessibility>

<http://www.mediaaccess.org.au/web/policy-and-web-accessibility>

Designing for (dis)abled people

Things to discuss:

- What problem are we trying to solve, and for whom?
- Is it a problem? [A problem is only a problem if it is a problem]
- Should we focus on “abilities” rather than “disabilities”?
- Gathering data using first-person statements “I need to be able to do ...” and “I want to be able to do ...” (in contrast to third-person statements “They need to be able to do ...”)
- How do we, as designers, think about designing interactive systems for disabled people?
- What might “inclusive design” mean?
- What might change the way we think?