INFO2222 Week 11 Tutorial

Structure of W11 Lab

1. Understand how to conduct a accessibility check to then write an accessibility report

2. Understand how to conduct usability testing and think aloud

3. Work on Usability assignment

   - Refine previous usability activities or
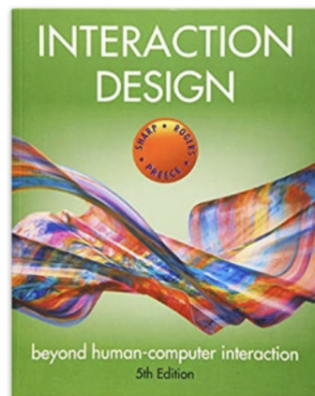   - Prototyping

1 Accessibility

1. Review WCAG

   (a) When considering WCAG (https://www.w3.org/WAI/WCAG21/quickref/) we look at the four principles that provide the foundation of Web Accessibility, POUR:
      - Perceivable
      - Operable
      - Understandable
      - Robust

   (b) To understand POUR better:
      https://www.w3.org/WAI/WCAG21/Understanding/intro#understanding-the-four-principles-of-accessi

2. Read Easy Checks – A First Review of Web accessibility `https://www.w3.org/WAI/test-evaluate/preliminary/`

3. Perform an accessibility check on the following website based on your understanding

   (a) `https://www.reddit.com/`

4. Note down conformance and any issues with the website

5. Test each website using Google Lighthouse audit tool
   `https://developers.google.com/web/tools/lighthouse`

6. Write a report comparing the results of your manual test and the automatic results from Google Lighthouse. The report must include the following:

   (a) Steps taken to generate the results

   (b) Results from the manual and automated audit (using Lighthouse tool)

   (c) Discussions of the results i.e. implication of results to different users

7. Exchange the accessibility report with another student. Review the report and answer the following questions:

(a) Does the report describe clearly how the audit is done?

- If yes, you should be able to replicate the steps based on the contents presented in the report.
- If no, list out questions that you have for the author of the report

(b) Are the results presented in a clear and coherent manner?

- If yes, you should be able to understand the outcomes of both manual and automated audit easily
- If no, highlight parts of the report that was confusing

(c) What is the author's view of the significance and/or implications of the results?

- If it is present, you should be able to extract out the significance and/or implications from the report
- If it is not present, you will need to ask the author directly

2 Usability Testing

You are going to conduct a usability test to identify if users have difficulty searching for resources and locating important information on the University of Sydney library website. There are two roles: facilitator and participant. You will each take turns playing the facilitator and participant for one task. The participant is the person testing the website while the facilitator conducts the test session.

Website: `https://library.sydney.edu.au/`

Task 1:
Open the book Interaction Design: beyond human-computer interaction by Jenny Preece.

Task 2:
Find how long can a University of Sydney student borrow a book from the library collections.

The facilitator should encourage the participant to think aloud as he/she performs the task. Take note of the time taken for your participant to complete the task. Once you are done with each task, review your observer notes and check with your participants if he/she agrees with your observation.

[Individual] Reflect on ways you can improve your facilitation skills the next time you conduct a usability test i.e. better observing, better questions, clearer instructions to the participant, etc.

3 Refine Previous Usability Activities

If you already have your prototype ready:

- Come up with task of your core functionalities

- Ask another student from another group to do think aloud on your prototype for you

- Facilitate them, note down the time they took to go through all the tasks you have listed and note down observations

- Evaluate your prototype and method of usability testing by reflecting on the result of your observation

- Iterate if needed (reminder to do at least 2 iteration).

If you have not completed any of the previous usability activities, use the remainder of lab time to work on them. Here is a guide to what you would have completed by the end of this lab

- Defined requirements for the project by having completed

- Identifying target users

- Analyzed project

- User investigation to understand user better

- Refined requirements

- Defined Information Architecture of your website by having completed

- User investigation on what layout makes sense

- Iterative designing and evaluating

- Have some understanding of how usable your website will be by having completed

- Creating prototype

- Conducting user investigation to test the usability of your website might be via your prototype

- Iterative designing and evaluating

What to expect in Week 11 and what to submit in week 11

- Week 11 demo: Demonstrate completion of functionalities by conducting usability testing, randomly picking other student as participant

- Submission: Report + code + video demonstration of core functionalities and additional features
    - 1 or 2 core functionalities implemented is enough
    - Implementing all of them and more will be considered as bonus

4 Tools for making prototypes

https://balsamiq.com/wireframes/

https://www.figma.com/