A8: Usability Study Results

Group assignment
Due: Monday, 26 March before 6:00 pm
Submit on Markus
Worth: 10% of your final grade

The most important part of the usability study is what happens to the results of the test. In this assignment you will prepare your usability testing results for sharing with "your stakeholders" to convince them that your project is on the right track and that the design is usable.

In this assignment you will **present the results from the usability testing** of your prototype.

Your Tasks

- Conduct the usability study
- Write up a report of the results from the usability testing.
- Discuss the research limitations, and share reflections on your process

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Usability Study Results Report

The results report will include images of your interface and observations of **things that worked well** in your design as well as **things that did not work so well**. Usability issues should be rated according to the **severity of their impact** on the user experience, using the scale HIGH, MEDIUM, LOW and GOOD. After you present the **observations** of what users did, (that you did not expect, e.g. '*pressed the wrong button*'), **explain** why they did this if questionnaire and/or post-study interview data allows to (e.g. *Participant said they* "did not see the intended button") and/or **hypothesize** why they did this (e.g. '*may not have understood the label on the intended button*', or '*may not have understood the mental model of the system*'), and **recommend improvements** to the system that will remove this barrier for future users.

You are encouraged to make your report as **usable** and **engaging** as possible for your audience. Use your design and presentation skills to communicate your message in the most optimal way, including **images**, **charts** and **tables**. Your report must include **user quotes**, to support your observations. You should also include **links to (3 to 5) brief** video clips (or audio clips, if video is not possible) of users interacting with and reacting to your system where relevant (e.g. as a complement of quotes for instance). **Each of these video/audio segments, should be carefully clipped, and must not exceed 1 min in length**.

Sections of your report must include:

- **Executive Summary:** includes the summary of the high level findings of your research efforts. Some stakeholders in reality may only read this brief section.
- **Research Method** you used to conduct your research (one-on-one moderated usability test, focus group, survey, card sort), how you recruited participants, tasks completed by the participants, data recorded during the sessions, all of the details of the analysis done on the data.
- **Participant Demographics summary**: number of participants, rage of ages, average age, gender distribution, roles (students, year of study), school attending, profiles and other details relevant to your topic and tasks (e.g. year of study, number of systems currently used, interested in cooking, sports, languages, music).
- **Findings & Design Implications**: what areas of your design proved to be successful, which were challenging to your users. What challenges did your participants encounter? How severe were these challenges (using Usability Severity scales: HIGH, MED, LOW, and GOOD). Any numeric calculations or scales you gathered are summarized: success rates on tasks, Software Usability Scale (SUS) scores, Net Promoter Score (NPS), average completion times (if measured and applicable). Recommendations for changes or design implications should be also covered. Demonstrate these changes showing the BEFORE and AFTER of a few (at least 3) of the key HIGH and MEDIUM severity usability issues.
- **Discussion of Research Limitations:** including quality of prototype, test execution, participants evaluated, generalizability of your findings to a larger population of users.
- **Reflections**: Discussion on how your assumptions changed as you iterated your prototypes, and your ultimate ability to solve your users' problems.
- **Appendix** can include any supplementary information (test documents, analysis work, less critical results & details) that support the key findings of the report.
- **Link to curated video/audio segments** of your test (youtube, vimeo, ...)

What to submit

Pilot study activity tracking sheet. The scan of your activity tracking sheet from pilot session in class on March 13th as a PDF document named `pilot-activity.pdf`

Usability study results report. A PDF document named `study-report.pdf`, including:

- A **title page** including your names, group name, TA name, etc…
- An **executive summary** of your high-level findings
- A **description of your research method**
- A **summary of your participant demographics**
- A **detailed report of your findings** and **implications for design** (including recommendations for changes, quotes and links to curated video/audio segments)
- A **discussion of the limitations of your research**
- Your **reflections** on the project evolution, how your assumptions changed as you progressed through the project, and your ultimate ability to solve your users' problems.
- **Appendix** including supplementary material (e.g. usability testing instruments, analysis work, details and discussion, ...)
- **Project calendar**

There is *no page limit* for this report, but recall that quantity does not equal quality. The ability to present results in a concise manner is an important skill, that will be evaluated in this assignment.

Note on the video/audio segments: links to multimedia (video / audio) should point to a **standard platform** such as YouTube or Vimeo. The curated video/audio segment should feature interesting moments from your testing (e.g.: participants "a-ha moment", or participant struggling, etc…).

How will it be graded?

Usability study pilot (evaluated during the class on March 13th):
      15% for the pilot testing (prototype, instruments, execution)

Usability study result report:
      5% for the executive summary
      5% for the description of the research method
      5% for the summary of your participant demographics
      45% for the detailed report of your findings and implications for design
      10% for the discussion of the limitations of your research
      10% for your reflections
      5% Project Calendar