

CSCC10H3: Human-Computer Interaction (HCI)

Group Project: User-Centered Design Project

Phase IV: Usability Evaluation, Final Report & Presentation

Presentation Slides Due Date: Wednesday, August 3, 2022 11:59 PM EST

Presentation Due Date: Refer to the Presentation Schedule posted on Quercus under Module (Week 9). [Aug 4, 5, 9, 10]

Final Report Due Date: Wednesday, August 10, 2022, 11:59 PM EST

Worth: 15% of your final grade.

Overview:

Each group will design a user study to evaluate their interactive prototype (Phase III) and the three tasks that the interface can accomplish. In order to evaluate your prototype, you may choose one of the following:

1. Interviews (5-7 participants – at least 30 minutes each);
2. Questionnaires (10-15 participants);
3. Focus group (5-7 participants).

Group members are not allowed to participate as participants. Please try to design and conduct your usability testing during your tutorial in the next two weeks. It is appropriate to recruit your fellow classmates if they fit your recruitment criteria. A consent form is required from each participant (use the supplied sample consent form and modify it accordingly). Please note that this consent form must only be used for the purposes of this course and the project only.

The results should be analyzed (qualitatively, quantitatively or both) and described in the final report along with limitations and future work. Each group will be required to do a 10 minute presentation highlighting all the Project Phases (including **completed** Phase 4) during the tutorial (refer to the Presentation Schedule posted on Quercus) and submit the final report by the deadline stated above.

What to submit:

- A final report should meet conference submission standards (i.e., CHI papers) - minimum 7 pages and maximum 10 pages (excluding appendices):

1. Sections to include: Abstract, Introduction, Literature Review, Problem Statement/Research Question, Gathering of User Requirements, Prototype, Usability Study, Results from Data Analysis, Limitations, Future Work and References.
 - **Abstract:** refer to CHI papers
 - **Introduction, Literature Review, Problem Statement/research question, Gathering of User Requirement and Prototype** – You have already done this as part of previous phases of your project. However, you need to present these in a concise and organized fashion.
 - **Usability Study:** describe which method was chosen and why. Provide details about the design of your usability study and the environment in which the study was conducted. Describe the tasks that were evaluated and how.
 - **Results:** analyze the results from the usability study and present your findings including the number of participants. You can use tables and charts to describe your findings and explain it in this section.
 - **Limitations:** describe any limitations of the study.
 - **Future Work** section should include the improvements you would make to your prototype based on the results from the usability study. You do not need to implement the improvements but you must state all improvements based on your findings from the usability study. In addition, please describe further work that can be accomplished in a broader level (*for example, further studies can be conducted to examine the new interface's usage on small screen devices*).
 - **References** in APA format.
2. As appendices, include the artifacts used to conduct the usability evaluation (sample informed consent, sample interview questions, questionnaires, focus group questions, along with your notes from all interview sessions, your notes from focus groups – **ensure participant's names or identifiers are not included**).
 - A 10 minute presentation (all members of the team must be present). The focus of the presentation should be on your proposed solution – state the problems first and how you solved it. Make sure to cover all aspects of the design from user gathering to prototyping to usability testing and the final results. All groups must send their presentation slides as a PDF and PPT to the Instructor and their TA via email by August 3, 11:59 PM EST.

Submission Instructions:

Please submit a single PDF file on Quercus with the following naming convention: “P4.[your group name].pdf (*for example, “P4.UXExperts.pdf”*). Only one electronic submission is required from each group.

Grading Rubric:

Components	Marks
1. <u>Project Presentation;</u> <ul style="list-style-type: none">- Duration 10 min (marks will be deducted for going over 10 minutes).- All members of the team must be present – all members of the team do not need to present but they must be present to answer questions. There are marks associated to the question/answer period.- Clarity in the explanation of the new idea/problem and a high-level overview and results from all the phases of your project.	30
2. <u>Final Report</u> <ul style="list-style-type: none">- CHI Conference Style Paper format & presentation (min 7 and max 10 pages) (10)- Adequate details for each section (50)- Appendices (10)	70
<u>Total</u>	100

Sample Informed Consent Form:

Usability Study – Informed Consent Form

Title: <Title of Study>

Investigators: <Insert Names of Investigators>

I _____ hereby consent to participate in a usability study conducted by the Investigators (listed above) as part of a Summer 2022 project for **CSCC10, Human-Computer Interaction**, a course offered by the Department of Computer & Mathematical Sciences at the University of Toronto Scarborough.

I **agree** to participate in this study and the purpose of this study is <description of the purpose of the study>.

I **understand** that:

- The procedures to be used are <description of your procedures>.
- The risks incurred by participating are <description of potential risks>.
- I will receive no compensation for my participation.
- I am free to withdraw at any time during the study without the need to give any explanation or penalty.
- All materials and results will be kept confidential, and, in particular, that my name and any identifying or identified information will not be associated with the data.
- I can contact the course instructor, Naureen Nizam (nnizam@cs.toronto.edu) with any questions or concerns.

PARTICIPANT

Name (please print) _____

Signature _____

Date: _____

INVESTIGATOR(s)

Name _____

Signature _____

Date: _____