

Department of Computer Science and Engineering

College of Engineering, University of Nevada, Reno

## CS 791 Special Topics in Computer Science: Human-Computer Interaction

### Project #2

#### Experimental Setup

Tuesday November 6, 2016

<b>Due:</b>	Monday, November 19, 2018 at 11:59 pm (by email) Single PDF file, named <a href="#">P2_Team_X.pdf</a>
<b>Points:</b>	100
<b>Weight in course grade:</b>	8%

In the previous project part (P1) you have decided on an HCI project topic for this class, amenable to *an experimental user study*. Recall that the proposed project will be the basis of the course paper in CS 791 HCI. Now, you need to plan the *methodology* that you will be used in your project experiments. For this purpose, write a project document (P2) with the following contents:

**Cover page:** university, department, course, project title, project part, team #, authors, instructor, date

**I. Introduction** (between 250 and 500 words): Explain what your project is about, why it is a relevant HCI project, why are you interested in it, who would benefit from the results of your planned work, and what are the goals and/or the research questions that your planned related experiment will try to reach/answer.

**II. Methodology** (at least 500 words—for Team of 3, at least 750 words). Indicate the following:

- **Participants** – Indicate who will be the participants in your study, how many, how and from where you will recruit them, and what characteristics you expect them to have (or are you interested in); also, provide any other relevant details regarding the participants in your study;
- **Apparatus** – Describe the system that you plan to use in your study: hardware, software, and other materials. Include here representative snapshots of the equipment and the software that you plan to use. Provide references as appropriate. Include details of workspaces, room(s) and/or other location(s) used.
- **Procedure** – Explain how each participant will take part in the experiment (describe the steps of the experiment, from the moment the participant arrives until he or she leaves). Indicate all elements involved, such as instructions, pilot demos, training, practice, entry questionnaire, exit questionnaire, and so on (see more details in Chapter 5). Provide here the initial drafts of the entry and exit questionnaires – these are particularly important as they will be the basis for your qualitative evaluations.

- **Tasks** – Describe the tasks that the users will perform as part of your experiment, and what measurements will be made, using what metrics. [Note: if you prefer, you can include this subsection after the following one, Design].
- **Design** – Provide a summary of the experiment in terms of variables (independent, dependent, and, if considered, control, random, and confounding), conditions, type of evaluation (within-subjects or between-subjects) and, if applicable, details of counterbalancing. Conclude with a big-picture summary such as the one on slide 25 of Chapter 8 presentation.

### **III. [Optional: Additional Information]**

- Optionally, include here any other information relevant to your planned experiments.

**Note:** it is recommended that you check IRB requirements for user study approval, and include here details of elements not captured in sections 1 and 2 above.

### **References**

- At least 5 references are required, but more is better. For the Team of 3 students: 8 references are required.

*Send the project concept as a single PDF file to the instructor by email at [dascalus@cse.unr.edu](mailto:dascalus@cse.unr.edu)*