ISTE-260: Designing for the User Experience, Exercise 6: Usability Testing

Exercise 6 consists of two parts. Part 1 is the work that your team must do to plan and conduct a usability test in class (see dates on syllabus). Part 2 is a report that your team will submit. Of course, the instructor will only grade the report that you submit, but the level of preparation effort you do before the Usability Test will likely affect the quality of your results.

Preparing for Your Usability Test (GROUP):

o Design and administer a test to assess the usability of your product UI. Ideally, you should test how well/poorly users are able to perform the critical tasks that are more important to your design. So, your team may want to begin by identifying what these critical tasks are. However, if any of these tasks is so straightforward that you feel nothing significant can be learned from observing how users perform it, test a different task. Or if you feel it's more appropriate, instead of task testing, you could interview your subjects about key aspects of the UI: its look, feel, clarity, usability, etc. **Regardless of the questions you ask, you will still need a prototype to show the participants.**

o Test *at least* **four people (or pairs of people) per day**. Tests should take a *maximum* of 10 minutes, so you can fit in the required five tests within the class time. However, you want the tests to be meaningful, so they should last no less than 5 minutes each. To save time, your team should practice conducting the study so that everything is ready.

o Record the necessary observations, including both **quantitative** and **qualitative** data. This includes timing, counting clicks, post-test interviews and questionnaires, etc. Establish acceptance criteria for your tests, so you know if your test is successful or not. It's a good idea to choose specific tasks, and time each user as they go through each. You should probably have a stopwatch (or a stop-watch app) to help you time things.

o Have a standard script for each user, as well as a customized **consent form.** Your script should include both introductory and follow-up information, including interview questions for your users to get any feedback they might have or thoughts on specific areas of interest in your interface.

o Make sure to fill out a **Usability Test Data Sheet** for each test subject. (You should design this sheet for your experiment.) This sheet should be designed to capture the information that is relevant to your specific tasks and tests, and needs to be planned ahead of time. Taking notes on each test is important, but just doing so in a haphazard fashion can lead to problems not too far down the road.

o You will need some sort of **"working" prototype** for your tests. This can be quite primitive, in between a mockup and real prototype. All of these are acceptable: paper prototypes, web pages (static or interactive), flash programs, something produced using a prototyping tool (e.g., Axure, Balsamiq, etc.) You can use one prototype for all tests in your group, or specific prototypes for specific tests. Use whatever works for you.

Day 1 of Testing:
- o For the usability tests, designate one group member as the test administrator, and a **different** group member as the observer (who carefully watches users, without interfering, to gather as much observational data as possible). The rest of your team will be test **takers** for other teams. You should collect data from four participants on Day 1.

- o If some members of your team use ASL interpreters, then please email the instructor during the week before the Usability Test. We will need to make a plan for the ASL interpretation logistics for the day so that everything goes smoothly.

Day 2 of Testing:
- o On Day 2 of testing, your team members will exchange roles: The test takers from Day 1 will serve as the administrator and observer for Day 2. The administrator and observer from Day 1 will be test takers during Day 2. You should collect data from four participants on Day 2.

- o Your team is also allowed to modify details of your experiment, if you believe that something about your script or questions was unclear during Day 1 of the testing.

Document to Submit:

For a sample of how to structure your report, **refer to the example report** on myCourses. The document should summarize your usability test. Discuss your prototype, testing procedure, and what you learned from each test. You should attach unsigned copies of your customized **consent forms**, and you should attach a (blank) copy of your **Usability Test Data Sheet**.

Your group should upload the document to your group folder on dropbox on myCourses.
- - Your team should submit ONE file. It should be a single, cohesive document, with consistent formatting throughout. Please submit the written assignment as a MS Word, Adobe PDF, or PowerPoint.
- - Please name the file: Exercise6_*GroupName.pdf*
- - **Line Spacing** (3 points): 1.15 - 1.2
- - **Font**: 10-11 point Arial, Calibri or Times (3 points)
- - **Margins**: 1 inch
- - Your writing should be grammatical, clear, and persuasive, as would be expected of students in university level courses. Text that is difficult to understand will receive lower grades.
- - Compress your pictures before you submit your document so that the size of your submitted file is not too large. Additional details for how to accomplish this have been included in prior homework assignments.

Note about Plagiarism: This is a group assignment. It is OK to share your work with your team members, but you should not share your work with other teams.