User Experiments

Spencer Smith
McMaster University, Canada
smiths@mcmaster.ca

Jacques Carette
McMaster University, Canada
carette@mcmaster.ca

Olu Owojaiye
McMaster University, Canada
owojaiyo@mcmaster.ca

Peter Michalski
McMaster University, Canada
michap@mcmaster.ca

Ao Dong
McMaster University, Canada
donga9@mcmaster.ca

1 User Experiments

1.1 Usability Experimental Procedure

1.2 Procedure

1. Survey participants to collect pre-experiment data
2. Participants perform tasks
3. Observe the study subjects (take notes, record sessions(OBS screen recorder), watch out for body languages and verbal cues)
4. Survey the study subjects to collect feedback (post experiment interview)
5. Prepare experiment report
6. Perform pairwise comparison analysis
7. Prepare analysis report

1.3 Task selection criteria

**The task selection will be determined with the aid of the domain experts attached to any of the selected projects.
**The domain experts will be asked to consider the below criteria when defining a task.
**Domain experts will also be asked to identify what background knowledge is necessary for the suggested tasks - Novice, Intermediate, Advanced
1. Collectively all tasks should not take no more than 2 hours.
2. Selected tasks should reflect common use cases of the software.
3. Include tasks that require a set of sequential or hierarchical steps to be completed

1.4 Usability Questionnaire

Two sources of standardized usability questionnaire we could use.
   - https://www.usabilitest.com/sus-pdf-generator- 20-29 - SUS.
- https://uiuxtrend.com/pssuq-post-study-system-usability-questionnaire/ - PSSUQ

References