

Usability Testing: Role Playing as an Illustration

Presented by your loyal 318F TA's Shen and Mike

Defining experimental tasks
Recording stuff
Identifying problems → changes
Leading to A6

Role playing usability test

- Before we start, we have to do our homework first:
 - Ethics approval
 - Preparation of experimental setup
 - Decide how to record information
 - Think of analysis methods

Ethics approval

- Must submit research proposal for review by an ethics committee before work can start!
- Minimum standards to be met (UofT):
<http://www.nserc.ca/programs/ethics/english>
- Guidelines for the Use of Human Subjects:
<http://www.library.utoronto.ca/rir/tblconhu.html>

Experimental tasks

- Reflections computer game
 - What is being tested (and not tested)?
 - Effectiveness of user interface
 - grid, drag/drop, occluded pieces, etc...
- Start/end state of freeform exploration
 - Start: Level 1
 - End: 7 minutes
- Start/end state of various experimental tasks
 - Start: ...
 - End: ...

Recording stuff, analysis prep

- Questionnaires and evaluation surveys
- Data collection via audio/video/keystroke capture
- Observations and note-taking
- Think of how you will be analyzing your data!

Reflections Laser Game: A Usability Test

- <http://www.input-entertainment.de/laser/laser.html>
- Actors in the Scene
 - 1 Experimenter, 2 Observers, 2 Participants
- Director, Audience
 - Director can call "FREEZE" any time (actors stop moving)
 - Director can pose a question
 - Director can point out something
 - Audience can call "FREEZE" no more than *once a minute*
 - Caller asks a question

[Call for participation]

- Looking for volunteers!
 - What if experimenter knows participants personally?
 - What about participants' backgrounds?
- Need 4 participants...
 - ...who want to use a fun computer system
 - ...who want to contribute to the goodness of Computer Science
 - ...who don't mind bonus participation marks

[Blank space on purpose]

[Inspecting and analyzing data]

- Identify problems
- Recommend interface changes

[What have we done?!]

- Methods to evaluate Usefulness + Usability:
 - Empirical:
 - controlled experiments, field studies
 - freeform exploration/interview, experimental tasks
 - think aloud, co-discovery learning
 - Analytical:
 - claim analysis, usability inspection, user models
- Methodology is important, but so is *what you have learned at the end*

[Did you read A6 yet?]

- You will use your prototypes in:
 - 2 usability tests
 - Free-form exploration, experimental tasks
 - 2 usefulness examinations
 - Free-form interview, examining user models
- Flexibility in procedures, but explain why!
- Describe what you Do and what you Discover

[Wrapping it up]

- Usability and usefulness
- Designing and conducting a study
- Illustrating a usability test
- Results → changes to interface
- Relating to A6
- “FREEZE! Questions?”