User testing
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Questions at the outset

• What do you want or need to know?

• How will you use the results?
How can we measure usability?

"Without" users
- Cognitive walkthrough
- Nielsen’s Heuristics
- Action/Log analysis
- Surveys

With users
- Direct observations
- Think aloud
- Surveys
- Interviews

What will you measure?

• What will give you information about the usability of an interface?

Quantitative metrics

• Time to learn to use a feature
• Time to complete a specific task
• Use of features (or not)
• Errors – how many, where, when
• User satisfaction – Likert scale, SUS

Three point Likert scale

Image source: http://www.useit.com/jakob/
A quick word about surveys

• Fast, useful, A LOT of data
• But! This depends on the questions...
• What are you really asking?
• Will the information be useful?

Qualitative metrics

• What does the user say?
• What is their first reaction/impression?
• How would they describe the interface?
• How do they imagine using the interface?
• Is the user happy? sad? frustrated?

Helping you out

• Let’s think about usability tests for your class projects

Ok, we know what we want. How does the test happen?
The ingredients

- Experimenters/Observers
- Participants/Users
- The Artifact(s) [i.e. your design]
- Tasks, scripts, questions

Experimenters/Observers

- At least two testers
- Facilitator: run the show
- Observer(s): record what happens, try to be unobtrusive

Participants/Users

- How many?
- People’s time is valuable—including yours
- Diminishing returns (especially at an exploratory, prototyping stage)

Quick reminder

- What does it feel like to be a participant in a study?
- What are some of the issues related to recruiting and using participants?
Tasks

Depend on where you are at in the design process

• Are you just beginning and want feedback on your ideas?
• Have you done the legwork and mocked up an interactive interface?

Tasks –cont.

• Directness of tasks depends on goal

• How long should tasks be?
  – (hint: Pilot!!)

• How long is the test/how many tasks?
  – (hint: Pilot!!)

Script

• Your roadmap

• Really, really, really important!

• Why?

• How do you write a script?
Think Aloud

• The user thinks aloud about what [s]he is doing, thinking, feeling...

• A little unnatural, may need reminders

• Super-useful “inside the head” data
  – Finds pain points
  – Complements and explains observations

Main ideas

• Plan
• Recruit
• Observe, ask questions
• Summarize
• Act

Tools and tricks o’ the trade

• Paper, pen [!]
• Other recording devices
  • camera, audio, video…
• SUS: www.usabilitynet.org/trump/documents/Suschapt.doc
• Kuniavsky’s site: www.orangecone.com
• Nielsen’s site: www.useit.com
• www.usability.gov
• Krug’s site: www.sensible.com