

# Usability Testing Tutorial Details

Director: Mike

Class: as themselves

Experimenter: Shen

Participants: 2 observers, 2 participants

Overview:

- Intro and context of usability and usefulness (A4)
- Slides to introduce topic
- Get 4 volunteers
- Consent form is handed out
- Role playing
- Think about evaluating data and results
- Propose changes to interface
- Discussion of A4

## EXPERIMENTER

Experimenter's script (for 2 observers):

- Experimenter describes to observers what they are looking to take notes on
  - the other will be looking at user interface issues
  - one will be looking at multiple mouse usage

Experimenter's script (for 2 participants):

- two participants in the study
- participants given consent form to sign
- the participants play Reflections on a laptop, each using a diff mouse
  - goal is to look at how we can improve the application [freeze (\*)]
  - explain anonymity preserved
  - explain that they can leave any time
  - interested in their thoughts relevant to system, encourage them to discuss with each other [freeze (\*\*)]
  - explain that system is being tested, not participants
  - **explain very roughly** introduction to system
    - goal: light up all the light bulbs by passing a single laser light beam through them
    - can manipulate the path of light using mirrors
  - explain that they will play for 15 minutes
  - when can participants ask for help? they are discouraged from asking questions regarding the application to the experimenter

Experimenter asks questions to participants after experiment is done

## DIRECTOR

FREEZE rule. Director can call FREEZE at any time (audience can call a FREEZE too).  
When FREEZE is called, all actors stop moving.

- class can ask a question to Director or Experimenter
- director can pose a question to Class
- director can talk briefly about one of the Director's notes

Director's notes:

- ethics (participant consent form)
  - 1) Study purpose
  - 2) Anonymity/confidentiality
  - 3) Can leave anytime you like
- (Q) Why is video is touchy issue?  
(A) What if you had an internal video of Dr. Baecker not being able to figure out how to use MSWord? May affect his reputation!
- experimenter has prepared thoroughly (script, all software tested)
- demonstrate think aloud process, using simple banana as example → then extend this to co-discovery learning
- during experiment
  - if participants are quiet, experimenter encourages them to talk (this is more effective for one person think aloud protocol)
  - when user asks a question to experimenter, experimenter tries to get them to talk ("Well, can you describe what you think is going on first?")
  - interruptions are bad, but we have this FREEZE mechanism just for this tutorial
  - (\*) note that experimenter doesn't talk about the exact factors → bias
- after experiment, ask questions to Observers
  - (Q) What is difficult to carry out or record?
  - (Q) How can the recording be improved with other techniques?
  - (Q) What are the advantages of each technique?