CIS 443/543 User Interfaces  
Fall 2006  
Exercise #2 Usability Evaluation

Due: Monday, October 16 at 10:00am

The purpose of this exercise is to understand how to evaluate the usability of software by fairly informal testing of real people doing real tasks. This has two phases: analysis—finding problems—and synthesis—solving them.

Procedure:
Find another person in the class to work with for this assignment. One of you will be the “tester” and the other the “observer”. You might find it useful to audio or videotape the session.

Decide who will be the tester and who the observer.

By October 10, the observer will contact by email Professor Douglas (douglas@cs.uoregon.edu) who will give instructions on what software and tasks to do.

During the testing session:
1) Learn the software. The observer briefly explains how the software works and demonstrates the software. The learner also explores and practices. No user's manuals are available. The observer takes notes. How much time did the tester spend learning? What are the learning problems due to design? Other problems?
2) Do real-life tasks. The tester will then do several tasks. The observer takes notes. How much time does it take to do each task? What are the usability problems due to design?
3) Critique the system: Ranking. Using a ranking from 0 (terrible) to 5 (excellent), the tester evaluates the system compared to other software she/he has used, in terms of these performance measures: functionality, learnability, quality of output, errors, performance time, acceptability, enjoyableness, fatigue. What is this rating? Explain?
4) Critique the system: Explanation. At the end of the session, the observer should ask the tester several questions about what problems he/she experienced and why. These are usually a follow-up to sections 1-3 above. What problems did the user experience and why?
5) Improve the systems. Using the problems discovered in sections 1-4 and your observations in general, both the observer and the tester should answer this question. What would you do to change the interface to make it more learnable and usable? Try to make general recommendations about the overall design as well as specific recommendations that address the problems you documented in sections 1 & 2.

Please write a report (3-5 pages) answering the questions above. Your analysis and recommendations will be aided by conceptualizing the problems in terms of categories such as functionality, control, feedback and context (See Lecture #2, slide 21.) Turn in your work and keep a copy for discussion in class.