

CS774 HCI
Week 2, January 26th – Modeling in HCI

Objectives:

- Continue with the modeling and psychology of HCI design
- Review potential projects for semester

Class outline:

- I. Review homework questions and finish intro to HCI
- II. Discuss interesting and potential projects for semester, including
 - introductory computer science applets
 - image registration, manual and automatic
 - robotic surgery
- III. Continue with modeling issues in HCI
 - High level, explanatory models (taxonomies)
 - Lower level, predictive models

Readings:

Shneiderman, Chapter 2, pages ; Chapter 10, pages 352-369
Norman, Chapters 3 and 4, pages 54-104; Chapter 5, pages 105-140
KLM paper by Kieras; review Druin report
Note: Last week the pages in Chapter 2 were to be 52-74, not 2-32.

Written homework:

1. Write up a short discussion of one design and one usability project that would interest you this semester. A project near and dear to you would be excellent.
2. The Loyola Blackboard system will let you send email to the instructor or other students. First, send me email via the system. Then, do a KLM analysis of what it took to send me email. What specific operations did you have to do to perform this task? List them, assign timings and give an estimate.
3. Find three doors (or similar common devices with a basic control) and figure out if they work well. Are the affordances consistent with the action of the door or device?
4. Take a common electronic device in your life, such as a TV. We all use TVs and have a basic mental model – on/off, channel up/down, sound up/down, mute. Write down your mental model of the device – what you understand to be its states and operations. Then play with it to see what you might have overlooked. How does your mental model relate to the actual operation of the device? (There's an object oriented class hierarchy concept lurking here ...)