ICS 105:
Project in HCI

Paper Prototyping

paper prototypes

- early engagement with users
  - the earlier the better… head off problems
  - better to engage before you even start!
  - minimise wasted development effort
- paper prototyping
  - user engagement with interface mock-ups
  - paper isn't interactive, so you have to be

preparation

- four things before you start
  - gather kindergarden supplies
    - heavy paper, index cards, tape, pens & markers, scissors
    - you'll need these *during* the session
  - a well worked-out design
    - you can't test what you haven't designed
    - you need a *detailed* understanding
  - a set of questions
    - what is your evaluation meant to determine?
  - a set of tasks
    - write these down
      - ensure that all users have the same starting-point

paper prototypes

- three parts to the model
  - the fixed components
    - the window frame, etc
  - the variable components
    - major components that will occur regularly
      - screens, dialog boxes, menus
  - the dynamic components
    - things based entirely on individual interaction
      - generated on the fly… so you need "blanks"

conducting the session

- the session
  - introduction
    - give some general background to the expected setting
    - introduce the task
      - again, do this IN WRITING

paper prototyping

- four roles
  - one person to facilitate
    - interact with the user -- *ONLY PERSON WHO SPEAKS!*
    - keep getting "output" from the user -- avoid pauses
      - "what are you thinking now?"
      - "what do you need to do next?"
  - one person to "be the interface"
    - respond to user input
    - simulate application logic

paper prototyping

- four roles
  - one person to manage resources
    - keeping interaction smooth is key
    - supply the person who's "being the interface"
      - manage existing resources
      - generate new ones
        » input boxes, dialogs, menus, etc
  - one (or more) people to take notes
    - what the subject says
    - what the subject does
    - this is CRITICAL
      - what's the point of doing this if you can't learn from it?
      - the other people are too busy
      - most of what you learn, you learn in retrospect

conducting the session

- remember:
  - you're there to OBSERVE and LEARN
  - not to
    - laugh (this most of all!)
    - comment
    - criticise
    - guide
    - inform

important considerations

- other things to remember
  - you need to REALLY know your interface
    - can't go into this with a partial understanding
    - know what happens for every possible mouse-click
  - you can always generate new interface components
    - remember that paper can be layered…
  - figure out where precision is needed and where not
  - when "being" the interface, be no more or less
    - no extra hints
    - respond to what the user does, not what they SHOULD do

plan for tuesday

- we have 80 minutes
  - two blocks of 40 minutes
    - in each block, four teams test their interfaces
      - members of other teams are test subjects
    - ten minutes (max) per subject
      - five-six minutes is a better target
- need to be prompt!
  - we'll need all our time
- watch your email
  - may try to line up a better room to use

meantime…

- design plans?

next…

- Tuesday is paper prototyping
- After that, I want an interim report
  - three things
    - your design
    - paper prototyping experience
    - reflection and any design changes
  - around 5-10 pages (15 max)
    - say, one page per test subject, plus a couple of design outline and a couple of redesign considerations
  - show me *the alternatives you considered*
  - due in my email following Tuesday