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 physical interface mock-ups
    - paper, card, post-it notes, etc
  - paper isn’t interactive, so you have to be

preparation

- four things before you start
  - gather kindergarten supplies
    - heavy paper, index cards, tape, pens & markers, scissors
    - you’ll need these during the session
      - not just beforehand
      - creating extra dialogs, etc
  - a well worked-out design
    - you can’t test what you haven’t designed
    - you need a detailed understanding
      - need to know how the system will respond to all input
      - define your expectations in advance
      - know what error checking you will do
- a set of questions that the test should answer
  - what is your evaluation meant to determine?
  - how are you going to figure it out?
  - what kind of evidence are you looking for?
  - bring a page on this to class, and hand it in
  - describe the design and what you are testing
- a set of tasks for test subjects to perform
  - write these down
  - ensure that all users have the same starting-point

- 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”
conducted 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 “be 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

conducted the session

- as a test team, remember:
  - you’re there to OBSERVE and LEARN
  - not to
    - laugh (this most of all!)
    - comment
    - criticise
    - guide
    - inform

- as a test subject, remember:
  - what would you actually do?
    - press return? hit a button? give up and go watch TV?
    - remember the context in which you’d use the system
      - not normally in a class or a test lab
  - help out the testers
    - talk through your thoughts and expectations
**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
  - depends on your questions
  - 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 test session (5/4)**

- 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

**meantime**

- I’m away next week
- group meetings with Alex
  - Friday, Tuesday, Thursday
  - I’m also sending comments from Tuesday
- working on designs
  - need to get specific
    - about the system, about the users, about the tasks

**next...**

- Tuesday 5/4 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