Introduction & Course Overview

CSE 441 – Advanced HCI

Prof. James A. Landay
University of Washington
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Outline

• Who are we?
• Course overview & schedule
• Introductions
• Teams

Who are we?

• James Landay
  – Associate Professor in CSE at the University of Washington
  – formerly professor in EECS at UC Berkeley
  – spent 3 years as Director of Intel Research Seattle (ubicomp lab)
  – Ph.D. in CS from Carnegie Mellon ’96
  – HCI w/ focus on informal input (pens, speech, etc.),
    Web design (tools, patterns, etc.), & Ubiquitous Computing
  – founded NetRaker, leader in Web experience management
  – now subsidiary of KeyNote Systems
  – Co-authored The Design of Sites with D. van Duyne & J. Hong

• Susumu Harada
  – Ph.D. student in CSE
  – BS in Computer Science from Carnegie Mellon
  – MS in Computer Science from Stanford
  – HCI w/ focus on assistive technology, specifically speech input

How to Design and Build UIs

• UI Development process
• Usability goals
• User-centered design
• Task analysis & contextual inquiry
• Rapid prototyping
• Evaluation
• Programming

Goals of the Course

1) Learn to prototype, evaluate, & build UIs
   – the needs & tasks of prospective users
   – cognitive/perceptual constraints that affect design
   – technology & techniques used to prototype UIs
   – techniques for evaluating a user interface design
   – importance of iterative design for usability
   – how to work together on a team project
   – communicate your results to a group
      • key to your future success

2) Understand where technology is going & what UIs of the future might be like

Iteration

At every stage!

Design
Prototype
Evaluate
**Course Format**

- Quarter long project & individual homeworks
- Interactive lectures on Tuesdays
- Studio like design critiques on Thursday
- Monday discussion/“studio” for project work w/ teaching staff (start next week)
- Readings
  - All material is (will be) online
    - slides, exercises, readings, schedule
  - http://www.cs.washington.edu/cse441

Have fun & participate! Small for a reason

**Project Description**

- We will continue work on projects from CSE440
  - we will give you a list to choose from
- Groups
  - 4 students to a group
  - groups meet with teaching staff every 2 weeks
    - Susumu will help schedule these meetings
  - industrial mentors will also meet with teams
- Cumulative
  - apply several HCI methods to a single interface

**Project Process Overview**

- Heuristic Evaluation of current design
- Medium-fi Prototype (using tools) #2
- Online Usability Study
- Interactive Prototype #1 (code)
- Usability Study
- Interactive Prototype #2 (code)
- Final presentations & project fair with industry guests

**Administrivia**

- Roll
- James’ office hours
  - Mon, 10-11 AM (642 Allen Center)
  - TBD online (send Susumu preferred IM IDs)
  - email last name at cs.washington.edu for appointments at other times
- Susumu Harada’s office hours
  - Thurs., 4:30-5:30 PM (220 Allen Center)
  - email last name at cs.washington.edu

**Books**

- Universal Principles of Design by Lidwell, Holden, & Butler
  - I’ll give you copies of the 5-7 chapters we will use
- We will also hand out other papers, give you web links, & refer to slides
- Other recommended refs on web page
Assignments

- Individual
  - 1 written + 6 short studio tasks + one talk
- Group
  - 7 written assignments
    - 3 group presentation/demos with the write-ups
  - all work handed in on Web (group & individual web site)

Grading A Combination Of

- Midterm (20%) [no final exam]
- Individual assignments (25%)
- Group project (45%)
  - demos/presentation (group component)
  - project write-ups and exercises
  - ratings given by other team members & class
- In class participation (10%)

Tidbits

- Late Policy
  - no lates on group assignments
  - individual assignments lose one letter grade/day
- Cheating policy
  - will get you an F in the course
  - more than once can get you dismissed
- More information (syllabus/schedule/slides)
  - http://www.cs.washington.edu/cse441

Introductions

- Name
- Major
- What you want to get out of the class

Teams

- Start with prior top projects in 440/490L
- Give me your preferences & we assign
  - try to balance skills, etc.
  - teams of 3-5
- Proposed projects
  - GreenBean (CSE 440, Autumn 2008)
  - Step Intuit (CSE 440, Autumn 2008)
  - ParkSmart (CSE 440, Autumn 2008)
  - MyTransTracker (CSE 440, Autumn 2008)
  - Swickr (CSE 490L, Spring 2008)
  - Radr (CSE 490L, Spring 2008)
  - TripMe (CSE 440, Autumn 2007)

Summary

- Thursday
  - Studio assignment #1 – Gestalt Principles
  - Read Gestalt Principles from Universal Principles of Design
  - Turn in online to Susumu so we can access from web directory
    - should all have CSE accounts