CSE 441: Advanced HCI
User Interface Design, Prototyping, and Evaluation

Course Overview

James Fogarty
Daniel Epstein
King Xia

March 31, 2015
Class Logistics

“Lecture”: Tuesday 10:00-11:50am, MGH 284
Actually class meetings and presentations

“Lab”: Thursday 10:00-11:50am, MGH 284
Actually scheduled group meetings with staff

Class Website:
http://www.cs.washington.edu/441

Contact:
cse441-instr@cs.washington.edu
Understanding a Capstone

Traditional courses mix:
- Lecture
- Project
- Assignments
- Exam

Our role is to prepare and present structured material.

Capstone is entirely about your project:
- Pitch
- Milestones
- Proposal
- Presentation
- Documentation
- Evaluation

Our role is to facilitate, critique, and advise in your independent work.

Waiting for the answer is the wrong approach.
Projects

Industry-Like Experience

Group of 3 or 4 students with mixed skills
You drive much of the direction and agenda
Report to and receive advice from course staff

High-Fidelity Interactive Prototype

More than just a design, an interactive prototype
Mostly or entirely in software, due to constraints

Intended to be demanding, but fun and rewarding
Benefits of this Approach

Project Experience

Learn to work on a project end-to-end
Project for your resume
Experiences and skills not in traditional courses

Project Environment

Demanding “CEO”, “board”, “manager”, “investor”
Ill-defined requirements
Emphasis on exploration, iterative prototyping
Need for documentation, selling idea and results
About Me

James Fogarty

BS, Virginia Tech, 2000
PhD, Carnegie Mellon, 2006
Joined UW CSE, 2006

Industrial Stints

IBM, 2000
IBM Research, 2003
Microsoft Research, 2007
About Me

Cross-Campus HCI Efforts

DUB
MHCID

Teaching

CSE 332: Data Structures
CSE 440: Introduction to HCI
CSE 441: Advanced HCI
CSE 510: Advanced Topics in HCI
CSEP 510: Human-Computer Interaction
About Me

Computing

You
About Us

Daniel Epstein

King Xia
### About Your Classmates

<table>
<thead>
<tr>
<th>Name</th>
<th>Majors</th>
<th>Experience / Background</th>
<th>Relevant Skills</th>
<th>Special Application Knowledge</th>
<th>Desired Growth Opportunities</th>
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<tbody>
<tr>
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<td>HCI / User Research / Design / Implementation</td>
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<td>440 Project / Other Relevant Experience</td>
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Write it down, then a few minutes to introduce
Project Nature and Scope

“Students will propose, design, and develop a high-fidelity interactive prototype. The definition of “high-fidelity interactive prototype” will be negotiated with each group according to the nature of their project. For example, a group delivering a mobile application or website will be expected to provide a complete interactive experience. But the prototype of that experience might be unlikely to scale in a large deployment, or might be limited in some other regard.”
Project Nature and Scope

“It is appropriate, but not required, to choose to pitch proposals based on prior CSE 440 projects”

“We welcome proposals based on any idea that has previously been explored and developed at a similar level of depth. But the demands of this course are too high for starting from scratch. You need an initial high-quality understanding of your problem and directions for your design.”
Project Evaluation

Project scope
e.g., setting sufficiently ambitious milestones

Project results
e.g., achieving milestones, employing appropriate methods to yield good results, deliverables

Project commitment
e.g., appropriate weekly reports, high effort, peer evaluation

Combination of Peer and Staff Evaluation
Project Process

Pitch Session on Tuesday April 7

Pairs of students pitch ideas (± 1 student as needed)
3 to 5 minutes, plus time for questions / discussion
Slides recommended, but this is still early

Sell us that it is an interesting, tractable project

Extensive feedback opportunities before then
Tuesday / Wednesday bidding and team formation
Project Process

Proposal Session on Tuesday April 14

Teams present detailed proposal and milestones
5 to 10 minutes, plus time for questions / discussion
Slides required, idea and plan are clear

Present plan for an interesting, tractable project

Written proposal due based on feedback in class
Project Process

Weekly Stand Ups or Presentations

Three milestone presentations
Formal presentation of progress

Three standups
Informal update

Maintained Project Website

Project info and documents
Weekly lab notebook updates
Document everything (e.g., pictures, videos, notes)
Website Publishing

All website content submitted via GitHub

https://github.com/uwcse441/web-cse441-sp15

Submit pull requests with your content

Keep your content with a project directory
Course website is a Jekyll site, but you probably should not attempt to integrate with it

Non-project pull requests done separately
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