EECS 394
SOFTWARE DEVELOPMENT

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Agile UXD
Wireframes, mockups and prototypes, oh my!

- Not to mention proofs of concept and demos
- Evolutionary view:
  - non-working wireframe sketches
  - evolve into non-working fleshed out mockups
  - evolve into interactive but not real demos
  - evolve into running proofs of concept
  - evolve into testable working prototypes
- But prototype can also mean
  - an interactive mockup
  - or even a low fidelity paper simulation
WIREFRAMES, MOCKUPS AND PROTOTYPES, OH MY!

Purpose: internal communication

The real difference is purpose, not content or structure.

Purpose: external validation

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Wireframes

- Sketchy
- All about functionality not form
- Built with pencil and paper, Powerpoint, wireframing tool, e.g.,
  - http://www.cssgalleries.com/the-big-list-of-wireframe-software/
Mockups

- Visual look and feel
- Color palette, guiding metaphors and themes
- Built with HTML, Powerpoint, Photoshop, ...
**Prototypes**

- Interactive enough to support user stories.
- Lab-testable but not a marketable
- Some tools, many based on wireframes
  - [http://www.uxforthemasses.com/rapid-prototyping/](http://www.uxforthemasses.com/rapid-prototyping/)
Minimum Viable Products

- Slices of product functionality
- Marketable or at least beta (non-lab) testable
- Supports one or more complete scenarios
PITFALLS

- Wireframes provide a needed UI overview but also
  - encourage premature UI design
  - lead to overly complex initial UIs with many controls that are non-functional or poorly thought out
- Mockups provide a consistent testable aesthetics but also
  - don't distinguish must-have from nice-to-have
  - cause substantial misguided early implementation effort to match the aesthetics precisely
  - lead to substantial rework in later iterations
  - make UI promises that development can't keep
A way to design and implement in slices that support valid informative user testing and a coherent but changing UI vision.
INTEGRATING USER EXPERIENCE DESIGN INTO AGILE
User-Centered Design

- User-centered design (UCD) is about identifying and meeting real user needs
- Developed over decades of UI failures
- UCD is a mature ethnographically driven process
- Some key practices:
  - study users at the real locations of intended use
  - do big picture analysis (workflows, affinity relationships, ...)
  - develop target persona, scenarios, use cases

use cases ≠ user stories
UCD: Big Design Up Front all over again!
Agile: ready, shoot, aim!
UXers keep changing the design!
It isn't iteration if you only do it once!
Incrementing vs Iterating

http://www.agileproductdesign.com/blog/dont_know_what_i_want.html

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STAGGERED ITERATIONS

AKA staggered sprints

<table>
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<tr>
<th>UX Team</th>
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<th>Iteration 1</th>
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<td>personas, wireframes, sitemap</td>
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<td>Developers</td>
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<td>test &amp; code</td>
<td>test &amp; code</td>
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Gives design a small head start then interleaves design, implementation, user testing, and redesign.
ITERATION 0

- Designers sketch out the big picture
  - [http://www.agileproductdesign.com/blog/the_new_backlog.html](http://www.agileproductdesign.com/blog/the_new_backlog.html)
- Developers set up the CI server and construct the ZFR
- Both of these are after the Inception Deck meeting with the client
Staggered Iteration References

- Desiree Sy's early articulation of Agile UCD and staggered iterations

Getting real about agile design

- http://www.alistapart.com/articles/gettingrealaboutagiledesign/

- Iteration 0
Drupal experience from Iteration 0 to Iteration 1


ComputerWeekly case study

http://www.boxesandarrows.com/view/case-study-of-agile

TheLadder's detailed experience report