EECS 394
SOFTWARE DEVELOPMENT

Chris Riesbeck

About this course
What you can learn

How to write quality code efficiently:
- test-driven development (TDD)
- unit-testing
- mocks, stubs, and web testers
- pair programming
- DTSTTCPW
- refactoring
- group ownership of code
- continuous integration

How to maximize client value:
- project chartering
- the inception deck
- user stories
- acceptance tests
- minimum viable product
- release planning
- zero-function release
- technology spikes

How to improve constantly:
- gelled teams
- self-organizing teams
- no silos
- high bus factor
- 5 whys root cause analysis

How to stay on track:
- timeboxed iterations
- standup meetings
- story points
- velocity
- burn-down and burn-up charts

Thursday, September 27, 2012
WHAT YOU PROMISE TO DO

- Quickly learn new languages, e.g., modern Javascript, CSS, Ruby, Python, PHP
  - No silos, everyone does everything
- Learn and use constantly collaborative development tools, e.g., git, heroku, parse.com, ...
- Commit wholeheartedly to the health and progress of the team and the project
  - Meetings in and out of class
  - Pairing and swarming as needed
**TIME REQUIREMENTS**

- Class: 3 hours / week
  - includes in-class team meeting
- Team: 5 hours / week development work
- Client: 1.5 hours / week:
  - weekly face-to-face with client at MPD² classes
    - 3 are on Saturday, 2 on Friday
  - weekly conference call
- Me: 0.5 hours / week: team retrospective meeting
- **10 total hours week minimum**
- If you can't commit to this, drop now.

Thursday, September 27, 2012
Timeline

Weeks 1 through 5
- Team Project
- A mobile web app of your design
- Your team's demo product
- Your chance to gel and develop effective practices

Weeks 6 through 10
- MPD$^2$ Project
- A mobile (web) app for a client
- Their fate rests on you
- Your chance to develop effective client communication skills
MPD² Timeline

- **Nov 3**: Saturday 1:00 - 4:00
  - Class 1
  - Topics:
    - product vision
    - release #1
    - story backlog
  - work with developers

- **Nov 9**: Friday 12:30-3:30
  - Class 2
  - Topics:
    - prioritizing
    - tracking
    - rescoping
  - work with developers

- **Nov 17**: Saturday 1:00 - 4:00
  - Class 3
  - Topics:
    - velocity
    - 5 whys
    - testing
  - work with developers

- **Dec 1**: Saturday 1:00 - 4:00
  - Class 4
  - Topics:
    - deployment
    - lean development
  - work with developers

- **Dec 7**: Friday 12:30-3:30
  - Class 2
  - DEMOS!!

Ford ITW

Thursday, September 27, 2012
FIRST TASKS

1. Do the Blackboard skills survey
   - Needed to form teams

2. Get a copy of The Agile Samurai
   - Read Chapter 1 for Monday.