EECS 394
SOFTWARE DEVELOPMENT

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About this course
Task One

- Form your team
  - Do the Drucker Exercise
- Brainstorm a simple interesting web app, with
  - interactions on browser
  - persistent data on server
- Implement a demoable initial release
- Report on all of the above in your twice-weekly team reports
SKILL REQUIREMENTS

- You can
  - quickly learn new languages, e.g., modern Javascript, CSS, Ruby, Python, PHP
  - learn and use collaborative development tools (git, BaseCamp, ...)
  - commit wholeheartedly to the health and progress of the team
TIME REQUIREMENTS

- 3 hours / week in class working meetings
- 6 hours / week in development team work
- 1 hour / week meeting with client
- 0.5 hours / week team meeting with me
- **10.5 total hours week minimum**
is for you to learn to be

- a jelled, productive, reflective, constantly improving agile **team**
- capable of delivering high quality HTML5 / CSS / Javascript mobile and web applications
- with earliest possible delivery of value to the client
- and minimum delay and waste
Timeline

Weeks 1 through 5
- Agile Development
- Mobile Apps
- Continuous Integration

Weeks 6 through 10
- Project
- Software Project Management
- Communication
MPD² Timeline

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

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

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

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

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

Ford ITW
TASK ONE REVISITED

Set up
- Form your team
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Task One Revisited

Set up

- Form your team
- Do the Drucker Exercise
What are your top three strengths?

1. ___________  Excellent listener
2. ___________  Natural diplomat
3. ___________  I get things done
    Follow through
    Attention to detail
    Bringing order to chaos
How do you perform?

1. __________
   - Morning person
   - List maker

2. __________
   - Love eliminating waste
   - Are a minimalist

3. __________
   - Hate being micromanaged
   - Dislike office politics
What are your values

1. ____________
   - Honesty
   - Doing a quality job

2. ____________
   - Having fun
   - Respect for others

3. ____________
   - Continuous improvement
   - Being trusted
What results can you contribute, and what should you be expected to deliver?

1. ____________
   - Quality code that works
   - A wonderful user experience
2. ____________
   - Compelling website copy
   - Rigorous exploratory testing
3. ____________
   - Just-in-time analysis
   - A realistic plan
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TASK ONE REVISITED

- Implement a demoable initial release

Set up
Task One Revisited

- Implement a demoable initial release
- Set up source control for everyone
  - Implement a walking skeleton
- Implement the demoable release
Source control

- E.g., git, svn, mercurial
- FTP, Dropbox, Google Docs are not source control

Every team member has to

- have a local copy of the repository
- have personally and successfully committed a change
- use it in the implementation of both projects

Source control is an absolute requirement
All HTML must validate without error or warning.

- use HTML5 DOCTYPE
- all HTML5 and CSS should validate without error or warning
  - Exception: required CSS extensions
- Javascript should pass at least JSHint
  - even better, pass JSLint
- use a mobile-ready JS library