

MOBILE APP DEVELOPMENT FOR ENTREPRENEURS

eeecs 441

Lecture 1: Introduction

Time and Place

Lecture: MW 8:30-10:00 and 10:00-11:30 in 1311 EECS
Discussion: F 9:30-10:30 in 1006 DOW and
10:30-11:30 in 1018 DOW

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Office hours: Tu 1:30-2:30, W 4:30-5:30 in 1637 BBB and by appt.

About

Project based course: build a mobile app, explore entrepreneurial issues

NOT: teach you how to program a mobile device

Me: started an Internet-TV company, mentored 9 MDP projects over 5 years, 4 of which were mobile apps, for Expedia, NTVB, UM

Course Web Site

Course Web site:

<http://web.eecs.umich.edu/~sugih/courses/eecs441/>

- Syllabus and reading list
- Course grade composition and grading policy
- Project milestones and deadlines

Web site is "required reading"

- including Announcements page

Grading Policy

Individual elevator pitch:	5%
Team and project management:	5%
Value proposition and competitor analysis:	15%
UI/UX and backend architecture design:	10%
Customer analysis:	15%
Business model and market analysis:	15%
Minimum viable product:	10%
Usability test:	10%
Final launch and demo:	5%
Class attendance:	7%
Class participation:	3%

Project Timeline (1/2)

Week 1: Elevator pitches

[Tue, 9/5](#): Individual elevator pitch

Weeks 2-4: Team management and value proposition

[Sun, 9/17](#): Team contract and VPC questionnaire

[Tue, 9/26](#): VPC, competitor analysis, and Gantt Chart

Weeks 5-6: UI/UX and backend architecture

[Thu, 10/12](#): Design presentation

Weeks 7-8: Customer analysis

[Thu, 10/19](#): Buyer persona interview questionnaire

[Thu, 10/26](#): Customer profiles and buyer personas

Project Timeline (2/2)

Weeks 9-10: Business model and market analysis

[Thu, 11/02](#): BMC and market analysis

Weeks 10-11: Minimum viable product

[Thu, 11/19](#): MVP code drop and demo

Weeks 11-13: Usability test

[Tue, 11/14](#): Usability test script

[Tue, 11/28](#): Usability test results

**Do not email us
any assignments!**

Week 14: Testing, Validation, Launch

[Tue, 12/05](#): Final presentation

[Mon, 12/11](#): Final demo and launch certification (in class)

Class Attendance

Points per class (lecture and discussion):

- 2 points for being on time and staying till end of class
- -1 point for joining late (after roll call is done)
- -1 point for leaving early

Attendance taking is not done at every class;
will become faster as I recognize more of you

Honor Code Policy

Presentations must be your own work (in team)

Do NOT copy someone else's code verbatim

Do NOT use any copyrighted graphics without permission

You MAY use open-source code or library or Creative Commons graphics to help you complete your project, but you MUST credit the authors and cite the sources in your documentation

Team Management

At least 5 and not more than 7 members

Task assignments (must be substantial), e.g.:

Project: Catch a Monster

Text-based: 1 UI, 1 engine, 1 level designer (3)

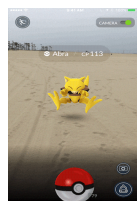
+ 2D graphics (4)

+ AR (5)

+ location and mobile ad (6)

+ project management (7)

management role assumed by existing team members



Platform and Launch

Platform can be Android, iOS, VR, AR, car, drone, IoT, etc.

To get a A-range grade, your app MUST be launched

- proof of launch, e.g., a URL, a letter from Apple AppStore, etc. at the Final demo and launch day
- registration fees: cost of a textbook, may be shared across teams

Value Proposition

What is your product about?

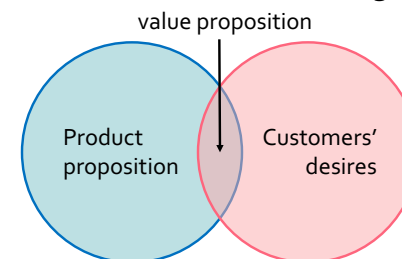
Who is the target customer?

What are the benefits to your customers?

What makes you stand out and irresistible?

Why would anyone buy what you sell?

NOT jargon, buzzword, nor meaningless slogans



The Elevator Pitch

Tim David's advice:

Start with a "verbal slap"

Build rapport with audience:

- ask a problem QUESTION they can identify with
- "noddable" quote to create ownership of problem

Hint at solution, get to "Tell Me More"

But be authentic



Monetization Prospect

Monetization Prospect: GRIM

Further pursuant: DISCOURAGED

What does it mean?

Project has been attempted in 441. Previous team's market analysis found non-existent or poor monetization prospect. Unless you have some special secret sauce (new tech, new distribution, new revenue model, etc.) to differentiate the project, you will receive at most a B if you came to the same conclusion as the previous team (even if you launch your app!).

Elevator Pitch Assignment

Specification:

I'm a VC with a billion dollar to invest (not really)

You have 30 seconds to get me interested in your idea for a product

Reading assignments:

3 on value proposition, 2 on elevator pitch

One slide

Team Forming

Review all elevator pitches posted on Syllabus page of the course web site

Contact the person you would like to team with

Do this by Mon, 9/11

We'll record the teams in class on Mon and I'll create a Canvas group for each team: going forward, submit only one presentation per team under the group name

Time Commitment

The CoE expects time commitment of 16 hours/week for a 4-credit course, including time spent in class

Successful teams in the past spent about 4 hours/week working together

Part of next assignment: All parts required for submission will be listed in the spec to be posted on Canvas

- weekly meeting time
- your team's Gantt chart: schedule with milestones and task assignments (e.g., [Tom's Planner](#))
- [Team Commitment Contract](#)

Presentation

All team members must be present

- -5 points individually for absent member (in addition to attendance deduction)

Slides must be legible (use ≥ 28 pt font size)

Don't gloss over details

How to Get an A

There is no credit for re-inventing the wheel

Get a FAST start on your project (only have 3 months!)

Make progress every, single week

Work together in team (4 hours/week)

Plan for delays

Fail fast: be accountable for your work, acknowledge mistakes

Fail early: if you get stuck, get help FAST

Fail often: iterate fast and often, pivot if necessary

Launch!



Presentation

Hands not in pockets nor crossed

No cap, no headphones

Be professional

Step up to speak, step back to yield the floor

