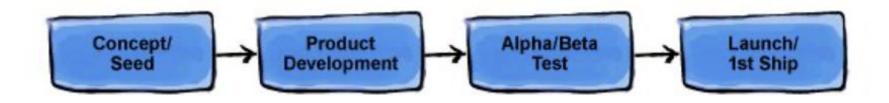
Software Studio

Shan-Hung Wu CS, NTHU

The Product Development Flow



• This is the path to *disaster*



Goals

- What it is like to develop *real* applications
- Iterate, iterate, iterate
 - Market survey
 - Problem identification
 - Unique selling point & core features
 - Retention and growth tactics
 - Data analytics
- Improve, or pivot

Classes

- Tue: lectures
 - at Delta 105
- Thu: labs
 - at EECS 326 & 328
- <u>Syllabus</u>
- Course wibsite: <u>www.cs.nthu.edu.tw/~shwu</u>

Lectures

- Track 1: Design thinking
 - Problem identification
 - Solution ideation & low-fi prototyping
 - Usability test
 - Hi-fi prototyping
 - Execution & psychology
- Track 2: Coding *in videos*
 - HTML, CSS
 - JavaScript & reactive UI programming
 - API design
 - Backend programming
 - Web/app intelligence

Labs

- Based on videos
- To be done on-site
 - In 2 hours
 - Late submission get 60% grade

Demo Topics

- Anything as long as you and your classmates are targeted audience
- Must have a *unique selling point*
 - Not in the <u>prohibited list</u> unless you have a good reason

Evaluation

- Labs: 60%
- Demo 1: **10%**

- Problems, low-fi prototypes, usability test results

- Demo 2: **10%**
 - Hi-fi prototypes, execution tactics
- Demo 3: **20%**
 - Minimal Viable Product (MVP)
- Bonus: up to **5%**
 - Peer-review awards
 - In-class participation

Some Notes

- We will teach AWS services
 - The most widely used cloud services in production
 - Requires a credit card to create an account

Questions?

FAQ (1/3)

- Is this a programming language course?
 - No, we **do not** teach you how to code
 - This course focus on *design* and *experiments*
- Is this a software engineering course?
 - No. We don't focus on SE theories, but you will learn some "best practices"
- Is this a entrepreneur course?
 - No. But we will discuss the software development process in startup companies

FAQ (2/3)

- Do I need to write programs in this course?
 - A lot, for experiments
 - Observations are more important than code
- Are we going to interact with the open source software?
 - Yes, via NPM
- Why JavaScript?
 - Both an Object-Oriented and Functional programming language
 - Both used in front-end and back-end

FAQ (3/3)

- Do I need to write code with others?
 - Yes, 3~6 people a team
 - For 4+ people teams, your MVP must has both front-end and back-end features
 - You'll have peer-reviews in grading
- Do we need to come to the class?
 - No, as long as you can pass
- Is this a light-loading class or heavy-loading class?
 - Should be *heavy* to most students