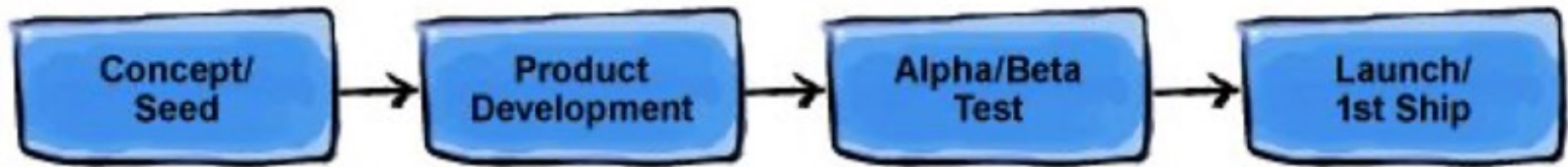


Software Studio

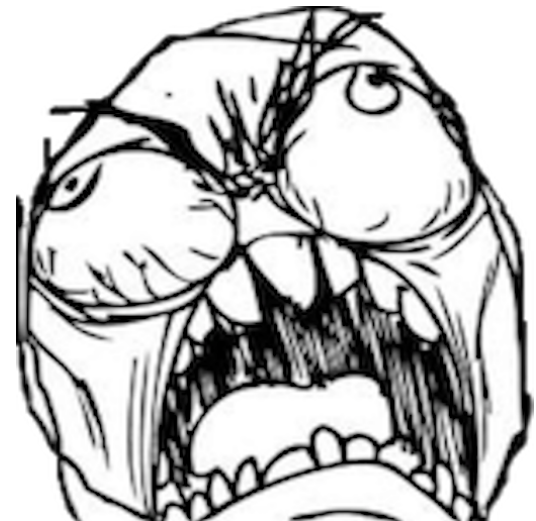
Shan-Hung Wu

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 + videos
 - at Delta 105
- Thu: labs
 - at EECS 326 & 328
- Course website: www.cs.nthu.edu.tw/~shwu

Lectures

- Part 1: Iterations for problems & solutions
 - Demo 1: Market and user persona
 - Demo 2: Unique selling point & MVP
- Part 2: Iterations for feature design
 - Demo 3: retention & growth
- Part 3: Iterations for data-driven improvement
 - Demo 4: data analytics & intelligence

Labs

- Part 1: Android basics
 - 6 homework
- Part 2: Backend (API/GraphQL, DB, etc.)
 - ~2 homework
- Part 3: Modern Android development
 - ~2 homework
- Part 4: Data analytics
 - ~2 homework

Topics Slection

- You, as developers, need to be targeted audience
- Must have uniqueness
- Study apps
 - Focus
 - Flashcards
- Stress-relief apps
 - Meditation
- Habit-forming apps
 - Sleep routines
 - Personal finance
- And more...

Evaluation

- Demos: 70%
- Homework: 30%
- Peer-review bonus: up to 10%

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?
 - Not required, but likely
- Why Android?
 - It's free
 - Apps change people's lives

FAQ (3/3)

- Do I need to write code with others?
 - You cannot do it all
 - ***2~4 people a team***
- 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