### Software Studio

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### Goals

- What it is like to develop real applications
  - OOP and functional programming
  - Teaming and version control
  - Tools and libraries
  - Under time pressure

#### How?

- Part 1: web frontend
  - Old school: HTML, CSS, Javascript, etc.
  - Modern approaches: React, Redux, ES6, etc.
- Part 2: backend
  - Databases, authentications, etc.
  - App intelligence (machine learning and AI)
- Part3: mobile apps
  - React Native

# FAQ (1/3)

- Is this a programming language course?
  - No. This course teach you how to make *real* software
- Is this a software engineering course?
  - No. We don't focus on SE theories. You will learn some "best practices"

# FAQ(2/3)

- Do I need to write programs in this course?
  - A lot
  - Under time pressure
- Are we going to interact with the open source software?
  - Yes.
- Why Javascript?
  - **OOP**
  - Functional programming
  - Has potential to unify frontend development

# FAQ(3/3)

- Why do I need to write code with others?
  - Yes. 3~4 people a team
- Do we need to come to the class?
  - No, as long as you can pass
  - Video lectures
- Is this a light-loading class or heavy-loading class?
  - Very heavy because we have assigned readings

### **Evaluation**

- Idea and market survey: 10%
- Labs: 30%
- Midterm project: 30%
- Final project: 30%

### Schedule

- Syllabus
- We will have a project demo party after the week of final exam
- TODO:
  - Team up: 3~4 people
  - Idea exploration
    - Check out the lean canvas

#### Resources

- Text Book
  - Lecture notes
  - Reference links
- Course page
  - www.cs.nthu.edu.tw/~shwu
- TODO
  - Register your seat