Lecture 1a

Introduction to WPR course

What is this course about?

General

- HTTP
- Client-server architecture
- Form Handling
- APIs

Front-end

- HTML
- CSS
- **JavaScript**
- ReactJS
- Create React App Library

Back-end

- Node.js
  - ✓ Express.js
  - ✓ File I/O
  - ✓ EJS
  - ✓ Handlebars
- Databases
  - ✓ SQL (MySQL)
  - ✓ NoSQL (MongoDB)

Study questions

- How to create *static* web pages?
- How to create *good-looking* static web pages?
- How to create *interactive* web pages?
- How to create *server-rendered website* using Node.js and a template engine such as EJS/Handlebars?
- How to create a *restful API* (back-end) using Node.js?
- How to *keep website's data* in a SQL/NoSQL database?
- How to create a *dynamic* website's *front-end* which *connects to the back-end* using ReactJS?

Course Resources

- Lecture slides
- Exercises in tutorials
- Progress quizzes
- Recommended online tutorials
- Chosen online readings
- Lecturer and tutor support

Assessments

Attendance 10%

- Bonuses for in-class performance

Assignment 15%

- DB-driven website with server-side rendering & template engine

Mid-term test 15%

- Closed-book MCQ quiz

Final Exam 60%

- Paper-based exam, covers all topics

How to study?

- Pay attention in lecture classes
  - Lecturer often shares information outside of lecture slides
- Self-study from external sources is important
  - Expand your knowledge about the programming languages, frameworks… beyond what's introduced in the lectures
  - There are countless of (free) online resources
- Review lecture slides before tutorial
- Doing tutorial exercises beforehand isn't recommended
  - Use tutorial time and interact with tutor effectively

Is it necessary to study now that AIs are so powerful?

- **Yes**
- You need to learn even more so that you can:
  - Contribute what AIs cannot do to your software products
  - Review AI's works & Fix AI's mistakes
- AIs do help students learn faster
- Also, AIs can make students become reliant on them and less creative