

## **Course Project**

### **Web Programming Project: Multi-Module Web Application**

In this final project, you will design and develop a website inspired by a real-world scenario. This is your opportunity to bring together the web programming skills you've gained throughout the semester—including modular architecture, session handling, persistent data storage, and user interaction.

In class, we've worked on a basic educational management system with two modules: User and Course. For your project, you are expected to build a more comprehensive system consisting of at least three modules. One of these will generally be a User module (for login, registration, profile, etc.), and you will design at least two additional modules based on your chosen theme.

You may expand on the university management system we explored, or you can choose a completely different real-life application. Examples include:

- An e-commerce platform (e.g., online bookstore, guitar shop, clothing store)
- A movie or event booking system
- A portfolio or job board site
- A recipe sharing or blogging platform
- A freelance job board or portfolio site
- Any idea that reflects a real-life scenario with user interaction and data management

Project Requirements:

- Minimum of three interconnected modules
- User module with authentication (login, logout, etc.)
- Use of session management
- Data persistence using files or databases (e.g., CSV, JSON, MongoDB)
- Logical navigation between pages/modules
- A working frontend using HTML, CSS, and JavaScript
- A working backend code using the technologies taught in class

Submission Requirements:

You will submit two components:

1. Project Code (70% points)

- Complete source code (frontend and backend codes)
- README with instructions on how to run the project

2. Project Report (30% points)

- A written report (~3 pages) including:
  - Motivation: A brief description of the idea and why you chose it
  - Modules Overview: Description of each module and how they interact
  - Functionalities: Key features and workflows supported by your application
  - Technical Details: Technologies used, database or file structure, session handling, etc.

Use this project as an opportunity to demonstrate both your creativity and your technical understanding. Think practically, design thoughtfully, and aim for a polished final product. Create a zip file containing all codes and the README file; and name it source.zip. Create a pdf file of the report and name it report.pdf. Submit source.zip and report.pdf in Gradescope (all members of a group should submit the same files).