Al Maaref University

Faculty of Sciences
Department of Computer Science

Web Programming Project

Project Description

Course: CSC 400 – Web Programming
Instructor: Rayane El Sibai, Ph.D.

The project could be done in teams of two students. If so, please find a partner.

Project Objective and Scope:

The purpose of this project is to build a complete web application using HTML, CSS, JavaScript, and Laravel.

Each group is required to:

- Propose its own idea (check the "*Project Proposal Template*" document), design the interface, and implement a functional backend.
- Build a frontend with HTML/CSS/JavaScript. <u>Bonus</u>: Use React for Front-end.
- Implement a backend using Laravel (MVC structure).
- Use a MySQL database.
- Include authentication.
- Have at least two user roles (in addition to the guest).
- Follow clean design, good structure, and validated input.

Project Phases

- Proposal: One/two pages about the project idea, roles, and key features.
- Design Phase: Frontend layout and components built with HTML/CSS/JS.
- Implementation: Laravel setup, routing, database, models, controllers.
- Integration: Link frontend to backend functionality.
- Testing & Polish: Fix bugs, validate forms, style pages, and polish UX.

Required Features

- At least six functional pages (including the *login* and *register* pages).
- A homepage: With a navigation bar and basic info about the application.
- Form(s) with validation: Frontend (JavaScript) and Backend (Laravel) validation.
- Laravel Authentication (login/register).
- Database Integration: CRUD operations, migrations, Eloquent models.
- Frontend Interactions: Use JavaScript for dynamic behaviors (i.e., modals, etc.).

Technologies to be Used

- Frontend tools (HTML, CSS, JS frameworks if any). <u>Bonus</u>: Use React.
- Backend framework (Laravel).
- Database (MySQL).

Final Submission: Deliverables

Submit everything in one zipped folder. **You final submission must include:**

- Code: Laravel project folder.
- Database: SQL export of the database.
- Documentation: PDF Report (project title, project idea, user roles, main features, ER diagram, and instructions and screenshots of the application).

Submission Guidelines

The submission must be made through Google Classroom. Any group member can submit the report. <u>However, a comment must include the partner's name, ID, and section. If there is no partner, please also mention it.</u>
Please include in your report the full names and IDs for all the members of the group.

Submission Deadline

The project submission deadline is on **Thursday, January 1, 2026 at 11:59 p.m.** Late submissions will not be accepted.

Plagiarism and Cheating

MU policy is clear. Once the instructor finds out that any project is not your final output, you will receive a grade ZERO.

Presentation

- Your project must be presented in class, during the date and time slot specified by your instructor.
- This date and time will be communicated to you later. Missing the presentation means you will get a **ZERO** on the project!
- The presentation should be clear and understandable, describing everything you think is important about your project (motivation, description, techniques, results, etc.).
- Each group will present the project on his own laptop. The purpose is to verify your mastery of your project. Each student is expected to know all the details of their project. You have to bring your own laptop (1 laptop/team).
- You are not required to prepare any PowerPoint presentation.

Grading Rubric

This project represents 30% of your final grade.

The project will be graded with, as follows:

Criteria	Points
Layout & Frontend Design (HTML/CSS)	10
JavaScript Interactivity & Validation	10
Functional Pages & Routing	10
Authentication	8
CRUD Operations & DB Logic (Laravel)	20
Overall Effort	7
Documentation (PDF Report)	15
Presentation	20