Final Assignment Details - Advanced Web Programming

Deadline and Submission:

Deadline: **28 November 2025**

Submission via Google Forms **(link shared on Telegram by Mr. Mohamed Boutaba).**

Evaluation:

Starts 29 November 2025 by **alphabetical order by last name**.

Be prepared to **run the system live** and **answer questions**.

Project Title:

Design and Implementation of a Web-Based Student Attendance Management System for Algiers University

Project Description:

This project requires designing and implementing a web-based Attendance Management System to streamline and automate student attendance tracking at Algiers University. Traditional manual attendance methods are time-consuming, error-prone, and inefficient for large classes. The proposed system will provide a digital platform for professors, administrators, and students to record, access, and analyze attendance data in real time.

Objectives:

- Replace manual attendance procedures with a reliable digital system.

- Provide role-based access for students, professors, and administrators.

- Support automated analytics and reporting.

- Allow secure submission and management of absence justifications.

- Enable import/export of student lists compatible with Progres Excel format.

Expected Deliverables (Design, Frontend, Backend)

1. Design Deliverables

- Figma prototype (mobile-first approach).

- Database Design (ER diagram + schema + constraints).

2. Frontend Deliverables

- Use of jQuery.

- Responsive/mobile-first design.

Professor Pages: (3 pages minimum)

1. Home page showing list of sessions per course

2. Session page to mark attendance

3. Attendance summary table (per group/per course)

Student Pages (2 pages minimum)

1. Home page with list of enrolled courses

2. Attendance page per course (view status, submit justifications)

Administrator Pages (3 pages minimum)

1. Admin Home Page

2. Statistics Page (charts)

3. Student List Management Page

- Import/export student lists (Progres Excel format)
- Add/remove students

3. Backend Deliverables

- PHP backend.

- Authentication + roles.

- Attendance session management.

- Justification workflow.

- Participation and behavior tracking.

- Reporting logic (attendance/participation).

- Import/export handling.

- Connection to MariaDB/MySQL

- Handling connection errors properly (try/catch, error logging)

- Data storage and CRUD operations for:

  - Users (students, professors, administrators)

  - Courses and groups

  - Attendance sessions (create/open/close)

  - Attendance records (insert/update)

  - Justification requests (store request + file path)

Technologies:

Frontend: **must include jQuery**

Backend: **PHP**

Database: **MariaDB/MySQL**