IMS566
ADVANCED WEB DESIGN DEVELOPMENT AND
CONTENT MANAGEMENT

GROUP ASSIGNMENT GUIDELINES

1. Objective of the Project

This project requires students to apply their knowledge of **web design, content management, and system development** to build a fully functional **web application with database interaction**. The project emphasises **team collaboration**, **technical implementation**, and **documentation**. Students will:

- Identify and digitalise a real-world form into an online web application.
- Apply **authentication, CRUD operations, search, and data export**.
- Demonstrate **UI/UX design skills** using a CSS framework.
- Document the system development and produce a **user manual**.

2. Project Weightage

- **50% of total course marks** (Group project).

3. Instructions

3.1 System Development

Each group must:

a) Identify a real-world **form/process** to convert into an online form (must be approved by the lecturer).

b) Design the **database schema/ERD** based on form metadata.

c) Develop a **CRUD-enabled** web application using a back-end framework (e.g., PHP with Laravel, CakePHP, CodeIgniter, or frameworks covered in class).

d) Apply a CSS framework (e.g., Bootstrap, Tailwind) for responsive design.

e) Ensure the application includes:

- Database table(s)
- Authentication (login/logout)
- Input form (Create)
- Data listing (Read all)
- Data detail view (Read one)
- Data update
- Data delete
- Search/filter function
- Export to PDF (for at least one dataset)
- Responsive navigation and UI

3.2 Deployment & Code Management
   a) Upload source code to **GitHub repository**.
   b) Ensure code is **clean, structured, and commented**.

3.3 Report & User Manual
   Groups must prepare a **structured documentation report**:
   a) **Introduction** – Overview of the system and its purpose.
   b) **GitHub Repository Link**
   c) **Entity-Relationship Diagram (ERD)**
   d) **System Requirements** (software, version compatibility, dependencies)
   e) **User Interface Overview** (layout, navigation)
   f) **Features & Functionalities** (with screenshots)
   g) **Workflow of Form** (illustration of the CRUD cycle)
   h) **Team Roles & Contributions**
   i) **Contact Information (Support)**
   j) **Conclusion & Reflection**

4. Presentation
   a) Each group will **present the web application** in **Week 13**.
   b) The **Project Manager** leads the presentation, but **all members** must contribute.
   c) Presentation should demonstrate: system workflow, technical features, and team collaboration.

5. Software Requirements
   a) **Minimum PHP 8.1** (uniform across groups).
   b) Recommended browser: **Google Chrome** for testing.

6. Deliverables
   a) Web application project (fully working)
   b) GitHub repository link
   c) Documentation report & user manual (PDF)
   d) Final presentation (Week 14)

7. Submission
   Week 14

8. Software Uniformity
   Students are expected to use **Google Chrome** as the web browser for development and testing purposes. This ensures uniformity on a student and lecturer basis. Students can download Google Chrome from https://www.google.com.my/chrome/

END OF INSTRUCTION

Appendix 1: Evaluation Rubrics

Criteria	Excellent (Full Marks)	Good	Fair	Poor	Marks
System Design & Database (6 marks)	Well-structured ERD, normalised tables, and correct relationships	Mostly correct, minor flaws	Basic ERD, limited normalisation	Weak or missing ERD	/6
Authentication (4 marks)	Secure, fully functional, with validation & error handling	Works with minor issues	Basic login/logout only	Missing or non-functional	/4
CRUD Implementation (10 marks)	All CRUD operations work smoothly with validation	CRUD mostly works, some bugs	Limited CRUD (missing functions)	CRUD is incomplete or broken	/10
Search & Data Export (4 marks)	Search accurate & export to PDF works perfectly	Search works, export limited	Basic search only, no export	Missing	/4
User Interface & Responsiveness (6 marks)	Professional, responsive, consistent, good UX	Clean design, responsive, minor issues	Functional UI, inconsistent	Poor, not responsive	/6
Navigation & Usability (4 marks)	Clear, intuitive, and consistent navigation	Mostly clear, minor issues	Functional but confusing	Missing/inconsistent	/4
Code Quality & Framework	Clean, well-commented, good use	Some structure, minor flaws	Poorly structured code	Disorganized, no framework used	/4

Usage (4 marks)	of frameworks				
Report & User Manual (6 marks)	Complete, well-organised, detailed with screenshots	Clear report, minor details missing	Basic report, lacks depth	Poor or missing	/6
Presentation & Teamwork (6 marks)	Clear, professional, all members contribute	Good presentation, most members involved	Basic, a few members present	Weak presentation, poor teamwork	/6