Course : Web Developemnt
Dr.Mohamed
Fall 2025 / 2026
Eng . Hamdy – Eng.Hossam

جَامِعَةُ الإِسْكَنْدَرِيّةِ
ALEXANDRIA
UNIVERSITY
كلية الحاسبات وعلوم البيانات

Alexandria University
Faculty of Computers and
Data Science
Data Science Department

Final Project

Project Structure Requirements:

1- **Problem Statement**:
Briefly describe the problem your project is addressing. What challenges or inefficiencies are you trying to solve?

2- **Objectives :**
List the specific goals you aim to achieve with this project. What are the desired outcomes?

3- **Analysis & Design:**
Entity Relationship Diagram (ERD) Use Case Diagrams Database Schema

4- **Implementation:**
Complete or partial implementation Clean, well-structured code Sufficient comments explaining functionality

5- **Testing:**
Test cases for all major features Input validation testing

Project Ideas (Choose ONE):

1- **Medical Clinic Appointment System** : Patients face difficulties booking appointments via phone, leading to scheduling conflicts. Clinics struggle to organize patient recorefficiently, resulting in poor time management and patient dissatisfaction.
- Allow patients to book/cancel appointments online
- Manage patient records and medical history
- Prevent appointment conflicts with automatic validation
- Send notifications to patients about their appointments
- Provide a dashboard for doctors to manage schedules
- Generate reports on daily/weekly appointments

Key Features:
- User registration and login (Patients, Doctors, Admin)
- Appointment booking system with calendar view
- Patient medical records management
- Search and filter appointments
-Email/SMS notifications
- Admin panel for system management

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2- Library Management System:

Objectives:
- Register members and catalog books efficiently
- Implement borrowing and return system with due dates
- Automatically calculate fines for late returns
- Provide search and filter functionality for books
- Generate reports on most borrowed books and member activity
- Manage book reservations

Key Features:
- Member registration and authentication
- Book catalog with search and filters
- Borrowing and return management
- Fine calculation system
- Reservation system for unavailable books
- Admin panel for librarians
- Reports and statistics

3- Reports and statistics:

Teams struggle to track tasks and projects effectively.
There's no clear visibility on who is working on what, leading to missed deadlines and poor collaboration.
Communication about task progress is scattered across different platforms.

Objectives:
- Create and assign tasks to team members
- Track task status (To-Do, In Progress, Done)
- Implement comment system for task discussions
- Attach files to tasks
- Display productivity dashboard with statistics
- Send notifications for overdue tasks
- Generate team performance reports

Key Features:
- User authentication (Team members, Managers)
- Project creation and management
- Task assignment with priorities
- Status tracking and updates

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- Comments and file attachments
- Dashboard with charts and statistics ,Notifications system.

4- Food Ordering Platform:

Small restaurants lack their own online ordering platforms, forcing them to rely on expensive third-party services. Customers want aconvenient way to order food from home with real-time order tracking. The current system is inefficient and lacks transparency.

Objectives:
- Display food menu with images, descriptions, and prices
- Implement shopping cart and checkout system
- Track order status in real-time
- Allow customers to rate dishes and provide feedback
- Provide restaurant dashboard for order management
- Generate sales reports

Key Features:
- User registration and login
- Menu browsing with categories
- Shopping cart functionality
- Order placement and payment
- Order tracking (Preparing → On the way → Delivered)
- Rating and review system
- Restaurant admin panel
- Order history

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Submission Guidelines :

- Project documentation (Problem Statement, Objectives, ERD)
- Complete frontend implementation (HTML, CSS, JavaScript) - Static pages with dummy data
- Client-side validation
- Responsive design implementation
- Basic folder structure

Complete the remaining parts of your project including:

- Backend implementation (PHP Or Nodejs Or .net)
- Database implementation (MySQL)
- Integration between frontend and backend
- Testing and test cases
- Complete documentation
- Final code with comments

Good luck