

Internet Application Development

Lab 13

Dated: Tuesday, 13th May 2025

Registration No: _____

Full Name: _____

Problem 1) Refer to your semester project as outlined below:

Task 1: To develop a brief project proposal document of a web development project.

- It must be a data driven web application
- Incorporate state management
- Validation is mandatory
- Data security is essential
- Users and roles based software functionalities to be incorporated

Task 2: To write software requirements specification

Task 3: To develop the analysis and design model of web application including:

- Use case model
- Sequence diagrams
- Activity diagrams
- Class diagrams

Task 3A To develop component model and deployment model

Task 4: Develop database model including:

- ER Model
- Relational Model
- Normalization of relational model
- Physical Model
- SQL Implementation

Task 5: To implement the web application using concepts and examples studied in course.

Task 6: To host the application on a web domain.

- Database can be on local machine
- Or on web hosting platform

Task 7: Testing of Web Application

What are the necessary security features of your semester project? After identifying the security features of your project, prepare a list of at least 07 security features and write a brief description about each of them?

Problem 2) Implement identified security features for your project and make a live demonstration available.

Problem 3) Develop test cases for all security features and prepare a report about testing of security features?

Note:

- (i) This is an individual student assignment.
- (ii) All report and implementation work must be non AI generated / non copilot generated in order to get good score.
- (iii) Submission of copied work (by any means/through any channel) will lead to poor grades

Submission of “Lab 13”

- (i) Deadline is 22:00 on 13th May 2025.
- (ii) Submit all above problems by creating suitable links (under Lab 13) on your own portal.
- (iii) For problem 1 and 3 you may upload pdf file or create html pages.
- (iv) For problem 2 make a live demo available online.
- (v) Submit all codes and interfaces through suitable links.
- (vi) On first page of your portal clearly write your name and registration number.
- (vii) Do not change your portal address / url.