

Database Management Systems
Lab Assignment IV: Web Based Information System Design
Topic: Online Course Management Platform
Due: February 11, 2026, 5PM (Individual Submission)

An Educational Technology Company offers Massively Online Open Courses to its customers. You have to build a platform to manage all the data related to the courses, teachers, partner universities, and students.

The goal of this project is to build a complete web-based information system having a backend database, a connectivity server, front end scripts and finally a form-based web interface. Any database server/scripting language can be used to build the system. However, the use of a database and scripts are compulsory.

Design Objectives:

The goal is to provide a web-based system for using as well managing the online course platform with required functionalities and an easy to use interface. The system should provide a system for creating new courses and programs, create new users of different types, displaying information about courses. It should also generate statistics about the course enrolments.

Users of the System: A. System Administrator B. Instructors C. Students D. Data analyst

Functional Requirements:

- i. The system must provide an entry page which will be the home page after login. The entry page would display various menu based on category of the user.
- ii. The system should allow students to view and search various courses that are offered, and register for them.
- iii. The system should allow teachers to add content to a course.
- iv. The system administrator should add teachers to a course and if necessary, add/delete students.
- v. The data analyst should be able to view various statistics about the courses.

Group size: At most 5 students per group. Time: 2 weeks. ER Diagram to be submitted by next week.

Submissions and Deliverables:

- i. Demonstration of the project in Lab.
- ii. A report consisting of:
 - a. Name and roll number of group members
 - b. ER Diagram
 - c. Table Schema
 - d. List of functionalities implemented
 - e. List of front-end tools used