

Deadline : **24 August**

****Training Management System**

Overview

A basic ASP.NET MVC web application for managing **courses**, **sessions**, **users**, and **grades**.
Students must:

- Use the **Repository Pattern** for all data access.
 - Apply **validation** with both data annotations, custom rules and client side validation.
 - Ensure **course names are unique**.
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Core Features

1. Course Management

- Add, edit, delete courses.
- Assign an instructor to a course.
- **Search** courses by name or category.
- **Validation:**
 - Name: Required, 3–50 characters, **must be unique**.
 - Category: Required.

2. Session Management

- Add, edit, delete sessions for a course.
- Set start and end dates.
- **Search** sessions by course name.
- **Validation:**
 - StartDate: Required, cannot be in the past.
 - EndDate: Required, must be after StartDate.
 - CourseId: Required.

3. User Management

- Add, edit, delete users.

- Each user has a name, email, and role (Admin , Instructor , or Trainee).
- No login system — role is just stored as a field.
- **Validation:**
 - Name: Required, 3–50 characters.
 - Email: Required, must be valid email format.
 - Role: Required.

4. Grades Management

- Record a grade for each trainee in a session.
 - View grades for each trainee.
 - **Validation:**
 - Value: Required, must be between 0 and 100.
 - SessionId: Required.
 - TraineeId: Required.
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Entities

- **Course:** Id, Name, Category, InstructorId
- **Session:** Id, CourseId, StartDate, EndDate
- **User:** Id, Name, Email, Role
- **Grade:** Id, SessionId, TraineeId, Value