

Web Technologies

Case study

Instructions

Work on this quiz/lab individually.

What you have to do

Program the following tasks. The name of your files will be according to the task given in this lab.

Task

[100]

Student Management System using Java Servlet and DAO

You are tasked with building a simple **Student Management System** for a university using Java. The web application will allow administrators to **Create, Read, Update, and Delete (CRUD)** student records in a database using a **Java Servlet-based web interface**. All database interactions must be abstracted using the **DAO (Data Access Object) class**.

Requirements:

1. Database Table (MySQL)

```
CREATE TABLE students (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    name VARCHAR(100) NOT NULL,  
    email VARCHAR(100) UNIQUE NOT NULL,  
    course VARCHAR(100),  
    country VARCHAR(100)  
);
```

2. Functional Requirements

- **Create:** Add a new student record.
- **Read:** Display all student records.
- **Update:** Modify an existing student's details.
- **Delete:** Remove a student record.

3. Technologies to be Used

- Java Servlets
- JDBC (Java Database Connectivity)
- MySQL
- HTML/CSS for front-end (simple forms)
- DAO Pattern for database interaction.

😊😊😊 **BEST OF LUCK** 😊😊😊
