

## Exercise: Database CRUD Operations with JSP

**Task:** Create a JSP application for managing a list of employees with full CRUD operations.

### Requirements:

1. **Setup Database:** Create an `employees` table with:
  - `id` (INT, primary key, auto-increment)
  - `name` (VARCHAR)
  - `department` (VARCHAR)
  - `salary` (DECIMAL)
  - `email` (VARCHAR)
2. **Create** `listEmployees.jsp`:
  - Display all employees in an HTML table
  - Add "Edit" and "Delete" buttons for each row
  - Include "Add New Employee" button
3. **Create** `addEmployee.jsp`:
  - Form to input new employee details
  - Validate required fields (client-side JavaScript optional)
  - Connect to database using JDBC and insert record
  - Redirect back to list after successful addition
4. **Create** `editEmployee.jsp`:
  - Pre-populate form with existing employee data
  - Update record in database
  - Handle form submission to update database
5. **Create** `deleteEmployee.jsp`:
  - Confirm deletion (can be JavaScript confirmation)
  - Delete record from database
  - Redirect to list

**Key concepts:** JDBC connection, PreparedStatement, JSP database operations, CRUD patterns, redirect vs forward