

Task Assignment 1: Create a Simple Data Display Page

Deadline: Submit by 14th September 2024

Objective: Develop a basic web page that retrieves and displays a list of records from a database using JDBC. This will involve both front-end development to present the data and back-end development to fetch it from the database.

Abstract: The goal of this task is to build a straightforward web application that demonstrates the integration of front-end and back-end components. The front-end will consist of a simple HTML page with a table to display data, styled for clarity. The back-end will be implemented in Java, using JDBC to connect to the database and retrieve the necessary records. The application will use AJAX to request data from the back-end and update the table dynamically based on the received JSON response.

Requirements:

1. **Front-End Development:**
 - Create an HTML page with a table structure to display data.
 - Apply CSS styling to make the table readable and aesthetically pleasing.
 - Use JavaScript (or jQuery) to handle AJAX requests and update the table with data.
2. **Backend Integration with JDBC:**
 - Develop a Java servlet (or a simple Java application) to connect to the database and retrieve a list of records.
 - Implement an endpoint that returns the data as a JSON response.
3. **Data Display:**
 - Implement AJAX functionality to fetch data from the backend and populate the HTML table dynamically.
 - Ensure that the data is displayed correctly and the layout is responsive.
4. **Testing:**
 - Verify that the page displays data correctly and handles cases where data retrieval might fail (e.g., database connection issues).

Deliverables:

- HTML page with a data table and CSS styling.
- Java servlet or application for data retrieval via JDBC.
- JavaScript code for AJAX data fetching and dynamic table updating.
- Documentation on how to set up and run the project.

Submission Instructions: Please submit the completed project by the end of the day on 14th September 2024. Ensure all code is well-commented and the project includes clear instructions for setup and execution.