Homework 2

Assignment: Multi-page Interactive Recipe Site

Objective

Build a dynamic multi-page recipe web application using Express.js, EJS for templating, MySQL for database storage, and client-side Javascript. You will become more familiar with client-side interactive behavior, Express routing, Database management and connections, as well as dynamic pages through data retrieval. You should meet all the stated requirements, but there is room for creativity.

Project Requirements

Project Theme

You will create a recipe site featuring your favorite recipes and cooking experience. The site should highlight different recipes categorized by main protein types.

Express & EJS Pages

The application should have at least three pages, including:

- **Home Page**: Describe your favorite food and cooking experience.
- **Recipe Listing Page**: Display a categorized list of recipes retrieved from the database. Separate tables should be used for each main protein type (e.g., Chicken, Beef, Tofu, Grains).
- **Recipe Page**: Display a selected recipe, retrieved dynamically using route parameters. Hovering over ingredients shall display a small pop-up window with more information, such as origin of the spice, cooking safety tips, or a fact you find interesting.
- **Add Recipe Page:** Show a form for the user to add a new recipe with existing ingredients in the database.

Each page must be rendered using EJS templates with dynamic data from the database.

Database Integration (MySQL)

- The application must be connected to a MySQL database.
- The database must have at least two tables:
    - `ingredients` table containing ingredients and their highlighted information.
    - `recipes` table storing details about each recipe, including foreign keys linking it to ingredients.
- The listing page should fetch categorized data from the database and display it dynamically.

- There should be at least one HTML form that allows users to insert new recipes into the database.

Client-Side JavaScript & Interactivity

- Include the ingredient hover functionality and at least one additional interactive element using client-side JavaScript, including but not limited to:
  - Search/filter feature for the recipe list.
  - Form validation before submitting a new recipe.
  - Dynamically expanding protein tables.

Submission Requirements

- A GitHub repository containing:
  - The full project code.
  - An SQL script to create and populate the database.
    - This can be created through MySQL Workbench with the Administration tab -> "Data Export"
  - A README.md file with setup instructions.
  - Share the repository with me @ DrBrittonHorn

Grading Criteria

Category	Points
Overall website functionality	50
Database integration	20
Frontend (HTML, CSS, JS)	20
Quality and Creativity	10
Total	**100**