

Frontend UI Assignment

Objective

Develop a responsive and interactive **Employee Directory Web Interface** using **HTML**, **CSS**, **JavaScript**, **and Freemarker templates**. The goal is to assess your understanding of modern front-end development principles and your ability to build clean, modular, and user-friendly interfaces **without relying heavily on external APIs**.

Requirements

User Interface:

- 1. Dashboard Page
 - Display a list/grid of employees with the following details:
 Employee ID, First Name, Last Name, Email, Department, and Role.
 - Use a Freemarker template to render the list (mock data will be passed to the template).
 - Each employee card/row should have an "Edit" and "Delete" button.

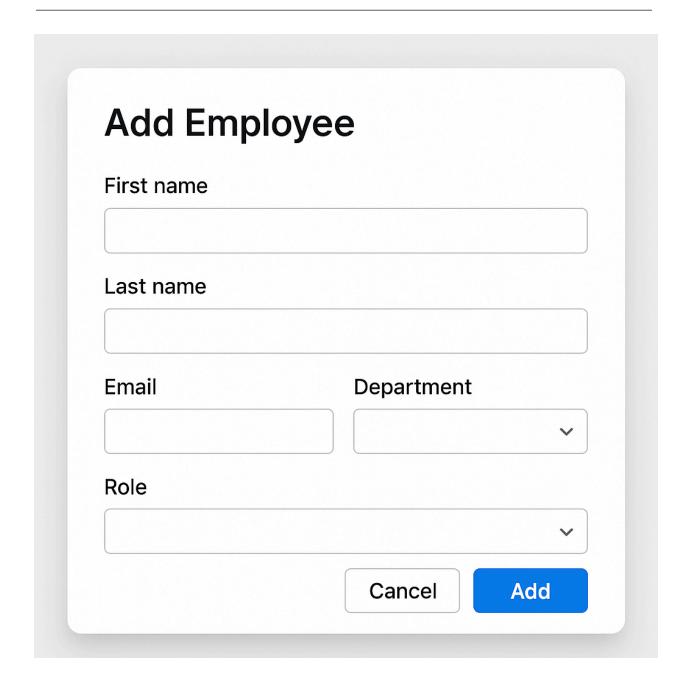


Employee Directory Search by name or email Filter Add Employee Sort: --Select-- > Show: 10 > Alice Smith **Bob Johnson** Charlie Lee Email: alice@example.com Email: bob@example.com Email: charlie@example.com Department: IT Department: Finance Department: HR Role: Analyst Role: Manager Role: Developer Edit Delete Edit Delete Edit Delete © 2025 Employee Directory App. All rights reserved.

2. Add/Edit Form Page

- o Create a **form (HTML)** to add or edit an employee.
- This form should be styled and validated using CSS and JavaScript.
- o Fields: First Name, Last Name, Email, Department, Role.
- Use simple client-side JavaScript to handle form submission, validation, and updating the data locally (in memory, no backend required).

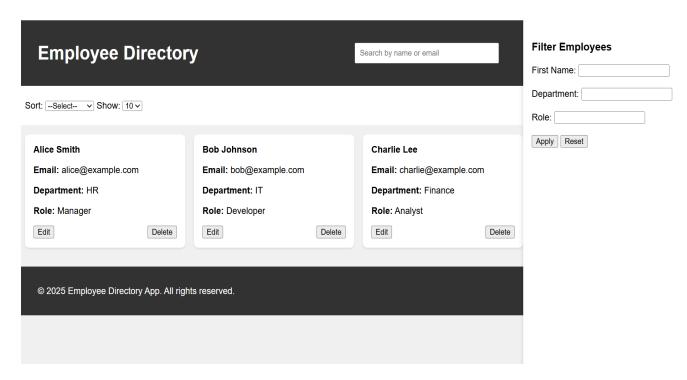




- 3. Filter/Sort/Search
 - Add a **filter popup or sidebar** that allows filtering employees by:
 - First Name
 - Department
 - Role
 - Add a search bar at the top to search employees by **name or email**.



Add sorting capability by First Name and Department.



- 4. Pagination or Infinite Scroll
 - Implement pagination (options for 10, 25, 50, 100) or infinite scrolling using JavaScript.
- 5. Responsive Design
 - o Ensure the app is responsive and looks good on desktop, tablet, and mobile.

Functionality

- Data Handling:
 - Use a local JavaScript array to simulate employee data (can be loaded via <#assign> tag in Freemarker from a mock JSON object).
- Form Validation:
 - Validate fields like email format, required fields, etc., using JavaScript.
- No Backend Interaction Required:
 You do not need to connect to any backend API or perform real network calls.



Error Handling & Validations:

- Display validation errors clearly (e.g., invalid email, required fields).
- If the user tries to delete an employee without selecting one or editing without saving, handle these interactions gracefully.

Guidelines:

- Focus on writing clean HTML/CSS/JS.
- Use vanilla JavaScript (optional: minimal use of libraries if really needed).
- Use **Freemarker** where dynamic HTML rendering is required.
- Try to modularize your CSS and JS.
- Add comments in your code where necessary to explain logic.

Submission:

- Upload your project to a public GitHub repo.
- Include a **README** file with:
 - Setup and run instructions.
 - o Overview of your project structure.
 - o Screenshots (optional but recommended).
 - Reflection: Challenges faced and what you'd improve if given more time.

Timeline:

• The faster turnaround will be awarded bonus points.

Evaluation Criteria:

- HTML/CSS code quality and responsiveness.
- Use of JavaScript for DOM manipulation and interactivity.
- Freemarker integration and clean templating.
- User Experience (UX) & Interface Design (UI).
- Code structure, readability, and validation handling.