

## My Week 3 Progress

During the third week of our PulseHR Employee Management System project, our team shifted focus to the frontend development. Notable additions include components for adding and listing employees, as well as header and footer sections.

### **I code I worked on is the List Employee Component:**

A significant contribution from my end was the implementation of the "List Employee" component. This React component interacts with the backend to fetch and display a list of employees.

Here are the key features:

- **State Management:** Utilized React's `useState` hook to manage the state of the employee list.
- **Data Retrieval:** Incorporated the `useEffect` hook to fetch the employee data from the backend upon component mount.
- **Delete Functionality:** Implemented a function to delete an employee, updating the list accordingly after deletion.
- **Dynamic Rendering:** Rendered a dynamic table displaying employee details with options to update or delete each entry.

### **Backend - Spring Boot Contribution:**

Additionally, I contributed to the backend by working on the `EmployeeController` in the Spring Boot application.

- **RESTful Endpoints:** Developed RESTful endpoints (`GET`, `POST`, `PUT`, `DELETE`) for managing employee data, adhering to industry best practices.
- **Exception Handling:** Implemented exception handling to deal with scenarios where an employee is not found, providing meaningful error messages.
- **Dependency Injection:** Utilized dependency injection with `@Autowired` to seamlessly integrate the `EmployeeRepository` into the controller, promoting modular and maintainable code.
- **ResponseEntity Usage:** Utilized `ResponseEntity` to control HTTP status codes and responses, ensuring a standardized and informative API.
- **CORS Configuration:** Included the `@CrossOrigin("*")` annotation for cross-origin resource sharing, facilitating communication with frontend components.

I contribution in the backend development in creating a RESTful API and Exception Handling Implementation i.e., Implemented effective exception handling in the backend, providing meaningful error messages when employees are not found. This contributes to the overall reliability of the system which is what I am proud of this week.