

Project: Building a Simple Task Management System

Project Description: You will be responsible for building a simple task management system that allows users to create, update, and delete tasks. The system should have both a backend API built with Spring Boot and a frontend user interface created with React.js. This project is designed to help you learn and demonstrate your full-stack development skills.

Deadline: 2023/10/30

Requirements:

Backend (Spring Boot):

- Create a RESTful API that can handle CRUD operations for tasks (Create, Read, Update, Delete).
- Implement validation for input data to ensure that task details are well-formed.
- Use Spring Data JPA to persist tasks in a database.
- Implement proper error handling and exception management.
- Use Spring Security to add basic authentication to the API.
- Implement API documentation using tools like Swagger.

Frontend (React.js):

- Create a responsive user interface for the task management system.
- Implement user registration and login functionality.
- Allow users to view a list of their tasks and add, edit, or delete tasks.
- Make use of React Router for navigating between different views.
- Ensure proper error handling and user feedback.

Version Control (GitHub):

- Create a new GitHub repository for this project.
- Use Git for version control, and make frequent commits to the repository.
- Collaborate with your team by working on feature branches and creating pull requests for code review.

Additional Guidelines:

- Use best practices for coding, project structure, and naming conventions.
- Implement tests for both the backend and frontend (unit tests, integration tests, or UI tests).
- Use a relational database (e.g., H2, MySQL, PostgreSQL) for the backend.
- Ensure the project is well-documented with clear instructions on how to set it up and run it locally.



Submission: At the end of the week, please provide a link to your GitHub repository and a brief report outlining your design decisions, challenges faced, and what you learned during the project. Be prepared to discuss your code and project during a review session. This task should give the interns an opportunity to work on a real-world full-stack development project, learn how to collaborate using Git and GitHub, and demonstrate their skills in Spring Boot and React.js.