

Project Title: SkillStream

Project Description: SkillStream Web Application is an online learning platform that allows students to enroll in courses and manage their learning, and for administrators to add, remove, and update courses.

Project Goals:

Develop a modern and user-friendly web application using React and Spring Boot.

Implement secure authentication and authorization mechanisms using Spring Security.

Create RESTful API endpoints for managing course and user data.

Build a responsive and accessible user interface for students and administrators.

Deploy the application to a cloud platform with automated CI/CD pipeline.

Conduct testing and quality assurance to ensure functionality, performance, and security.

Provide user documentation and training materials for end-users.

Project Timeline:

- Day 1:

Define project scope, requirements, and goals.

Create wireframes and design mockups.

Set up development environment, including React and Spring Boot.

- Day 2:

Implement user authentication and authorization using Spring Security.

Create API endpoints for course and user data using Spring Boot.

- Day 3:

Build course management interface on the frontend using React.

Integrate API endpoints to allow adding, removing, and updating courses.

- Day 4:

Build student enrollment interface on the frontend using React.

Integrate API endpoints to allow students to enroll in courses.

- Day 5:

Test the application for functionality, performance, and security.

Debug and fix any issues found during testing.

- Day 6:

Deploy the application to a cloud platform, such as AWS or Google Cloud.

Configure CI/CD pipeline to automate deployment and scaling.

- Day 7:

Conduct final testing and quality assurance checks.

Create user documentation and provide training materials for end-users.

Prepare for launch and announce the application to users.

Deliverables:

Source code for the SkillStream Web Application.

Deployment scripts and documentation.

- User documentation and training materials.
- Final report documenting the project scope, requirements, and outcomes.
- Assumptions and Risks:

Assumptions: I have experience with React and Spring Boot development. The cloud platform and CI/CD pipeline are already set up and available for use.

Risks: Possible delays in development due to unforeseen technical issues or lack of resources. Security vulnerabilities may be discovered during testing that require additional development and fixes.