Web Development Intern - Home Assignment

Assignment Overview:

Objective:

Develop a platform that enables users to register, log in, view a list of courses, and enroll in courses. The application should utilize React.js for the frontend, Spring Boot for the backend and free feel to utilise dev-ops tools of your own choice.

Requirements:

1. **Frontend: [React.js]**
   o Develop a user interface comprising:
     ▪ Registration and login pages.
     ▪ A dashboard listing available courses.
     ▪ An enrollment page for course registration.
   o Use React Router for seamless navigation.
   o Ensure the design is responsive and user-friendly.

2. **Backend: [Spring Boot/NodeJS]**
   o Implement a RESTful API to support frontend functionalities:
     ▪ User registration and authentication.
     ▪ Retrieval of course data.
     ▪ Course enrollment functionality.
   o Implement authentication and authorization.
   o Implement robust error handling.

3. **Database: SQL/NoSQL**
   o Design and optimize the database schema for storing user and course data.
   o Ensure secure and efficient database interactions.

4. **[Preferred] AWS Integration (Feel free to use any other hosting platforms):**
   o Deploy the backend service on AWS EC2 for scalability.
   o Utilize AWS S3 for static asset storage (if applicable).
   o Implement Docker to containerize the application for simplified deployment.

Submission Guidelines:

1. Create a GitHub repository containing your project code. Share the repository link with us.
2. Include a detailed README.md file in your repository covering:
   o Project description.

       ○   Steps to set up and run the project locally.

       ○   Any assumptions or design decisions made during development.

3. Submit your assignment by email to stealthmode.techgurukul@gmail.com with the subject "Web Development Intern Home Assignment - [Your Name]".

Evaluation Criteria:

- Evaluate based on code quality, organization, and application functionality.
- Assess adherence to best coding practices.
- Review efficient use of AWS services and database performance.
- Consider Docker implementation as bonus points.

Deadline: Submit your assignment within one weeks of receiving this email.

Best of luck! We look forward to reviewing your innovative solutions and potential contributions to our team.