Java Spring MVC Backend Assessment: Student Management System

Objective:

Develop a backend-only web application using <u>Java Spring MVC</u> to manage student, teacher, quiz, and course data for the current semester. This assessment aims to evaluate your ability to configure Spring, create service layers, handle data persistence using XML configuration, implement CRUD operations, and optionally integrate Swagger for API documentation.

Entities:

- 1. Student
- 2. Teacher
- 3. Quiz
- 4. Course

Service Layer:

- 5. Service Interfaces:
 - StudentService
 - TeacherService
 - QuizService
 - CourseService

Controller Layer:

- 6. Controller Interfaces:
 - StudentController
 - TeacherController
 - QuizController
 - CourseController

Configuration:

- 7. XML Configuration:
 - Configure Spring beans, Hibernate/JPA, and other necessary configurations using XML.

Database Configuration:

- 8. Database Connection:
 - Set up Hibernate/JPA for data persistence.

Web Configuration:

- 9. Spring MVC Configuration:
 - Configure Spring MVC for handling web requests.

CRUD Operations (Mandatory):

10. Implement basic CRUD operations for each entity in the service layer.

GitHub Upload:

12. Upload your project to GitHub: - Create a public repository on GitHub. - Upload your project including source code, configuration files, and README.

Optional Enhancement:

11. Swagger Integration: - Optionally, integrate Swagger for API documentation.

Submission Guidelines:

- Submit via GITHUB.
- Organize code neatly, use clear naming conventions, and provide comments where necessary.

Assessment Criteria:

• Evaluate based on functionality, code quality, effective use of Spring MVC, proper configuration of Hibernate/JPA, successful implementation of CRUD operations, and optionally, Swagger integration.

Feel free to reach out if you have any clarifications or questions. Good luck!