

**Semester: Fall-2024**

**Course Name:** Object Oriented Design **Course Code:** SE221

**Topic:** Project Proposal

**Submitted To:**

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**Date of Submission**

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**Project Proposal:**

**Student Registration Management System using Java Spring Boot, HTML, and MySQL**

**Executive Summary**

The proposed project aims to develop a comprehensive Student Registration System using Java Spring Boot as the backend framework, HTML for the user interface, and MySQL as the database management system.

The system will provide an efficient and user-friendly platform for managing student registrations, including the storage and retrieval of essential student information.

**Project Objectives**

The main objectives of the project are as follows:

* **Efficient Student Registration:** Design and implement a user-friendly system that allows students to register for courses seamlessly.
* **Database Management:** Develop a robust MySQL database to store and manage student information securely.
* **Web Interface:** Create a responsive HTML-based user interface for easy interaction with the system.
* **Spring Boot Backend:** Implement the backend logic using Java Spring Boot to handle business logic, data processing, and communication with the database.

Future objective:

* **Security:** Implement appropriate security measures to ensure the confidentiality and integrity of student data.

**Scope of Work**

The project scope includes:

* **Student Registration Form:** Develop a web-based form for students to input their registration details, including personal information, course preferences, and other relevant details.
* **Database Schema:** Design and implement an efficient MySQL database schema to store student information, including courses registered, personal details, and academic records.
* **Dashboard:** Create a user-friendly dashboard for administrators to manage student registrations, view reports, and perform administrative tasks.

For future implement:

* **User Authentication:** Implement secure user authentication to ensure that only authorized users can access and modify student information.
* **Email Notifications:** Implement email notifications to send confirmation emails to students upon successful registration and other relevant notifications.

**Technology Stack**

The proposed technology stack for this project includes:

* **Backend Framework:** Java Spring Boot
* **Frontend:** HTML
* **Database Management System:** MySQL
* **Version Control:** Git
* **Build and Dependency Management:** Maven

**Conclusion**

This Student Registration System aims to streamline the student registration process, enhance data management, and provide a secure and efficient platform for administrators and students. The proposed technology stack ensures a scalable and maintainable solution that aligns with modern development standards.

I am looking forward to the opportunity to develop and deliver a successful Student Registration System that meets my university requirements and expectations.