

**SOFTWARE RE-ENGINEERING**

**STUDENT PORTAL**

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**Project Summary**

The Student Portal is a web-based application designed to manage student and teacher records efficiently. The system facilitates communication between students and teachers by allowing students to view their academic records while enabling teachers to update attendance and marks seamlessly.

The portal provides an intuitive user experience where students can register for courses, check their grades, and view attendance records. Teachers will have the ability to update marks and attendance while ensuring data security and role-based access control. The backend will be powered by an SQL database, ensuring data integrity and scalability.

The system will enforce constraints such as restricting students from modifying their grades or attendance, which only teachers can update. Additional features include generating transcripts at the end of the semester and a help section where users can provide feedback or seek instant assistance. These functionalities will streamline academic processes and improve the overall experience for students and teachers.

Moreover, the system will enhance the overall efficiency of academic processes by minimizing manual record-keeping and reducing errors. It will provide real-time updates to students regarding their performance, ensuring transparency and accessibility. The integration of a help and feedback mechanism will also contribute to continuous improvement and user satisfaction.

**Feature List**

1. **User Authentication:** Secure login for students and teachers.
2. **Student Dashboard:** View attendance, grades, and registered courses.
3. **Teacher Dashboard:** Add/update student marks and attendance.
4. **Course Management:** Students can register for courses.
5. **Transcript Generation:** Automated transcript generation at the end of each semester.
6. **Help & Feedback:** Users can report issues and request support.
7. **Role-Based Access Control:** Students can only view their data, while teachers can update academic records.
8. **Database Integration:** SQL database for efficient data management and integrity.
9. **User-Friendly Interface:** A clean and intuitive UI for seamless navigation.

**Project Type:** Web Application

The project is designed to ensure students gain hands-on experience in software re-engineering concepts by working on database management, user authentication, and full-stack development.