

Project Title: Student Management System with Role-based Control

Introduction:

This project is a simple, locally-hosted Student management System built using HTML, CSS, JavaScript and node.js, with a backend database. It allows users to register as either **Students** or **Teachers**, offering tailored access to academic records based on their role.

Students can **view their grades** and **report inaccuracies**, while teachers can **manage and update grades** without modifying student personal information

In many institutions, Student data is very still managed or overly complex systems that are inaccessible to smaller schools. This project is inspired by the need for a **Lightweight, role-based academic record system**, that works offline without the need for external hosting, and maintains privacy and control for both students and educators.

By separating permissions clearly between user types, this project simulates real-world systems while remaining beginner-friendly for developers

Objective:

- To design and implement a web-based student management system with clearly defined user roles
- To allow students to securely access the review of their academic records
- To enable teachers to manage student grades without access to sensitive personal data
- To store all data locally for simplicity and offline access
- To reinforce secure and ethical data handling in software systems

Scope:

This project will cover;

- Local user registration and login
- Role-based dashboards for students and teachers
- Secure data handling and storage using Node.js and JSON
- CRUD (Create, Read, Update, Delete) options for grades (teachers only)
- Feedback systems for grade complaints (students only)

This project will not include;

- Online access hosting
- Real-time updates or multi-user support
- Advanced encryption or third-party integration
- Admin role or automated grading