

System Requirements Specification (SRS)

Title: School Management System

1. Introduction

1.1 Background of the Project

The School Management System is designed to streamline and enhance student, teacher, and administrative activities within an educational institution. The system facilitates easy access to academic records, schedules, exam results, and financial information while enabling seamless management of student and teacher records.

1.2 Statement of the Problem

Traditional academic record management systems often suffer from inefficiencies, such as difficulty in accessing records, managing attendance, and updating student performance. The proposed system addresses these issues by automating academic processes and providing real-time access to crucial information.

1.3 Purpose of the Project

The purpose of this project is to develop a centralized and efficient platform for students, teachers, and administrators to manage academic activities, ensuring accuracy, accessibility, and transparency.

1.4 Team Composition

- Project Manager
- Backend Developer
- Frontend Developer

1.5 Objectives of the Project

1.5.1 General Objective

To develop a web-based School Management System that enhances the efficiency of academic operations in an educational institution.

1.5.2 Specific Objectives

- To provide students with easy access to academic records, attendance, and schedules.
- To enable teachers to manage student performance and attendance records efficiently.
- To allow administrators to oversee and manage student and teacher records, timetables, exams, and fee payments.

1.6 Feasibility Study

1.6.1 Technical Feasibility

The system will be developed using modern web technologies such as React.js for the frontend, Node.js/Express.js for the backend, and a MongoDB/mongoose database.

1.6.2 Operational Feasibility

The system will be user-friendly and easy to adopt, ensuring smooth integration with existing workflows.

1.6.3 Economic Feasibility

The system will reduce administrative costs by automating tasks, minimizing manual data entry errors, and improving efficiency.

3. Proposed System

3.1 Overview of the System

The proposed School Management System is a web-based platform that enables students, teachers, and administrators to efficiently manage academic records, attendance, timetables, and payments.

3.2 Functional Requirements

Student Functionalities

- View personal profile & academic records
- View class timetable & schedules
- View exam results & report cards
- View attendance records
- Receive announcements & notifications
- Check fee payment status

Teacher Functionalities

- Manage student attendance
- Grade review
- Enter and update student marks
- View class timetable & schedules
- Post important notices for students

Admin Functionalities

- Manage student records (Add/Edit/Delete)
- Manage teacher records (Add/Edit/Delete)
- Assign students to classes & sections
- Assign teachers to subjects & classes
- Generate & manage timetables
- Manage exams & result processing
- Manage fee collection & payments
- Post global announcements & notices

3.6 System Model

3.6.1 Scenario

- **Student Perspective:** A student logs into the system using their credentials and navigates to their academic dashboard. They check their latest exam results, review their attendance records, and verify their upcoming class schedule. If they have any pending fee payments, the system alerts them.
- **Teacher Perspective:** A teacher logs in and selects their assigned class. They update the daily attendance of students, enter marks for recent assessments, and post an important notice about an upcoming exam. The system ensures that only the teacher's assigned subjects and students are accessible.
- **Admin Perspective:** An administrator logs into the system and reviews teacher assignments. They assign a newly recruited teacher to a specific class and subject. Additionally, they generate the new academic timetable and ensure all records are up to date.