

Overview

This web-based platform is designed to help schools manage academics, sports, and cultural events efficiently. It provides role-based access for administrators, teachers, students, and parents.

User Roles & Features

Feature	Admin	Teacher	Student	Parent
Dashboard Overview	✓	✓	✓	✓
Manage Users (Teachers, Students, Parents)	✓	✗	✗	✗
Manage Classes & Sections	✓	✗	✗	✗
Assign Subjects & Timetable	✓	✓	✗	✗
Take Attendance	✓	✓	✗	✗
View Attendance	✓	✓	✓	✓
Enter Exam Marks	✗	✓	✗	✗
View Exam Marks	✓	✓	✓	✓
View Rank & Report Card	✓	✓	✓	✓
View Student Timetable	✓	✓	✓	✓
Sports & Cultural Activities Tracking	✓	✓	✓	✓
Event Management	✓	✓	✓	✓
Notifications & Alerts	✓	✓	✓	✓

School Management Features

1. User & Role Management

- School Admin, Teacher, Student & Parent login
- Parent-child linking (Parents can track multiple children)
- Role-based permissions

2. Student & Academic Management

- Class & Section Management
- Subject & Teacher Assignments
- Student Registration & Profile Management

3. Timetable & Scheduling

- **Class Timetable** – Viewable by students & parents
- **Exam Timetable** – Scheduled exams & notifications

4. Attendance & Performance Tracking

- Teachers mark attendance
- Parents & Students can view attendance history

5. Marks & Report Cards

- Teachers enter exam scores
- Rank card generation & performance analysis
- Parents track child's academic progress

Sports & Cultural Activities

- Sports & Team Management (Register teams & players)
- Training & Tournament Scheduling
- Score & Performance Tracking
- Cultural Activities Calendar

Events & Notifications

- Create & Manage Events (Academic, Sports, Cultural)
- Event Registration & Reminders
- Announcements & Real-time Notifications (Email, SMS, WhatsApp)

Technology Stack

- **Frontend:** React.js + Redux
- **Backend:** Java Spring Boot (REST APIs)
- **Database:** MySQL / PostgreSQL
- **Authentication:** JWT-based login
- **Notifications:** Firebase/SMS API/WhatsApp API
- **Deployment:** AWS / DigitalOcean