

A picture containing text

Description automatically generated

Student Activity Manager

System proposal

Table of Contents:

[Introduction 2](#_Toc520367647)

[1. What is our system idea (in a nutshell)?. 3](#_Toc520367648)

[2. What information will the system offer the user? 3](#_Toc520367649)

[3. What data will be stored by the system? 3](#_Toc520367650)

[4. Where the data will come from 3](#_Toc520367651)

[5. List of Use Cases the system will implement. 3](#_Toc520367652)

[6. Who are the target users/actors? 4](#_Toc520367653)

[7. What comparable systems are available and how differ from ours? 4](#_Toc520367654)

[8.](#_Toc520367655) [Diagram: Problem Domain sketch 4](#_Toc520367655)

Student Activity Manager

## INTRODUCTION:

The system idea of student Activity manager is a student academics and activity management system that enables educational institutions to manage student data in real-time and help parents to manage their children’s time. The system would allow users to view, add, and manage student data, including personal information, academic records, and schedule. It would also allow users to manage student enrolment in classes, extra-curriculum activities and track overall progress. The system would generate reports on student data, such as academic performance, and schedule, which can be customized to show data for specific time periods, student groups, and academic departments.

The proposal for this system will present a novel concept that will be comprehensively elucidated in terms of the data inputs, queries it can handle, the intended users, and the distinguishing features that set it apart from existing products.

By using SQLite, we can provide a robust and scalable solution that is both efficient and cost-effective. Also, it has been flexible enough to be customised later as per the user’s demand.

## What is our system idea (in a nutshell):

Nowadays, people live in faster lifestyle than before. Students have different kinds of commitments either inside or after school hours every day. Managing all the activities could be very challenging especially to the family with more than one child.

The proposed system is a student Activity manager system that allows educational institutions and parents to manage student data and time in real-time. A student Activity manager system can help educational institutions streamline their administrative processes, reduce paperwork, and improve the quality of education by providing better insights into student performance and parents can utilize their child’s time effectively. Our proposed student Activity manager system with SQLite is a practical and useful solution for institutions and parents to manage student data in real-time.

Features:

1. **User Authentication:** Users will be required to log in to access the system. The system will have different user roles with varying access levels to maintain security.
2. **Student Management:** Users will be able to view, add, and manage student data, including personal information, academic records, activities and disciplinary records.
3. **Enrolment Management:** Users will be able to manage student enrolment in classes and track academic progress.
4. **Reporting:** The system will generate reports on student data, including academic performances and reports can be customized to show data for specific time periods, student groups, and academic departments.

## What information will the system offer the user:

The student Activity manager system will offer users access to a wide range of student data and related information, including:

1. **Personal Information:** The system will offer personal information about each student, such as their name, contact information, date of birth, and identification number. This information is used to identify and track students in the system.
2. **Academic History:** The system will offer academic history information about each student, including their enrolment status and academic program.
3. **Course and Extra-Curricular Activity Information:** The system will offer information about each course and activity offered by the institution, including course codes, course names, course descriptions, credit hours, schedules, and instructors. This information is used to guide students in course selection and enrolment.
4. **Reports and Analytics:** The system will store comprehensive reports and analytics that can help administrators, educators and parents make data-driven decisions about student performance and institutional management.

## What data will be stored by the system:

The data that will be stored by the student Activity manager system will be:

1. **Student Data:** The system will store personal information about each student, including their name, address, contact information, date of birth, and identification number. It may also include information about their parents or guardians.
2. **Academic Data:** The system will store academic information about each student, including their enrolment status, academic history, courses taken, grades, and attendance records. It may also include information about academic courses.
3. **Course and Extra-Curricular Activity Information:** The system will store information about each course and activity enrolled, including the course code, course name, course description, credit hours and instructor. It may also include performance and grades.

## Where the data will come from:

This system provides users a variety of options which is most attractive attribute about management database. The more the users use this system the more it will become popular and efficient. The sources from where the data can be obtained are quite less due to privacy concerns, so most of data will be synthetic (entered manually).

1. **Parents**: The main target audience (parents) will put their child's information in the system to make it more certain regarding the academics, extracurricular activities and schedules and the tuition fees.
2. **Schools**: This system provides schools an efficient attribute regarding to touch with their students and teachers. School will store the information about teachers, students and get in contact with providers. (To be entered manually)
3. **Activity Provider**: This will system store data of an activity provider where the provider put all the details of students, parents and schools regarding the best timing for students. (To be entered manually).

## List of Use Cases the system will implement:

The possible use cases for the student Activity manager system are:

## Some possible use cases that different types of users could access in the student Activity manager system:

## **Use cases for students:**

## View their personal information (name, email, phone, address, etc.)

## View their academic records (enrolment status and course schedules, etc.)

## View available courses.

## View their extracurricular activity participation and progress.

## **Use cases for teachers or instructors or educators:**

## View and manage their courses (create, modify, or delete course details, such as syllabus, assignments, etc.)

## View and manage their course enrolments.

## View and manage their students (access their personal information, communicate with them via email, schedule class.)

## View and manage extracurricular activities that they supervise or sponsor.

## View and generate reports on course or student performance metrics (such as average grades, attendance rates, completion rates, etc.)

## **Use cases for parents or guardians:**

## View their children's personal information (name, email, phone, address, etc.)

## View and monitor their children's academic records and progress.

## View and manage their children's course enrolments or schedules.

## View and manage their children's extracurricular activity participation and progress.

## Communicate with their children's educators or instructors via email.

## 

## Who are the target users/actors:

The target users/actors of the online student Activity management system are:

1. **Students:** Students are the primary users of the system, as it is designed to manage their academic records and information. They will use the system to access their personal information, academic history, course information, attendance records, and other relevant data. Students will also use the system to enrol in courses, view their grades, and communicate with educators and administrators.
2. **Educators:** Educators are another important user group of the student Activity manager system. They will use the system to manage course materials, assignments, class schedules, quizzes, and exams. They will also use the system to track student progress, monitor attendance, and communicate with students, parents and other educators.
3. **Parents/Guardians:** Parents and guardians may also be users of the online student Activity management system, particularly for younger students. They will use the system to access information about their child's academic progress, attendance records, check schedule, manage their child’s time and communication from educators and administrators.

## What comparable systems are currently available and how differ from ours:

There are several comparable systems currently available for managing student records, and they vary in terms of their features, functionality, and pricing. Some of the commonly used student Activity management systems include:

1. **Banner:** Banner is a student Activity management system used by many higher education institutions. It provides features such as registration, financial aid, and academic advising. Banner also offers mobile applications for students, faculty, and staff.
2. **PeopleSoft:** PeopleSoft is another popular student Activity management system that provides features such as student registration, course scheduling, and academic advising. PeopleSoft also offers human resource and financial management modules.
3. **PowerSchool:** PowerSchool is a student information system used by K-12 schools. It provides features such as attendance tracking, grade reporting, and parent communication. PowerSchool also offers mobile applications for parents and students.
4. **Blackboard:** Blackboard is a learning management system used by many higher education institutions. It provides features such as course management, student communication, and assessment tools. Blackboard also integrates with other systems such as student information systems and library systems.

Compared to these systems, the system proposed in the question would have some unique features and differences. For example, the system proposed may be designed to use SQLite as its database management system, which could offer benefits such as lower cost, simplicity, and portability. The proposed system may also have a user interface designed specifically for the needs of the institution and the users, offering more customized functionality and ease of use. Additionally, the proposed system may be designed with specific security features to ensure the confidentiality and integrity of student data.

## Diagram: Problem Domain sketch:

