Siddhant EyeBall – A Review Paper
(Student Attendance and Test Report Management Project)

[1]Vidya B. Maskar
Department of Computer Engineering,
SVERI's College of Engineering (Poly.)
Pandharpur, India

[2]Pratiksha A. Raut
Department of Computer Engineering,
SVERI's College of Engineering (Poly.)
Pandharpur, India

[3]Harshada H. Katkar
Department of Computer Engineering,
SVERI's College of Engineering (Poly.)
Pandharpur, India

[4]Sneha S. Shinde
Department of Computer Engineering,
SVERI's College of Engineering (Poly.)
Pandharpur, India

[5]Dnyaneshwari V. Gophane
Department of Computer Engineering,
SVERI's College of Engineering (Poly.)
Pandharpur, India

Abstract:- This system involves the administrators, staff, and parents. Its main purpose is to facilitate attendance tracking and store student information, including academic attendance data and class test marks. The messaging system is the fastest way to distribute information directly and accurately. With this system, the possibility of errors, offenses, or data registration issues is low. To develop this system, an analysis was conducted to identify problems and effective ways to overcome them. While the system is achieving its objectives, there is still room for improvement.

Keywords:- Student, Teacher, Attendance, Report, Marks, Staff, Parents.

I. INTRODUCTION

The title of the project is "Siddhant EyeBall". In an age where technology continues to redefine the way we live, work, and communicate, it is no surprise that education is also undergoing a digital transformation. The traditional methods of managing student attendance, class timetables, and test score records are increasingly becoming obsolete, giving way to more efficient and effective solutions.

We present to you "Siddhant EyeBall," an innovative Android application designed to revolutionize education management and communication between students, teachers, parents, and administrators.

Siddhant EyeBall is a comprehensive and user-friendly mobile application that brings a new level of organization and transparency to educational institutions. With its multifaceted features, it caters to the unique needs of students, teachers, and administrators. Let's take a closer look at the key features Siddhant EyeBall has to offer:

A. Student Attendance Management:
Siddhant EyeBall simplifies the process of shadowing and managing pupil attendance. preceptors can painlessly record attendance in real-time, reducing the chances of crimes and making it easier to identify patterns in pupil attendance.

B. Class Timetable Scheduling:
Creating and managing class schedules is a breeze with Siddhant EyeBall. Preceptors can record classes, assign subjects, and give scholars over-to-date calendars. This ensures that everyone knows when and where their classes are held, reducing scheduling conflicts and confusion.

C. Test Report Marks Management:
Keeping track of students' test scores and academic progress is crucial for educational institutions. Siddhant EyeBall allows teachers and administrators to efficiently manage and access test scores, providing insights into students' performance over time.

D. Parent Communication:
In today's world, effective communication is crucial for the success of educational institutions. Siddhant EyeBall is a platform that equips these institutions with the necessary tools to streamline administrative tasks, increase transparency, and improve the parent-teacher relationship. By providing real-time access to critical data, Siddhant EyeBall is the ideal solution for modern educational institutions to overcome the challenges of the dynamic and demanding academic landscape.

E. Objectives
The system made to fulfill the following objectives:

- To record all of the student academic information for future reference and enhancement and to update and search student information, attendance, results, and performance

- To record student attendance and notify. The main objective of the project is to manage the details of Students, Teachers, and Batches.
- The project is built at the administrative end and thus only the administrator guarantees access. The purpose of building the project is to reduce the manual work for managing student information.
- Improved Transparency: Our project seeks to bring greater transparency to the education system. By offering real-time access to attendance records and test marks, students, parents, teachers, and administrators can all stay well-informed about academic progress and class schedules.

Enhanced Communication: We aim to foster better communication between educational institutions and parents. Through automated messaging, our application will help parents to get regular updates on their child's attendance and test scores, keeping them actively involved in their child's education.

II. LITERATURE REVIEW

A. Fedena:

"Fedena" offers comprehensive solutions for administrative tasks, including attendance management and communication with parents. They have been praised for their user-friendliness and real-time data access, simplifying school operations (Shah, 2019).

Fedena is a web-based school management and enterprise resource planning (ERP) software that provides a comprehensive solution for educational institutions, including schools, colleges, universities, and other educational organizations. It is designed to streamline administrative and academic processes, automate routine tasks, and enhance communication within educational institutions.

Here are some key features and information about the Fedena app:

➢ *Key Features:*

- *Student Information Management:*
Fedena allows for the management of student information, including enrollment, profiles, attendance, and more.

- *Class Timetable Scheduling:*
It provides tools for creating and managing class timetables, making it easier to schedule classes and allocate resources efficiently.

- *Grading and Exam Management:*
Users can manage grading systems and examination schedules, including the recording and analysis of test scores and report cards.[1]

B. My Study Life:

My Study Life has redefined class timetable scheduling. These applications streamline the process, helping teachers and students access up-to-date schedules, reduce scheduling conflicts, and make changes in real time.

"My Study Life" is a popular cross-platform student planner application that helps students organize their academic schedules and tasks. It allows users to create and manage class schedules, set assignments and exams, and receive notifications for upcoming events.

The app also provides cloud synchronization, making it easy to access and update schedules from multiple devices. It's designed to help students stay organized and on top of their academic responsibilities. "My Study Life" is available for iOS, Android, and Windows devices, providing a user-friendly and efficient way for students to manage their studies.[2]

C. Power School:

"PowerSchool" is popular for test score management. They offer digital grade books and detailed analytics for educators to monitor student performance. These apps are instrumental in maintaining accurate and organized student data.

PowerSchool is a widely used student information system (SIS) and school management software. It offers a comprehensive platform for educational institutions to manage student data, including attendance, grades, and schedules. PowerSchool provides tools for educators, administrators, students, and parents to access and track academic information.

It also offers a mobile app that allows users to view student information and receive real-time updates on attendance, grades, and school announcements. The mobile app enhances parent-teacher communication and helps keep stakeholders informed about students' academic progress.[3]

D. Remind:

"Remind" has been pivotal in automating parent communication. These applications enable direct messaging, and automated updates on student attendance, and test scores, enhancing parental involvement and support for students' education.

"Remind" is a communication platform designed to facilitate communication between teachers, students, and parents. It allows teachers to send messages, announcements, and assignments to students and their parents through the app.

"Remind" helps improve communication, keeps everyone informed about important school-related information, and fosters greater engagement in the educational process. The platform is available as a mobile app and a web application, making it accessible from various devices, and educators and students widely use it to streamline school communication.[4]

E. TeacherKit:

"TeacherKit" specializes in student attendance management. They allow educators to record attendance digitally, analyze attendance data, and identify trends in student participation. These apps reduce the chances of errors and improve administrative efficiency.

"TeacherKit" is a mobile application designed to help teachers manage their classrooms and students more effectively. It offers features such as attendance tracking, grade management, behavior recording, and student profile management.

Teachers can use the app to record and analyze student data, streamline administrative tasks, and improve communication with parents. "TeacherKit" is available on iOS and Android devices and is a valuable tool for educators to maintain organized classroom records and enhance their teaching experience.[5]

F. Campus Management:
Comprehensive education management suites such as "Campus Management" offer a wide array of features, including attendance, scheduling, and grade management. These solutions are tailored for larger educational institutions, enabling streamlined administration and data analysis.

"Campus Management" is a comprehensive software suite designed for educational institutions, including colleges and universities. It offers a wide range of features, including student information management, enrollment, course scheduling, academic records, financial management, and more. The platform is designed to streamline administrative tasks, enhance communication, and improve efficiency within educational institutions.

"Campus Management" is a scalable solution that caters to the needs of both small and large institutions, providing tools for data management and analysis, and it's widely used in higher education for improved operational workflows and student services.[6]

G. MyHomework:
Teachers can use apps like "MyHomework" to keep track of grades, manage communication with students and parents, and stay organized. These applications are a great help in tracking the progress of students. Meanwhile, "MyHomework" is a digital app that serves as a planner for students, enabling them to manage their academic workload. The app provides a user-friendly interface, which is available on both Android and iOS devices, to organize assignments, track deadlines, and set reminders for better time management.[7]

H. ParentSquare:
Platforms such as "ParentSquare" offer solutions for parent communication and engagement. These applications streamline communication, including automated notifications for attendance and academic updates, enhancing the collaboration between parents and educators.

"ParentSquare" is a communication platform that facilitates interaction and engagement between schools and parents. It enables schools to send messages, updates, and important information to parents through the app, email, or text messages.

Parents can receive notifications about school events, announcements, and their child's academic progress. "ParentSquare" promotes better communication and involvement in a student's education by keeping parents informed about school activities and facilitating interaction with teachers and school staff. It offers a convenient way for parents to stay connected with their child's school community.[8]

III. SUMMARY

Siddhant EyeBall is a revolutionary Android application designed to simplify and modernize education management. With features that include student attendance management, class timetable scheduling, and test report marks management for staff and administrators, it streamlines academic processes, reducing administrative burdens.

Notably, Siddhant EyeBall bridges the communication gap between educational institutions and parents. Automated messaging ensures parents get timely updates on their child's daily attendance and test scores, fostering greater engagement in their child's education.

Siddhant EyeBall not only saves time and resources for educational institutions but also provides real-time access to crucial information, improving transparency and efficiency. This user-friendly app empowers educators to focus on teaching, administrators to make informed decisions, and parents to get more involved in their child's academic journey.

IV. METHODOLOGY

Project work is a process that involves a series of oriented activities, carried out through projects. The main goal is to incorporate ideas or skills to be expressed or executed through communication with the group. The projects are conducted under the guidance of the teacher and the work is carried out by the students to acquire certain knowledge, skills, and values.

The project work has three fundamental phases: the formulation of a problem, the search for solutions, and the presentation of the solutions behind a communicative action. Each of the phases should be evaluated according to their relevance, and the communicative action should present the possible solutions to solve the problem

The goal of the project work is to expand the potential of each student. This is achieved through the project, which starts from the search for a solution to a problem and is carried out effectively in each space and time in an educational context. This allows the development of a consciousness that is accompanied by a communicative act on the real.

Working with projects is a proposal of education that focuses on the formation of competencies. It aims to develop active learning through the participation of students, avoiding the traditional approach of passive, verbal, and theoretical pedagogy.
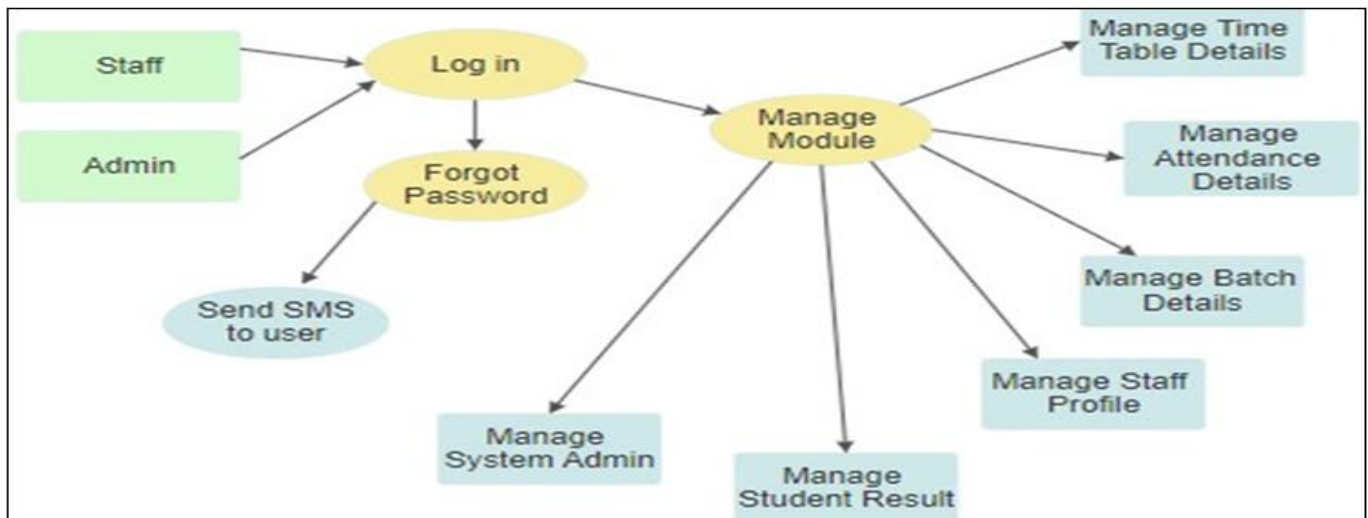
Fig 1 Siddhant EyeBall DFD Level 2

A. Problem Statement

In the realm of educational institutions, managing student attendance, timetables, and test reports is challenging for educational institutions. Traditional paper-based methods are inefficient and lead to errors. Communication between institutions and parents is often ineffective, resulting in limited involvement. Our Android app addresses these issues, providing a comprehensive solution for attendance management, scheduling, marks, and parent communication, transforming education management for all stakeholders.

B. Project Scope

The Siddhant eyeball Android application project aims to enhance education management and communication within educational institutions. Its primary focus is to provide a user-friendly platform for managing student attendance, class timetable scheduling, test report marks, and facilitating automated parent communication.

By offering a comprehensive solution, Siddhant Eyeball aims to improve education management, transparency, and communication between educational institutions and parents, ultimately enhancing the educational experience for all.

The project includes the following key features: i. Real-time recording and management of student attendance by teachers. ii. Secure storage and easy access to attendance data by staff and administrators. iii. Automatic generation of attendance reports for analysis. iv. Automated messaging to parents regarding student attendance and test scores. v. Real-time updates to parents on their child's educational progress.

V. CONCLUSION

Siddhant EyeBall is more than just an application; it is a catalyst for positive change in education management. It simplifies complex administrative tasks, making education more efficient, transparent, and accessible to all. As we conclude this project, we look ahead to a future where traditional constraints do not confine education. Siddhant EyeBall has set a new standard in education management, providing a scalable platform that adapts to the ever-evolving needs of educational institutions. Our commitment to this project extends beyond its development phase. We will continue to support, enhance, and refine Siddhant EyeBall, ensuring it remains a valuable resource for educators, administrators, and parents. In conclusion, Siddhant EyeBall marks a significant stride towards a more connected, informed, and efficient education ecosystem. It is a testament to the transformational power of technology in shaping the future of education. With Siddhant EyeBall, we empower the stakeholders of education to embark on a journey of collaboration, engagement, and success in the academic world.

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