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College Commune

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Abstract: *The attendance system is a system that is used to track the attendance of a particular person and it is applied in many institutions. Students must be present for class. The lecturer or teacher cannot evaluate a student's participation without the attendance procedure. But in the process now, attendance is still done manually using paper. So to provide the feature of automated attendance we are approaching college community application. It's providing the feature of note sharing with the flexibility for teachers or lecturers to provide notes very easily and even they don't have any need to carry the notes paper with them to circulate to students. As well as it providing the showcase board to present the official notice, reminders, alerts, achievements, placement activities, and extra-curricular activities, so we don't have to maintain the physical notice board.*

Key Word: *Face Recognition; Student Information Management;*

I.INTRODUCTION

A person's attendance can be tracked using an attendance system, which is used in businesses, educational institutions, and workplaces. The attendance rate will be calculated based on the average percentage of students attending school every class of the course. Students that regularly attend class have a higher chance of succeeding academically, so the attendance rate is crucial. If a significant portion of the class is regularly absent, the lecturer and the class will struggle to advance and develop their skills. The traditional method of recording attendance has limitations, including the difficulty of reusing the data from the attendance list. If the lecturer wants to determine the proportion the students that attend the class, he/she has to calculate manually or input by typing. This also easily leads to human error such as the lecture may be wrong. The technology-based attendance system will reduce human involvement and decrease human error. Attendance is an activity of data retrieval in order to find out the number of attendance in a course. Every activity that calls for student data will be in attendance. This also takes place while learning. Students and other participants in the teaching and learning process benefit from this presence. One of the uses of this attendance system for students is, among other things, to determine how likely it is that they will take exams. One of the uses of this attendance information to those who are engaged in teaching and learning activities, among other things, is to assess students' levels of satisfaction with a subject and establish benchmarks for the future. Providing better information the process of manually retrieving attendance data has various drawbacks. The loss or degradation of existing data is another drawback of manual data retrieval. The ineffective and inefficient data processing is another drawback. The ease of obtaining and retrieving information is believed to make the use of mobile and online applications more effective and efficient.

II.SYSTEM DESIGN

To design a college application that can take attendance via face recognition, share notes, and send notification alerts, we need to consider the user interface, face recognition system, attendance management, notes sharing, notification system, security, integration with existing systems, and analytics. By addressing these components, we can create an app that improves the student and faculty experience and enhances the learning environment.

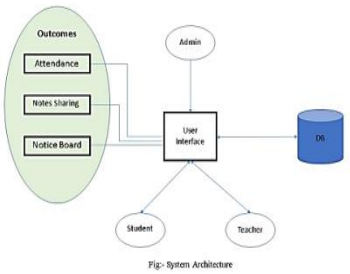

Fig:- System Architecture

User Interface: This is the front-end of the application, where users can interact with the system. It can be a web-based or mobile-based application.

Attendance System: This system includes a face recognition module that captures students' images and matches them with the images stored in the college's database. The system then marks the attendance of the students automatically.

Notes Sharing: This system allows students and faculty to upload, share and download notes. The system categorizes notes by course, date, and author to allow for easy access.

Alert Messages: This system includes push notifications or SMS alerts that notify students and faculty about important events, such as upcoming tests, deadlines, and schedule changes.

III. OVERVIEW

The college application designed to take attendance via face recognition, share notes, and provide notification alerts is a modern technological solution to automate attendance taking and simplify note sharing for college students and faculty members.

With the face recognition feature, students can easily and quickly register their attendance by simply looking into the camera of their device, which can save time and prevent attendance fraud. This feature can also help faculty members keep track of attendance records, which can be useful for monitoring class participation and engagement.

The note sharing feature allows students to easily share their notes with other students in the same class or with faculty members, which can promote collaboration and improve learning outcomes. This feature can also help students who miss a class to catch up on what they missed.

The notification alerts feature can help students and faculty members stay informed about important announcements, class schedules, and assignment deadlines. This feature can also help faculty members send reminders to students about upcoming exams, assignments, or other events.

Overall, this application can help streamline administrative tasks and improve the learning experience for college students and faculty members by leveraging modern technologies such as face recognition and real-time notifications.

IV.EXISTING SYSTEM

There are several existing systems that offer similar features to the college application designed to take attendance via face recognition, share notes, and provide notification alerts. Some of the popular existing systems are:

Blackboard: Blackboard is a learning management system (LMS) that allows students and faculty members to manage course content, take assessments, and communicate with each other. It also has features such as attendance tracking, gradebook management, and notification alerts.

Canvas: Canvas is another LMS that offers similar features to Blackboard, including attendance tracking, gradebook management, and communication tools. It also has a mobile app that allows students and faculty members to access course materials and stay updated on course activities.

Top Hat: Top Hat is a cloud-based teaching platform that allows faculty members to create interactive content, manage attendance, and track student performance. It also has features such as note-taking, discussion boards, and real-time feedback.

V.PROPOSED SYSTEM

The proposed system for the college application designed to take attendance via face recognition, share notes, and provide notification alerts would consist of several components:

- **Face recognition system:** This component would use facial recognition technology to accurately and efficiently take attendance in the classroom. The system would capture an image of the student's face and compare it to a database of known students to mark their attendance.
- **Notes sharing system**: This component would allow students to easily share notes with each other or with faculty members. Students could upload their notes to the system, which would be organized by course or topic for easy access.
- **Notification system**: This component would provide real-time notifications to students and faculty members about attendance, notes sharing, and other important events such as assignment deadlines or exam schedules.
- **Administration system**: This component would allow faculty members to manage attendance records, view and download notes shared by students, and send notifications to students.
- **Database**: The system would store data such as attendance records, notes shared by teachers, and notifications in a database for future reference and analysis.

The proposed system would provide a comprehensive solution for attendance taking, notes sharing, and notification alerts, and would be designed with a desktop application approach to provide convenience and accessibility for students and faculty members.

VI.CONCLUSION

In conclusion, the college application designed to take attendance via face recognition, share notes, and provide notification alerts can offer several advantages over existing systems. By providing a more efficient, user-friendly, and feature-rich solution, the proposed system can simplify attendance tracking, streamline note sharing, and provide real-time notifications for students and faculty members. The system would consist of several components, including a face recognition system, note

sharing system, notification system, web app, administration system, and database. By integrating these components into one platform, the proposed system can provide a more comprehensive solution for college students and faculty members.

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