DEPARTMENT OF CS & IT

Biometric attendance management system and digital notice board.

(Project Proposal)

Project Code

USH404252

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Advisor's Signature

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1.Abstract

The project's objective is to develop a biometric-based attendance registration system for educational institutions like universities. The project combines hardware and software concepts to produce a finished system that is intended to replace the current outdated technology. A smart gadget replaces the traditional pen-and-paper approach for maintaining and registering attendance in its entirety. The result is a system that identifies individuals, maintains an online attendance register in the form of a database, and gives faculty members complete access to each person's attendance record upon request.

Additionally, this system uses a notice board to present information about regular classes. Information about the received room will be posted on the notice board. And by employing this digital notice board in place of conventional analog-type notice boards, we can make information transfer easier in a paperless workplace. The notice board can be managed by the administrator. Information may then be transferred everywhere and shown in a matter of seconds, which is not feasible with the current system. The usage of information in text, pictures, video, and other media is permitted.

2.Background and Justification

The current system relies on human data entry. Attendance will be recorded in handwritten registers here. Maintaining the record is a time-consuming task. More human work is required here. The retrieval of information is more difficult since the records are kept in handwritten registers. This application requires accurate entry into the appropriate field.

The old attendance marking procedure is a real-time issue that affects the records of professors' attendance and working hours, which are recorded on a sheet of paper or in a notebook. This is risky since the paper or notepad can easily be misplaced because it is not safeguarded.

Observations of the challenges in front of us sparked the concept for this project.

The suggested system has evolved to address the shortcomings of the present system. This project intends to eliminate paperwork while also saving time to produce accurate findings of academics' working hours. Using the suggested approach, efficient reports may be created.

Through this system we can track Timing in and out and how many hours an instructor teaches each day and throughout the workday. The number of lecture hours they provided was also reviewed regularly during working hours.

In the old method, announcements were displayed on a wooden notice board that hung on the wall. Many people in modern society have access to modern technologies. As a result, the wall notice board is out of the current and has several limitations. It's exhausting to continually monitor the notice board for new entries, and it's not immediately accessible, among other drawbacks of the standard notice board. As a result, the planned Online Notice Board system must be implemented to digitalize the traditional notice board and make it available online, therefore addressing the constraints of the traditional notice board.

The system will save energy and time spent viewing the notice board by creating an excellent interface for users to engage with posts. - It will reduce the cost of printing papers and other supplies required for posting to a standard notice board.

3.Project Methodology

In this project, we'll start by adding professors' data and fingerprints to a database. When the professor uses the fingerprint reader outside the classroom to enter the room and begin the class, data is transferred to the database and is also displayed on a noticeboard to indicate that the room is reserved by the professor's name. Through the admin panel, the admin will have access to the data and records and can only add, edit, or delete data.

4.Project Scope

There are following system properties of the biometric attendance management system and digital notice board will consist of:

Biometric Attendance:

- Biometric Attendance: It helps with staff scheduling by accurately capturing teachers' arrival and exit timings.
- Timing in and out: Timing in and out keeps track of the number of hours a teacher taught each day and throughout the workday. The number of hours they supplied lectures was also regularly checked throughout working hours.
- Monitoring Late Time-in: Using the Biometric Attendance Management System, this function allows the administrator to monitor Teachers' late time-in.
- Leave Management: This is a tool that allows the administrator to manage the Teachers' leave.
- Working Days Monitoring: This will be used to verify holidays and working days.
- Attendance Reports: These will assist in calculating the number of working hours and days completed by the Teacher and will provide information to the administration about the performance of their personnel.
- A simple attendance chart may be created.
- It is long-lasting and simple to care for.
- Staff workers log in at the front desk permanently.

Digital Notice Board:

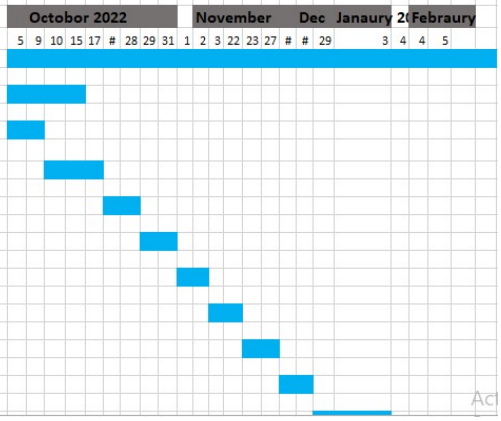
- Important Notices: Digital notice boards keep everyone informed about future events and possibilities. Meetings, holidays, and today's lecture plan may all be shared with students and teachers without putting in extra effort or wasting time.
- On the day of arrival, every visiting dignitary or notable faculty member is greeted with a welcoming message.

- Achievements and Flash News: If a school or institute achieves a significant accomplishment or there is significant news, it might be shown on screens across the campus.

5.High-level Project Plan

Project Name	Biometric Attendence Management System and Digital Notice Board
Project Duration	7 months
Project Start Date	10/9/2022
Project End Date	5/10/2023

Task Name	Duration	Start	Finish
Project Planning	7 months	10/9/2022	5/10/2023
Background Knowledge and research	10 days	10/5/2022	10/15/2022
Proposal	5 days	10/5/2022	10/9/2022
Planning	7 days	10/10/2022	10/17/2022
Requirements Gathering	10 days	10/18/2022	10/28/2022
Requirements Analysis	3 days	10/29/2022	10/31/2022
Accommodating Changes	2 days	11/1/2022	11/2/2022
Design Specification	20 days	11/3/2022	11/22/2022
Design Analysis	5 days	11/23/2022	11/27/2022
Front-end development	30 days	11/28/2022	12/28/2022
Validating design	5 days	12/29/2022	1/3/2023
Back-end implementation	30 days	1/4/2023	2/4/2023



6.References

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