



Curriculum Monitoring System

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ABSTRACT

Over time, the majority of educational institutions have continued to use manual attendance management. We have created a "web based attendance Management System" to solve the issues with manual attendance. Web servers, which may be installed on any computer, are the foundation of the attendance management system. The system interacts with a distant server's database. Without any human paper-based effort, it automatically estimates the percentage of students in attendance. The system facilitates the end users with interactive design and automated processing of attendance management. This proposed system manages the online portal attendance of the student as well as the attendance records will be kept in a database. The class instructor, parents, and HOD (Head of Department) will also be informed of the pupils' attendance. The database for this system will be MySQL. The HTML and CSS (Cascading Style Sheet) codes will be used to create the website's template. The system will be made easier to use by the addition of JavaScript. Additionally, it will provide information about the instructors based on the programs and subjects they instruct. The system will be mobile phone compatible. Additionally, the creation of this project will be user-friendly thanks to the usage. Consequently, this website will help institutes.

Keywords: Web based attendance management system, Web server, Remote server, Automated processing, MySQL, CSS, HTML.

1. Introduction

Now, there are many universities around the country and each university consists of up to 10 thousand students. To handle a large number of students can be a problem especially for attendance. The instructor will take back any paper that was present during class and keep a record of it. Nowadays, most of each university lecturer will provide a list of students to sign in for students who attend the class. Cheating often occurs in the presence of students. Therefore, if there is fraud student attendance, lecturer will not be able to identify the problem. For example, other students signed their other friends. It is excellent to create an attendance management system in order to avoid this issue. using biometric attendance which will monitor and record the presence of each student in the class. The information will be kept in the database, and users will also have access to the information from the prior year. (P) is used to indicate attendance in class, whereas (A) is used to indicate absence (A). According to the data, the mobile application automatically estimates the percentage. Red is used to indicate percentages below 70%, whereas green is used for all other percentages. A student gains access to the main building once they have successfully signed in page that shows a menu containing an arrangement of features provided to the student „absence“ denoted as (A). According to the data, the mobile application automatically estimates. Red is used to indicate percentages below 70%, and green is used for all other percentages. A student gains access to the main building once they have successfully signed in.

2. Related Work

In this paper the author represents one of the most popular attendance system which is smart and efficient according to today's need. Employees use this card to sign in and exit; all they need to do is wave it in front of a reader to verify their presence [2]. There are numerous desktop software for tracking attendance; here are a few examples: 1. To track students' daily attendance, a desktop application for attendance was created. Then the operators, who will be supplied by the teacher, will store the data for a certain class. The software was created by Bhumpesh Kumar Sharma, Uma Joshi, and

Saurabh Kumar Jain. VB.NET and Backend:-MS- Access are the technologies which they use for their applications [3]. 2. When the instructor starts the desktop application that Jainetal has created, then all of the registered student lists for that particular course will be shown.

2 The attendance is done by clicking of checkbox next to student's name that are present, and then for marking their presence a register button is clicked [4]. 3. Muhammad, Ahmad Shakur Idris, Abu-Bakr Sadiq alhassah, and Muhammad Ibrahim, Hakimi and Muhammad Zakaria created a desktop program.

3. Proposed System

To get a biometric attendance system going, first and foremost, every individual worker's scans the fingerprint device and then maps it out to a set of predetermined locations. Additionally, the coordinates of each fingerprint are plotted against a graph and saved in the system. The coordinates are then compared to the saved and mapped coordinates each time the same person touches their fingertip on the scanner.

Only when the most recent photograph and the one that is already stored match is the person's entry timed. A person's fingertip cannot be replicated by another person as scanning a single finger causes several coordinates to be mapped and stored in the biometric attendance system. It is challenging to match every coordinate that is generated.

4. System Requirements

Software Requirements:

- JavaScript
- VB.Net
- MySQL
- HTML
- CSS

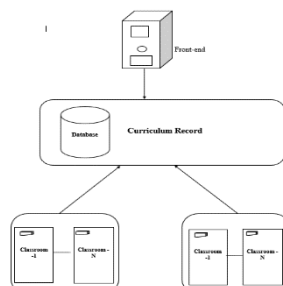
Hardware Requirements:

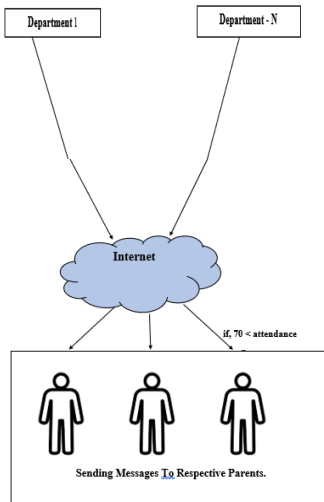
- RaspberryPi
- LCD screen display
- GSM Model
- GPS Module

5. Dependencies

- i) We rely on location information.

6. Architecture Diagram

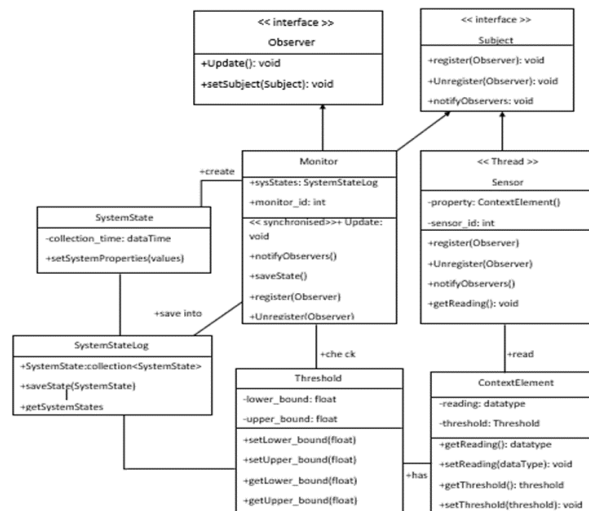




7. Advantages

- Security – security-wise, it is a vast improvement on passwords and identity card.
- They are simple and straightforward to utilise for the user.
- Non-transferable — Because fingerprints cannot be shared, they cannot be transferred.
- Using fingerprint recognition also offers a better level of accountability.
- Cost effective
- Customization
- Connectivity- Internet connectivity enables the transfer of employee time-in and time-out details directly to the payroll system.
- Identification Time- The two essential components of fingerprint identification are speed and accuracy.
- The greatest biometric attendance systems are capable of being durable and tough.

8. UML Diagram



9. Literature Survey

[1] Mohammad Ausaf Anwar, DurgaprasadGangodkar, "Design and Implementation of Mobile Phones based Attendance Marking System", Graphic Era University, Department of Computer Science Engineering, Dehradun, Uttarakhand, India. The architecture and design requirements of the Student Attendance Marker Application on an Android platform are presented.

Shahab Ali, Falah Ibrahim, KarwanJacks, System for Monitoring Student Attendance.

The authors with their team have compared both iOS and Android OSs and they came up with a conclusion that although iOS is more resistant to virus attacks and other security risks, but Android is more advanced and less expensive due to its open source nature.[2] Student Attendance Management System by KarwanJacks, Falah Ibrahim, and Shahab Ali at the University of Zakho in Iraq. This paper's system can distinguish between the number of hours spent on theoretical and practical lessons. [3] Kamal Bijlani, Mahesh G, and Jayahari KR Amrita e-Learning Research Lab (AERL), Amrita School of Engineering, Amritapuri, Amrita Vishwa Vidyapeetham, Amrita University, India. There will be a server on campus that students can connect to using their smartphones and Wi-Fi routers.

In order to individually identify each student and to make sure that only student mobile phones are connected to that router, the MAC address of each student's smartphone will be saved in the router's access level.

[4] EB Jain Institute of Technology, Management and Research, Nagpur, Ekta Chhatar, Heeral Chauhan, Shubham Gokhale, Sompurna Mukherjee, "Survey on Student Attendance Management System." The system discussed in this paper deals with maintaining students' attendance. Based on their attendance and absence in class, it calculates the student's attendance. The staff will receive their own account and password.

10. Conclusion

In conclusion, these are the most essential features to look for when buying a biometric attendance system.

Installation and usage is very easy for the biometric attendance management system. However, if any problem occurs then the assistance will be required by the expertise. Therefore, important to buy the device from a company that offers web assistance as well as in-place service support. This method usually puts an emphasis on things like applicability, consistency, practicability, effectiveness, and scaling-up and sustainability, as well as whether learners are achieving the expected learning outcomes. It evaluates how well the program satisfies the various learning demands of every student.

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