

AUTOMATIC ATTENDANCE USING WIFI TECHNOLOGY

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ABSTRACT

The attendance monitoring system is the most important thing to measure for the professors who attend the college in the month. Over the years, attendance time is taken by pen and paper in a view sheet, or paper is distributed by teachers to get signatures and attendance. It takes a lot of time, and uses man power and uses a lot of paper to show the professors presence. The details stored in the register are very difficult to manage. Here we identify the attendance management system using a mobile phone with the help of WiFi and MAC addresses, the mobile phone is connected to a router or modem in the college campus area. When a professor enters the college premises, he or she will attach a specific router to attend. All databases are stored in the database and send to the college registrar and principal for the presence of the college professor.

Keyword : - attendance monitoring, mobile phone, WiFi, MAC Address.

1. INTRODUCTION

Attendance monitoring systems play a very important role in making people a daily presence and counting attendance and absenteeism in school, college, and workplace or management environment. The traditional method of obtaining fingerprints using a biometric device for attendance is not reliable for a wider campus area. Our proposed system allows employees to demonstrate their presence using the Android app through Wi-Fi technology. We have decided to work on this project because it is a real time problem that our college staff is facing daily. Employees will have to wait there to attend so that other people are there. Our project will help employees to demonstrate their presence without any difficulty with a static device such as a biometric device or a manual note. In our project, the app will be able to show the presence of specific employees or view apps whenever they connect to a college Wi-Fi router. Identity authentication purposes, the app staff / employees of the face, knowing patavela and then they will be able to show their presence. The presence of the successful staff / employees is required to file two entries, to cancel the selection and choice. If the user will be able to see only the personal presence of the administrator will be able to see the presence of the employee or employees. The current system has been made in such a way that the staff/ employee of the College, the router can show their presence anywhere in the range of Wi-Fi. Some of the equipment we're using in our project such as Wi-Fi router and an Android phone. In our project we are using some equipment such as Wi-Fi router and Android phone. The Android Studio IDE is used to create Student applications. Different APIs will be used to reduce the length of program code. The free cloud storage will be used as a database to store attendance reports. Some related products are available in the market for automatic presence but they are not trusted at the industry or organization level as no authentication is provided. We are improving the automated presence system using authentication and advance technology.

2. LITERATURE SURVEY

Dr. Sreeja Mole S, “smart attendance monitoring system using Wi-Fi and mac address” [1] The most important thing is to measure student performance. In previous years the time taken by the pen and paper is taken in the view sheet or the distribution of the paper is obtained by the students to get the signature and mark the attendance. It takes a lot of time for students to attend and uses the power of man and it takes a huge amount of paper. The details stored in the register are very difficult to manage. Here we identify attendance management systems using smartphones with Wi-Fi and Mac addresses, connected to a smartphone router or a modem in the classroom. When a student enters the classroom, he or she will connect to a specific router to attend. Data is stored in all databases and send to staff and principals for student attendance in the classroom.

Neil Sharma, Behara Manoj Kumar, “Attendance Tracking System Using Wi-Fi” [2] Tracking attendance is a difficult process using a traditional approach. The person has to register in the files and file using pen and paper. The problem with this approach is that it requires a lot of paper that is part of our renewable natural resources. We are in an age where we have to think about sustainable development. Managing attendance using mobile phones, provide an alternative route in this direction. The project emphasizes the development of a stand-alone system that can track student attendance using Wi-Fi. Communication between teachers and parents is also an important issue that should be considered because after interacting with teachers, parents can only know about their ward. That is why we tried to bring this system up so that parents can get their regular division information every day.

Saptorshi Bhattacharjee¹, Dipankar Kundu², Shinjini Raychaudhuri³, Papiya Chakraborty⁴ “Attendance Management System an Android Application” [3] Technology education in India has improved in the last few years. Smart classes, video conferencing, are just a few examples of the latest trends in the educational system. The Student Attendance Management System is an Android-based application that helps organizations achieve their goals, moving forward. It builds student presence based on classroom attendance. This is maintained on a daily basis of their presence. Employees will be provided with a separate username and password to know the student's status. It helps teachers to take attendance through their smart phones and pocket the attendance record to use at any time.

Aakruti Buddhiwant, Mudita Bharkshe, Rushabh Bansod, Mayur Chandekar “Smart Attendance Application” [4] The Attendance System was developed before the mobile device was introduced to the market and hence it is necessary to make it smart using various technologies. End In the traditional model of the tendons system, RFID reader and Bluetooth / infrared were used, but this led to the error of changing the system to restrict, attendance of complex and pen paper. With the emergence of a GPS based system, a smart way of presence can be introduced. In this project we will implement a smart attendance application in which teachers on their mobile device will create a fence on Google Maps according to latitude and longitude; Students inside that fence can attend. With the rise of smart phones, students will be able to attend fingerprints via their Android phones and attendance for that lecture will be recorded and sent to the cloud. Students can check their attendance and if attendance is lower than IVR call, then SMS will be sent to parents registered number. This will reduce the need for teachers to attend and update their records and analysis.

Dr. D. Asir Antony Gnana Singh, Dr. E. Jebamalar Leavline, P. Meera Vijayan “Mobile Application for Student Attendance and Mark Management System” [5] Demonstrating attendance at class meeting sessions and recording student scores are major tasks of the subject as marking attendance allows students to enter the classroom. Also verifies the number of students present in the organized class. The purpose of reporting scores is to analyze student performance in terms of course work. In the past, the task of marking attendance and registering of marks is done manually by pen and paper. This method uses more time and adds more workload to the subject handler, and occasionally data errors can be detected. This paper presents mobile applications for student attendance and mark management systems to avoid these problems. This application is primarily designed for professors and other staff members of the organization who regularly maintain attendance and qualities. Using this system, subject handlers, staff or officers can check the number of students present or absent in class meeting sessions. This application allows users to mark attendance and interact with students through a mobile device. On top of that, this application allows teachers to mark and edit attendance and add points to the system database for further retrieval. It alerts students when attendance is lower than a specified percentage through an alert message.

3. SYSTEM ARCHITECTURE

This is a system architecture of “Automatic Attendance using WiFi Technology”. In this architecture, mainly two parts are important such as user and admin module.

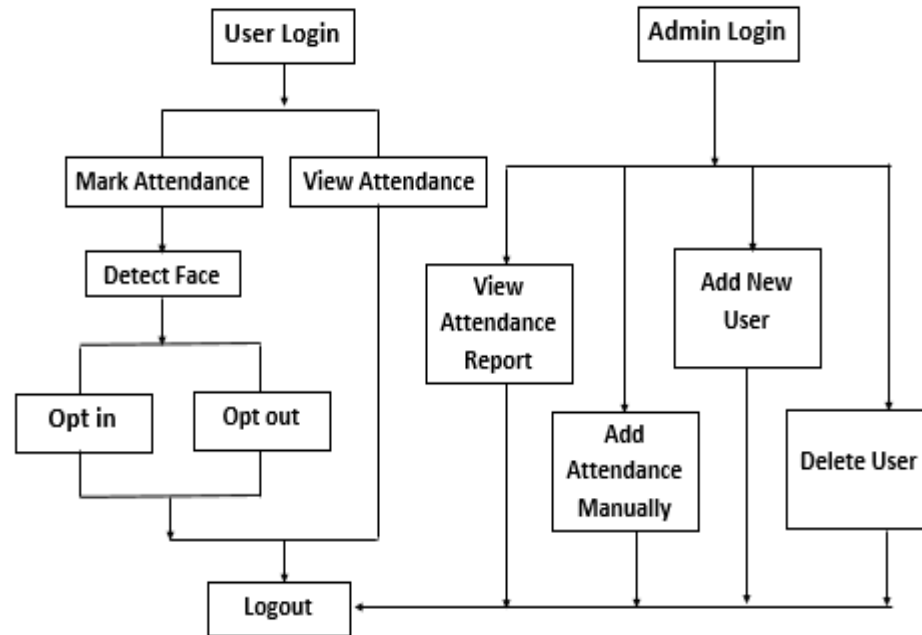


Fig.1: System Architecture

4. METHODOLOGY

Automatic Attendance using WiFi Technology contain following two modules

- User Module
- Admin Module

A. User Module

The user module of the application is related to the user interface / user experience. The application allows the user to mark and see their presence. If he / she is connected to college Wi-Fi, the user will first log in automatically. Then he / she has two options for the presence of qualities and the presence of visual. The Mark Attendance option will launch a new module where the system recognizes and identifies employees' faces. The employee / staff can then select or deselect to attend. The visual presence will allow the employee / staff to view the personal presence.

B. Admin Module

The admin will provide each user with a unique login ID and password to identify them. ID and password will be provided to the administrator. Then the Administrator will be able to view the attendance report of all employees / employees. Due to any technical difficulties, employees / staff are unable to show their presence while administrators have the privilege to manually add their presence to the database.

5. REFERENCES

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