



Autoupdation of SIP Protocol Log in Wireless Network for Application in Faculty Management System

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Abstract— In every Colleges there are various scheduled activities happening on day-to-day basis like Attendance record, Notice circulation, Attendance Report generation, Leave application, Meeting Alerts etc. All these activities are recorded today on paper and report generation is manual and tedious job. Faculty Attendance is recorded manually i.e., they give on-register attendance. This system usually increases the complexity, also at any point of time only one faculty can record his/her attendance which thereby takes a long time. Similarly, for the student's attendance record on paper record has to be maintained for each class. Leave Applications also needs to be manually approved every time and notices are to be displayed each time on the notice board.

To overcome the complex and manual systems we have decided to come up with the technologically advanced Android App. This App would work on Wifi system and record the faculty attendance through the wifi network using SIP protocol and can be used by the college staff members on their personal Android Phones.

Keywords— Wi-fi, Attendance, Face recognition, SIP Protocol, Faculty Management,

I. INTRODUCTION

In every Colleges there are various scheduled activities happening on day-to-day basis like Attendance record, Notice circulation, Attendance Report generation, Leave application, Meeting Alerts etc. All these activities are recorded today on paper and report generation is manual and tedious job. Faculty Attendance is recorded manually i.e., they give on-register attendance. This system usually increases the complexity, also at any point of time only one faculty can record his/her attendance which thereby takes a long time. Similarly, for the student's attendance record on paper record has to be maintained for each class. Leave Applications also needs to be manually approved every time and notices are to be displayed each time on the notice board.

II. LITERATURE SURVEY

□ Automatic Attendance Management System Using Face Recognition, this paper published by Prof. J. Joseph on 11 November 2013. Paper is aimed at implementing a digitized system for automatic attendance recording. Current attendance marking methods are monotonous & very time consuming. Manually recorded attendance can be easily manipulated. Hence the paper is proposed to overcome all these issues.

Advantage: Offers valuable wireless connection. There is no need of GSM modem in our application so it is cost affective. The area of covered services is more than current system. It requires lesser time to establish data connection than current system.

Disadvantage: It uses sqllite for storage. No doubt that sqllite can handle up to 40 millions data entries but then also it has many limitations which made the system limited to use.

Limitations of the Current System:

1. The present college system is handled manually till date, all the records are present only on the Paper and are person dependant.
2. For getting any report today the person maintain record has to make Numerous efforts to prepare the report.
3. Reports are not available on daily basis and frequency of the reports cannot be changed very often.
4. The faculty has to remain dependant on the register log each day for marking his/her attendance and dependency ruins the reliability of the system. Maintaining Student Attendance Record is also tedious and time consuming.
5. Regular monitoring the sincerity of the Faculty Members becomes difficult.
6. Leave application by the faculty demands the physical presence of the person for application. Substitute Management has to managed manually with consultance of all the faculty members and their schedules.

III. PROPOSED SYSTEM

To overcome the complex and manual systems we have decided to come up with the technologically advanced Android App. The proposed system provides authentication server and the android phones which act as clients and the monitoring is going to be done through this android phones only. Mobile phone needs to have its wifi enabled and perfectly working to be able to establish connection with the central proposed system. There are various features

proposed in the developing application. This project is loaded in the android phone and whenever the administrator wants to carry out any monitoring activity he needs to open the application in phone and use the features as per need.

A. System Architecture

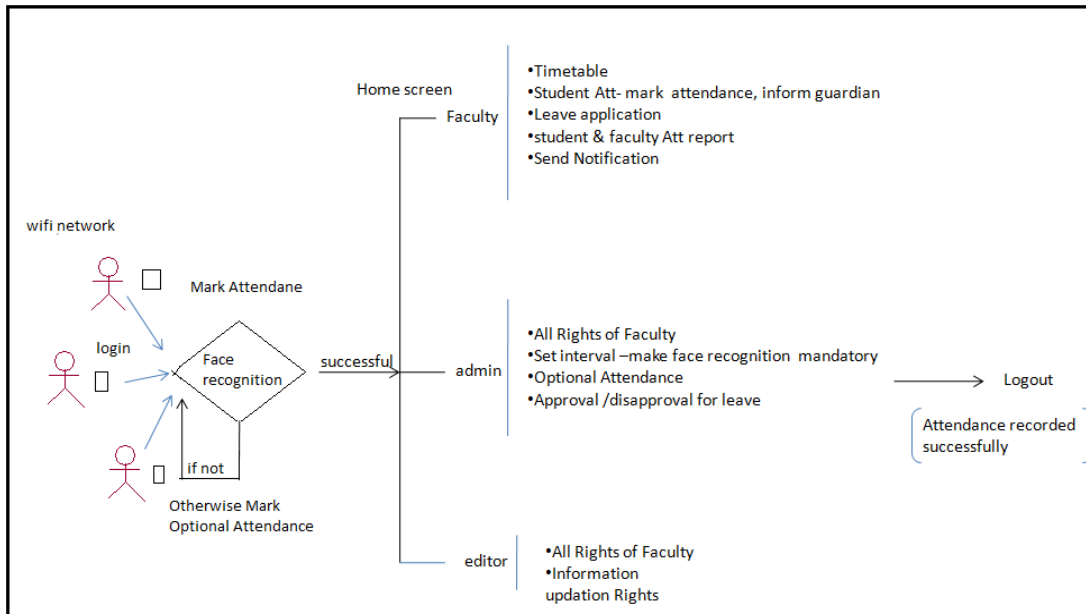


Fig. 1. System Architecture

A. System Workflow

All Application access rights are with the administrator of the proposed system. All the required and desired changes updates would be made by consulting the administrator. The most important and the punch of the required system is the attendance being marked under the prescribed wireless network. Thus the wireless network plays a very important Role. The Server, in this case is handled by a privatised company server and the application users would act as clients.

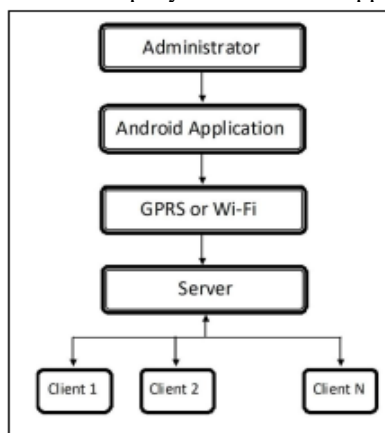


Fig 2: System Workflow

B. Security

As we have mentioned, for security purpose we have used the face recognition algorithm. Face recognition algorithm every time confirms and ensures the appropriate user to login into the system. The given username and password is not sufficient for user login.

IV. ADVANTAGES

1. Wireless network availability can be well utilised.
2. Attendance Marking is Automated.
3. Attendance Report Generation is also automated.
4. Application is very user-friendly.
5. Provides reliability, security, availability.

V. CONCLUSION

The proposed system has thus overcome the complex and manual systems of manually marking the attendance of the faculty system , we have come up with the technologically advanced Android App. This App would work on Wifi system using SIP protocol and can be used by the college staff members on their personal Android Phones. Attendance Report Generation also has become easier.

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