Android Based Proxy Prevention in Attendance with Social Media Report Generation

S. Pandiaraj [1], Akshay P.M [2]

[1] Assistant Professor (SG), Department of CSE, SRM Institute of Science and Technology, Chennai, Tamil Nadu, India.

[2] Department of CSE, SRM Institute of Science and Technology, Chennai, Tamil Nadu, India.

Abstract – **Maintaining attendance is one of the hardest jobs to do manually as it not only consumes a lot of time and energy but also requires lot of shelf storages to maintain the database, but when it comes to using online attendance we face a lot of difficulties in maintaining their authenticity due to proxies happening. So we designed an app in which the teacher (or any official) takes attendance daily and sends report to the Higher official with a lot of social media options as we found that most of the time people find reading attachment from mail to be real difficult. Since the attendance is taken by the teachers the authenticity is confirmed and being added with the android and cloud the database is safe, compact, and easy to manipulate with high amount of security.**

Index Terms – **Android, attendance, proxy, social media sharing.**

1. INTRODUCTION

In today's technology with world of smart devices there is a desperate need to upgrade our Daily use devices and gadgets and make them more usable; also it is not the era when we can blindly wait for anything. One thing that we are lacking is the change of attendance system as the hard manual task of taking attendance still continuous. Though there are several attempts taken to solve this hard labor task of maintaining and taking attendance some notable works includes

- RFID BASED ATTENDANCE
- FINGERPRINT BASED ATTENDANCE
- BLUETOOTH AND GPS BASED ATTENDANCE.

All these come with a lot of disadvantages as well. And we aim at curbing all the defect and inherit all these benefits and create a new system with the advantages of the existing.

2. EXISTING SYSTEM

With the disadvantage of manual attendance lot of idea's coming out to solve these issues which includes the below mentioned along with their disadvantages .

2.1)RFID BASED ATTENDANCE:

Using the RFID people are given a tag which when being touched by a board gets the attendance of the user. Disadvantages:

1)Loss of card- IT requires a card and once it is lost it requires a manual entry.

2)Proxy- It is easy to give proxy as the user needn't be there and only the card is needed.

2.2) FINGERPRINT BASED ATTENDANCE:

Using the fingerprint based attendance the users are authenticated using the finger print when the owner keeps his finger on the recognition pad.

Disadvantages:

1) If the finger which is connected to the database gets injured the owner can't use the same to get recognized.

2.3) BLUETOOTH AND GPS BASED ATTENDANCE

Bluetooth and GPS based Attendance is based on the current location at which the student is present during the given time and will give the attendance if he is in the given GPS and is connected to the GPS devices.
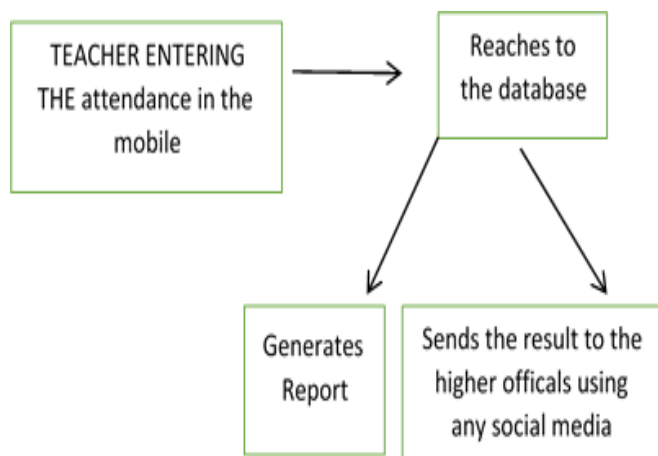
Disadvantages:

It is vulnerable to proxy as the owner needn't be in the proximity and only the device's present is the mandatory.

3. PORPOSED MODEL

The idea proposed is a mixture of all positives with the manual and the above mentioned ideas. The basic idea is to create an android app where the staff or the official will take attendance using an android app and the data is saved in the database. Whenever the official wants to retrieve any data the official opens the database(Firebase) and takes a copy moreover in the same app there is a provision to send report to the higher official using all social media as most of them find reading mail to be a difficult way.

3.1 SYSTEM ARCHITECTURE.

The Architecture of the proposed system is the diagrammatic representation which depicts the scope of the project with the whole system design. In the architecture diagram, it highlights the modules with its various functions as an process. It aims to show the internal design of the proposed system the following Figure shows the entire architecture of the proposed system.

3.2 SYSTEM IMPLEMENTATION:

The system uses different software to make this project viable.

Those includes: Android studio, Firebase.

Working of the app is pretty simple the teacher or the faculty comes to take the attendance takes their smart phone and opens the app. The app once logged in gives the access to which section he or she takes.

Once opening the correct section the attendance log for the sections opens up. The teacher roll calls and updates the result in the app which when completed the teacher presses the submit button and it gets uploaded in the system.

The administrator or the higher official can use his access to view the attendance and generate report.

The report can be shared on any social media making it easily accessible.

4. RESULTS AND DISCUSSIONS

This app is intended to create a fool proof attendance system which is secure and will definitely help the management to reduce the manual work of maintaining database and make it easily available to refer in future. Moreover it eases the faculty's work of creating and generating report and this app itself sends it to the coordinator at a click of a button in social media reducing the work of logging in and downloading the report.

5. CONCLUSION

This app though with several advantages can still be improved in many ways.

Some future improvements includes

1) Finding more secure automation on taking attendance.

2) Having a student portal where the student can see his attendance.

With all these updates the app will be very useful in any organization to maintain attendance.

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