

Fast Attendance Using Simple Android Application

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Abstract- Since ages, marking attendance has been one of the most important way to record and track the presence of students in schools, colleges. Attendance marking in different forms has been in use in various organizations to record the presence of their human resource. This helps the organization in generating their month-end payroll, and other activities. Such systems may be manual or automated. Biometric-based system, card-based system is some of the examples of automated attendance system. In this project, an attempt has been made to record attendance through mobile devices. The aim of the project is to create an Android mobile application for attendance system that can be used by all teachers for their respective courses. This application fetches the details of the courses allotted to the respective faculty and the students enrolled in the courses from the server using the internet connection and store it in the mobile database. This application stores the attendance in the mobile internal database and the faculty can view and update the attendance whenever required. This application uses Android application development toolkit. Android is a Linux based operating system developed for smart phones or tablet computers. It is a stack of software that includes operating system, middleware and libraries and APIs written in C. The Android application is developed in Java-like language using the Android software development kit (SDK).

Keywords: -Attendance, Automated, Mobile Application, Database, Share Data.

1. INTRODUCTION

What is attendance management?

Attendance management is important to every single organization, it can determine whether or not a business will be successful in the future. Businesses will have to keep a track of employees this being their main concern and a lot of other things. Monitoring attendance helps in the long term for a business, as an employer will be able to tell which employees arrive early, which arrive late and who has the most absences without any valid reason. This could help an employer in deciding which employees are most suitable to work in the business, having employees who arrive to work on time means that the day-to-day tasks of the organization will be fulfilled. Employees within an organization should know about their employer's attendance and absence policy, so that they are aware of what is required of them. Attendance management is also a health and safety procedure something in which that has to be carried out. It is important because in case of an emergency that was to arise in a workplace like a fire, then if they register in the company they will know how many people are inside a building. It is important to manage a set of workforce as it can lead to higher profits as well as an increase in productivity. If you have a look on the other side of what will happen if a business does not manage their attendance, it will mean that they will have no sort of information to look back on in case if it is needed in the future. They also

will not be able to keep a track on their employees on a day-to-day basis which means there is no leadership in place. .

2. PURPOSE OF SYSTEM

The purpose of developing attendance system is to computerized the tradition way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the session or in the between of the session. Attendance Management System is a software developed for daily student attendance in schools, colleges and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student.

3. PROPOSED SYSTEM

System is a software developed for daily student attendance in schools, colleges and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student. This project presents the Attendance system through mobile devices, which is developed using

Android application. The application is installed in every faculty's mobile phones can be used to take attendance in offline mode (that is even when there is no network connectivity as the application is a stand-alone application). This application fetches the details of the courses allotted to the respective faculty and the students enrolled. This application stores the attendance in the mobile internal database and the faculty can view and update the attendance whenever required. At the end of the month, when the faculty is needed to upload the attendance, they can directly upload it from their mobile in the server provided the internet connection is available.

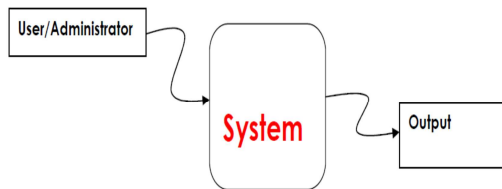


Fig.1. Flow Diagram

- **Login Process:-** This state allows the authenticate user to complete the login process by using the user name and password.
- **Attendance Entry:-** In this state, by selecting the check boxes the attendance is marked. Those students or employees who are present are marked by selecting the check boxes. But those who are not present are not selected.
- **Report Generation:-** In this state, after taking attendance a report gets generated which is sharable text file.

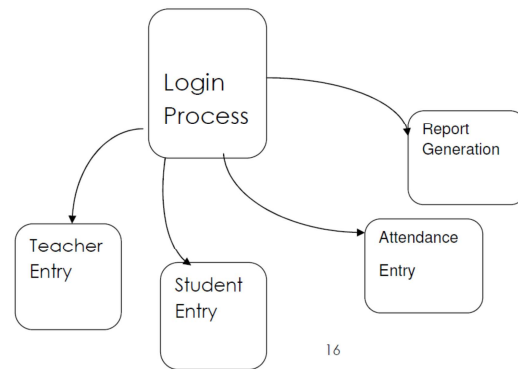


Fig.3. Login Process

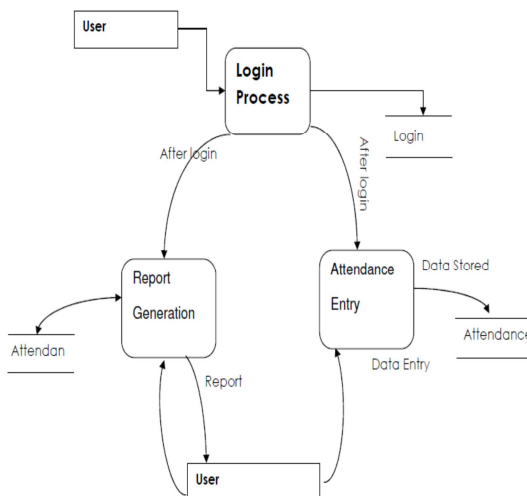


Fig.2. Architecture Diagram

4. ADVANTAGES OF SYSTEM

User Friendly: The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the graphical user interface is provided in the proposed system, which provides user to deal with the system very easily.

Reports are easily generated: Reports can be easily generated in the proposed system so user can generate the report as per the requirement (monthly) or in the middle of the session. User can give the notice to the students so he/she become regular.

Very less paper work: The proposed system requires very less paper work. All the data is feted into the computer immediately and reports can be generated through computers. Moreover work

become very easy because there is no need to keep data on papers.

Computer operator control: Computer operator control will be there so no chance of errors. Moreover storing and retrieving of information is easy. So work can be done speedily and in time

5. FUTURE SCOPE

The system can be further enhanced and several other functionalities can be added. The system can be made login independent. The present system logs in using Internet all the time. We can enhance the system by implementing offline mode login feature. The feature to update the attendance at a later stage can also be implemented. The system can also be enhanced by using voicerecognition feature of the Android.

6. CONCLUSION

The Attendance Management System is developed using Android Studio fully meets the objectives of the system which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification.

(A.1)

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