Mobile Attendance System App

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Abstract - *This research is regarding mobilizing change in the field of attendance. In the last few years due to improvement of technology education system in India has developed. Smart Class, video conferencing is some of the examples of modern trends in educational system. Student Attendance Management System is an android based application which helps the institute to move forward, fulfill their vision accomplish their goals.*

Key Words: Mobilizing, vision, goals, android app

1. INTRODUCTION

Nowadays, mobile devices have become a way of life for students especially in higher education. Computers are now replaced by compact smart phones that can fit into pocket and can be carried anywhere. Attendance Management System is an application for taking daily attendance in schools and colleges. It provides minimal error in report generation of a particular student's attendance. The main motive behind this software is to replace the traditional pen and register system.

1.1 AIM AND OBJECTIVE

The main objective to design the android-based mobile attendance application for the management of attendance records in the educational organization.[1] The main objective of this application are as follows:

1. Reduce admin work by integrating the details of the students of all departments into a single database.
2. Manual work for information retrieval on attendance becomes less as work becomes digitized.
3. It is also time saving because manual work is less.
4. There is less chance of error.
5. It eliminates duplicate data entries in time and attendance entries.

1.2 PROBLEM STATEMENT

This system developed will reduce the manual and avoid redundant data, by maintaining the attendance manually, then efficient report cannot be generated. The system can generate efficient weekly, consolidate report based on attendance. As the attendances are maintained in registers it has a tough task for admin and staff to maintain for long

time. Instead, the software can keep long and retrieve the information when needed.

2. RELATED WORKS

Marking attendance is a mundane task that every teacher in every school, college and coaching class has to do day in and day out. Everything from taking attendance, to entering the marks procured by students in examinations comes as daily chores for all subject teachers, as this is a form of note-taking they have to keep up with. Marks and attendance are tabulated regularly so as to keep an eye on students, and keep track of their progress. Earlier, these tasks used to be performed manually by making use of pen and paper. But as the classes get bigger, and the number of students increase, this method becomes extremely cumbersome and time-consuming.

To avoid such problems, today we will be taking a look at a mobile app that helps record and analyse the attendance of students. This application has been designed keeping in mind the teachers and other staff members, and will help them save time and effort, allowing them to focus on more important tasks at hand. This system can be used to mark students as present or absent during class hours, and also allows authorities to contact students and keep in touch with them via mobile phones.
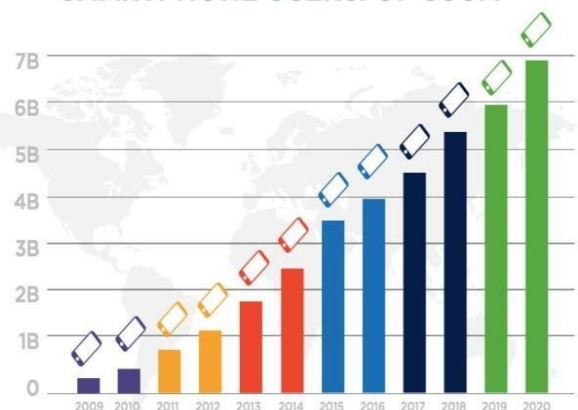

Fig 1: Growth Rate of Mobile Phone User

There is a huge increase in the usage of mobile phones since 2013. So, to cover most of the population in world we chose to build an application

Table 1: Advantages and Disadvantage ofApplication

Name of Application	Advantage	Disadvantage
Mobile attendance system	Accuracy Humans are prone to error, even if we provide them with supporting computational devices.	Inconsistency in data entry and generate errors.
Mobile attendance system	Hassle Free Workflow Management	System is fully dependent on skilled individuals.
Mobile attendance system	Visibility / Insights	Time consuming and costly to produce reports.
Mobile attendance system	Productivity / Efficiency	Entry of false information.

Fig 2: Screenshots of existing apps

5. FUTURE SCOPE

By this system Attendance marking and report generation becomes easy. Less chances of malfunctioning are there. 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. It was intended to solve as requirement specification. In

3.METHODS

This project is developed using Agile Development Model. This model has focuses on iterative development. Agile methods or Agile processes generally promote a disciplined project management process that encourages frequent inspection and adaptation, a leadership philosophy that encourages teamwork, self-organization and accountability, a set of engineering best practices intended to allow for rapid delivery of high-quality software, and a business approach that aligns development with customer needs and companygoals.
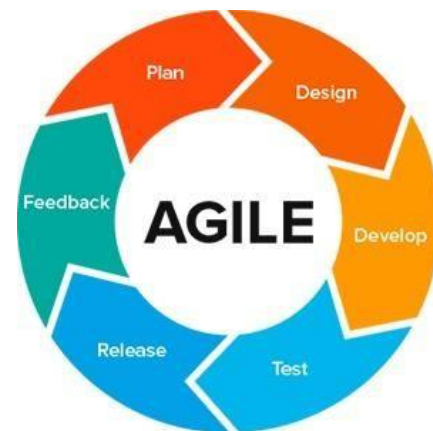

Fig -3: Agile Development Model

4. EVALUATION

Testing's such as Unit testing, Integration testing, Load and Stress testing were performed on the prototype of our app. Some improvements regarding data management in apps and faster response rate were suggested by the testing team.These updates will be done in the next version of the app, and after Acceptance testing this app will be published on Google Play store.
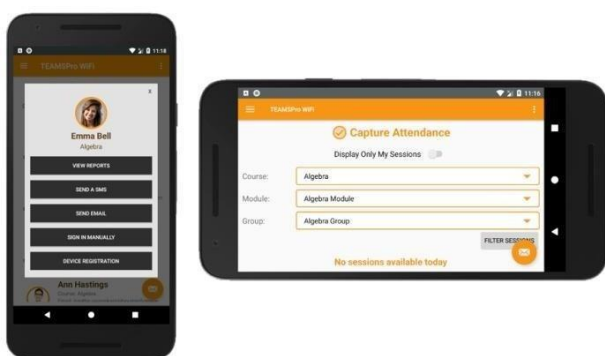
future this system can be implemented to automate most of the educational systemsand it can be designed for cross platform. This project is intended to replace the age-old system of attendance register with a digital register which can show its worthiness by its features and ease of use.

6. CONCLUSIONS

This whole work is to access the details about the student attendance information and generate a final report.

MobileBased Student Attendance Management System is a collection of mobile application-based pages. This provides an offer to the user to enter the data through their unique id and password. It is very helpful for the teachers and admin to keep and maintain the information about the students easily. In future this work can be expanded to store the internal marks, semester marks, college events and college placement activities of the students to get minimized all stuffs at one place in a systematic way to import and export the data through the admin and authorized persons whenever it will be needed in future by the educational organization

ACKNOWLEDGEMENT

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