

Android Based Attendance Management System

Shrinivas kendre¹, Samadhan Markad², Mrs S.S.Jogdand³

Students in Department of Information Technology, Pimpri Chinchwad Polytechnic, Nigadi, Pune^{1,2}

Lecturer in Department of Information Technology, Pimpri Chinchwad Polytechnic, Nigadi, Pune³

Abstract: Over the years the manual attendance management has been carried across most of educational institutions. To overcome the problems of manual attendance, We have developed “Android Based Attendance Management System”. Android Based Attendance Management System is based on Android, which can be implemented on any Android Phone. In This application, PHP is server side language, MySQL and PHP is used as back-end design and HTML, CSS and JavaScript are used as front-end tools. The system communicates with database residing on a remote server. It calculates automatically, the attendance percentage of students without any manual paper-based work. Managing the attendance using traditional approach is really a cumbersome process. The person has to be maintain the attendance record in registers and file using pen and paper. The problem with this approach is that it requires lots of paper which are the part of our non-renewable natural resources. We are in the age, where we have to think about sustainable development. Managing the attendance using mobile phones, provide an alternative way in this direction. Communication between teachers and the parent is also an important issue that should also be considered, because parent can only get the information about their ward after the interaction with teachers. So, we also tried to bring the system which enables parent to receive the information of their ward of regularity on daily basis.

Keywords: HTML, CSS, Java Script, PHP, SMS, .Net, SQL Server.

1. INTRODUCTION

In current scenario, management and maintenance of student information is cumbersome task for any institution. The student’s academic information consists of monitoring their performance and progress periodically which seems to be a huge workload on lecturers to handle and update on the progress of subjects for the respective classes. The traditional way of attendance is, recording manually in a log book and then converting into desktop application. Such system can be tedious process and may often lead to errors while generation reports. Apart from this, sometimes the attendance sheets are lost, misplaced or information wrongly entered due to various reasons. In order to reduce the manual work and to achieve more efficiency in managing student’s information, a smart phone based mobile application using android can be applied to make this process more easy and beneficial in every way. The proposed system will store, retrieve and sent the student information to the concerned person. In developed an android based mobile application for attendance system. Through this project, teacher can easily record the student attendance and report. Attendance Management System is 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. Android Based Attendance management system using android and Java technology. It consists of four modules such as user authentication process, calling of web service, attendance marking process and display information about students. In, proposed a framework for maintaining student attendance and also it tracks the illegal use of mobile phones during class hours. Attendance is taken every day on each working day whether it is college, school or any other institution and in this process every institution wasted lots of paper just for keeping the record. With such small reasons, our natural resources are depleting at the enormous rate and it can be possible that our descendants don’t able to get those resources.

2. LITURATURE SURVEY

An Android Based Attendance Management System is a software solution for monitoring the attendance of the students. Academics in the India are to introduce a monitoring system to check when students attend or miss class. Sensors will detect student’s identification card, when they enter the lecture theatres. Warton classes for example, makes use of software that automatically determined if the student didn’t attend their classes and this will be reflected. An attendance management system serves as a time log that is set up as a computerized database. An attendance-monitoring system maintains a daily record of a person's arrival and departure time from work or college. System Type The attendance Management system database is an application that contains electronic files about a person's history. Common Attendance Features An attendance monitoring system contains a person's name, address, Phone number,

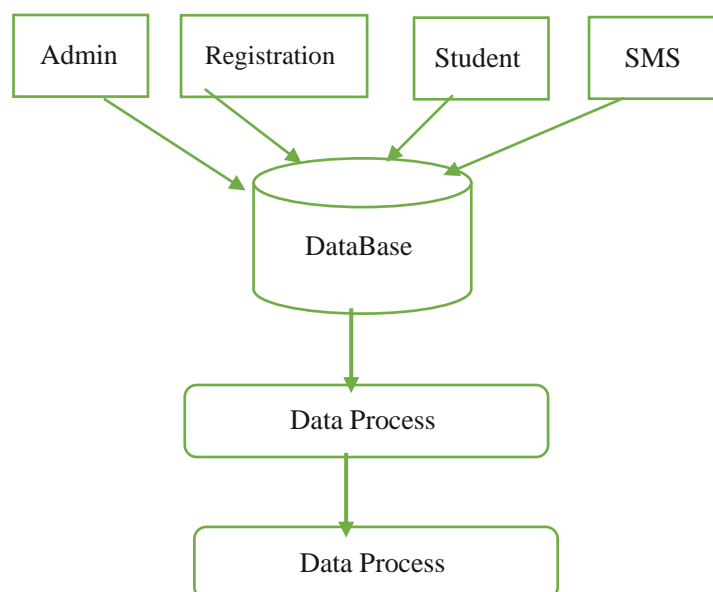
parents mobile number, Roll number etc. plan has been developed to support the strategic plan of the Attendance Management System. The implementation plan will be amended and updated as new actions are introduced and as developments are implemented to the system. The system tracks the performance of Students regarding their attendance on a daily basis Background of the Study The proposed system intended for Auto Precision Incorporate is an Attendance Monitoring system that will record the arrival and departure of the Student.

3. PROPOSED SYSTEM

We tried to implement a system which overcomes the limitations of the existing approach. Taking the attendance on mobile phones instead of traditional approach is one step forward to sustainable development. Doing the same work on mobile phones not only saves our resources but also enables the user to get easy and interactive access to the attendance records of student. We tried to make an application that can help the teacher to take attendance of the students through their own mobile device. What could me more interesting for that!!The purpose of developing attendance management 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 This Application is built for automating the processing of attendance. It also enhances the speed of the performing attendance task easily. It also generates periodic reports to keep a check on the students who are regular & who are not. A Faculty has to login to the system & then in the attendance option they have to select Appropriate class, semester and subject. So this will display the list of the students who are eligible to appear in this session. So now the faculty has to just select the students name from the manual attendance sheet according to their roll number and then submit the sheet. This will add the selected students as present student in that particular session. This will add the selected students as present student in that particular session. This system is very useful to the office staff also because they can generate.

Various types of reports and submit them to respective faculties also or also can be submitted to the College Coordinator. Office staff can also generate black list of students who have attendance less than 50% or 80%. So this kind of various reports can be generated A Computer can work more efficiently then compared to a human being . The work becomes easy for the employees and thus, some amount of human resources is saved. Data accuracy is maintained. Accurate information can be achieved within a short span of time Data can be accessed easily and randomly. This also saves a lot of time. Data is protected with the help of login system. Because of this login system, unauthorized persons cannot access the data .Complexity of the work can be reduced by using the system which was not possible in manual or semi-automated system. So it saves the time utmost. The intention of developing Attendance Management System is to computerized the tradition way of taking attendance. Another purpose for developing this software is to generate the desired reports automatically at the end of the session or in the between of the session as they require. This project is basically a desktop application which means self-contained software runs on the system on which it has been installed under the user control and it will work for a particular institute or college only.

4. SYSTEM ARCHITECTURE



This project is developed by using Android and SQL Server. It is divided into two phases. In the first phase, feasibility study is conducted, requirement analysis is carried out to understand the need for the system and the necessary modules such as admin module, registration module, student module and SMS and android module are identified and explored in section, in the design phase, requirements are converted into system design, it is shown in Figure 1. In the second phase, design is converted into coding, testing is conducted to ensure that the developed project is bug free and it meets the requirement specification. Finally developed project is installed and it is ready to use.

5.2.1 System Requirements

Selection of software and language

Front end	:	VB.NET
Back end	:	SQL Server
Platform	:	Windows 8.1
IDE	:	Visual Studio 2010
Supporting s/w	:	Android

Selection of hardware

Processor	:	Intel i5 core
Hard disk	:	80 GB
RAM	:	4 GB Other hardware: Android Mobile with Android Apps

5.3 Module Description

5.3.1 Administrator Module

This module is used to login for administrator, it have whole rights to monitor and manage the entire project, through this module, new information can be insert, update, view and delete

5.3.2 New User Registration Module

This module is used to register the user information and it will be store in database. The information such as name, password, date of birth, department, phone no and email id are collected. The collected details are sent to the database for the purpose of login.

5.1.1 Login Module

This module is used to login for the student profile home page and will continues the other *processes*.

5.1.2 Student Module

This module can be used for student for registration. The information such as name, reg-no, gender, course, department, e-mail, father's name, mobile no. and address are collected and the collected information is stored in the database.

5.3.3 SMS Module

This module can be used to send SMS to their parents through way2sms.com.

5.3.4 Android Module

This module can be used for receiving text messages from students about their leave

6. CONCLUSION

This work is to access the details about the student information and generate reports. The project "Mobile Based Attendance Management System" is a collection of static and dynamic pages. This project offers user to enter the data through simple and interactive forms. This is very helpful for the students and staff members to keep and maintain the information about students easily. Further this work can be expanded to store the internal marks, semester marks and placement activities.



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