ABSTRACT

Over many years of manual attendance management had been carried across lot of establishments in academics there will be some issues like loss of data, error during attendance marking. The system maintains the information residing on a server. It does the analysis mechanically. Managing attendance manually is an ancient approach which is a cumbersome method. The person must maintain the attendance record in registers and files. The most important matter with this approach is that it needs many papers that results a loss in the part of our non-renewable natural resources. So, to overcome the issues of manual report attendance, we developed "Android based Attendance Management System" using Android Managing the attendance through mobile phones, offers many advantages like this becomes the paperless system due to which non-renewable resources can be saved a lot and lot and human errors when marking the attendance can be reduced, attendance of a particular student is recorded daily, weekly or monthly and attendance percentage is calculated automatically through which students attandance eligibility criteria can be known without efforts. Communication between staff and also the parent is additionally a crucial issue that ought to even be thought of, because parent will solely get the knowledge regarding their ward once when they interact with college. So, we tend to additionally tried to bring the system that permits parent to receive the knowledge of their ward of regularity day to day.

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INTRODUCTION

1.1. Introduction

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.

In most educational institutions, participation of students in learning process is regarded as a vital exercise for allowing knowledge transfer. This signifies the importance of having students to attend the scheduled lectures and classes. Conventional methods for recording students attendance are still adopted by most colleges. One common method is by having students to manually sign the attendance sheet, which is typically passed around the classroom while a lecturer is giving the lecture.This approach could undoubtedly allow the students to cheat about their attendance, where a student may sign for an absent student. Besides, such attendance sheet could easily be misplaced or lost. A stricter approach especially to prevent students cheating about their attendance is additionally tedious, where a lecturer calls out the individual names from the students list and validate the presence of every single student.

Such manual methods of taking students attendance have been proven to be difficult and time consuming. Thus, there is a need for a semiautomated system that would eliminate all of these troubles. 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. Another reason for developing this software is to generate the report automatically at the end of the session

or in the between of the session. Smart phones are based onoperating systems like blackberry, IOS and Android. To design this project, smart phones with Android operating system are chosen because penetration rate of Android OS is 70 percent. It is an open source and free ware operating system. The application is compatible with all Android versions starting from 4.2 Jelly Bean.

Therefore, it is our objectives to develop a portable attendance system equipped with an online database, especially to prevent data loss as well as to promote paperless and agreener environment. Besides that, the application will help to reduce time being wasted, leading to a higher learning productivity in class. There are a few paperless attendance systems that have been developed but such systems need to be equipped with either a computer or RFID reader, resulting in additional cost for hardware and its maintenance. With that in mind, we have aimed to address this issue by having a system with minimal ha--rdware requirement and at the same time, enhancing the mobility aspect of the existing attendance systems.

Attendance systems of old practices are not quite efficient today for keeping track on student"s attendance. Due to the availability of large resources over the internet today, it is very hard to motivate the students to attend lectures without fail. Have become more challenging. In order to drag the attention of students and make them interactive in observing technologies we move on to latest upcoming trends on developing attendance systems. This is the strong reason for college attendance management system has to come up with an approach that ensures strong contribution of students in classrooms. To track attendance of the students, many attendance management systems are introduced in the market. With the introduction of this variety of attendance system, skipping classes without the staff"s knowledge have become difficult for the students

The 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.

1.2 Problem Statement

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. The conventional and traditional mode of attendance management system (AMS) leads lot of paper work and it is hard to maintain for a long period of time. Due to the nature of manual work, it is hard to perform the activities related to the management of attendance, when there is a need in taking reports of specific interest and there is a chance of committing error in recording the data and information on the records.

The computerized automation of academic attendance management system is available in the form of personal computer based application and available in various computing platforms. The various topology equipped, PC based management

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applications are running efficient and effective manner in many institutions and are being in the category of either internet based applications or intranet based applications [4]. The first category of in-ternet based management applications, the system at backend is in need of live server deployment of its database server. The second category of intranet based management applications, the system at backend is implemented within the local network as local database server.

This computerization of management systems provides the organization or institution to manage their academic/administrative activities in effective manner and is accessed by their all types of system user-s along with the support of 24/7. The system with mobility in the form of portability provides much accessibility. The mobile application based academic management system provides paper less activities, comparing with traditional and personal computer based computations. In this proposed, "design and development of Android based Academic Management System" (AAMS), the properties based on software engineering like ease of use, effective GUI, flexible in accessibility, and employing MIS principles are considered.

1.3. Purpose

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.In present situation, managing and maintaining the human information is difficult work for any educational establishment. The particular student tutorial information contains watching student performance and their progress sporadically that seems to be the heavy task for lecturers to take and update the progress of subjects in several categories.Similarly, way of taking the manual attendance is also a tedious work and errors also can be generated during report generation. So as to cut back the non-automation work and whereas to attain additional potency in management of student information, an android application which can be used in android phones is created using an easy approach with less number of difficult tasks. This system can save and retrieve and also sends the information to the particular person or student. Using this application, Staff can simply take the attendance and generates the report of a student.

System of Attendance management is a android application which is developed for recording day to day student attendance. It facilitates in accessing the attendance information of specific selected person in each particular category like department, section etc. Data can be sorted by the controller, who can be able to provide the teacher for a specific category. The current method can facilitates to provide the attendance eligibility rule for a student. It generally comprises of 4 modules – They are user, authority module, net service module, attendance building process and show information concerned to that person. It is a framework where students attendance can be taken by authorities based on hourly, daily,weekly or monthly basis. Attendance is taken daily on every operating day whether it's faculty, faculty of the other establishment and during this method each establishment wastes a lot of paper only for keeping the record. With such tiny reasons, our natural resources square measure depleting at the big rate and it will not be possible that our descendants that they don"t able to get those resources.

1.4. Scope

The scope of the project is the system on which the software is installed, i.e. the project is developed as a desktop application, and it will work for a particular institute. But later on the project can be modified to operate it online. Attendance Management System is software developed for daily student attendance in schools, colleges and institutes**.** If facilitates to access the attendance information of a particular Employee in a particular industry. The information **is** sorted by the operators, which will be provided by the employee for a particular working day. This system wills also help in evaluating attendance eligibility criteria of a employee.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.The scope of the project is the system on which the software is installed, i.e. the project is developed as a desktop application, and it will work for a particular institute or organization. But later on the project can be modified to operate it online.Employee Personal information: Name, Date of Birth, Age, Marital Status, address (permanent and present) and contact person details, Email, Contact no., Blood group, Nationality, Category, employee profile, Date of joining, Service up to, employee current position and job profile, family background details, employee local address and references details, Passport No., PF No, ESI No, Bank A/c No., Qualification details and previous work experiences. Manage leaves of all types for employees Manage different types of employee leave status: permanent, rolling contract and contract Leave ledger of employee Leave application management to be handled by HR Leave structure and policy management.

The benefits of using a time and attendance management solution at your workplace can not be underestimated. With thousands and thousands of employees working in many companies around the world, the need of an efficient organizational system or programs are getting more and more vital. Therefore, there are many companies implementing time management solutions in order to improve productivity.Attendance Management System covers the requirements of the

that will record the arrival and departure of the Student.The existing system has a web or desktop based application for student attendance management and the faculty must take the attendance and later should enter the attendance details into the server manually.