Smart Attendance System

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Abstract:

An online student progress report project that holds absent student automatic call to parents various problem occurred in college attendance. These abstraction can serve as a foundation for understanding the key components and process of your automatic call system for absent students. They help you break down the system into manageable parts, which can be further developed and implemented in our project. The project title as “SMART ATTENDANCE SYSTEM FOR KARMAYOGI INSTITUTE OF TECHNOLOGY SHELV” is a Desktop application. Includes student details, contact information, and attendance records. Identifies absent students, their reasons for absence, and the date of absence. User Credentials: Secure storage of login credentials for school staff. Student Absence Process: Begins with marking a student as absent, then triggers the automated message system. Automated Calling Process: Involves retrieving contact information, initiating calls, and logging call results. Notification Process: Notifies school staff when a call is made and when issues occur.

1. INTRODUCTION:

Automatic message systems for absences have become a vital tool in various domains, including education, business, and healthcare. These systems are designed to proactively alert stakeholders about the absence of personnel, students, or services, thereby ensuring smooth operations, safety, and effective communication. An automatic call for absent students is a system used by educational institutions to notify parents or guardians when a student is marked as absent from school. This system serves as a proactive communication tool to keep parents informed about their child's attendance and to ensure the safety and well-being of students. Here's an introduction for such a system.

2. PROJECT OVERVIEW:

Smart attendance management system is designed to solve the issues of manual systems. Smart attendance management System provide for the teacher requirements. The smart Attendance Management System helps in increasing the accuracy and speed ultimately to achieve the high-precision real-time attendance and its evaluation process.
3. LITERATURE SURVEY:

In the literature, school absenteeism is most often measured through self-reported data (Maynard et al., 2012; Havik et al., 2015; Keppens and Spruyt, 2016), irrespective of whether it is combined with reports from the parents (Kearney and Silverman, 1993; Kearney, 2002).[1]

One of the main strengths of the self-report method is the capacity to investigate the etiology of school absenteeism by means of collecting comprehensive information on individual, familial, school and societal characteristics and influences. The self-report method allows differentiation between different types (e.g., truancy, school refusal, specific lesson absence, school withdrawal), and reasons for (the maintenance of) SAPs (Kearney, 2007; Keppens and Spruyt, 2016; Heyne et al., 2019).[2]

The longer this period, the greater the chance that the self-reported absenteeism will deviate from the real absenteeism rate (Stone et al., 2000; Kirk, 2006). However, it should also be noted that self-reported measures that use a shorter reference period to measure absenteeism (for example, 2 weeks) may lead to an underestimation of school absenteeism. When the reference period is short, there will likely be an underreporting of students who are only absent a few times a year (Keppens and Spruyt, 2014).[3]

4. PROBLEM STATEMENTS:

Smart 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. This system will also help in evaluating attendance eligibility criteria of a student. By just a click on the mouse, the system will be able to produce the students Smart Attendance Management System thus reducing the need for manual labour which is prone to human errors and time consuming. This application is built for automating the processing of attendance. It also enhances the speed of performing attendance task easily. The Smart Student Management Attendance will be based on the department and section. According to the department wise and section wise the attendance will be marked for the students. It includes present, absent and leave column for each student so that they would mark the attendance like period wise. By just a click on the mouse, the system will be able to produce the Students Smart Attendance Management System.

5. PROBLEM STATEMENT:

Attendance Report 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. This system will also help in evaluating attendance eligibility criteria of a student. By just a click on the mouse, the system will be able to produce the students' attendance report thus reducing the need for manual labour which is prone to human errors and time consuming. This application is built for automating the processing of attendance. It also enhances the speed of performing attendance task easily. The Student Attendance will be based on the department and section. According to the department wise and section wise the attendance will be marked for the students. It includes present, absent and leave column for each student so that they would mark the attendance like period wise. By just a click on the mouse, the system will be able to produce the students' attendance report thus reducing the need for manual labour which is prone to human errors and time.
6. METHODOLOGY:

Agile Development Model: The meaning of Agile is swift or versatile. “Agile process model” refers to a software development approach based on iterative development. Agile methods break tasks into smaller iterations, or parts do not directly involve long term planning. The project scope and requirements are laid down at the beginning of the development process. Plans regarding the number of iterations, the duration and the scope of each iteration are clearly defined in advance. Each iteration is considered as a short time “frame” in the Agile process model, which typically lasts from one to four weeks. The division of the entire project into smaller parts helps to minimize the project risk and to reduce the overall project delivery time requirements. Each iteration involves a team working through a full software development life cycle including planning, requirements analysis, design, coding, and testing before a working product is demonstrated to the client.

7. HARDWARE REQUIREMENTS:

- Operating system: Windows 7, 8, 10, 11 etc.
- Front-End Language: Android, java
- Back-End: SQLite

SOFTWARE REQUIREMENTS:

- Internet: - 2GB
- Minimum RAM: - 4GB
- Hard Disk: - 256GB
- Processor: - Intel Pentium 4 (1.50 GHZ) or above

APPLICATION:

This project is applicable at various places as mentioned below:

- Schools
- Colleges
- Universities
8. RESULT:
9. CONCLUSION:

This software reduces the amount of manual data entry and gives greater efficiency. This software clears communication on parent and teachers. The User Interface of it is very friendly and can be easily used by anyone. It also decreases the amount of time taken to write details and other modules. Finally, in the Smart Attendance Management system, the outcome of all the hard work done for the Smart Attendance Management system is here. It is software that helps the user to work with the easy attendance for teachers & Communication between parents and teachers by using automated message through etc.

The User Interface of it is very friendly and can be easily used by anyone. It also decreases the amount of time taken to write details and other modules. All the details about students, teachers, and their other tasks can only be seen by the verified users. The solution to all the problems related to the attendance, message, call, text, fee status, courses taken by the Parents, teachers and the students, etc. In the end, we can say that this software is performing all the tasks accurately and is doing the work for which it is made and this system can be implemented in N number of colleges.

10. REFERENCE:

