1. INTRODUCTION

The world is developing day by day so as the technology. Technology is evolving constantly and making many things easier to mankind. What we have developed is that attendance management system. One can access this webpage through their mobile or system. This helps the institutions to keep records of each and every student along with date and class details along with which topic has covered that particular day.

This attendance management record who is present or absent in the class. It will help the teacher keep track of students who may be missing a lot of classes. A list of students who were present in school. The teacher who is responsible for keeping important information about every student up to date will be allowed to use the system. Teachers can also check the list of students who all are registered for that particular lecture and can mark attendance for those who are present. The goal is to give a teacher something they need. Keeping track of attendance is now simple and easy with a mobile option. While marking the attendance, teachers can select the date and enter what topic they have covered in that particular class. In this way it's easy for teachers to not only know who all missed that class but also the topic they have missed. By this system teachers could help students learn better.

All these records of student's information will be stored and can be re-checked anytime later. This system is way more easy and secure compared to the previous system where there are lot of chances to data loss or data manipulation. And teachers have less idea about student's regularity.

1.1 Purpose

The main purpose of our developed system is that teachers must have an better idea on students who are attending the class regularly and who are not along with the date and topics they have missed. This is much easy to use. One can easily operate this anywhere using their phone or system and mark attendance and submit so that action we will be recorded and stored.

1.2 Scope

By implementing this system in educational institutions, we can be sure of no data manipulations done and no data loss. And every student who attended are sure marked present.

1.3 References

Dey, S., Guha, A., Basu, D., & Banerjee, S. AUTOMATIC ATTENDANCE MANAGEMENT SYSTEM.

Goel, S., & Vasudeva, A. (2015). Online Attendance System.

Abidi, A., & Ukasha, R. (2018). Student Management System For TAFF-VTI. Habib University.

1.4 Overview

The primary aim of this project is to design and develop a sophisticated technology-based tool that can manage attendance records effectively. The replacement of the conventional manual attendance system is necessary due to its significant time-consuming nature and to improve the overall quality of the output. During the evaluation process of individual students, assessing their attentiveness is an important aspect. Moreover, an inquiry into the regularity of attendance for all scheduled classes.

2.Overal Description

2.1 Product Perspective

This smart attendance system is useful to manage every student's attendance record. And everything will be stored along with dates students were on leave and topics covered on that day so, teachers could check and act according to it.

2.1.1 System interface

After submitting the whole data will be stored. Apache is used as the web server. Th user gives inputs and submit and the program that will allow user to perform these actions are written using HTML, CSS, Java Script.

2.1.2 User interface

Once the user has enter the webpage and login, student's timetable will be displayed. Then the user could click on any particular subject then the page will be again redirected to students list who all are taking that particular class. The user could mark the checkboxes for who attendant and select the date and enter topic that has covered in that class and click on submit.

2.1.3 Hardware interfaces

Server Side:

Operating System: Windows 7/xp ,Windows ME

Processor: Pentium 3.0 GHz or higher

RAM: 1 Gb or more

Hard Drive: 10 GB or more

Client side:

Operating System: Windows 7 or above, MAC or UNIX.

Processor: Pentium III or 2.0 GHz or higher.

RAM: 1 Gb or more

2.1.4 Software interfaces

Server side-

An Apache web server will accept all requests from the client and forward it accordingly. A database will be hosted centrally.

Client side-

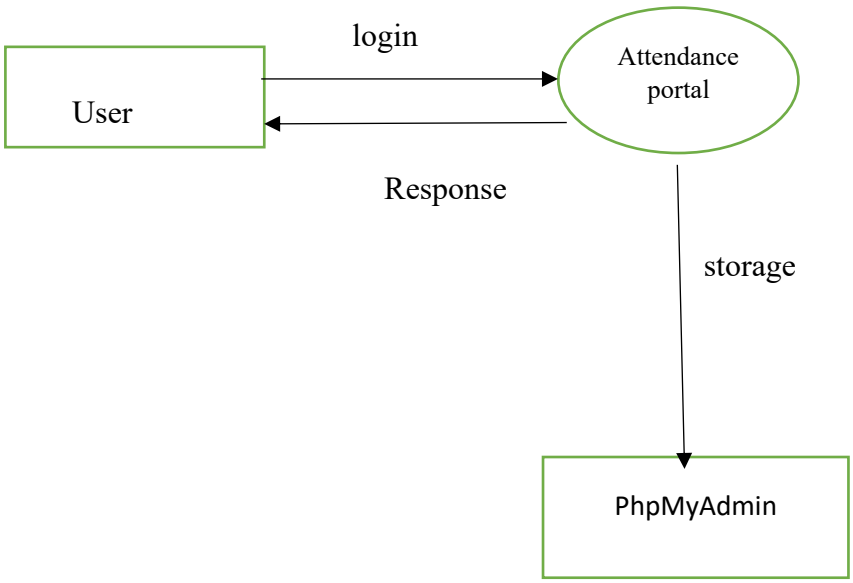
An OS which is capable of running a modern web browser which supports JavaScript and HTML.

2.1.5 Memory constraints

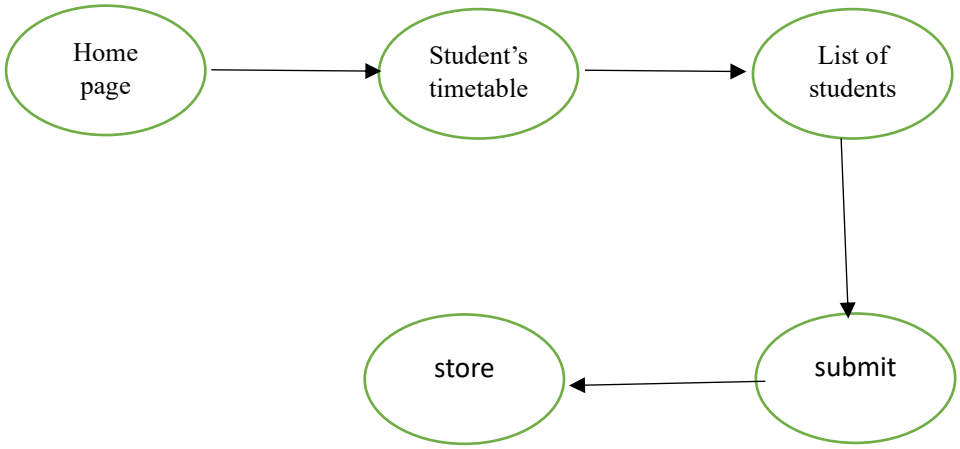
Memory constraints will come into play when the size of database grows to a considerable size

2.2 Product functions

2.2.1 Context diagram



2.2.2 Use case diagram



2.2.2 Use case diagram

once the user has entered the home page, there's an attendance button which will redirect to the student's timetable.

The user can click on their subject displayed in the timetable.

Then the user will again be redirected to the list of students who are registered for the subject they chose in the timetable.

That page has students list along with date and topic column where the user can enter what topic they taught that day.

And then submit so that whole activity will be recorded. Attendance status of the student along with other columns will be recorded.

2.3 User characteristics

2.3.1 Students

Students can be more profitable in this system. As they can be sure of being marked if they attended and no data can be lost. They can easily know what topic they have missed while they were on leave.

2.3.2 Professors

This system makes work easy for them. They can operate this from anywhere using their phone or system. And no one can be blamed for manipulating data or if there's a data missing.

2.4 Constraints

2.4.1 User Interface constraints

Using this system is very easy and simple. A user familiar with basic browser navigation skills can be able to operate.

2.4.2 Hardware constraints

Can work on any system which supports JavaScript and HTML.

2.4.3 software constraints

This system can run on your browser.

2.5 Assumptions and dependencies

Previous manual attendance taking system is time consuming and teacher may not have any proper idea on who are attending and who aren't. There's also high chance of data missing or manipulating. Our new system has many advantages and can overcome above mentioned problems. It is easy to use, not time consuming, teachers will have an know the attendance status of students along with what topics they are teaching daily.

3 Specific Requirements

3.1 External interface

3.1.1 web server

- Apache will be used as web server
- User will click on submit button so that data will be stored.
- phpMyAdmin will manage the database.

3.1.2 PhpMyAdmin

phpMyAdmin is an open source web-based application used for managing and administering MYSQL databases. It is commonly used by web developers and system administrators to manage databases for websites and web applications.

3.2 Functional requirements

3.2.1 Use case scenario

User have to click on the attendance button in the home page so that it'll redirect to timetable. We can choose our subject and click on that particular subject so we can mark attendance who opted that subject. After clicking on that subject, the page will again redirect to list of students registered for that subject. We have leave he checkboxes checked for present students and unmarked for absents. Select the date and enter the topic covered in the class and click on submit button.

3.3 Performance requirements

Maximum number of teachers in the institution can be able to access the system.

3.4 Logical database requirements

All data will be stored in the database (student attendance status, date, topic covered on that day), phpMyAdmin application is used to manage this.

3.5 Design constraints

Home page is designed by using HTML and CSS

Table for displaying timetable and redirecting is designed by using HTML

Php is used in storing the data.

3.6 Software system attributes

Apache web server

Php application.

3.6.1 Availability

This system is available at all times. The user can access it anywhere at anytime using either of their mobile or system.

3.6.2 Maintainability

PhpMyAdmin web application manages the database so Apache server takes care of it.