



CLASSROOM ATTENDANCE DISPLAY

Pathan Mubeen Khan Ismail Khan¹, Sayyed Abrar Husain Haadi Husain², Priti Vilas Patil³,
Pooja Santosh Mali⁴

U.G. Student, Department of Computer Engineering, SSBT's College of Engineering and Technology,
Jalgaon, India^{1,2,3,4}

Abstract: Attendance management is important to every single organization, it can decide whether or not an organization such as educational institutions, public or private sectors will be successful in the future. Managing student attendance during lecture periods has become a difficult challenge. The ability to compute the attendance percentage becomes a major task as manual computation produces errors, and wastes a lot of time. For the stated reason, an efficient Web-based application for attendance management system is designed to track student's activity in the class. This application takes attendance electronically and the records of the attendance are storing in a database. Student attendance management system deal with the maintenance of the student's attendance details. It is generates the attendance of the student on basis of presence in class. It is maintaining daily basis of attendance, the staff will be provide with the separate username and password to make student attendance. The staff handling the particular subject to responsible to make the attendance for all students. Only if the student presents the particular date, the attendance will be calculated

I. INTRODUCTION

Attendance Management System is web based application developed for daily student attendance in schools, colleges and institutes. It is facilitates to access the attendance information of a particular student in a particular time. 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 today's world web application is omnipresent. Applications, websites, etc are developed with the intent to make our lives easier. But the people who build the software are also human, and they can make mistakes, to protect oneself we propose a design for web application tool which can help you to maintain student's attendance record safely without errors and this will save your important time.

A. Problem Definition

Proposed System developed will reduce the manual work and avoid redundant data. By maintaining attendance manually, the system can generate efficient monthly report. As the attendance are maintained in registers it has been a tough task for admin and staff to maintain for long time. Instead the web application can keep long and retrieve the information when needed.

B. Scope

The following project has much scope both in present as well as future. In present situation the system can be accessed both in laptop and mobile devices.

The Scope of the project any mobile device which has the access to its server on which the project has been developed, the project is developed as web application, and it will work for a particular institute. But later on the project can be modified to operate for many institutes.

C. Objectives

- Eliminate duplicate data entry and errors in time and attendance entries.
- Eliminate paperwork and save time.
- Automatic calculation of attendance.
- To increase security.
- Manual work for information retrieval on attendance become as the work becomes digitized.
- Easy access for students they can view their attendance and make up for the shortage of attendance accordingly.

II. LITERATURE SURVEY

Attendance management is important to every single organization; it can decide whether or not an organization such as educational institutions, public or private sectors will be successful in the future. Managing student attendance during lecture periods has become a difficult challenge. The ability to compute the attendance percentage becomes a major task as manual computation produces errors, and wastes a lot of time.



Over the years manual attendance management has been carried across most of educational institutions. It is not only time consuming, but it is also unsecure and unreliable and it can be lost. Some institutions are using punch card for attendance while this will be difficult for teachers to keep track of the large number of students because by using punch card, a student can help the other student to punch their card even the other students may be absent, so it is not reliable. To overcome these problems we have developed a better system which is web based. In this system records are kept safe and secure.

III. PROPOSED SYSTEM

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the paper work and saving time to generate accurate results from the student's attendance. The system provides with the best user interface. The efficient reports can be generated by using this proposed system.

Advantages of Proposed System

1. It is trouble-free to use.
2. It is a relatively fast approach to enter attendance.
3. Best User Interface

System Architecture

A system architecture diagram would be used to show the relationship between different components. Usually they are created for systems which include hardware and software and these are represented in the diagram to show the interaction between them.

1st module: is admin module in which admin can add information of newly joined student as well as teacher
In this Module Admin can edit the existing information of Student as well as Teacher.

2nd Module: is Teacher Module in which teacher can view his detail information filled in the system and Also can See the Attendance of students and in this module teacher will generate his subject attendance code.

3rd Module: is Student Module in which Student can see their detail information filled in the system and they also can see their attendance datewise and they also can mark their attendance by filling correct attendance code.

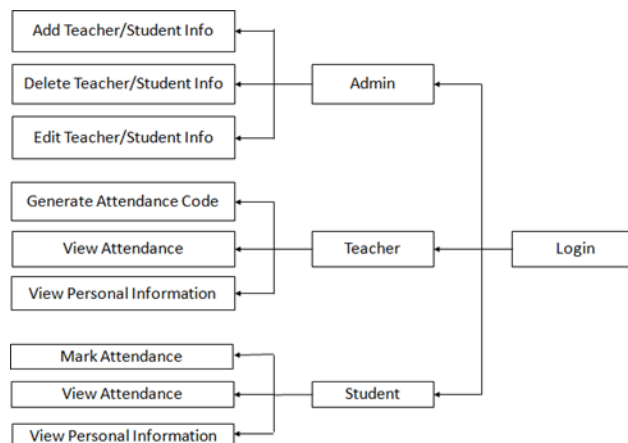


Figure : System Architecture Diagram

Data Flow Diagram

Also known as DFD, Data diagrams are used to graphically represent the own of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation. Data flow diagrams can be divided into logical physical. The logical data own diagram describes flow of data through a system to perform certain functionality of a business. The physical data flow dia- gram describes the implementation of the logical data flow.

Level 0 DFD

It is also known as context diagram. The zero level DFD of attendance management system, where we have elaborated the high level process of attendance. It's basic overview of the whole Attendance Management System or process being



analyzed or modeled. It's design to be an at a glance view of Leave, Login and Authentication showing the system as a single high level process, with it's relationship to external entities of Attendance, Student Attendance.

Level 1 DFD

First Level DFD of Attendance Management System shows how the system is divided into sub-systems, each of which deals with one or more of the data flows to or from an external agent, and which together provide all of the functionality of the Attendance Management System as a whole. It also identifies internal data stores of Authentication, Login, Leave, Holidays, Student Attendance that must be present in order of the Attendance system to do its job and show the flow of data between various parts of Attendance.

Level 2 DFD

DFD Level 2 then goes one step deeper into parts of level 1 of Attendance. It may require more functionalities of Attendance to teach the necessary level of detail about the Attendance functioning. First Level DFD (1st Level) of Attendance Management System shows how the system is divided into sub-system. The 2nd Level DFD contains more details of Login, Leave, Holidays, Student attendance.

IV. IMPLEMENTATION

Coding is the process of transforming the design of the system into a computer language format. This coding phase of software development is concerned with software translating design specification into the source code. In the coding phase, developers start to build the entire system by writing code using the chosen programming language. the coding phase, tasks are divided into units or modules and assigned to The he various developers. It is the longest phase of the Software Development Life Cycle process. During the implementation process, developers must write enough comments inside the code so that In anybody starts working on the code later on the user is able to understand what has already been written

Algorithm or processing of Application

Random Number Generator :-

- Now these days, OTP is mandatory in almost each and every service.
- A developer can generate OTP in many ways but the challenge is not to be predictive as any one can predict the OTP and can exploit the service.
- So the method which uses random function and some algorithm for generating the n-digit numeric OTP. function generate Numeric OTP(n)

Step 1:Take a generator string which consist of all numeric digits

Step 2:Generator = "1357902468";

Step 3:Iterate for n-times and pick a single character from generator and append it to result

Step 4:Login for generating a random character from generator.

Step 5: Generate a random number.

Step 6: Take modulus of same with length of generator.

Step 7: Append the character at place (i) from generator to result.

Step 8: result = ""; for(i = 1; i \leq n; i++)

Step 9: result. = substr(generator, (ran()))

Step 10: Return result

Step 11: return result; Function Call

Step 12: n = 6;

Step 13: generate Numeric OTP(n);

Modules in Project

- Student Logger Module :

The student module allows student to register, login, and logout. students benefit from being able to sign on because this associates content they create with their account and allows various permissions to be set for their roles. The Login Module is a portal module that allows student to type a user name and password to log in. We can add this module on any module tab to allow Student to log in to the system.

- Teacher Module :

The Teacher Module allows to login the faculty members. This module helps the teachers to view students attendance, class attendance, attendance by date, also it allows to download monthly reports and overall report of Individual students as well as overall class.



- User Module :

The Admin module consist of user login for authentication purpose. this module allows the users to add, update and delete the student as well as teachers records. also this modules have functionality to do attendance, view attendance , download attendance by date, download monthly report, download overall reports.

V. RESULT AND DISCUSSION

In the existing system data was gathered manually on paper which can be lost and erased but in the proposed system data is gathered through online registration form which can be accessed anytime, anywhere. In the existing system data modification was done by searching name and then modify by erasing previous data which looks odd but in the proposed system data modification can be by just one click on edit and you can modify information easily which looks clean and clear.

In the previous system attendance marking was done by calling name of student one by one which consume lot of time. In the proposed system student will mark their attendance by their self, they just need to allow location permission and enter correct attendance code which is provided by teacher.

Modules	Existing System	Proposed System
Data Gathering	Manually on paper which can be lost.	On online registration form and can be access anytime, anywhere.
Data Modification	On register by searching name and then modify by erasing previous data which looks odd.	Just one click on edit and you can modify the information and it looks clean and clear
Mark Attendance	One by one paper which is time consuming.	Student will be mark their attendance by self they just need to allow location permission and fill attendance code which is provided by teacher.
Attendance View	One by one searching name at particular date.	By just entering date you can see attendance of that date.

VI. CONCLUSION

In this proposed system, the web based attendance management system is developed using PHP server-side scripting language and CSS, HTML ,JavaScript for designing which is fully meet the system's goals.

This system overcome many limitations incorporated in attendance, this system saves a great amount of time and reduces errors which may occur during attendance calculation. The system developed is fully responsive which can be used in mobile, tablets and different operating systems.

Some other benefits are, Automated and web-based for easy accessibility. It is a dynamic and flexible system. It excludes paperwork and the possibility of making mistakes while using paper for taking attendance It is very user friendly and handy. The records of current and previous can be available in prompt and an immediate.

ACKNOWLEDGMENT

We would like to express deep gratitude and sincere thanks to all, who helps us to complete this major project work successfully. We thanks to principal **Prof. Dr. G. K. Patnaik**, for providing us facilities to complete this major project work successfully. Our deep gratitude goes to **Dr. Manoj E. Patil**, Head of the Department, for providing us opportunity to conduct this major project work. We are also sincerely thankful to our major project guide, **Ms. Dhanashree Tayade**, for her valuable suggestions and guidance. We are sincerely thankful to **Mr. A. D. Waghmare**, incharge of the major project. Last but not least thankful to our parents.

BIBLIOGRAPHY

- [1] Punch Card, available at:<http://www.computerhope.com/jargon/p/punccard.html>lastaccessed,10Oct2015
- [2] [BIOENABLE] Punch card attendance system available at:<http://www.bioenabletech.com/punch-card-attendance-system.html>lastaccessed,10Oct2015
- [3] Project Report on Attendance Management System available at: http://www.iisjaipur.org/iim-current-08/mca_iv_sem_pro_eva/15.project%20attendance%20managemnt%20system.pdflastaccessed,10Oct2015
- [4] S. K. Jain, U. Joshi, and B. K. Sharma, "Attendance Management System," Masters Project Report, Rajasthan Technical University, Kota.



- [5] [ACADAMIA] Attendance Management System, available at: https://www.academia.edu/9697549/Attendance_Management_Systemlastaccessed,10Oct2015/
- [6] Asghar MZ, Ahmad H, Ahmad S, Saqib SM, Ahmad B, Asghar MJ. Simplified Neural Network Design for Hand Written Digit Recognition. International Journal of Computer Science and Information Security. 2011 Jun 1;9(6):319
- [7] Asghar MZ, Ahmad S, Marwat A, Kundi FM. Sentiment Analysis on YouTube: A Brief Survey. arXiv preprint arXiv:1511.09142. 2015 Nov 30.
- [8] Kundi FM, Asghar D, Zubair M. Lexicon-Based Sentiment Analysis in the Social Web. Journal of Basic and Applied Scientific Research. 2014;4(6):238-48.
- [9] Asghar D, Zubair M. An Intelligent Agent for a Vacuum Cleaner. International Journal of Digital Content Technology and its Applications. 2009;3(2):143-6.
- [10] Asghar MZ, Khan A, Ahmad S, Kundi FM. Preprocessing in natural language processing. Editorial board.2013:152