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List of Abbreviations

PHP	**Hypertext Preprocessor**
VSF	**Vague Session Fetching**
JSP	**Java Server Pages**
HTTP	**Hypertext Transfer Protocol**

INTRODUCTION

1.1 Introduction

Web developers often work for clients who are trying to get their product or service onto the web. The work is typically very project focused and involves collaborating with a team that helps to coordinate the client's needs into the end product. The client could be a tech company, an organization, or a government. The work could involve front-end, back-end, or full-stack web development.

Web development could be a good profession for you if you like solving logical problems, building useful things, and experimenting with new technologies. Web developers are in high demand, generally have a good work/life balance, and command comfortable salaries. Google your specific location to get a better sense of your local web development job opportunities.

In this project we have used HTML , CSS , PHP and boot strapping . This project is basically based on a music class and its management . Here we have an approach for doing this project , we have made this project by collecting some source codes and taking information and requirements .
Here we have inserted a Home page – where user can see the whole interface of the website , on this home page we have inserted navigation bar and some buttons as home , login , About , Contact us

After this we have added some details of classes and in footer we have added some buttons like - About Login ,Our Guru ,Contact Us ,Fess , contact us , fees , courses ,social media and etc

For developing this site we have used software like –PHP, CSS, JAVA, VS-CODE , ZAMSERVER , MY-SQL , MY-EXCEL , Note pad and etc

1.2 Present System

We are familiar with many existing Websites for Student Attendance management System which provides information.

There are some websites like Class Charts a website and app that allows teachers to create a customizable classroom seating chart. It can also be used to track student behavior, reading levels, or any other student data. When setting up a seating chart, you can choose to set up rows of desks or build a class with tables that seat up to six students.

Once the classroom layout has been set up, you can create students and drag them to specific seats in the class. There's also a tool that automatically shuffles students according to your seating preference for behavior, reading level, gender, and more. You can choose to project the chart on a screen in your classroom, displaying student behavior "scores" and adding or removing points during class, and you can use the tool to create and keep track of student information and seats across one or multiple classes. Each student can be assigned an uploaded photo or a fun avatar. When behavior points are given or taken away, the site will play a sound, and a number is displayed next to each student's avatar reflecting their current behavior "status." You can also add notes whenever giving or taking away points. Students and parents can download the Class Charts app to their Android or iOS device and monitor their own progress.

Using Class Charts is a school- or district-wide investment, and its website seems geared mostly to schools in the U.K. rather than in the United States. You can request a free demo to learn more about the features and determine whether it's a good fit.

The website which we have developed can be accessed by google , chrome and other browsers for Android and iOS.

1.3 Proposed System

It was an interesting task to make my own Website. It became easier to get the current Students Attendance info.

1.4 Problem Statement

Ease to manage students attendance and record with the help of a website

Purpose:

This Website is Browser based website aims at developing a Website for Ease to manage Attendance and record with the help of a website

The main purpose of this Website is to perform the tasks of the user at certain information provided in either of the ways Login, Student Attendance. It will ease most of the work of the user as a complete task . Apart from giving the information, the Website will also provides class event

information, tickets for class organised events , paying fees , contact us 24/7, Details about Guru , which play critical roles in class operations.

1.5 Aim and Objective

The main aim of this project is to design and implement an website which will help classes to collect and keep information in a specific record update it and check for records and information of a specific student

The main objective of this Website is that Teachers can handle data operations according to the entries and records coming to them.

1.6 Scope For Future Work:

➢ This Website will offer class event information, tickets for class organised events , paying fees , contact us 24/7, Details about Guru , which play critical roles in class operations, which play a vital role in Classes operations s.

➢ The website has also been integrated with Razorpay as well to help the students to pay fees among themselves.

➢ It helps to improve class management

1.7 Limitations

- Cant pay more fess at a time you have to pay fees per month

CHAPTER 2

LITERATURE SURVEY

In recent years, educational institutions have increasingly adopted technology-driven solutions to streamline administrative processes and enhance student engagement. One such area of focus is the implementation of student attendance system websites, which provide a convenient and efficient way to track and manage student attendance. This literature survey explores the existing research and developments in student attendance system websites, highlighting key features, benefits, challenges, and future directions in this field.

1. "Automated Attendance Management System Using Web Technology" by Almazaydeh et al. (2018): This study presents an automated attendance management system that utilizes web technology to track student attendance. The system employs RFID technology, web-based interfaces, and database management techniques to achieve real-time attendance monitoring. The authors highlight the system's effectiveness in reducing manual data entry errors and enhancing administrative efficiency.

2. "Development of a Web-Based Student Attendance System" by Li et al. (2019): The authors propose a web-based student attendance system that utilizes barcode scanning and a cloud-based database. The system enables teachers to take attendance using their smartphones, and the data is automatically synchronized with the central database. The study showcases the system's user-friendly interface and its potential for reducing time spent on attendance management.

3. "A Comprehensive Review of Student Attendance Management Systems" by Ali et al. (2020): This review article provides a comprehensive analysis of different student attendance management systems, including web-based solutions. The authors discuss various features offered by attendance systems, such as biometric authentication, integration with learning management systems, and data analytics capabilities. The study emphasizes the need for user-friendly interfaces and scalable architectures in attendance system websites.

4. "Web-Based Attendance Management System Using Face Recognition" by Wazid et al. (2021): This research work proposes a web-based attendance management system that employs face recognition technology for student identification. The system captures students' facial images and matches them with the stored database for attendance verification. The authors discuss the accuracy and security aspects of the system, highlighting its potential for reducing proxy attendance instances.

5. "Enhancing Student Attendance Using IoT-Based Web Application" by Elma et al. (2022): The authors present an IoT-based web application for student attendance management. The system integrates IoT devices, such as beacons and RFID tags, with a web interface for real-time attendance tracking. The study discusses the system's advantages in terms of accessibility, accuracy, and cost-effectiveness.

Conclusion: Student attendance system websites offer numerous benefits, including automated data management, enhanced accuracy, and improved administrative efficiency. The reviewed literature demonstrates the diverse range of technologies used in these systems, such as RFID, barcode scanning, face recognition, and IoT. Future research in this field should focus on addressing privacy concerns, integrating with existing educational platforms, and exploring advanced data analytics techniques to derive meaningful insights from attendance data. Overall, the adoption of student attendance system websites holds great potential for optimizing attendance management processes in educational institutions.

CHAPTER 3

SYSTEMSPECIFICATION

3.1 HARDWARE REQUIREMENTS

- ➢ Mobile
- ➢ Desktop

3.2 SOFTWARE REQUIREMENTS

- ➢ Operating System :- Android / ios / windows / linusx
- ➢ Coding Language : HTML , PHP , CSS , Boot strap
- ➢ Disk Space : ------
- ➢ IDE : Visual Studio
- ➢ SDK : -----
- ➢ Database : Mysql , xampp , Excel

3.3 SOFTWARE DISCRIPTION

Visual studio

Visual Studio is an Integrated Development Environment(IDE) developed by Microsoft to develop GUI(Graphical User Interface), console, Web applications, web apps, mobile apps, cloud, and web services, etc. With the help of this IDE, you can create managed code as well as native code. It uses the various platforms of Microsoft software development software like Windows store, Microsoft Silverlight, and Windows API, etc. It is not a language-specific IDE as you can use this to write code in C#, C++, VB(Visual Basic), Python, JavaScript, and many more languages. It provides support for 36 different programming languages. It is available for Windows as well as for macOS. Evolution of Visual Studio: The first version of VS(Visual Studio) was released in 1997, named as Visual Studio 97 having version number 5.0. The latest version of Visual Studio is 15.0 which was released on March 7, 2017. It is also termed as Visual Studio 2017. The supported .Net Framework Versions in latest Visual Studio is 3.5 to 4.7. Java was supported in old versions of Visual Studio but in the latest version doesn't provide any support for Java language.

How to install Visual studio ?

Following are steps to download Visual studio

Step 1 - Make sure your computer is ready for Visual Studio

Step 2 - Download Visual Studio

Step 3 - Install the Visual Studio Installer

Step 4 - Choose workloads

Step 5 - Choose individual components (optional)

Step 6 - Install language packs (optional)

Step 7 - Select the installation location (optional)

Step 8 - Start developing

Step 1 - Make sure your computer is ready for Visual Studio

Before you begin installing Visual Studio:

Check the system requirements. These requirements help you know whether your computer supports Visual Studio 2022.

Apply the latest Windows updates. These updates ensure that your computer has both the latest security updates and the required system components for Visual Studio.

Reboot. The reboot ensures that any pending installs or updates don't hinder your Visual Studio install.

Free up space. Remove unneeded files and applications from your system drive by, for example, running the Disk Cleanup app.

You can install Visual Studio 2022 side by side with previous versions. For more information, see Visual Studio 2022 platform targeting and compatibility and Install Visual Studio versions side-by-side.

Step 2 - Download Visual Studio

Next, download the Visual Studio bootstrapper file.

To do so, select the following button, choose the edition of Visual Studio that you want, and then save to your Downloads folder.

Step 3 - Install the Visual Studio Installer

Run the bootstrapper file to install the Visual Studio Installer. This new lightweight installer includes everything you need to both install and customize Visual Studio.

From your Downloads folder, double-click the bootstrapper that matches or is similar to one of the following files:

vs_community.exe for Visual Studio Community

vs_professional.exe for Visual Studio Professional

vs_enterprise.exe for Visual Studio Enterprise

If you receive a User Account Control notice, choose Yes.

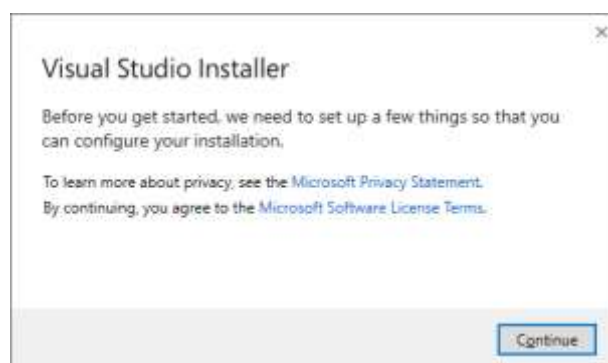We'll ask you to acknowledge the Microsoft License Terms and the Microsoft Privacy Statement. Choose Continue.

FIG. 3.1 VS INSTALLER

Step 4 - Choose workloads

After the installer is installed, you can use it to customize your installation by selecting the feature sets—or workloads—that you want. Here's how.

Select the workload you want in the Visual Studio Installer.

FIG.3.2 CHOOSE WORKLOAD

Review the workload summaries to decide which workload supports the features you need. For example, choose the ASP.NET and web development workload to edit ASP.NET Web pages with Web Live Preview or build responsive web apps with Blazor, or choose from Desktop & Mobile workloads to develop cross-platform apps with C#, or C++ projects that target C++20.

After you choose the workload(s) you want, select Install.

Next, status screens appear that show the progress of your Visual Studio installation.

Step 5 – Choose individual components (optional)

If you don't want to use the Workloads feature to customize your Visual Studio installation, or you want to add more components than a workload installs, you can do so by installing or adding individual components from the Individual components tab. Choose what you want, and then follow the prompts.

FIG 3.2 Individual Components

Step 6 - Install language packs (optional)

By default, the installer program tries to match the language of the operating system when it runs for the first time. To install Visual Studio in a language of your choosing, choose the Language packs tab from the Visual Studio Installer, and then follow the prompts.

FIG.3.3 Install language packs

Change the installer language from the command line

Another way that you can change the default language is by running the installer from the command line. For example, you can force the installer to run in English by using the following command: vs_installer.exe --locale en-US. The installer will remember this setting when it's run the next time. The installer supports these language locales: zh-cn, zh-tw, cs-cz, en-us, es-es, fr-fr, de-de, it-it, ja-jp, ko-kr, pl-pl, pt-br, ru-ru, and tr-tr.

Step 7 - Select the installation location (optional)

You can reduce the installation footprint of Visual Studio on your system drive. For more information, see Select installation locations.

FIG . 3.4 Select the installation location

Step 8 - Start developing

After your Visual Studio installation is complete, select the Launch button to get started developing with Visual Studio.

On the start window, choose Create a new project.

In the template search box, enter the type of app you want to create to see a list of available templates. The list of templates depends on the workloads that you chose during installation. To see different templates, choose different workloads.

You can also filter your search for a specific programming language by using the Language drop-down list. You can filter by using the Platform list and the Project type list, too.

Visual Studio opens your new project, and you're ready to code!

3.4 System requirements

Hardware and Software	Requirements
Processor	Minimum 1.6 GHz Pentium Processor
Supported architecture	X86 and X64 on windows mode
Operating Systems	Windows Server 2003 Service Pack or above Windows Server 2008 Windows Server 2008R2 or above Windows XP Service Pack 3 or above Windows Service Pack 2 or above Windows Server 2008 Service pack 2 or above Windows 7 or Windows 8 (popular and Recommended)
RAM	1 GB or More
Hard Disk	For Full installation between 3 to 4 GB of available system hard disk space
Hard Disk Space	5400 revolution per Minute (RPM) Recommended 7200 RPM or Higher
DVD-ROM drive	Required or other compatible device
Display	Minimum 1024 X 768 display
Mouse or Keyboard	Mouse ,Keyboard or compatible device

FIG 3.5 System requirement

HTML

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <img /> and <input /> directly introduce content into the page. Other tags such as <p> surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. The inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.[2] A form of HTML, known as HTML5, is used to display video and audio, primarily using the <canvas> element, in collaboration with javascript.

HTML in Visual Studio Code. Visual Studio Code provides basic support for HTML programming out of the box. There is syntax highlighting, smart completions with IntelliSense, and customizable formatting. VS Code also includes great Emmet support.
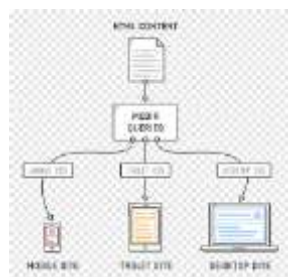
Fig.3.6 HTML

PHP (Hypertext Preprocessor)

It is a widely-used scripting language primarily designed for web development. It is embedded within HTML code and executed on the server, generating dynamic web pages. PHP is known for its simplicity, flexibility, and extensive support within the web development community.

Key features and functionalities of PHP include:

1. Server-side Scripting: PHP is a server-side scripting language, meaning it runs on the server before the HTML is sent to the client's browser. This allows for dynamic content generation, database interactions, and other server-side operations.

2. Integration with HTML: PHP can be seamlessly embedded within HTML code, making it easy to mix PHP and HTML to create dynamic web pages. PHP code is enclosed within special tags <?php and ?>, allowing developers to switch between HTML and PHP effortlessly.

3. Database Connectivity: PHP offers built-in support for various databases, including MySQL, PostgreSQL, Oracle, and more. It provides functions and extensions to establish connections, perform database queries, and manipulate data, making it ideal for building database-driven websites and applications.

4. Support for Various Web Servers: PHP is compatible with multiple web servers, such as Apache, Nginx, Microsoft IIS, and more. It can be installed and configured on different platforms, including Windows, Linux, macOS, and others, ensuring flexibility and ease of deployment.

5. Wide Community and Resources: PHP has a vast and active community of developers, providing extensive documentation, tutorials, and forums. This makes it easy to find help, learn from others, and access a wide range of libraries and frameworks to speed up development.

6. Object-Oriented Programming (OOP) Support: PHP supports object-oriented programming principles, allowing developers to write modular, reusable, and maintainable code. This promotes code organization, encapsulation, and code reuse.

7. Extensibility and Customization: PHP can be extended with various libraries, frameworks, and extensions to enhance its functionality and simplify common tasks. Popular PHP frameworks include Laravel, Symfony, and CodeIgniter, which provide additional features and tools for rapid application development.

8. Security: PHP incorporates built-in security measures, such as input validation functions, data sanitization, and protection against common security vulnerabilities. However, developers should follow best practices and adhere to secure coding practices to ensure robust security in PHP applications.

Overall, PHP is a versatile scripting language for web development, enabling developers to create dynamic web pages, interact with databases, and build feature-rich web applications. Its simplicity, flexibility, and extensive community support have made it one of the most widely-used languages for web development.

MYSQL

MySQL is one of the most recognizable technologies in the modern big data ecosystem. Often called the most popular database and currently enjoying widespread, effective use regardless of industry, it's clear that anyone involved with enterprise data or general IT should at least aim for a basic familiarity of MySQL.

With MySQL, even those new to relational systems can immediately build fast, powerful, and secure data storage systems. MySQL's programmatic syntax and interfaces are also perfect gateways into the wide world of other popular query languages and structured data stores.

What is MySQL?

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. In particular, a relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database. MySQL is integral to many of the most popular software stacks for building and maintaining everything from customer-facing web applications to powerful, data-driven B2B services. Its open-source nature, stability, and rich feature set, paired with ongoing development and support from Oracle, have meant that internet-critical organizations such as Facebook, Flickr, Twitter, Wikipedia, and YouTube all employ MySQL backends.

Current Developer   Oracle Corporation

Original Developer   MySQL AB (Then, briefly, Sun Microsystems)

Current Stable Release   8.0.16 (on April 25, 2019)

Original Release   May 23, 1995

License   GPLv2 (or proprietary)

Primary language   C and C++

Website   https://www.mysql.com/

Open-source repository   https://github.com/mysql/mysql-server

4 keys to understanding MySQL

Because MySQL enjoys the most widespread use in many industries, business users from new webmasters to experienced managers should strive to understand its main characteristics. Deciding whether to use this technology, and communicating about it effectively, starts with a review of MySQL's basic availability, structure, philosophy, and usability.

MySQL is widely compatible

Though often associated with internet applications or web services, MySQL was designed to be extensively compatible with other technologies and architectures. The RDBMS runs on all major computing platforms, including Unix-based operating systems, such as the myriad Linux distributions or Mac OS, and Windows.

MySQL's client-server architecture means it can support a variety of backends, as well as different programming interfaces. Data can be directly migrated from MySQL to its forks (e.g. MariaDB), as well as most other RDBMSs thanks to architectural and language similarities. Established Oracle and third-party migration tools further allow MySQL to move data to and from a vast set of general storage systems, whether these are designed to be on-premises or cloud-based. MySQL can be deployed in virtualized environments, distributed or centralized, and even exists as portable standalone libraries for learning purposes, testing, or small applications. MySQL's wide compatibility with all these other systems and software makes it a particularly practical choice of RDBMS in most situations.

MySQL databases are relational

The primary factor differentiating relational databases from other digital storage lies in how data is organized at a high level. Databases like MySQL contain records in multiple, separate, and highly codified tables, as opposed to a single all-encompassing repository, or collections of semi- or unstructured documents. This allows RDBMSs to better optimize actions like data retrieval, updating information, or more complex actions like aggregations. A logical model is defined over all of the contents of the database, describing for example the values allowed in individual columns, characteristics of tables and views, or how indices from two tables are related.Relational models have remained popular for several reasons. They empower users with intuitive, declarative programming languages — essentially telling the database what result is wanted in language akin to, or at least comprehensible as, written english, instead of meticulously coding up each step of the procedure leading to that result. This moves a lot of the work into the RDBMS and SQL engines, better enforcing logical rules and saving valuable resources and manpower.

MySQL is open-source

Any individual or enterprise may freely use, modify, publish, and expand on Oracle's open-source MySQL code base. The software is released under the GNU General Public License (GPL).For MySQL code needing to be integrated or included in a commercial application (or if open-source software is not a priority), enterprises can purchase a commercially licensed version from Oracle.Again, these options provide organizations with additional flexibility if deciding to work with MySQL. The public and community-based nature of open-source releases enriches MySQL's documentation and online support culture, while also ensuring that sustained or newly-developed capabilities never stray too far from current user needs.

MySQL is easy to use

Though MySQL's relational nature and the ensuing rigid storage structures might seem restrictive, the tabular paradigm is perhaps the most intuitive, and ultimately allows for greater usability. In fact, MySQL makes many concessions to supporting the widest possible variety of data structures, from the standard but rich logical, numeric, alphanumeric, date, and time types, to more advanced JSON or geospatial data. Beyond mere data types and an expansive built-in feature set, the MySQL ecosystem also includes a variety of tools, easing everything from server management to reporting and data analysis. Regardless of the RDBMS's overarching architecture, users can invariably find a MySQL feature allowing them to model and codify data how they wish. MySQL remains one of the most straightforward database technologies to learn and use.

How to connect HTML to database with MySQL using PHP?

First of all, you must be install any XAMPP or WAMP or MAMP kind of software on your laptop or computer. With this software, you will get a local webserver i.e. Apache, PHP language, and MySQL database. The complete code is on Github and the download link is the last of this article.my PHP, MySQL example is with database connection in xampp code.

After installation you need to on the Xampp see the image below:

Fig 3.7 xampp control

After installation of any of these laptop or desktop software you need to check your localhost is working or not. Open your browser and check this URL http://127.0.0.1 or http://localhost/ . If this is working it means you have the local webserver activated with PHP/MySQL.

Also, GUI PHPmyAdmin coming for handling CRUD operations i.e. insert(create), update, delete, and select(read) records from tables. This interface is browser-based and very helpful, easy to use for creating and managing phpmyadmin database in table(column, row).

If you have the above installation you can go ahead to start your coding.

If you have not a LAMP stack-based web server then you can do this directly in your hosting space.

If you have any more query then you can comment on this post. We will reply to your query.

Suppose you have a web page to insert contact form field data in your DB. For this you need to follow the following steps:

Step 1: Filter your HTML form requirements for your contact us web page

Suppose you selected the form field Name (text input), Email(email input), Phone (number input), and message (multi-line text). The form submit button also necessary for submitting the form. You will get the complete form in HTML coding in step 3.

Step 2: Create a database and a table in MySQL

Open a web browser (chrome, firefox, edge, etc.,) and type this http://localhost/phpmyadmin/ or http://127.0.0.1/phpmyadmin/ for open GUI for managing DB on your computer. See the xampp screen below how it is coming.

Click on the databases link and create your db by the name "db_contact". See the image below:
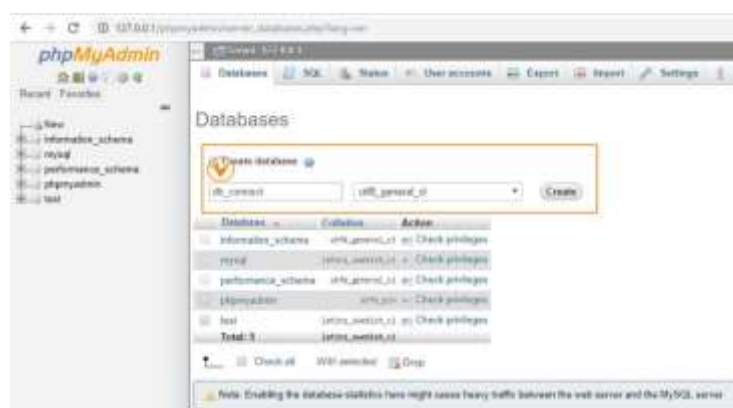
Fig.:3.8 db control

After creating your DB you need to create a table by any name I choose "tbl_contact" with the number of field 5. We choose 4 fields on top Name, Email, Phone, and Message. The first column we will keep for maintaining the serial number and in technical terms primary key(unique number of each recor). See the image below
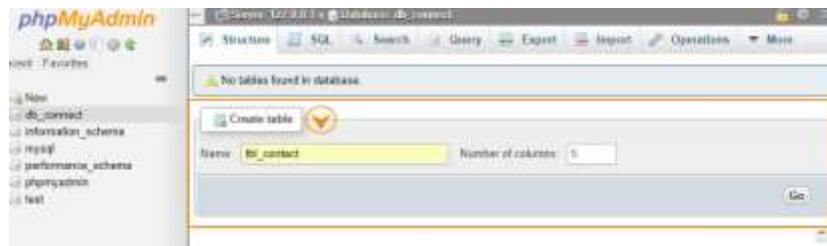
Fig.3.9 creating table

When you will click to go button you will get this screen. Now we need to feed every field information.
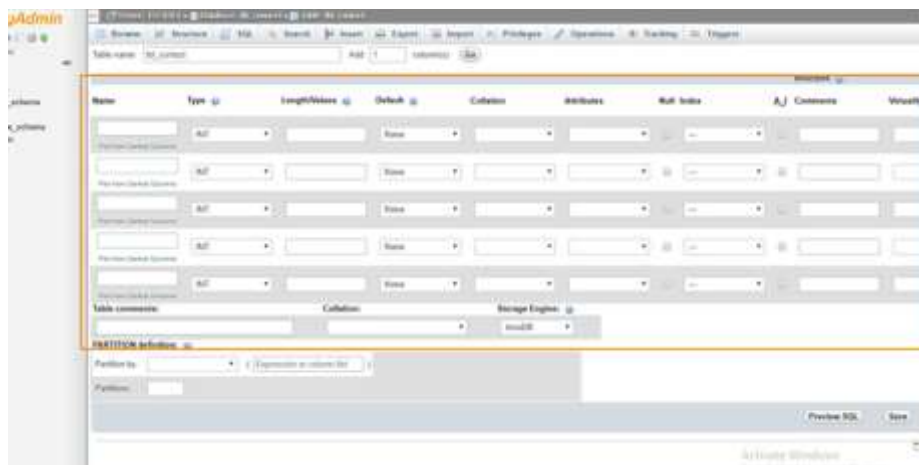
Fig.3.10 definig data

See the below image in which I added field information. So for field Name used field Name – fldName, Email – fldEmail, Phone – fldPhone, Message – fldMessage.
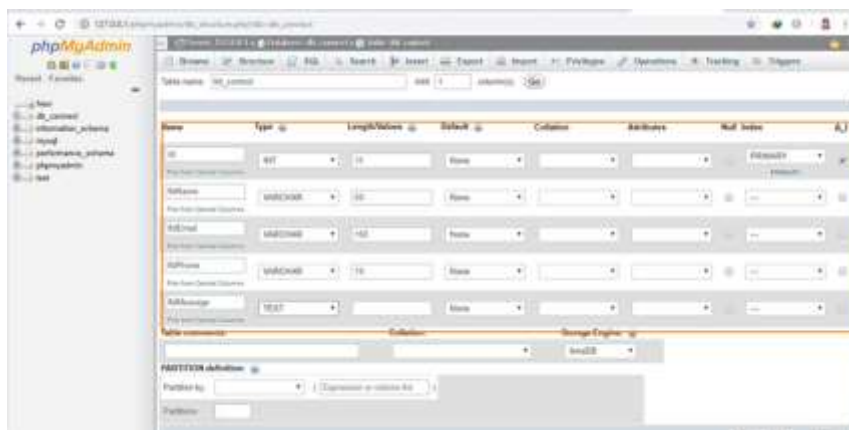
Now click on the save button that is on the bottom right of your screen. After saving your table it is created in your database.
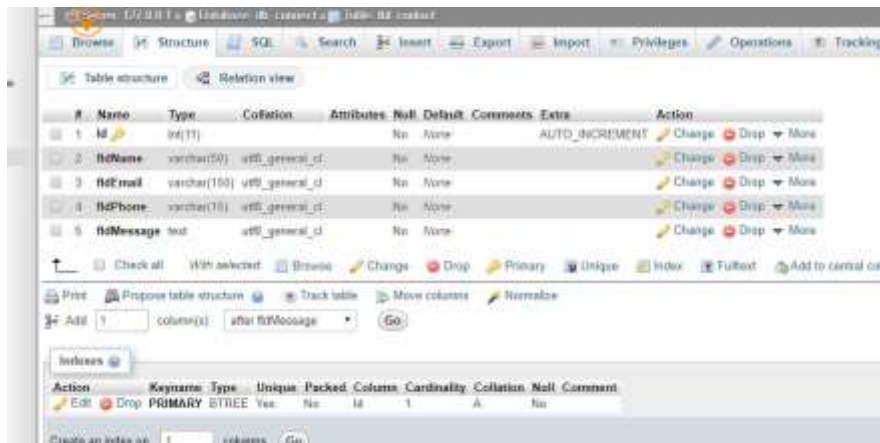
Fig.3.11 structure

You can create your DB and table using the SQL below. You have to copy the following code and paste it into your MySQL GUI phpmyadmin database or any other GUI or command prompt. At the bottom of the blog, you will get a git download link to download the SQL file.

Step 3: Create HTML form for connecting to database

Now you have to create an HTML form. For this, you need to create a working folder first and then create a web page with the name "contact.html". If you install xampp your working folder is in folder this "E:\xampp\htdocs". You can create a new folder "contact" on your localhost working folder. Create a "contact.html" file and paste

Step 4: Create a PHP page to save data from HTML form to your MySQL database

The contact HTML form action is on "contact.php" page. On this page, we will write code for inserting records into the database.

For storing data in MySQL as records, you have to first connect with the DB. Connecting the code is very simple.

CHAPTER 4

SYSTEM DEVELOPMENT

4.1 Overview

Systems development is the art and science of creating man-made systems to satisfy predetermined needs. It is a problem-solving process where we bring to bear appropriate elements of mankind's knowledge base to create new knowledge specific to the problem and, as a result, define a solution to the problem.

4.2 Feasibility Study

Feasibility study is one of the important four stages of the Software Project Management Process. As the namesuggests, a feasibility study is the feasibility analysis or it is a measure of the software product in terms of how beneficial product development will be for the organization from a practical point of view. Feasibility study is carried out based on many purposes to analyze whether a software product will be right in terms of development, implantation, contribution of project to the organization etc.

4.3 Technical Feasibility

In Technical Feasibility current resources both hardware software along with required technology are analyzed/assessed to develop projects. This technical feasibility study reports whether there exists correct required resources and technologies which will be used for project development. Along with this, the feasibility study also analyzes technical skills and capabilities of the technical team, whether existing technology can be used or not, maintenance and up-gradation is easy or not for chosen technology etc.

4.4 Operational Feasibility

In Operational Feasibility, the degree of providing service to requirements is analyzed along with how easy a product will be to operate and maintain after deployment.Along with this other

operational scopes are determining usability of product, Determining suggested solution by software development team is acceptable or not etc.

4.5 Economic Feasibility

In the Economic Feasibility study, the cost and benefit of the project is analyzed. Means under this feasibility study a detailed analysis is carried out of what will be the cost of the project for development which includes all required cost for final development like hardware and software resource required, design and development cost and operational cost and so on. After that it is analyzed whether the project will be beneficial in terms of finance for the organization or not.

4.6 Legal Feasibility

The Legal Feasibility study project is analyzed from a legality point of view. This includes analyzing barriers of legal implementation of project, data protection acts or social media laws, project certificate, license, copyright etc. Overall it can be said that Legal Feasibility Study is the study to know if proposed projects conform to legal and ethical requirements.

4.7 Schedule Feasibility

In Schedule Feasibility Study mainly timelines/deadlines are analyzed for proposed projects which includes how many times teams will take to complete the final project which has a great impact on the organization as the purposeof the project may fail if I can't complete on time.

4.8 Project Process Model

To help reduce the difficulty in constructing sites, we should adopt a process model that describes the various phases involved in Web site development. That way, each step can be carefully performed by the developer with help from guidelines and documentation, which tells them how to do things and ensures that each step is carried out properly as they go along. An ideal process model for the Web would help the developer address the complexity of the site, minimize the risk of project failure, deal with the near certainty of change during the project, and deliver the site quickly with adequate feedback for management throughout the process. Of course, the ideal process model also would have to be easy to learn and execute. This is a pretty tall order, and it is unlikely that any single process model is always going to fit the particular requirements of a project.

There are numerous process models used by people to build software and Web sites. However, the most basic process model used should be familiar to most people "at least in spirit, as it is deductive, or more simply, "top-down." Following the top-down method, a Web project begins with the big picture and narrows down to the specific steps necessary to complete the site. Thus, the model starts first with a planning stage, then a design phase, then implementation and testing, and ends with a maintenance phase. The phases might appear to be distinct steps, but the progress from one stage to another might not always be obvious. Furthermore, progress isn't always toward a conclusion, and occasionally previous steps may need to be revisited if the project encounters unforeseen changes. The actual number of steps and their names vary from person to person, but a general idea of the procedure is shown in Figure 2-1.

The Waterfall Model

- Problem Definition/ Concept Exploration
- Requirements Analysis Specification
- Design Prototyping
- Implementation & Unit Testing
- Integration & System Testing
- Release, Operation & Maintenance
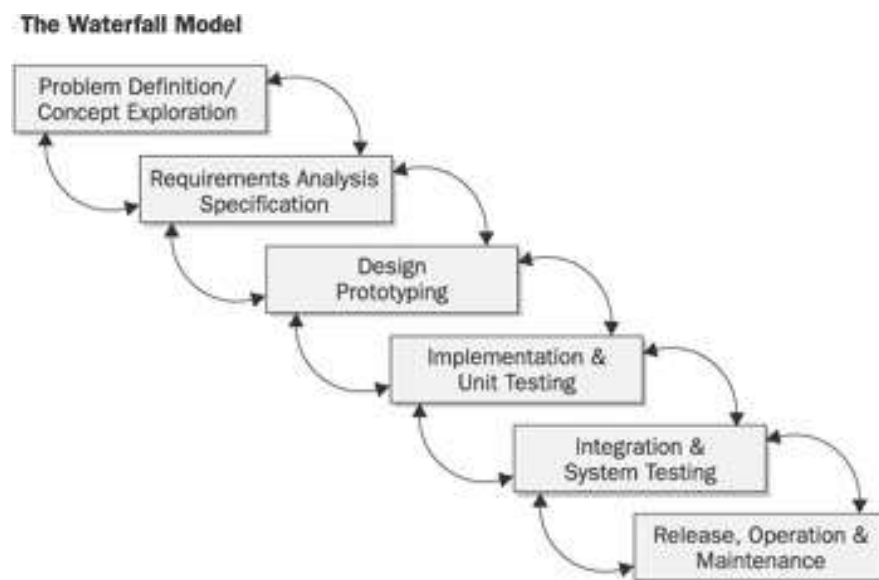
Figure 4.1: The Waterfall Model

Note :-In software engineering, this model often is called the waterfall model, or sometimes the software lifecycle model, because it describes the phases in the lifetime of software. Each stage in the waterfall model proceeds one after another until conclusion.

The good thing about this site development approach is that it makes developers plan everything up front. That also is its biggest weakness. In a Web project, there often is a great deal of uncertainty in what is required to accomplish a project, particularly if the developer has not had a great deal of Web development experience. Another problem with this development model is that each step is

supposed to be distinct, but the reality is that in Web development, like software, steps tend to overlap, influence previous and future steps, and often have to be repeated. Unfortunately, the basic Web site development approach can be fairly rigid and might require the developer to stop the project and redo many steps if too many changes occur. In short, the process doesn't deal well with change. However, this simple model for site design continues to be very popular because it is both easy to understand and easy to follow. Furthermore, the distinct steps in the process appeal to management as they can easily be monitored and serve as project milestones.

4.9 System Design Overview

Systems design is the process of defining elements of a system like modules, architecture, components and their interfaces and data for a system based on the specified requirements. It is the process of defining, developing and designing systems which satisfies the specific needs and requirements of a business or organization.

UML Diagrams: n Use Case Diagram :
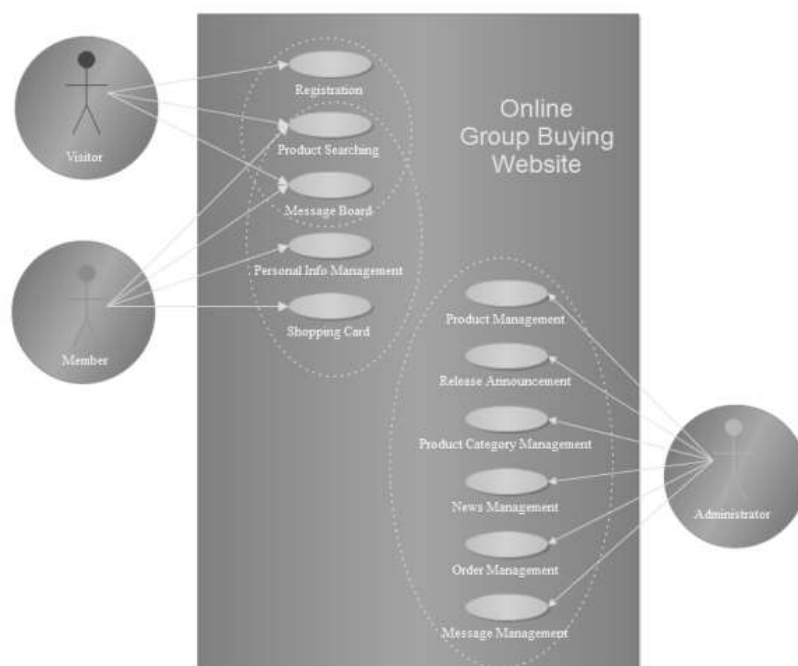
Fig4.2 Admin Module

CHAPTER 5

PERFORMANCE ANALYSIS

Overview

Performance Analysis (IPA) is a simple and useful technique for identifying those attributes of a product or service that are most in need of improvement or that are candidates for possible cost-saving conditions without significant detriment to overall quality. This process is underpinned by systematic observation, which provides valid, reliable and detailed information relating to performance. Performance Analysis can help enhance the coaching process by providing visual feedback (Video Analysis) and objective statistical analysis.

Testing and Validation

For the application or website to be deployed it has to be tested. Hence test cases will be written to test this application. There are many types of tests to be carried out on a web application from performance, functionality, database loading time, response time, server time handling, actions and many others. I will not carry out all types of tests for the application considering the time scale to present this project. Hence performance check related to upload time, memory usage will be part of a future test.I will focus the test cases on functionality, security and performance. The test will help reduce unpredictability on the application. Finally, the last test will be the checking of all input sources such as query strings and textboxes.

Input source test

● Submit your State.

● Fill forms with different district on the website.

Functionality test

Here is a list of some functionality that will be tested.

● Load new information about students .

● Is the information loaded on the website controlled and checked?

● Is it easy to move between pages on the website?

●   Adding, deleting and updating items the user uploaded

General view test

This test will be carried out by four randomly selected people .They will try to use the website give me feedback and comments. They will answer questions like :- ● Can the user find what they want by searching on the app?

●   Is the website easy to use or understand ?Does the user understand the goal of the website and what it does?

●   Is it easy to move between different pages or does navigation work properly in the website?

●   What is lacking in the website?

●   What are their recommendations?

●   Can they find the crop advisories they want?

Synthetic Performance Monitoring

Basic Web Performance Monitoring

Mid-Level Web Performance Monitoring

Advanced Web Performance Monitoring

5.2 Website Performance Indicators;-

1) UPTIME

2) Time to First Byte (TTFB)

3) Full-page Load Time

4) Broken Links

5) User Journey

6) Database Performance

7) Geographic Performance
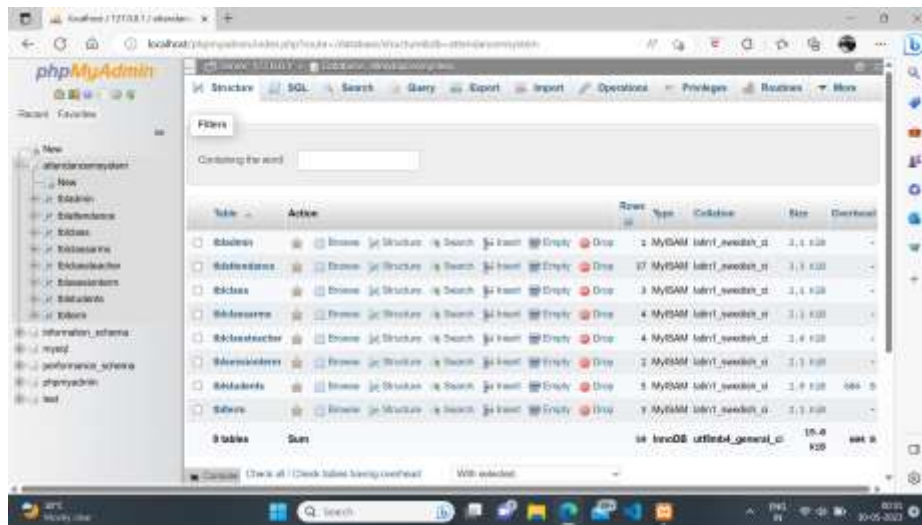
8) Web Server's Hardware

9) Website Visitors

10) Website Quality

11) Final Thoughts
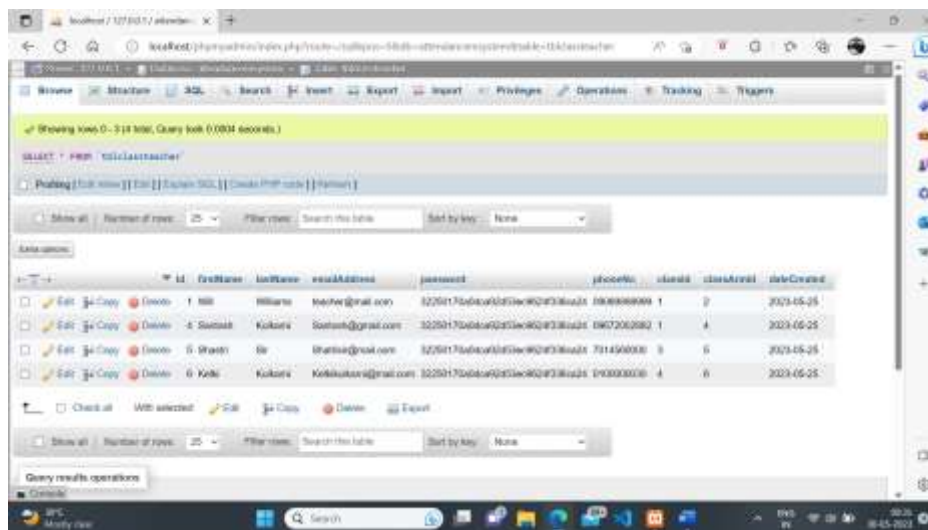
FINAL OUTPUT OF RUNNING SYSTEM

FIG.5.1 Attendance system table

FIG 5.2 Teachers table

FIG 5.3 Students table

FIG. 5.4 Login Pannel

FIG. 5.5 Class Teacher login
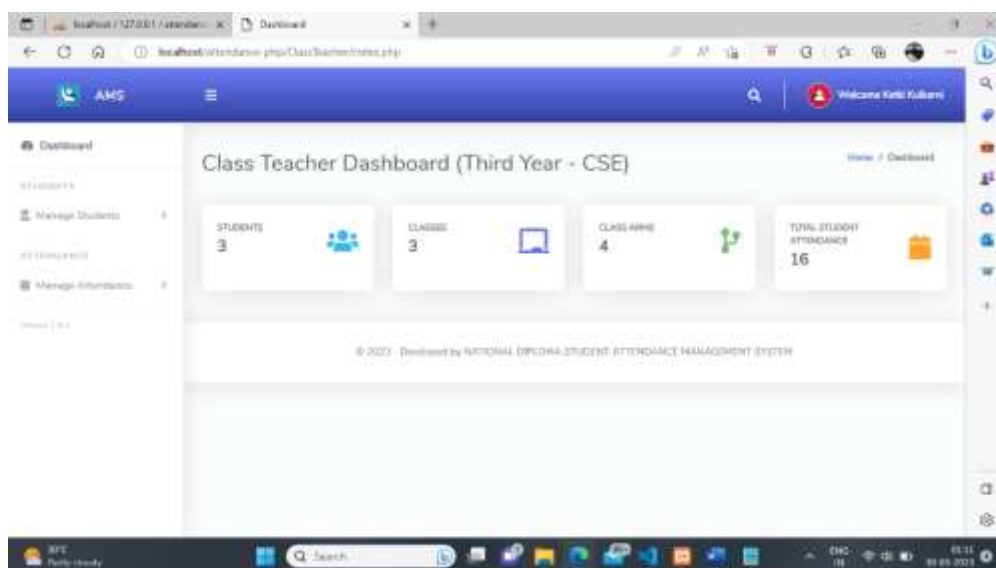
FIG. 5.6 Class Teacher Dashboard
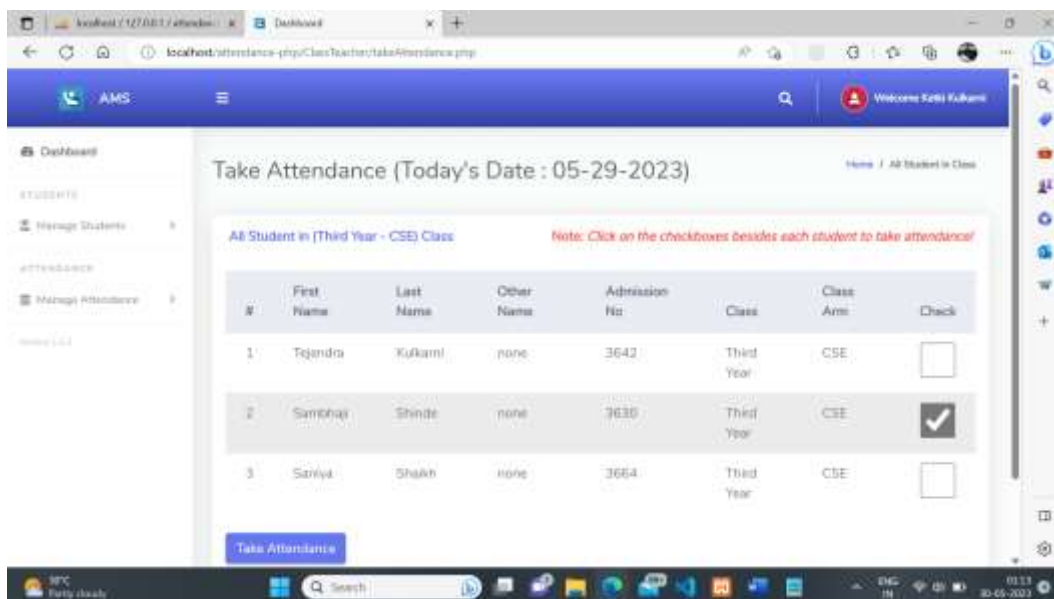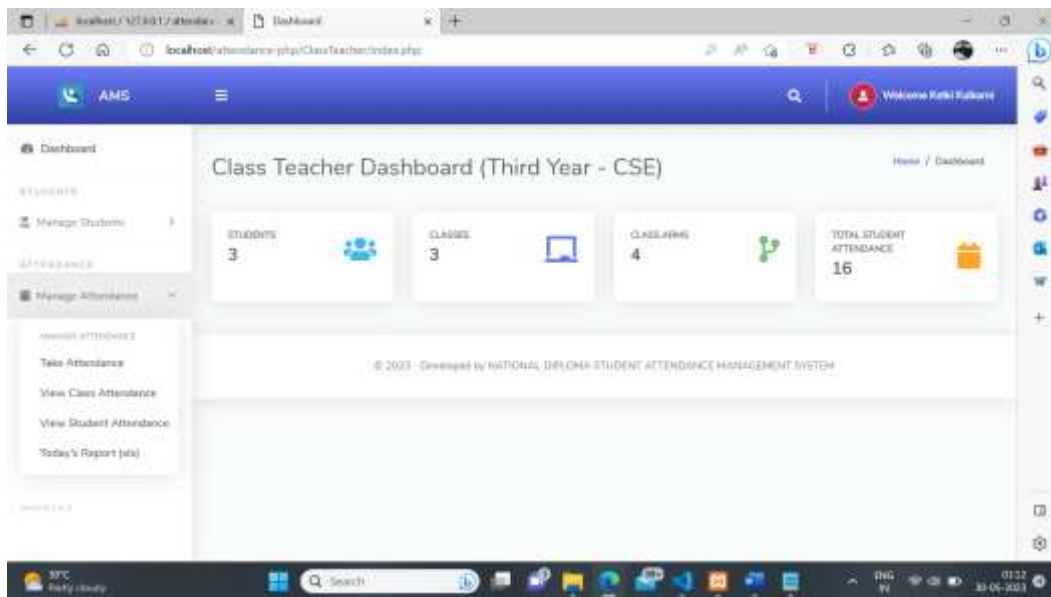
FIG. 5.7 Take Student Attendance
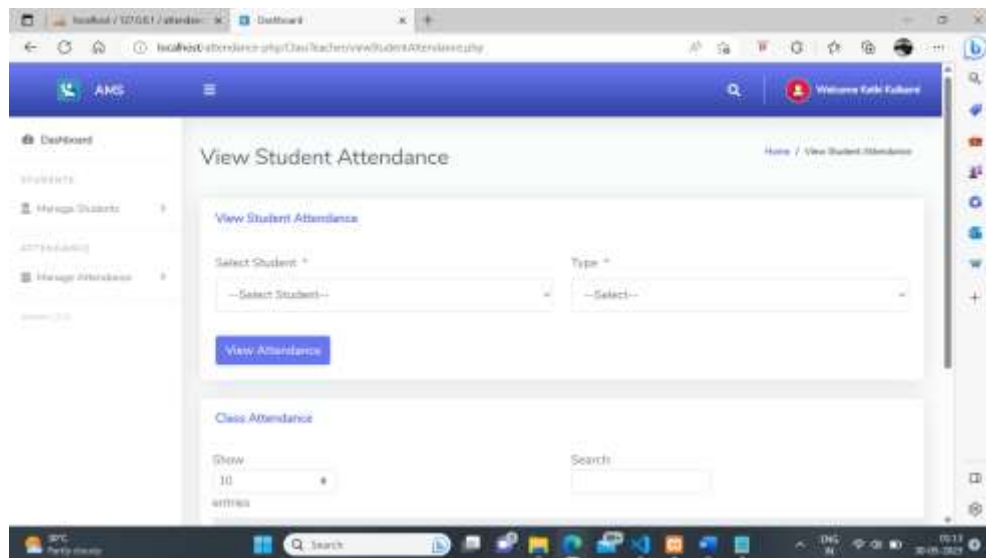
FIG. 5.8 View Student Attendance
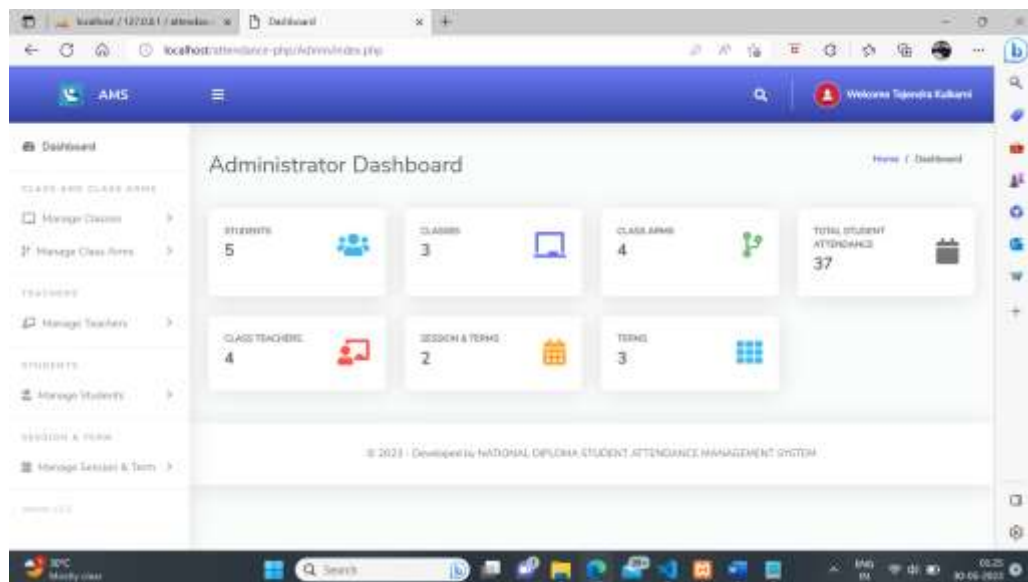
FIG. 5.9 ADMINISTRATOR DASHBOARD
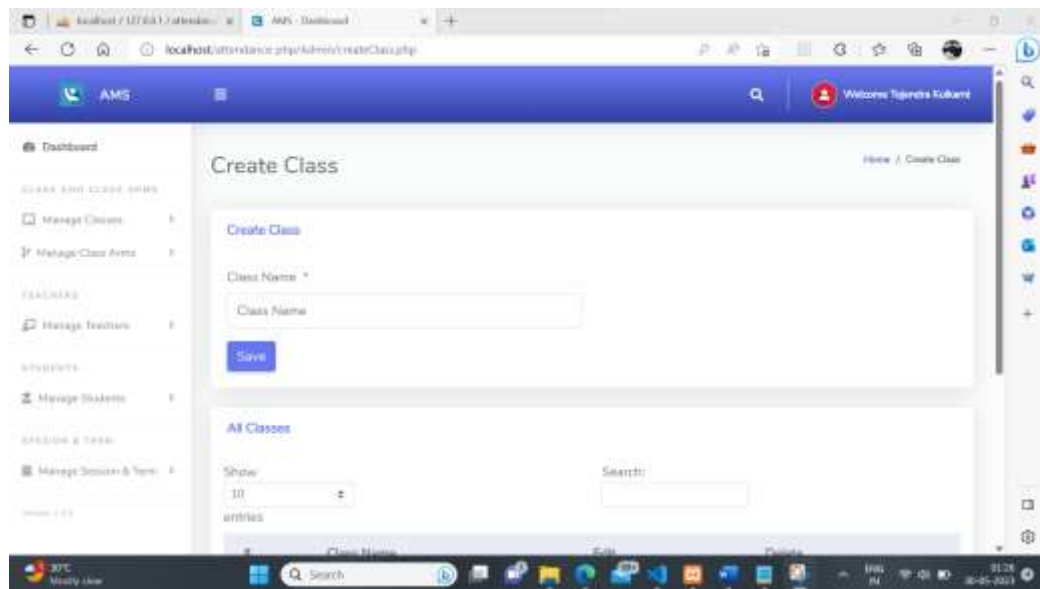
FIG. 5.10 Creat Class
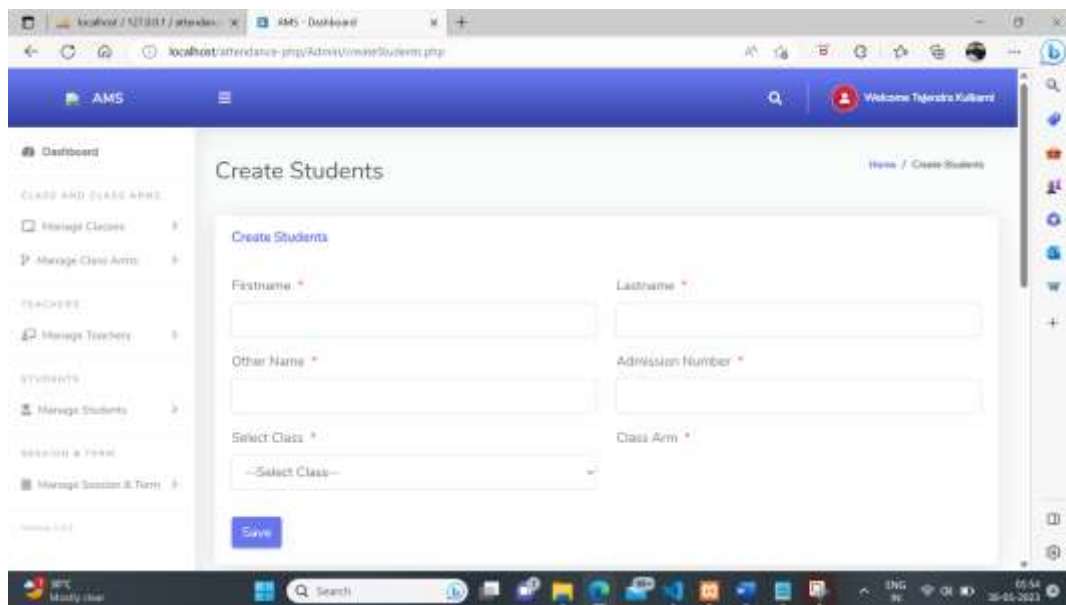
FIG. 5.11 Creat Student
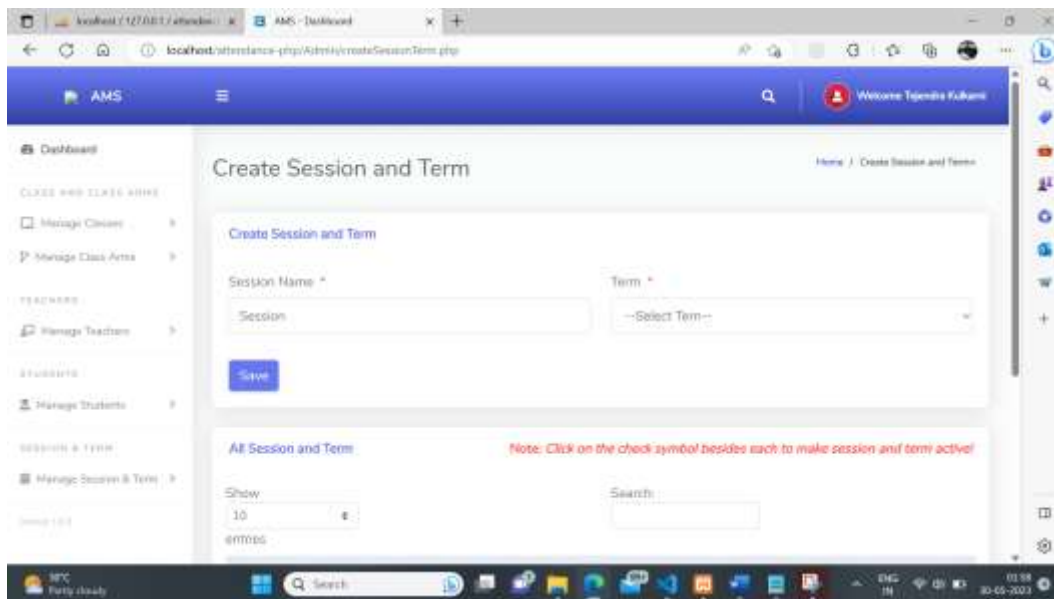
FIG.5.12 Creat Session And Term
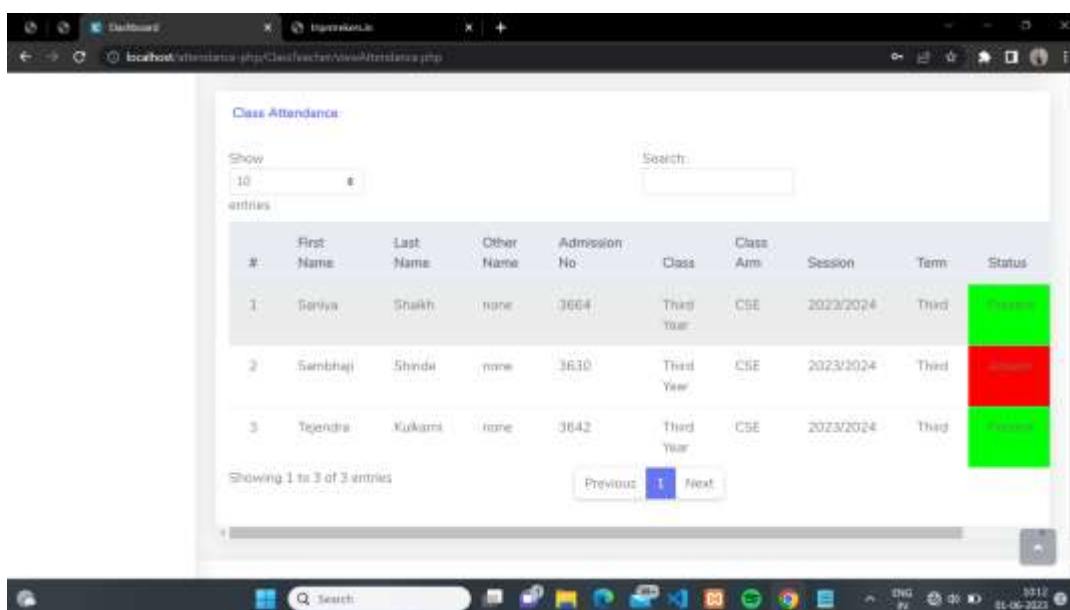
FIG. 5.13 View Todays Attendance
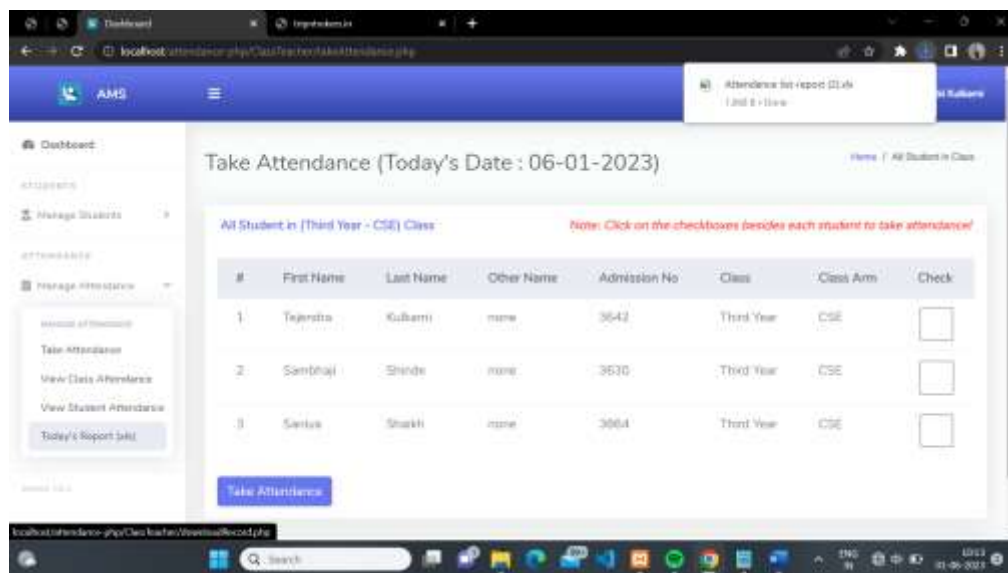
FIG. 5.14 Take Attendance

CONCLUSION

In conclusion, student attendance management system websites have emerged as a valuable tool for educational institutions, providing efficient and streamlined solutions for tracking and managing student attendance. The literature survey highlighted the diverse range of technologies and approaches employed in these systems, including RFID, barcode scanning, face recognition, and IoT integration.

The reviewed studies emphasized the numerous benefits of these websites, such as reduced manual data entry errors, improved administrative efficiency, enhanced accuracy in attendance records, and the potential to curb proxy attendance instances. Additionally, the user-friendly interfaces and accessibility offered by web-based solutions contribute to their widespread adoption.

However, it is important to address certain considerations for the successful implementation of attendance management system websites. Privacy concerns surrounding the collection and storage of student data need to be carefully addressed to ensure compliance with relevant regulations and to maintain student trust. Integration with existing educational platforms, such as learning management systems, can further enhance the efficiency and effectiveness of attendance tracking.

Future research and development in this field should explore advanced data analytics techniques to derive meaningful insights from attendance data, enabling institutions to identify patterns, trends, and areas of improvement. Furthermore, ongoing efforts to refine the technologies used, improve system scalability, and enhance security measures will contribute to the continued advancement and adoption of student attendance management system websites.

Overall, the integration of technology-driven solutions, such as student attendance management system websites, holds great promise in optimizing attendance management processes, facilitating data-driven decision-making, and improving overall student engagement and success in educational institutions.

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Research Paper

Attendance Management System

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Abstract—

Keywords—

I. INTRODUCTION

II. Hardware Components

Visual System for Student
Attendance Monitoring with
Non-standard Situation Detection

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Abstract— In this paper we present a visual system for monitoring of student attendance in lectures and lessons. Basic objective is estimate the number of people in the room using class detection algorithm and categorization of the face movements algorithm to normalize the actual classification of previous students. Proposed approach may be used for multiple purposes. First goal and primary purpose is to students' attendance, which is possibly simple to implement without. When standardized system is required to monitor the attendance automatically or if necessary using calibration to optimize time, first standard we develop solution is another aspect that it is to provided for teams, mitigation of solving on hands, style and specialized.