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Teachers Management System

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Abstract: Teacher Management System contains data and information of teacher. The main purpose of TRMS is to systematically record, store and update the teacher's records. Progressions can be brought about in the overall system of education, when the concept of teacher management is identified in an appropriate manner. Teachers are the ones, who are impart knowledge and information to the students in such a manner and ensure that their growth and development takes place in an operative manner and they are able to achieve their academic goals and objectives. The information from TRMS is used to search teachers online. With the help of this software person can easily search teacher according to his/her requirement. The whole year teacher record is stored in the registers. We can't generate reports as per our requirements because its take more time to calculate the teacher record report. The present system not user friendly because data is not stored in structure and proper format. Teacher record maintain in the register so lots of paper require storing details time consuming. To analysis this teacher management system to implement the work of teachers to update in the website it process to easy to communicate students and the teachers. Any others teachers to the query it will be feed back to teachers to report it. It the process to easy way to communicate with teachers it more use full to the students.

Keywords*:* Teachers management, records ,teachers record system , HTML, PHP, MySQL.

I. INTRODUCTION

Teacher Management system is a web-based technology that will help to search teacher online. Teacher Management system is important for person who search good teacher and also used by school to maintain teacher records. In Teachers Management System we use PHP and MySQL database. This is the project which keeps records of Teachers. Teachers Management System has two module i.e. admin and users. The purpose of developing teacher management system is to search teacher online without wasting a time. Another purpose for developing this application is to generate the report automatically. Teacher Management System project is developed as a web application and it will work over web to search teacher online according to their subjects. The teacher's management system is essential digital tool for organizing teaching activities. It helps to planning sessions, recording student's information and it generates performance reports with just a click. It system is beneficial to school, college and teachers to track with their own subjects. This project is an automatic system that delivers data processing which will help teachers in the school and college for record keeping purposes. It more the focus to the student and teachers to the communicating is increasing. This will Freeing up of time to spend focused on students and their learning as opposed to administrative tasks. Teacher Management System is beneficial to school and teachers to track with their own subjects. The students can benefit this in searching their subjects and will display the teacher assigned into that subject. This project is an automatic system that delivers data processing which will help teachers in the school for record keeping purposes. Its it easy to communicate with teacher and students.

II. OVERVIEW

Teacher Management system is a web-based technology that will help to search teacher online. Teacher Management system is important for person who search good teacher and also used by school to maintain teacher records. A teachers management system is a software application designed to assist educational institutions in the management of their teachers. This type of system typically includes features such as: Teacher information management: Allows administrators to add, update, and delete teacher information, including personal details, qualifications, and contact information. Class management: Allows teachers to create and manage their classes, including adding and removing students and creating lesson plans. Attendance tracking: Allows teachers to take attendance for their classes and view attendance records for past classes. Grading: Allows teachers to input and view student grades for assignments, quizzes, and exams. Communication: Allows teachers to communicate with students and parents via email or messaging. Reporting: Provides administrators with various reports on teacher attendance, student grades, and other data.

III. METHODS OF TMS

A teachers management system built with PHP will use several methods to perform its various functions. Some of the methods that may be used include:

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A. CRUD (CREATE, READ, UPDATE , DELETE) OPERATION

These are the basic operations that allow users to add, view, update, and delete data in the system. For example, a teacher may use the CRUD operations to add a new class or update a student's grade.

B. USER AUTHENTICATION AND AUTHORIZATION

These methods are used to ensure that only authorized users can access the system and its data. Users will typically be required to provide a username and password to log in to the system.

C. DATA VALIDATION

This method is used to ensure that the data entered into the system is accurate and consistent. For example, the system may use validation to check that a student's grade is within a certain range.

D. DATA ENCRYPTION

This method is used to protect sensitive data, such as student grades, by converting it into a code that can only be deciphered by authorized users.

E. REPORTING

This method is used to generate various reports on teacher attendance, student grades, and other data. The system will use data from the database to generate these reports and present them in a user-friendly format.

F. COMMUNICATION

This method is used to facilitate communication between teachers, students, and parents. The system may use technologies such as email and messaging to accomplish this.

G. WORKFLOW MANAGEMENT

This method is used to ensure a smooth functioning of the system by managing the flow of tasks and processes and ensuring that the system is running smoothly.

IV. TYPES OF ALGORITHMS

A teachers management system built with PHP may use several types of algorithms to perform various functions. Some of the types of algorithms that may be used include:

A. DATABASE ALGORITHMS
These algorithms are used to optimize the performance of the system's database, such as indexing and query optimization algorithms.

B. SORTING ALGORITHMS
These algorithms are used to sort data in the system, such as sorting student grades by class or sorting teachers by name. These algorithms can include bubble sort, quick sort, and merge sort.

C. ENCRYPTION ALGORITHMS
These algorithms are used to encrypt sensitive data, such as student grades, to protect it from unauthorized access. These algorithms can include AES and RSA.

D. SEARCH ALGORITHMS
These algorithms are used to search for specific data in the system, such as a student's grade or a teacher's schedule. These algorithms can include linear search, binary search and other algorithms.

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V. BLOCK DIAGRAM

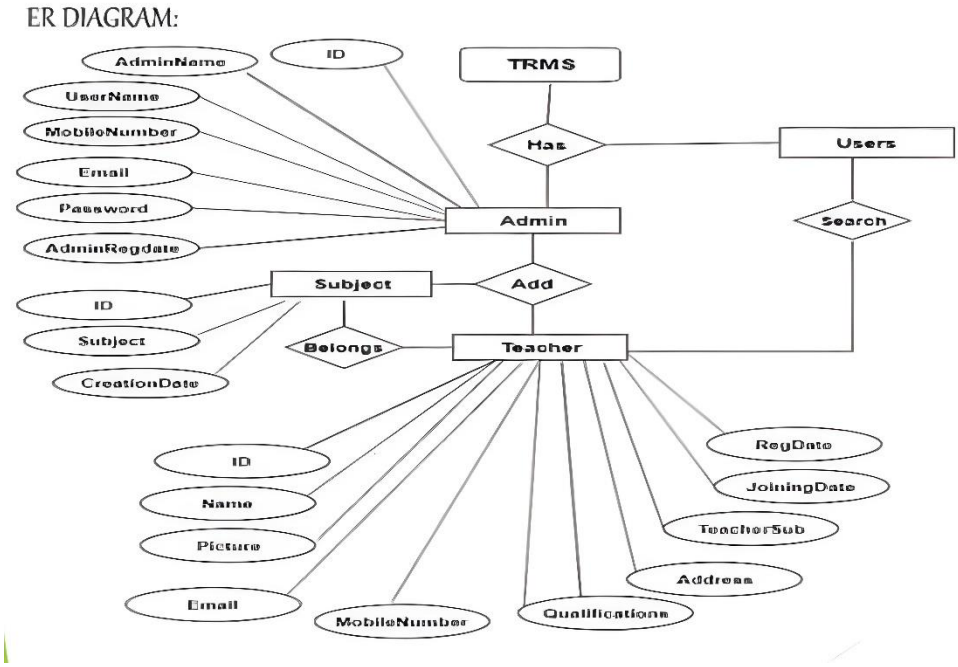

FIG 1: ER DIAGRAM

VI. USECASE DIAGRAM

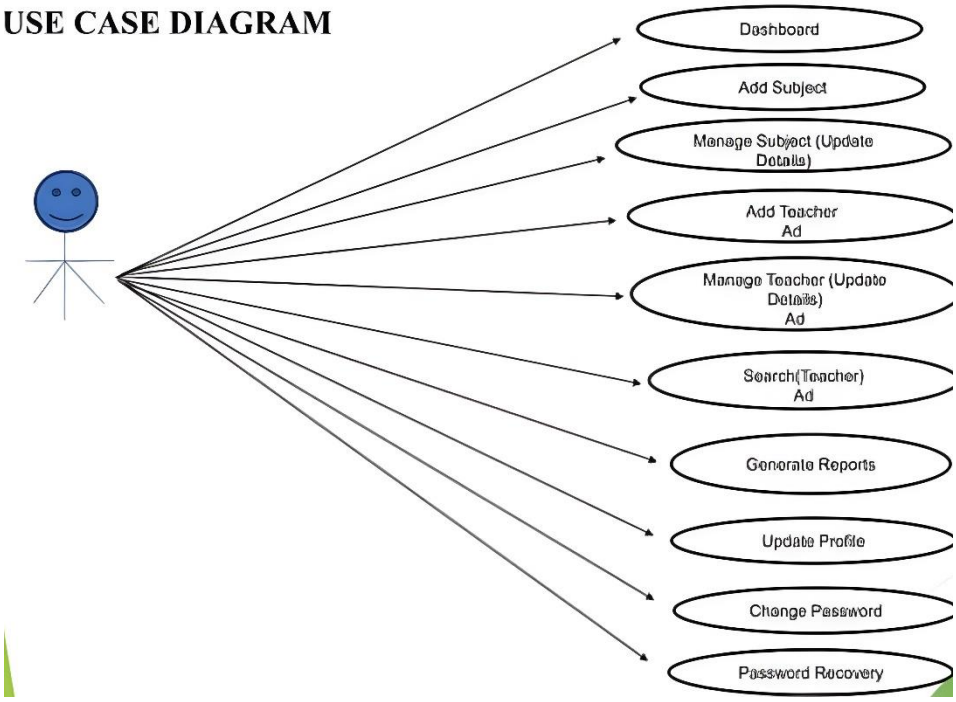

FIG 2: USECASE DIAGRAM

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A use case diagram is a type of UML (Unified Modeling Language) diagram that is used to model the interactions between actors and a system. In the context of a teachers management system built with PHP, a use case diagram would depict the different ways in which the system is used by various actors, such as teachers, students, and administrators

VII. SOFTWARE USED

A. PHP

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994. PHP is a recursive acronym for "PHP: Hypertext Pre-processor". PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C-Like

B. DATABASE MANAGEMENT SOFTWARE

1. Database Management Systems (DBMS) are software systems used to store, retrieve, and run queries on data. A DBMS serves as an interface between an end-user and a database, allowing users to create, read, update, and delete data in the database.
2. DBMS manage the data, the database engine, and the database schema, allowing for data to be manipulated or extracted by users and other programs. This helps provide data security, data integrity, concurrency, and uniform data administration procedures.
3. DBMS optimizes the organization of data by following a database schema design technique called normalization, which splits a large table into smaller tables when any of its attributes have redundancy in values. DBMS offer many benefits over traditional file systems, including flexibility and a more complex backup system.
4. Database management systems can be classified based on a variety of criteria such as the data model, the database distribution, or user numbers. The most widely used types of DBMS software are relational, distributed, hierarchical, object-oriented, and network.

C. VERSION CONTROL SOFTWARES

Version control, also known as source control, is the practice of tracking and managing changes to software code. Version control systems are software tools that help software teams manage changes to source code over time. As development environments have accelerated, version control systems help software teams work faster and smarter. They are especially useful for DevOps teams since they help them to reduce development time and increase successful deployments. Version control software keeps track of every modification to the code in a special kind of database. If a mistake is made, developers can turn back the clock and compare earlier versions of the code to help fix the mistake while minimizing disruption to all team members.

D. AJAX

AJAX = Asynchronous JavaScript and XML. AJAX is a technique for creating fast and dynamic web pages. AJAX allows web pages to be updated asynchronously by exchanging small amounts of data with the server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page. Classic web pages, (which do not use AJAX) must reload the entire page if the content should change.

VIII. RESULT ANALYSIS

A. Dashboard

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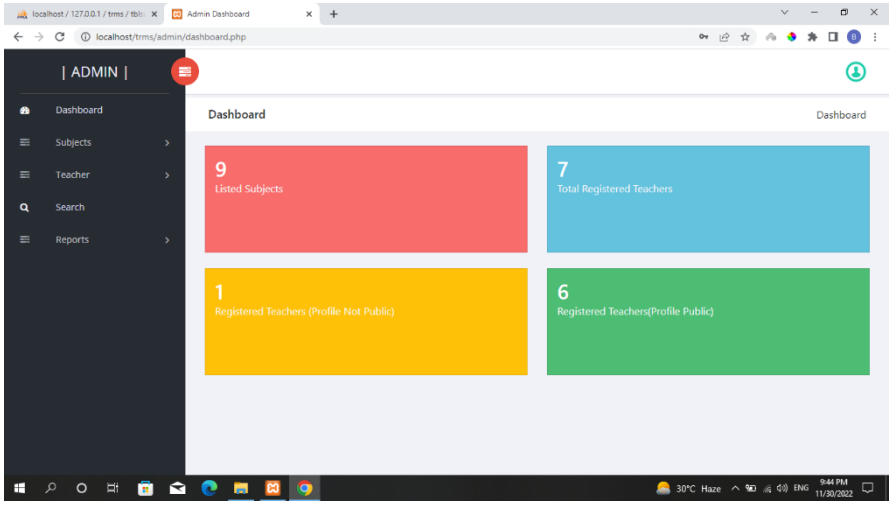
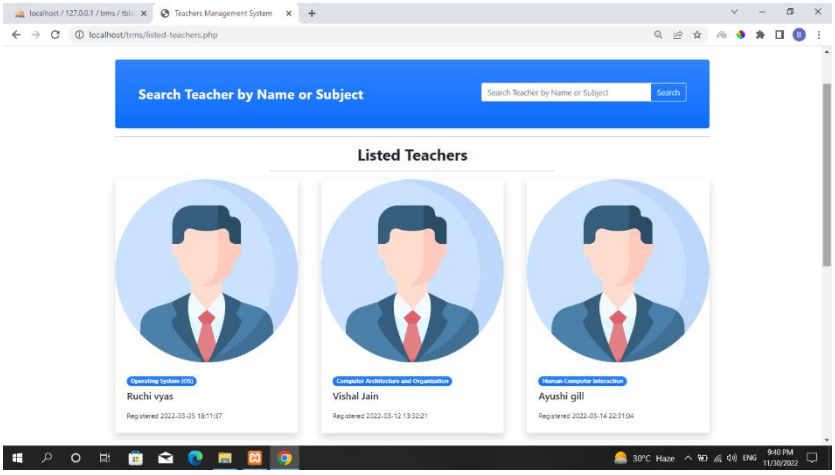
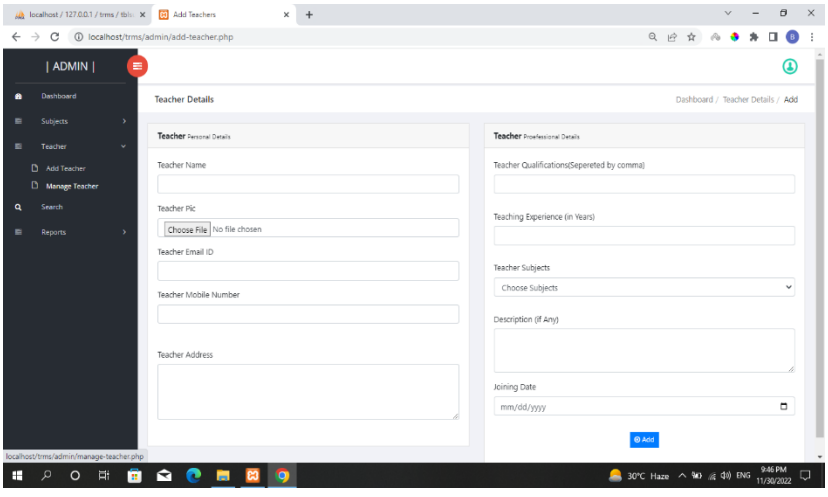


B. Listed Teachers Page



C. Manage Subjects



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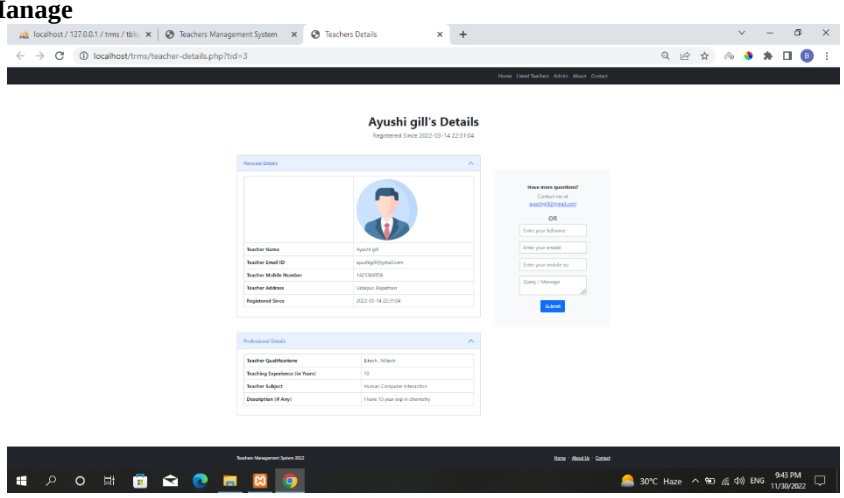
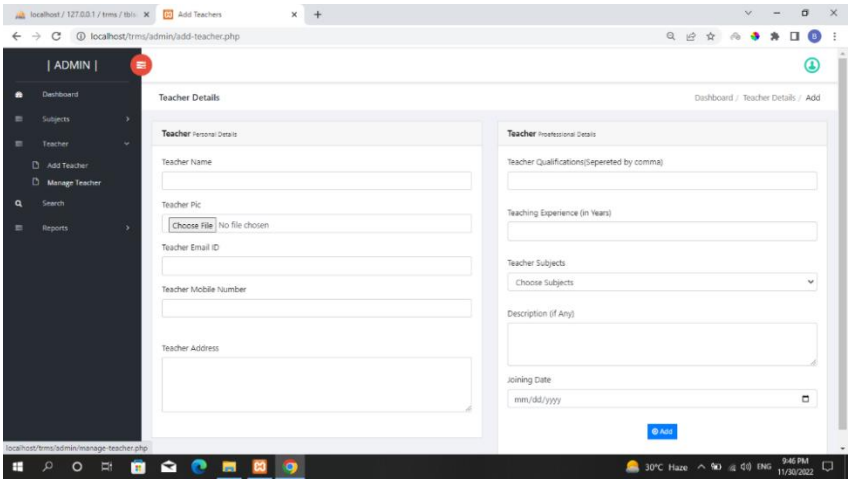
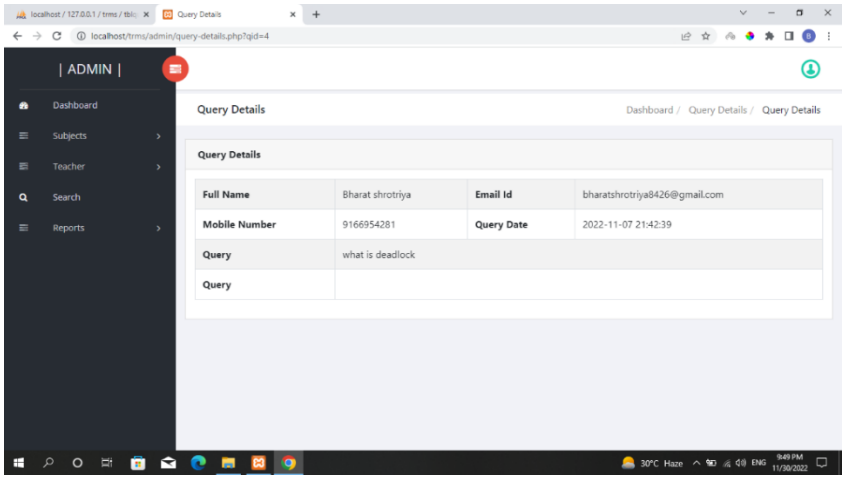
D. Particular Teacher Manage



E. Add New Teacher



E. Query Page



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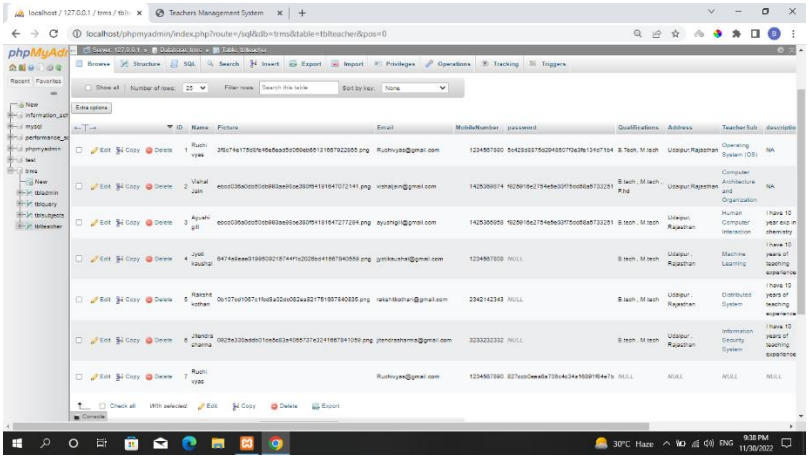
E. Teachers Database Entry



IX. CONCLUSION

A teachers management system is a software application designed to help schools and educational institutions manage their teachers and their associated tasks and responsibilities. The system can be built using various programming languages and technologies, such as PHP, SQL, HTML, CSS, and JavaScript. The system typically includes features such as teacher registration and login, student registration and login, teacher attendance management, grade management, and reports generation. It also often includes additional features such as communication tools, calendar and scheduling, and document management. The system can be accessed by teachers, students, and administrators, and provides them with different functionalities depending on their roles. Teachers can view and update student grades, view their own attendance, and communicate with students and administrators. Students can view their grades, assignments, and class schedule. Administrators can add and remove teachers, view and update teacher attendance, and generate reports. A teachers management system provides a centralized platform for managing teachers and their associated tasks, which can help to improve efficiency, reduce administrative burden and increase communication between teachers, students, and administrators. It should be noted that the conclusion of the specific teachers management system project will depend on the requirements and design of the system, and the choices of the development team.

X. REFERENCE

1. "PHP and MySQL Web Development" by Luke Welling and Laura Thomson: This book provides an introduction to PHP and MySQL, and covers topics such as database design, security, and session management.
2. "Pro PHP and jQuery" by Jason Lengstorf: This book provides an introduction to PHP and jQuery, and covers topics such as building web applications, working with forms, and creating interactive user interfaces.
3. "PHP Objects, Patterns, and Practice" by Matt Zandstra: This book provides an introduction to object-oriented programming in PHP, and covers topics such as design patterns, database access, and web services.
4. "PHP and MySQL for Dynamic Web Sites" by Larry Ullman: This book provides an introduction to PHP and MySQL, and covers topics such as database design, security, session management, and creating web applications.
5. Patel, M., Choudhary, N. (2017). Designing an Enhanced Simulation Module for Multimedia Transmission Over Wireless Standards. In: Modi, N., Verma, P., Trivedi, B. (eds) Proceedings of International Conference on Communication and Networks. Advances in Intelligent Systems and Computing, vol 508. Springer, Singapore. https://doi.org/10.1007/978-981-10-2750-5_17
6. "PHP and MySQL Web Development All-in-One Desk Reference For Dummies" by Janet Valade: This book provides an introduction to PHP and MySQL, and covers topics such as database design, security, session management, and creating web applications.
7. PHP: The official website of the PHP programming language (https://www.php.net/) provides documentation, tutorials, and resources for learning and using PHP. W3Schools: A website that provides tutorials and references on web development technologies, including PHP, SQL, HTML, CSS, and JavaScript (https://www.w3schools.com/)
8. Tutorialspoint: A website that provides tutorials and references on a wide range of programming languages and technologies, including PHP, SQL, HTML, CSS, and JavaScript (https://www.tutorialspoint.com/)
9. Codecademy: A website that provides interactive tutorials and resources for learning web development technologies, including PHP, SQL, HTML, CSS, and JavaScript (https://www.codecademy.com/)