

Realtime Chat Application Using PHP with MySQL

**Mrs. P. A. Satarkar, Sanika R. Vyavahare, Rasika A. Velapure,
Sneha C. Lohokare, Giteshwari A. Shinde**

Department of Computer Science and Engineering
SVERI's College of Engineering, Pandharpur

Abstract: *The purpose of chat application is a feature or a program on the Internet to communicate directly among Internet users who are online or who were equally using the internet. Chat applications allow users to communicate even though from a great distance. Therefore, this chat application must be real-time and multi-platform to be used by many users. This chat application in the manufacture begins with the collection of relevant data that will be displayed in the web and mobile versions. The programming language used to build server is HTML, CSS, JavaScript for framework for database PHP with MySQL.*

Keywords: Chat Application, Relational Database Management, Communication, User Friendly, Real-Time Chat App, etc.

I. INTRODUCTION

A web chat application makes it easy to communicate with people anywhere in the world by sending and receiving messages in real time. With a chat app, users are able to receive the same engaging and lively interactions through custom messaging features, just as they would in person. This also keeps users conversing on your platform instead of looking elsewhere for a messaging solution. Whether it's a private chat, group chat, or large scale chat, adding personalized chat features to your app can help ensure that your users have a memorable experience.

II. OBJECTIVES

The main objective of the project on Real-Time web chat application is to manage the details of online chat, chat application, chat profiles, users. It manages all the information about online chat, emojis chat, users, online chat. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the online chat, chat application, emojis chat, chat history, it tracks all the details about the chat history, chat profile, users.

Functionalities Provided by online chat Application are as follows:

- Provides the searching facilities based on various factors. Such as online chat, chat profile, users.
- Online chat application also manages the chat details online for chat profiles details, users' detail, online chat.
- It tracks all the information of chat application, chat profiles etc.
- Manage the information of chat application.
- Shows the information and description of the online chat.
- To increase efficiency of managing the online chat, chat application
- It deals with monitoring the information and transactions of chat profile.
- Manage the information of online chat.
- Editing, adding, and updating of records is improved which results in proper resources management of online chat data.
- Manage the information of chat profile.
- Integration of all records of users.

III. LITERATURE SURVEY

As we know the use of internet has increased greatly and internet has become one of the easiest and cheapest sources of communication there are many messaging and chatting applications coming up. There are already many applications available for communication. The oldest one we use is electronic mails. Other applications available are the various social websites, SMS, Mobile Chatting applications and much more. Electronic Mails Every day, the citizens of the Internet send each other billions of e-mail messages. If you're online a lot, you yourself may send a dozen or more e-mails each day without even thinking about it. Obviously, e-mail has become an extremely popular communication tool.

The real e-mail system consists of two different servers running on a server machine. One is called the SMTP server, where SMTP stands for Simple Mail Transfer Protocol. The SMTP server handles outgoing mail. The other is either a POP3 server Oran IMAP server, both of which handle incoming mail. POP stands for Post Office Protocol, and IMA stands for Internet Mail Access Protocol. Whenever you send a piece of e-mail, your e-mail client interacts with the SMTP server to handle the sending. The SMTP server on your host may have conversations with other SMTP servers to deliver thee-mail. The chatting applications added with mailing service allow the live chat. The transfer of messages takes place within seconds. Here the numbers of people communicating are two. So, the salability issue does not come into picture.

Instant Messaging is the private network communication between two users, whereas a chat session is the network communication between two or more users. Chat sessions can either be private, where each user is invited to join the session, or public, where anyone can join the session. There are on the order of 100million Internet IM users, where a user is defined as a unique name on one of the major public Mineworks' fundamental issues faced by IM service providers, and thus designers of the protocols, is how the systems will scale with large numbers of users. Ideally, each provider desires to have millions of customers logged on to their systems at each time. This in turn requires that organizations have a system architecture that can scale with the number of users. Two approaches are available here: Symmetric and asymmetric.

In a symmetric architecture, each server performs identical functions, such that a client need not distinguish which server it contacts to engage in an activity with. In an asymmetric approach, each server is dedicated to a particular activity such as logging in, discovering other users on the network, maintaining a chat room, or forwarding instant message. The client-server architecture allows Inservice providers to keep some degree of control over their users. On the positive side, it helps overcome some of the technical issues associated with traversing the firewalls that the clients are often behind. On the negative side, since both control and data paths go through the central servers, scaling the service to millions of users is difficult. Social Networking Sites The chats on social network are mainly peer-to-peer, they may happen in groups.

As the chats take place in peer-to-peer they do not need to apply any queue to chat application. They use the algorithm for showing up the latest news in window and the friends available online. The friends to which we have chatted frequently are shown in the list. The newly updated news is at top on the page. The scalability of the chat is checked so that multiple chats can be carried out simultaneously. Here too the scalability issue comes in picture. As the numbers of chats are carried out simultaneously the delay time to reply the chats is not fixed. If the reply time is fixed then delay study of the scalability with time constraint is a problem faced.

IV. METHODOLOGY

Since you are ready to write the code for your chat application, having the construction process laid out chronologically may assist prevent missing components or dependencies that could create issues later. While the specifics of this procedure may vary based on your chosen technical approach, the overall flow should be constant.

Setup a Directory & Dependencies

The first step in developing a chat client is to establish a directory and installthe necessary components and set up your project if you are using JavaScript.

Create the Front-End Chat Client

This may be as basic or complicated as you like. If your SDK solution includes a chat UI kit, you may save time by modifying or utilizing pre-built components. Depending on your use case, you may want to start from scratch.

Front-end components include a basic login page, a chat screen where usersmay modify, send, and receive messages, and a contact list.

Build/Connect the Back End (Chat Server)

The chat server handles message routing and other back-end operations that are not kept locally on the user's device. Moreover, you may use HTML, CSS, JavaScript, PHP with MySQL.

Create your user list (contacts), start a channel, add new messages to the channel, and show both old and new messages.

Based on User Feedback, Prioritize Feature Expansion

You should now have a working MVP chat app. You may already know which advanced features would be required and may start integrating them.

Moreover, the goal thing is to understand how your users engage with your software. Then you can safely prioritize your dev resources to build out the things that matter most to your expanding community of users.

Software Requirement

Windows 7 or higher, Visual Studio, SQL Server, Google Chrome Browser.

Hardware Requirements

i3 Processor Based Computer or higher, Memory: 1 GB, Hard Drive: 50 GB, Monitor, Internet Connection.

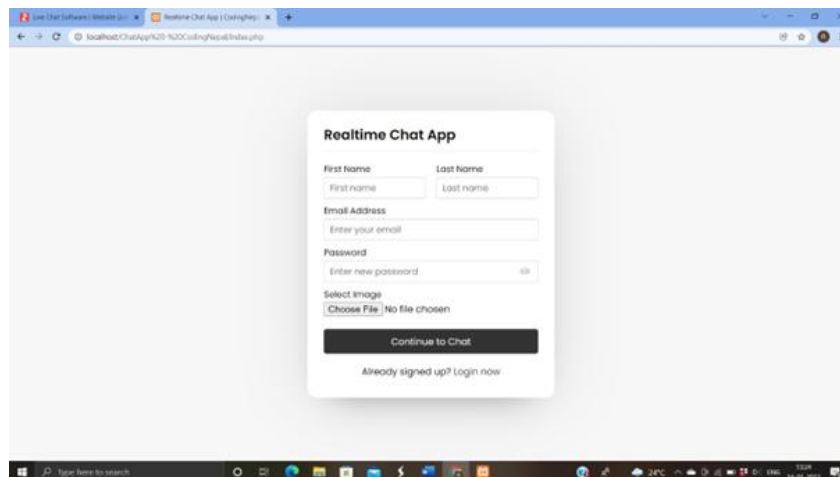
V. PROPOSED SYSTEM

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

The proposed system has following requirements: -

- Security of data.
- Ensure data accuracies.
- Proper control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater efficiency.
- Better service.
- User friendliness and interactive.
- Minimum time required.

1. Registration Page:

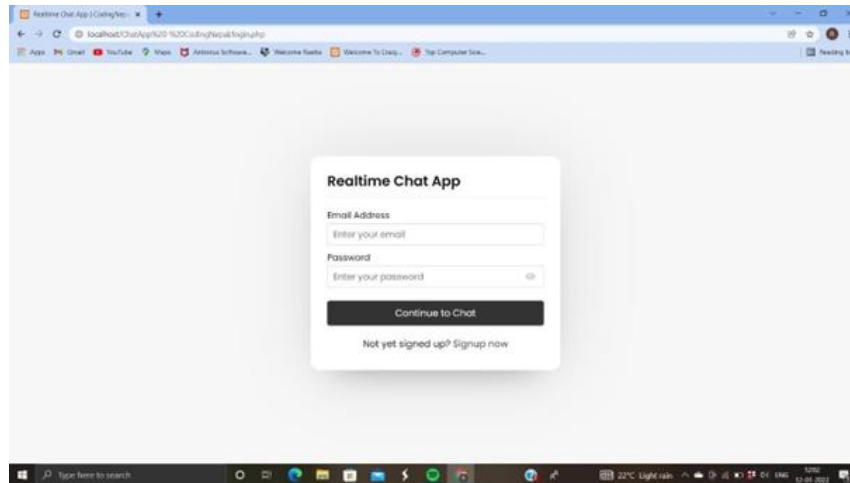


The screenshot shows a web browser window with the URL 'localhost:ChatApp/20-2020CodingProject/index.php'. The page displays a registration form titled 'Realtime Chat App'. The form has the following fields: 'First Name' and 'Last Name' (each with a text input), 'Email Address' (with a text input and a placeholder 'Enter your email'), and 'Password' (with a text input and a placeholder 'Enter new password'). Below the password field is a 'Select Image' section with a 'Choose File' button and the text 'No file chosen'. At the bottom of the form is a 'Continue to Chat' button. Below the button is a link that says 'Already signed up? Login now'.

Here new user can register to get benefit from our websites. User can enter their details as mentioned in register form. User should enter their valid Email id because they will get notification on the registered Email Id. User should remember

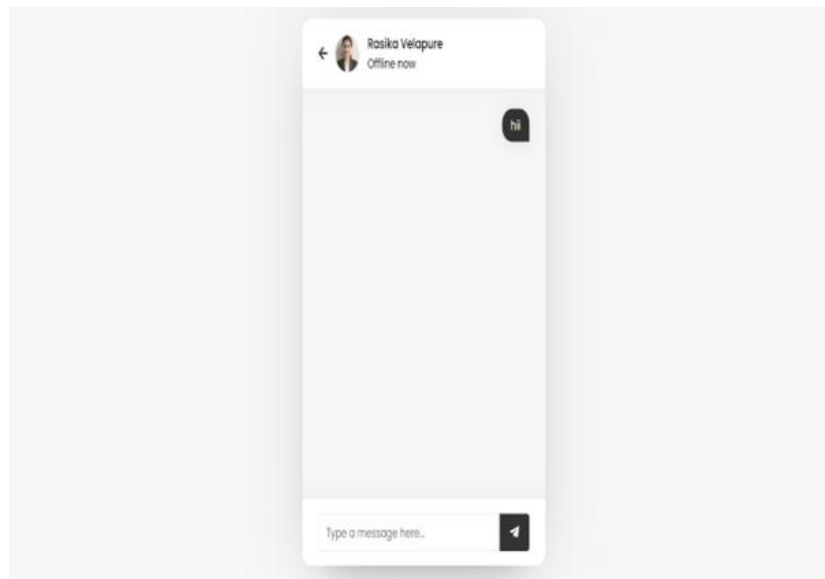
the email id and password during the registration for sign in next time.

2. Login Page:



This is Login Page. Here, User can enter their registered email Id and password, If the user enters the invalid email Id or password, then he /she couldn't login and the message will display on the screen that enter valid email Id or password.

3. Result and Frame Layout:



The Chat Form hold and displays the current conversation going on between two users of the app, this conversation is not saved locally or on a live server,so a new session is created for every new instance in time. The chat form hastwo main items which are the message areas which on-going conversations can be seen and the chat form which carry an input field to send new messages area.

VI CONCLUSION

It has been a great pleasure for us to work on this exciting and challenging project. This project proved good for us as it

provided practical knowledge of not only programming in HTML, CSS, JavaScript and web-based application and no some extent Windows Application and PHP with MySQL Server. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

ACKNOWLEDGEMENT

We are pleased to acknowledge Dr. S. B. Thigale (HOD CSE) sir for his valuable guidance during the course of this project work. We extend our sincere thanks to Mrs. P. A. Satarkar who continuously helped us throughout the project and without her guidance, this project would have been an uphill task.

We are also grateful to other members of the CSE faculty members and technical staff who cooperated with us regarding some issues.

REFERENCES

- [1] BEGINNING PHP 5, DAVE MERCER
- [2] BLACK BOOK HTML, WILEY DREAMTECH
- [3] PHP AND MYSQL WEB DEVELOPMENT, LUKEWELLING, LAURA
- [4] MICROSOFT SQL SERVER-2000, RANKIN, PAUL AND JENSEN
- [5] SQL SERVER-2000, DUSAN PETKOVIC
- [6] PHP IN A NUTSHELL, PAUL HUDSON
- [7] THE JOY OF PHP PROGRAMMING: A BRGINNER'S GUIDE, PLUM ISLAND