
ENHANCED WEB-BASED INSTANT MESSAGING APPLICATION

Mr. Shubham Saraswat*¹, Mr. Chetan Salunkhe*², Mr. Vivek Kadam*³,

Mr. Shashank Patil*⁴, Prof. Mrs. Minal Kolhe*⁵

*^{1,2,3,4}Student, Department Of Computer Science & Engineering, KCE's College Of Engineering And Management, Jalgaon, Maharashtra, India.

*⁵Professor, Department Of Computer Science & Engineering, KCE's College Of Engineering And Management, Jalgaon, Maharashtra, India.

ABSTRACT

Communication through the internet is becoming vital these days. Online communication allows users to communicate with other people in a fast and convenient way. Considering this, the online communication application must be able to share the texts or images or any other files in a faster way with minimum delay or with no delay. Also sometimes anxiety is the cause for the unresponsiveness of the person on the other end. The presently available chatting application is android or that requires some sort of operating system i.e they are platform-dependent. The main objective of this paper is to present a web-based application for the launching of real-time communication between operators/users even though one of the participants is unavailable at present moment for responding. As the application is web-based there is no requirement for installing the application and also it doesn't require extra permissions that are most likely provided to any similar chatting application, Hence if you have any browser available on your device, you are good to go, it also helps the user to overcome the anxiety issue related to chatting. The system optionally requires both devices to be connected via the internet. A chatbot is a conversational agent where a computer program is designed to simulate an intelligent conversation. It can take user input in many formats like text, voice, sentiments, etc. For this purpose, many open-source platforms are available. Node.js with Express.js are used here to build up a conversational agent (chatBot). We have used this method for developing a web-based chat application with a chatbot that will interact with users using text responses. To develop this application HTML, CSS was used. For the purpose of the developing application UI here, React.js is used. For the styling of the application, SASS is used.

Keywords: Chatbot, Node.js, Anxiety, Web-Based, Chatting.

I. INTRODUCTION

This chatting application will be built as a web-based and mobile application so as to provide the users with flexibility. This chatting application is aimed at users in society with or without stress issues. But apart from the specific's usage of the application, this can also be put to generic usage so as to extend the services to the general public. This application is developed and built using React.js, HTML, SASS, Node.js, Express, and Postgres SQL. Node.js is a software platform that is used in building server-side flexible applications in a network application. HTML is the standard mark-up language for documents designed to be built in a web browser. SASS is a CSS pre-processor for styling. As this project is being aimed at mobile applications, the React.JS library is put to use. This is a JavaScript library for building user interfaces. React can be used as a base in the development of single-page or mobile applications. Therefore in this project, a web chatting application, with a Chat-bot lets the user log in to the system and stay connected with their loved ones whether the User is available or not. Users can update their profile or password anytime. The objective here can be defined as to design and build a dedicated mobile application and web-based chatting with the growth and development in information technology, communication has become easier like never before. There are applications that help in the process of communication by relaying texts, images, files, etc. from one person to the other. Several such applications do exist that serve as a means to communicate to a large population. Such applications are often aimed at the general public and serve society as a whole. This paper proposes a chat-driven online framework that empowers continuous cooperation between users even if the user is unavailable to reply at the present moment. The design of the framework presented is from other collective conditions by presenting novel calculations, conventions, and techniques in the creation, coordination, and correspondence of rich content and

other information. Chatbot is used as even though the users are offline or online the process of communication will run smoothly.

II. METHODOLOGY

a. Existing System:

Native instant messaging applications provide a user to communicate with other users by installing the application on both of the user’s devices. Both users’ devices must be online for having a conversation. In the Existing System, users can’t reply or send messages while he or she is at work or busy with something. The existing system was very time-consuming and was not very efficient. The drawback of the existing system has resulted in the development of a new system, which is very user-friendly and effective. The existing system was also very low in performance.

Disadvantages of Existing System

1. Issue of installing its application and then running it while allowing many permissions like storage etc.
2. Issue of being Operating System and Platform dependent.
3. Issue of not being an automated chatBot feature enabled web-based application.

b. Proposed System:

This system can be used by users who are looking for a webchat application. The purpose of the web chat application is to allow users to chat with each other even when one of the users is unavailable for his/her response by using the Chatbot feature. Online communication allows users to communicate with other people in a fast and convenient way. The use of Chatbot ensures that even though the user is offline or not available the process can be completed without any problem.

Advantages of the Proposed System

1. Personal Details are safe and secure due to password encryption.
2. Users can update their profile or password anytime.
3. Chat Can’t be deleted which helps to keep proper chat history.
4. It is OS and Platform independent and has no Need for Installing any Software/Application.
5. The chatbot will text in response when the other user is unavailable for messaging.

III. SYSTEM ARCHITECTURE

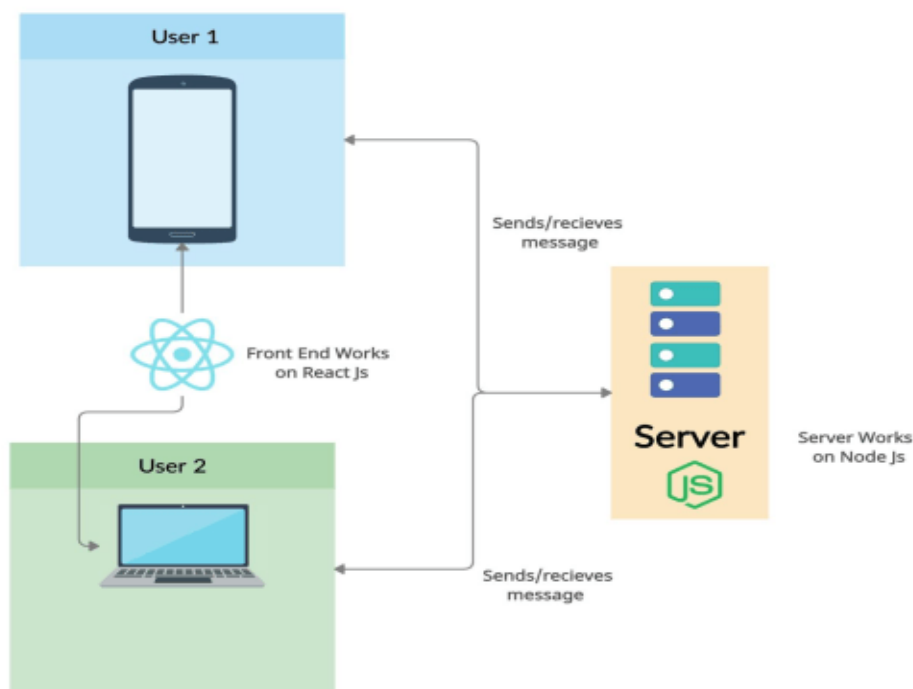


Figure 1: Working Of System.

IV. RESULTS AND DISCUSSION

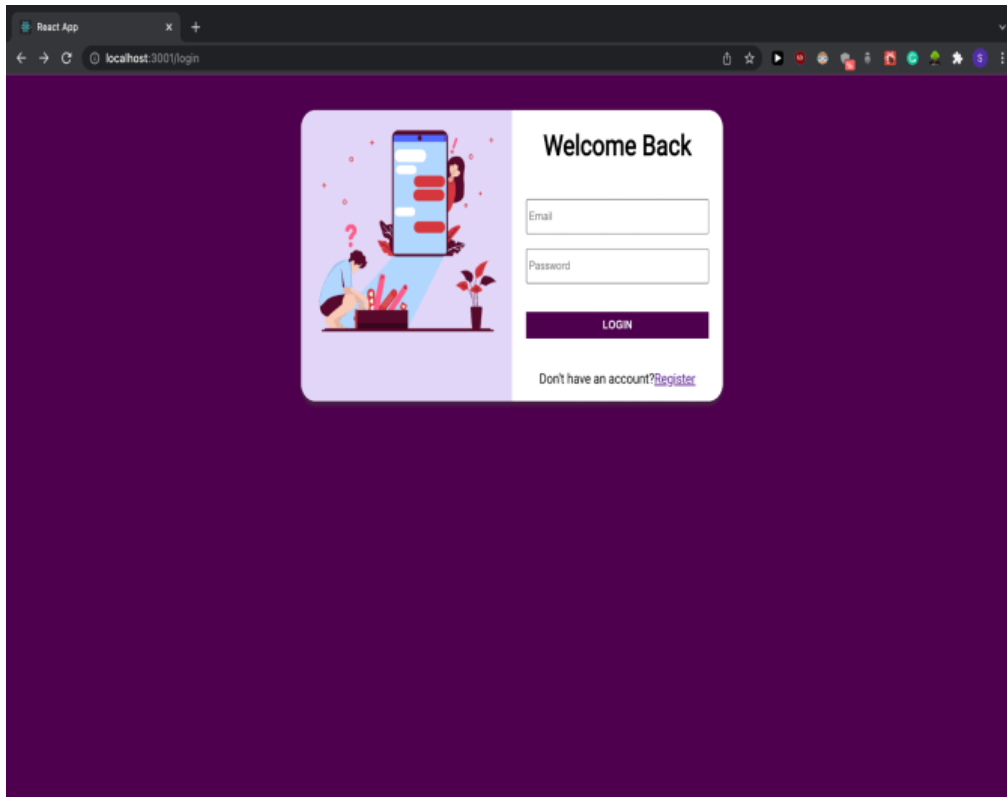


Figure 2: Login page of Chatting application.

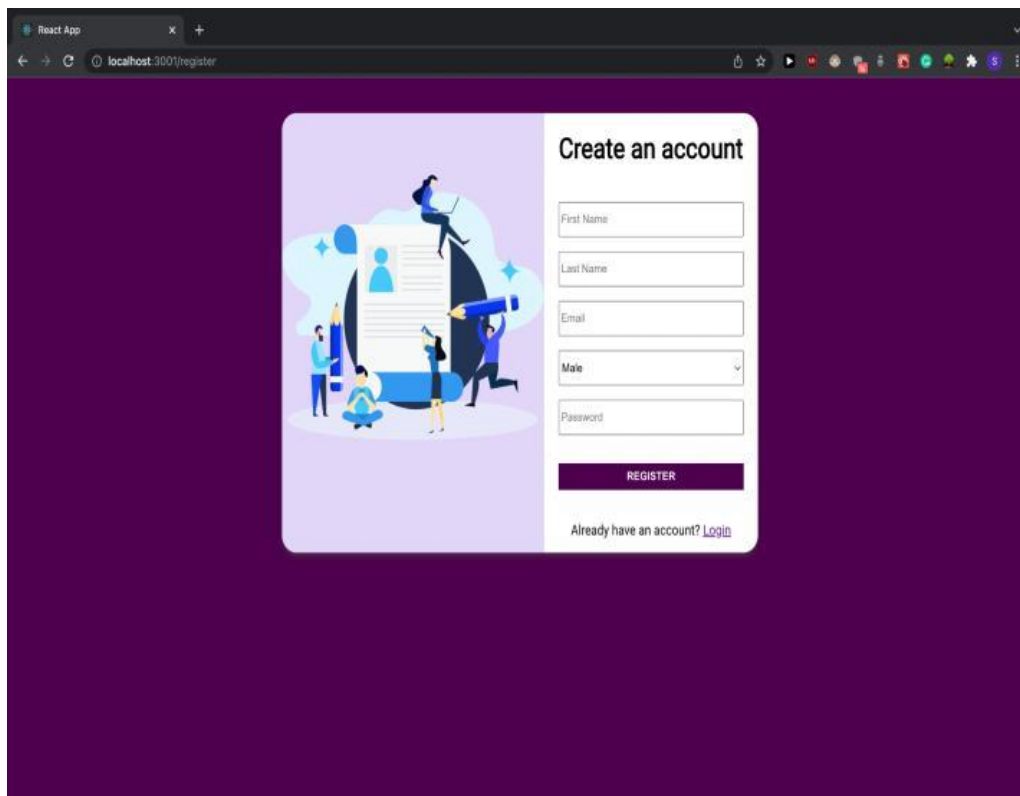


Figure 3: Register page of Chatting application.

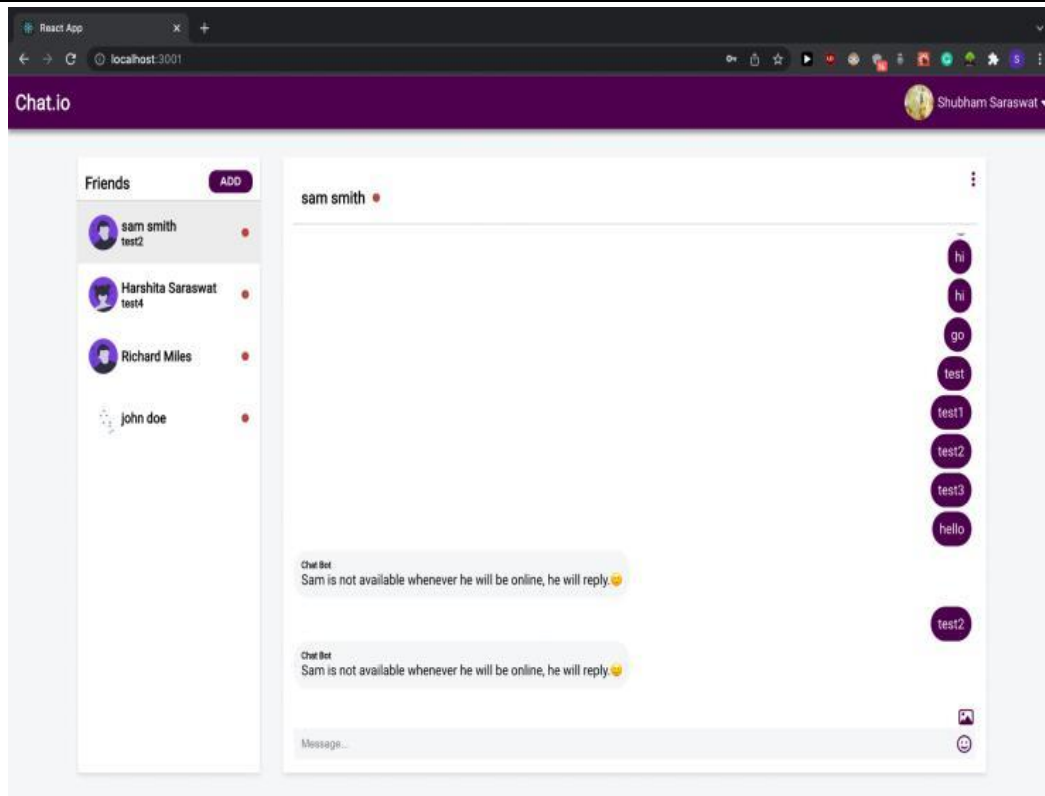


Figure 4: Chatbot giving reply on behalf of the other user who is currently offline.

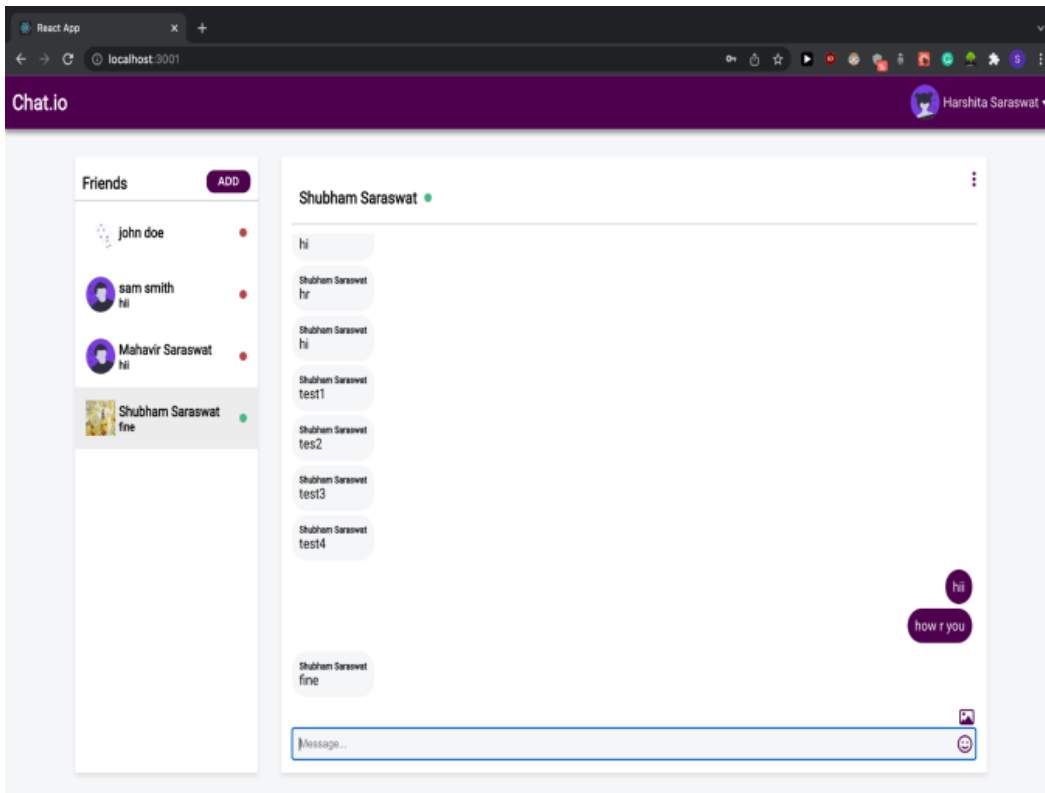


Figure 5: chatting between the user when both are online.

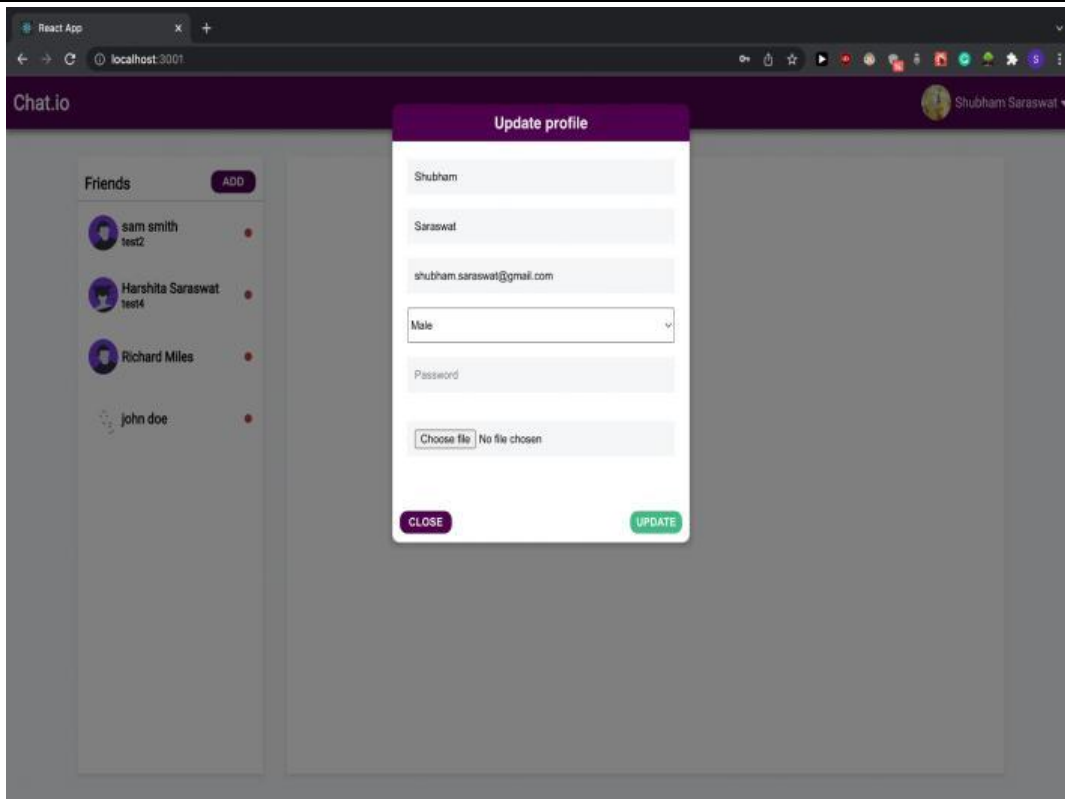


Figure 6: Updating the user's profile.

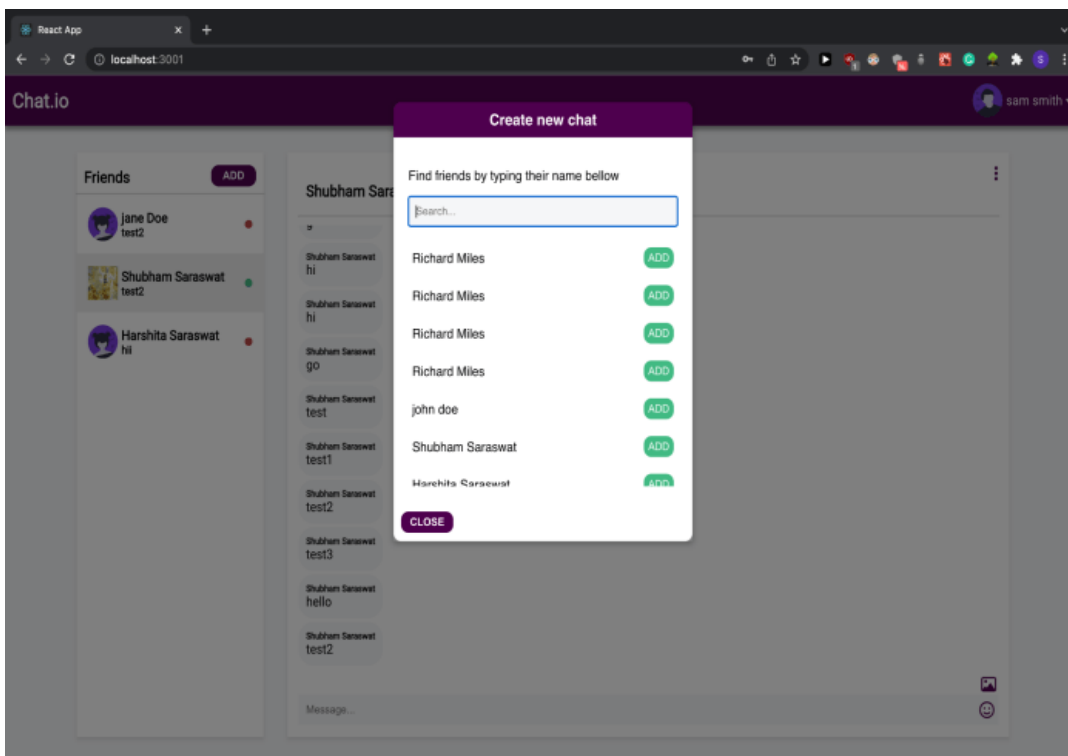


Figure 7: creating a new chatting and finding a new person.

V. CONCLUSION

We developed a web-based application that is helpful to minimize anxiety issues. We used a chatbot for generating the automated reply on behalf of the other user which is unavailable at the current moment and helps to prevail the happening conversations with the user that is presently available.

VI. FUTURE SCOPE

There is in every case some spot for improvements in any product application, anyway great and proficient the application might be. At this moment, we are managing just the texting between friends. In the future, the application may add more features to incorporate a few highlights, for example,

- Voice informing.
- Gathering calling
- Live spilling
- Messages auto-erase after a given time.
- Customized message tunes.
- Video Calling.

VII. REFERENCES

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