

## WEB BASED CHAT APPLICATION

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### ABSTRACT

Chat application is a feature or a program on the Internet to communicate directly among Internet users who are online or who are equally using the internet. Chat applications allow users to communicate even though from a great distance. Therefore, this chat application will be real-time and multi-platform to be used by many users. A chat app will allow the user to have private conversations along with groups. Users will be given privileges to send the message in the form of text/emoji/images/audio. The user can have its own profile identified by the profile picture. The chat group is based on a client server model. Each user must have a google account to use this application, it will be used to identify different users. We planned to make a website so that it can work on any mobile or laptop browser

**Keywords:** Chat application, Privacy, Authentication, Messaging.

### I. INTRODUCTION

This project is about demonstrating a chat application which can handle multiple users at the same time. Support for both public and private messages and User signup and login is also available. This project will be useful in connecting different peoples at different places. Thus, regarding this project our main aim is to motivate and supply the concept of internet chat application. So, we think that with the availability of this application we will be able to communicate with people.

### II. METHODOLOGY

This chat Application will have a very friendly user interface so it can be used smoothly on any device. Users can communicate one-to-one with a unique email-id, they can also create as many groups as they want with multiple users. Real time messages will be shown to the user with as little response time possible. Each user must have a google account to use this application, it will be used to identify different users. We planned to make a website so that it can work on any mobile or laptop browser.

Chat application will provide:

- Private conversations along with groups.
- Easy to operate and effortless navigation
- Messages can be sent in the form of text/image/audio
- User can have its own profile identified by profile picture.
- All the registered profiles are verified to ensure the privacy of the account.

It helps the user by specifying a profile for a prospective Bride or Groom and all the other information online. Any user can get every information about their life partner at his/her home at their own convenience. The portal will enable the user to search according to their own certain criteria of qualities as the portal will provide them with a search utility function. Our website will allow the new users to register as it will be a user-friendly application and when successfully registering themselves, they will get a confirmation for the same.

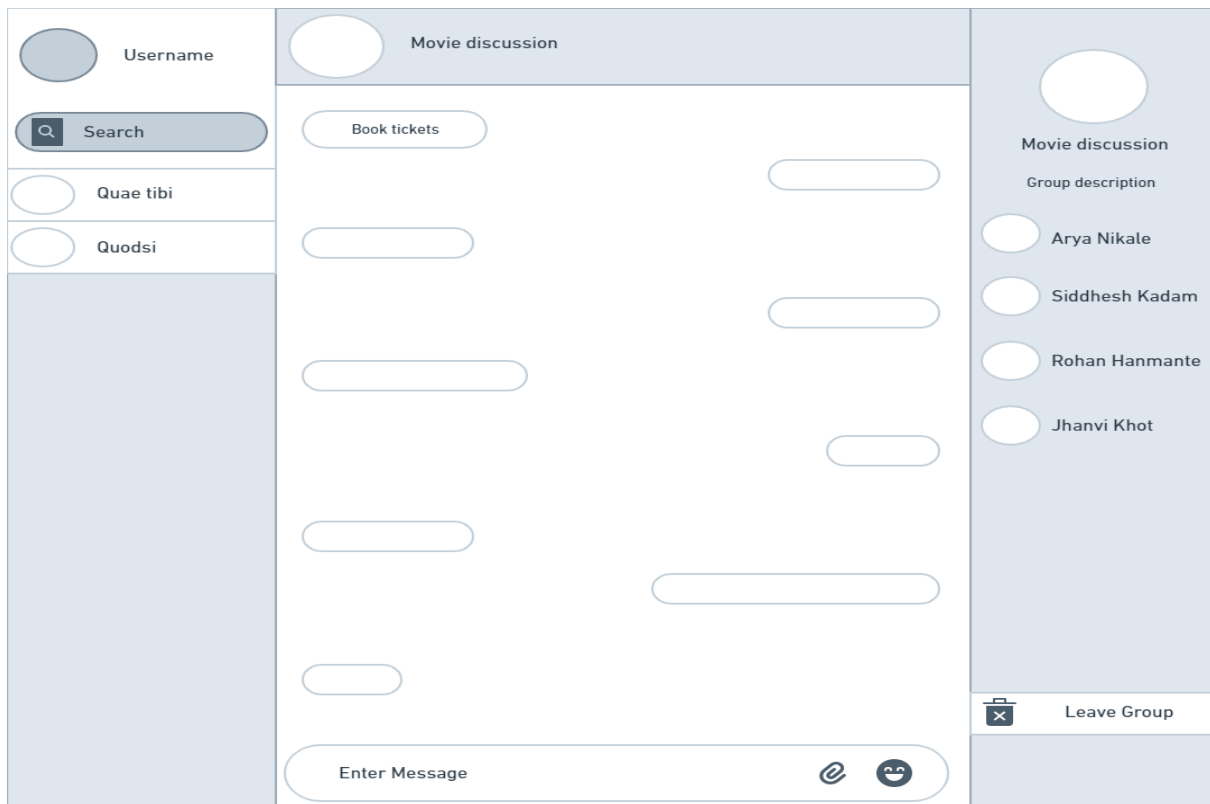
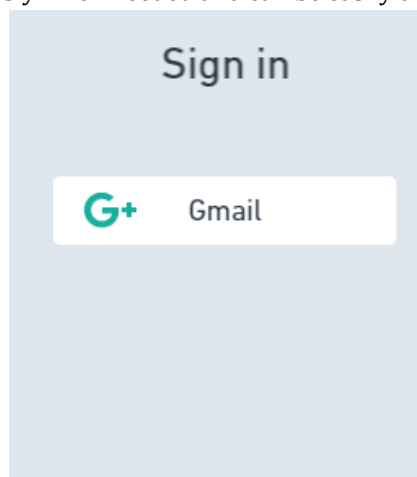
Requirements for developing the application

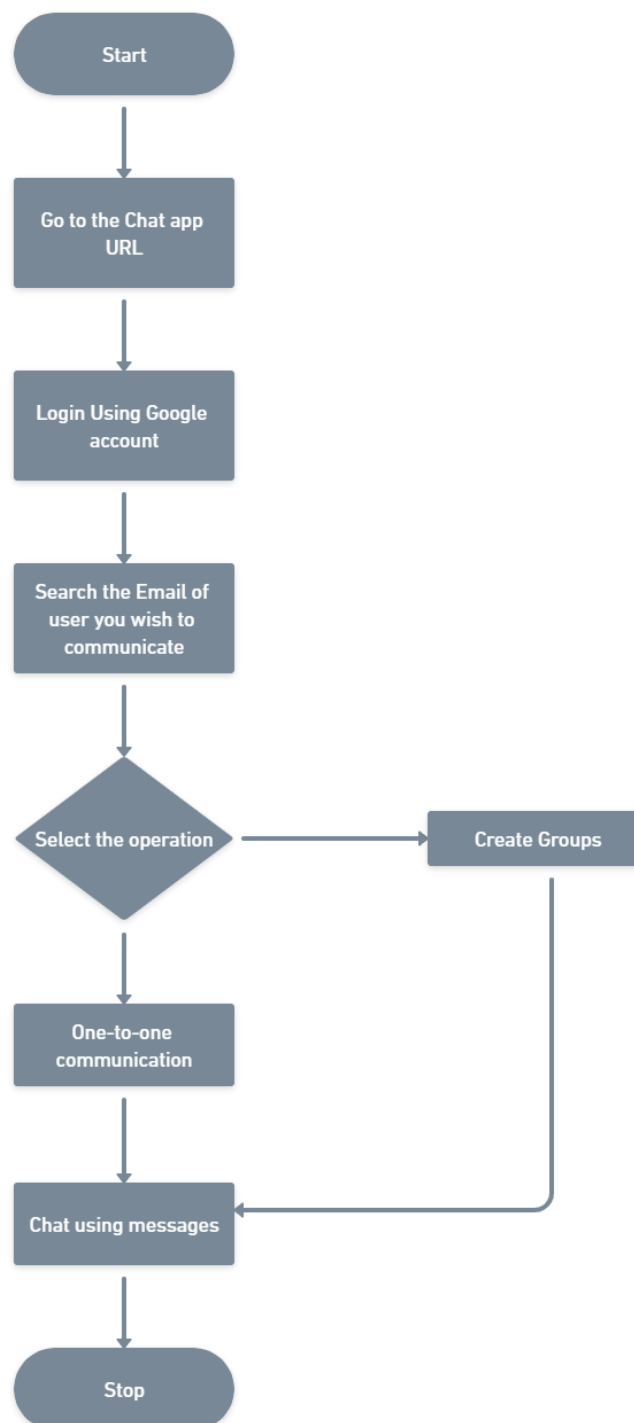
- React
- Firebase
- Hooks
- VS Code
- Node JS

- Git
- Web Browser

### III. MODELING AND ANALYSIS

The main objective of Web based chat Application is to provide services to users for communication among the user's privacy and security will be our first priority so all the messages will be encrypted and stored in the database. Keeping our objective in mind, we will try to create a safe and secure chat application for all the users. User will need to register through their Gmail account for creating their own global id to communicate with other users. If everything goes as planned then we may add a new feature of sharing news through photos for a limited time for each individual user. Users will be given the privilege To block or restrict a specific user. The main purpose of the software is to provide users with an instant messaging tool that has the ability to handle millions of users simultaneously when needed and can be easily done





#### IV. RESULTS AND DISCUSSION

All the group members conducted research about why a chat application is needed, what is the history of chat. To improve the functionality of Application by gaining more knowledge. Internet communication is getting more and more popular among the public. Apart from using telephones or automobiles and sending mails, people can now communicate with each other through the chat technology. Chat, in fact, is a kind of Internet technology that supports human-to-human communication. As we have seen during covid 19 pandemic period, face to face communication was not possible, due to various safety guidelines. In such cases many people especially in rural areas. How much there is a need for online communication and the most convenient way is to send messages online, not just in the form of text but also in the form of images, videos, GIF etc. The aim of

the project is to propose a chat application that provides End-to-End security that let safely exchange private information with each other without worrying about data. In addition to the protection of storage. The basic chatting system should involve both sending and receiving processes simultaneously. This application will have the least response time to provide a better user experience

## V. CONCLUSION

web based chat is designed to provide each user with a smooth experience to communicate with each user without any delay. If a user wishes to chat with multiple users at the same time, then, they can create chat groups to send and receive messages. If a user wishes to lose contact with another user within the application option will be given to block, restrict and delete. Messages will be encrypted and stored in the database to maintain data integrity and privacy of the user. Users can set a unique nickname within the application along with email id for easier identification, profile picture will be taken from the associated Gmail idn.

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