BROS

A Chat Server System using Socket Programming

Name: Biddut Sarker Bijoy Reg: 2016331012

Introduction:

This android app is a real-time chat application based on a chat server system using socket programming. Here allow multiple users to join the chat server simultaneously using a client system and chat with the devices.

Base Features:

- 1. When the server system is loaded, it will initiate the required communication setup so that a client system can join it.
- 2. When the client system is loaded, an option to provide the IP address/port number of the chat server cause my server is public, this is by default under the code, and the name of the joining user.
- 3. A proper GUI with a read-only text box to show the exchanged messages, a text entry field to write a new message and a Send button.
- 4. Each time Send is pressed with a new message in a client system, all of the users connected to the server will immediately see the new message.
- 5. A list in the GUI to show the joined user(s) with the server. An option, shown as a menu item, to save the exchanged messages.
- 6. All the messages automatically save on the server.

Extra Features:

- Users can register here. (Processing)
- Convert Speech to Text.
- When the app is started, a splash screen is loaded.
- This app can notify you which user was connected or disconnected in the past.

Procedures:

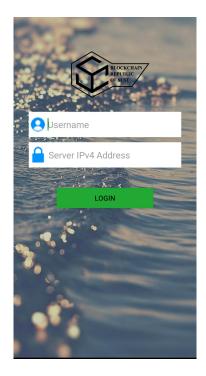
- 1. Install VSCode, so that you run the server.
- 2. Now install the software for running the server. At first Install Node.js.
- 3. Install npm.
- 4. Then load the Server folder into VSCode.
- 5. Install all the dependencies from here.

```
"dependencies": {
    "express": "^4.15.3",
    "mongodb": "^3.3.2",
    "mongoose": "^5.7.4",
    "nodemon": "^1.11.0",
    "socket.io": "^2.0.3",
    "validator": "^11.1.0"
}
```

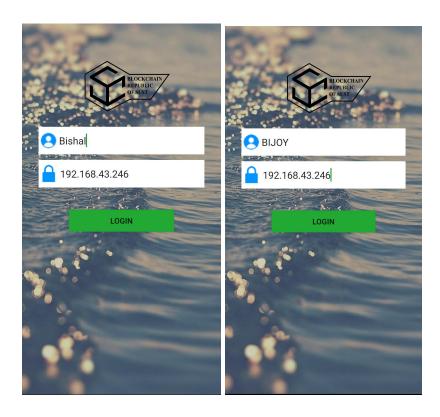
- 6. Run Nodemon server.js in the terminal.
- 7. Then load the Android app in the Android Studio. Run the project on virtual devices.
- 8. Or, Download the apk file which I provide in this link and install it into your Android device.
- 9. When the app starts a splash screen loaded.



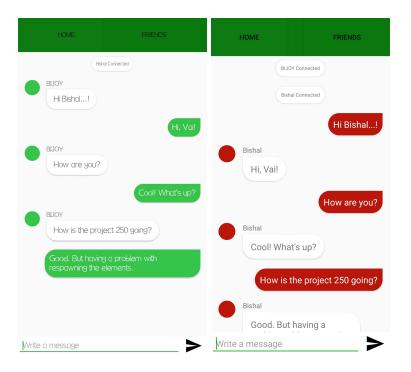
10. After, the user can log in here.



11. Now User Wants to login.



12. Multiple users can exchange messages between them.



13. Users can view active users.

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BIJOY	
Biplob	
Arup	
Sowmen	
Sajjad	
Sat	
Faiyaz	
Archi	
Mou	
Saba	