P2P messaging System using Java OOP.

This software is built by java. So you need netbeans or eclipse to run this program. Or you can use .jar file to run this program.

- 1. First download and install netbeans. Here is the download link: https://netbeans.org/downloads/
- 2. Now open up netbeans. On the left most corner click File and then Open project and then navigate to project folder and click ChatApp.
- 3. Now unfold ChatApp , then unfold Source Packages , then unfold mychatappp. Click MyChatAppp.java and press shift + F6 together. A window like below will appear. If this window appear then you have correctly implemented all the procedures.



All details are below:

- 1. <u>Name</u>: One must put his user name other wise the default name will be "Name".
- 2. <u>En key</u>: This is the encryption key. If keys from both sides do not match up they will not be able to read messages. En key must be -15 to 5 in jar file. If anyone runs java file by directly from Netbeans or Eclipse, any positive integers can be used as an encryption key.
- 3. R port: This is the port where one will receive the incoming messages and that will be shown on big text area. This must be any positive integer.
- 4. Tport: This is the port by which one will communicate with other side. This must be any positive integer.
- 5. IP: Default IP is given localhost. Anyone can change it to any valid real ip to connect.
- 6. <u>Connect Button</u>: After proper naming and insertion of En Key, R port, T port and IP address one must press the Connect button in order to establish the connection with the other side.
- 7. <u>Disconnect Button</u>: By Clicking this button any user can disconnect from the other side. So he will not receive message neither can send message.
- 8. <u>Text Area</u>: The big box just below the Connect or Disconnect button is the Text area. Any exchanged message will appear here.

- 9. <u>SendBox Area</u>: The long space on the left side of Side button is called Send box area. Anything the user wish to send must type on this area.
- 10.<u>Send Button</u>: After writing the message on Send Box area user must press the Send Button to send the message to the other side.
- 11. <u>Background Button</u>: Pressing this key will change the color of GUI and Text area.
- 12. Chat history: Clicking this button will download the chat history between two users as a text file. It will be saved in the project folder as ChatHistory.txt.
- 13. File Send: Clicking this button will tell the user to specify the file path example: C:\Users\Yunus\Desktop\1.txt.

If the file path is valid it will send the file data to the other side i.e receiver. By using this app one can send up to 20 MB size of any kind whether it is txt, mp3, mp4, pdf or another file.

How to run the app:

If you run from jar file press twice to run the project 2 times. So you can chat with yourself. The R-port of one app will be the T-port of another app and vice versa. Input the En-key and name and press connect. Now you can chat with yourself in localhost. If two parties have valid real IP and properly port forwarded in the router the two parties can chat remotely.