Project: An Instant Messaging System

How to compile:

You will need a Java IDE. I have used Eclipse Juno to develop this application.

Step 1: Import the project>

1. Copy the folder into the eclipse workspace.
2. Click on import
3. Click on General (Project)
4. Click on Existing projects into workspace
5. Browse the copied folder into the rood directory
6. Submit

Now the project is imported

Step 2: Set the input argument to 8192 in eclipse. So that it can give the argument as 8192.

1. Click on Run
2. Select the class ServerMain
3. Go to arguments tab
4. Insert 8192 in it

Finished importing arguments

Step 3: Now it’s time to run the program;

Open two classes, ServerMain.java and Login.java

Run ServerMain.java as an application 🡪 The server is started

Run Login.java as an application 🡪 Insert fields like this

Name: Any name that you want, preferably one word name so that it is easy to use the application

IP Address: it is a string, just enter **localhost**

Port: 8192

The current user is connected to the server.

Step 4: Repeat Step 3 for as many users as you want in the chat room

Step 5: Each Client has 3 features

Feature 1: To broadcast the message to all the clients, just enter the text and press enter or click on send button.

Feature 2: In real time, it dynamically updates all the current users who are online at the moment.

Click on File Tab in the client window, then click Online Users.

Feature 3(Main Feature): To send a private message to any of the client who is online type message like this…

Message: - **sendersName- hey, how are you?**

Here, sendersName can be any user who is online.

For Example: Aditya- hey dude

Step 6: Server Commands:

You have to type these commands in the server console

**Command 1: /help – Shows list of all the available commands for server**

**Command 2: /clients – Displays all the online users**

**Command 3: /kick username/id - enter any username or Id who is online at the moment and the server will kick them**

**Command 4: /raw -turns the raw mode on for the server**

**It displays all the income packets and traffic. For example, polling messages.**

**Command 5: /quit – this will terminate the server and disconnect all the clients who are online**

Limitations:

1. Server cannot send messages to all the clients, this was working a while back. But I made some changes and it stopped working and I didn’t have the time to debug it.
2. To send the message to any online use in private, use the above format. Else it won’t send.
3. Cannot use any other address or port. Since, I’ve hardcoded it.