Amanda Nguyen | PA 1 4311

[Axnguye1@uno.edu](mailto:Axnguye1@uno.edu)

2621252

My code has three classes: MyServer, MyClient, MyClientHandler. My program is multithreaded and can take multiple clients and chat through the server.

MyServer:

Is the server. My Server is responsible for having the server Socket for the other sockets to connect to it. My Server opens and closes the socket depending on if there is a user connecting or not.

The Client Handler will help the Server’s back end to handle messages and the User’s connected to the server.

A computer screen with text

Description automatically generated

MyClientHandler :

This class handles Welcome and exit messages. It also handles the “listAllUsers” method which for if the client messages “AllUsers” then it would print the list of all connected users to the client. There is a run method that allows this program to multithread. Basically, for this user and this user, all their instances can run through the server and client handler without interfering with one another. The screenshot below shows my run method where client Message is the input taken from the client. My Broadcast method allows me to send a message if the message is not the username.

A computer screen shot of code

Description automatically generated

MyClient:

The Client class only checks for messages from the Server and transmits its inputs to the MyclientHandler.

Summary:

Overall, the classes work together well, it can run multiple clients simultaneously and successfully sends messages and updates to the server and clients. The use of multiple methods allows me to organize the code neatly without the need to make messy try/catch statements. Having the MyClientHandler allows for multithreading/multiple users without making the code in MyServer extremely messy and complicated. Any new features simply need to be added to the MyClientHandler as methods. My “Bye” method currently works, but not my allUsers. I unfortunately, was not able to implement it completely.

Here are some screenshots of conversation and bye:

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated