**Project 1 – Instant Messaging System**

**How to Compile and Run:**

There are 5 java code files attached to this project. Compile those files through traditional command prompt compilation <RECOMMENDED>.

Navigate to the location of the files in Command prompt, Use “javac <filename>.java” and compile all the 5 code files.

In order to run the java program, just open the command prompt and Run “ServerGUI” for Server and “ClientGUI” for Client. You can open more than one “ClientGUI” in multiple command prompt windows.

Java <filename> to run

Note: I have tried dual mode for the client server communication, i..e., you can simply run using “Client” and “Server” file codes instead of “ClientGUI” and “ServerGUI”. Most of the time it works(be sure to know the command before executing through console mode), but GUI method is highly recommended and it’s works perfectly as per the requirement.

Some Popular Keywords are:

* WHOSIN
* LOGOUT
* CONNECTTO <yourname> <connectingusername>
* DISCONNECT <yourname> <connectingusername>

**Reference:**

I got the skeleton code from the below mentioned website, but the requirement of that code is completely different from the requirement of our code. So I have modified the code in most of the cases and the behavior will completely differ. You can compare the code to know the changes which I have made.

http://www.dreamincode.net/forums/topic/259777-a-simple-chat-program-with-clientserver-gui-optional/

I had some problem in connecting with the port 80, I tried that, but sometimes it’s saying that the port is full, So I have took the default port as 1500. But you can change the port any time before the connection in the GUI itself. If you get some connection related issues due to socket or port, just close all the programs and compile and run again, it will work.

**Features:**

1. It will display the message in HTTP format in the server.
2. Server will have a separate window to log the even details and separate window for HTTP messages. **(for extra credits)**
3. If you give a same username to connect with server, Server will identify the issue and assign a duplicate username for you. Like user1 or user2 when you give user. Thats because user is already existing.
4. You cannot broadcast your message unless you connect with an user.
5. You cannot connect with an user who is already engaged in another connection.
6. System will update you if the other connected user is disconnected with a logout or simply by closing the window.
7. Server will record each and every Client Thread, there can be more than one simultaneous connections possible. i.e., two or more set of clients can interact at the same time
8. I didn’t put any database to list the available online user’s to others based on privacy setting, but all user can see all the active users on their console. **(for extra credits)**

***My Details:***

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