CS380 — Project 1

January 9, 2017

Due: Wednesday, January 18, 2017 before midnight (40 points)

Description

In this project, you will be implementing a very simple chat client. I will have a server running that you will connect to for testing your client. In this project, both the server and client will communicate using UTF-8 text. The server will work as follows: the first line you send will be stored by the server as your user name. If it is already in use, the server will respond "Name in use." and close the connection.

After connecting and providing a name, any line you send to the server will be broadcast to all connected clients with a timestamp and the sender's username. Your client should run either a loop or a separate thread[1] that reads messages from the server and displays them. You can also create a graphical user interface if you desire.

You do not have to create the server program. You just have to create the client program and connect to the existing server. If you want, you can try to replicate the server's actions and create your own server as well, but this is not required.

The server will be running on `codebank.xyz` on port 38001.

Submission

1. On codebank.xyz, create a project named `CS380-P1`. Follow this naming convention precisely including case.

2. Create your own local repository by the following:

   (a) Navigate to your local directory for this project.

   (b) Run `git init` to initialize the repository.

3. Make sure you add the reference to the remote repository in your local repository with:

   `$ git remote add origin https://codebank.xyz/username/CS380-P1.git`

4. Your project should have a main class named `ChatClient` in a file named `ChatClient.java`. You can have other files or classes, but it should successfully compile and run by simplying using:

   `$ javac ChatClient.java`
   `$ java ChatClient`

You will lose points if your submission is not correct (e.g., incorrect repository name, file names, class names, or package declaration that causes the above commands to fail to run).

---

[1]I highly recommend running a second "listener" thread in this project instead of trying to manage input and output in the same thread.