User Guide

Preparation

- This project is written in Java, please install Java and configure the environment variables in advance.
- Please use JRE 8 (but no higher than 8) to run this project. Since this project depends on JavaFx library and there is no JavaFx support in Java 11, if the JRE has the version higher than 8, this project may not be able to run.
- The executable files of client and server is under the "/executable_files" directory.
- GitHub repo for client: https://github.com/jzhzj/CSCI-6431-chat-room-client
- GitHub repo for server: https://github.com/jzhzj/CSCI-6431-chat-room-server

1. Start the server

1. Open Terminal for Mac or cmd.exe for windows for the following processes.
2. Change the directory to where the "server-1.0.jar" resides.
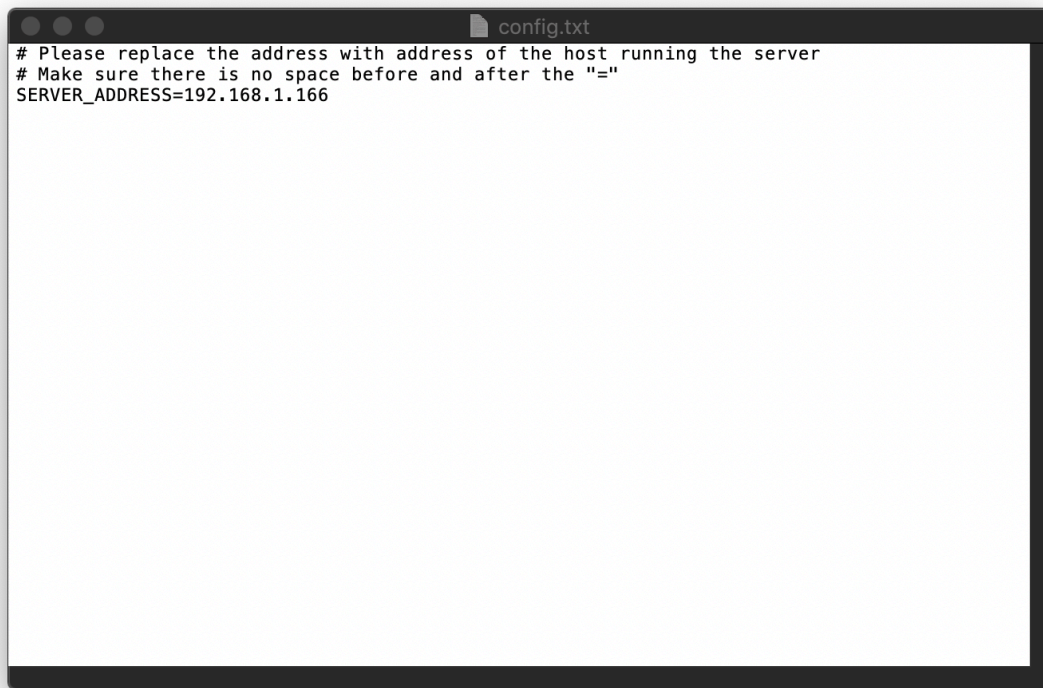3. Type "java -jar server-1.0.jar" to start the server.

Notice: Since this project is an exploration of academics, the server does not use databases. It is a runtime system, which means if you shut down the server, all the data will get lost. For example, if you register an account with a client, and you shut down the server, then you will need to sign up an account again after restarting the server.

2. Run the client

1. Since this project is based on client and server model, the client must know the IP address of the server. So, make sure there is a "config.txt" file, which configures the IP address of the server, in the same directory with the "client-1.0.jar" before running the client.
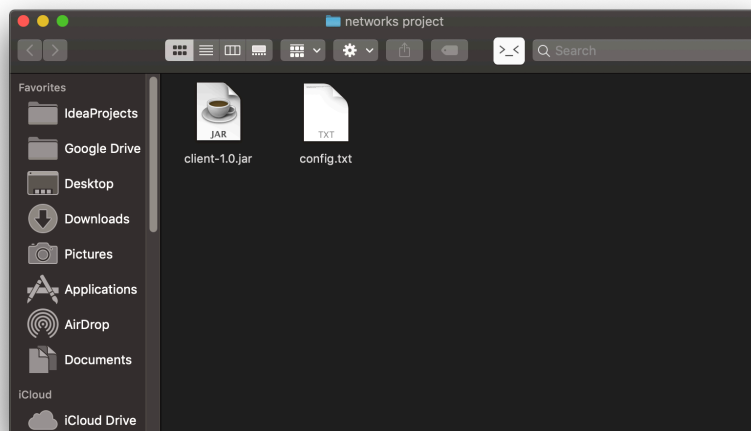
2. If there is no such file, you can create the config file on your own. The configuration file is like this.

```
●●●                          📄 config.txt
# Please replace the address with address of the host running the server
# Make sure there is no space before and after the "="
SERVER_ADDRESS=192.168.1.166
```

3. After dealing with the configuration file, you can just click the icon of "client-1.0.jar". If this doesn't work, try to use Terminal for Mac or cmd.exe for Windows to start the client. Command: java -jar client-1.0.jar
4. After starting the client, a window will show like this.

User ID

Password

Sign in

Sign up

Cancel
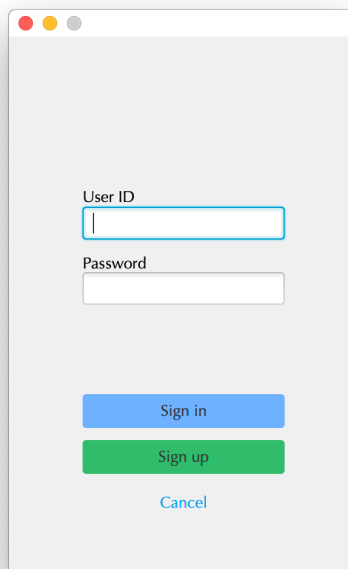
5. This is the interface for signing in and signing up. (*I ran into a situation where the outline of the window shows but no contents in it. That is not a bug from my code. That's a bug from JavaFx. I don't know how to handle it. So, if you meet this situation, please use another computer installed Java 8 to run the client.*)
6. If you don't have an account yet, fill in the user id and password blanks, and click the sign up button. FYI: A user id should starts with a letter, followed by letters or numbers. The

length of userID should between 5 and 10. Userid is case-sensitive. Password consists of letters and numbers, whose length should between 6 and 13. Password is case-sensitive.

7. If you successfully sign up for an account, an information will shows up.
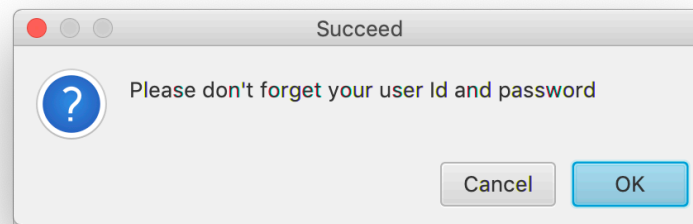
8. Then click the sign in button. The main interface will show up if your user id and password are correct.
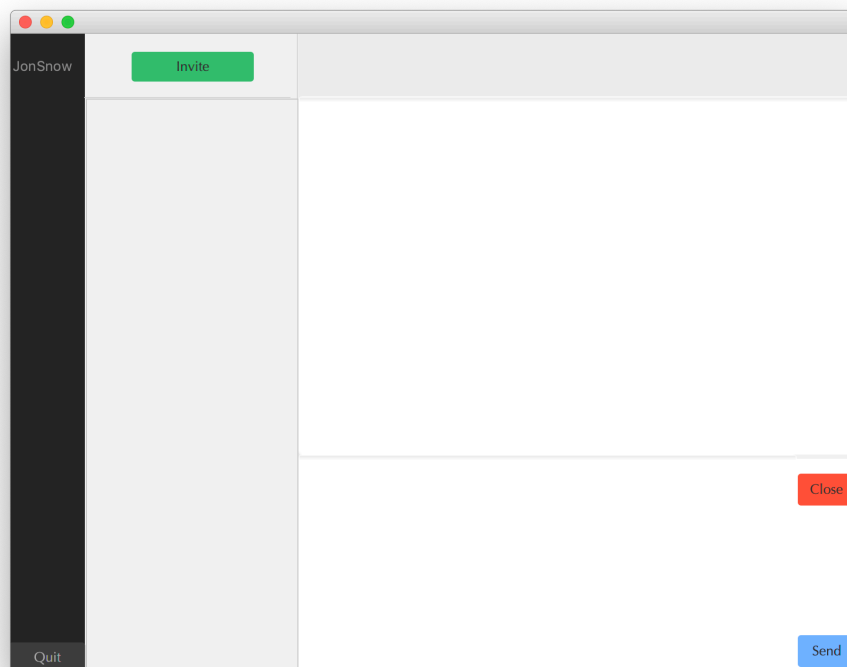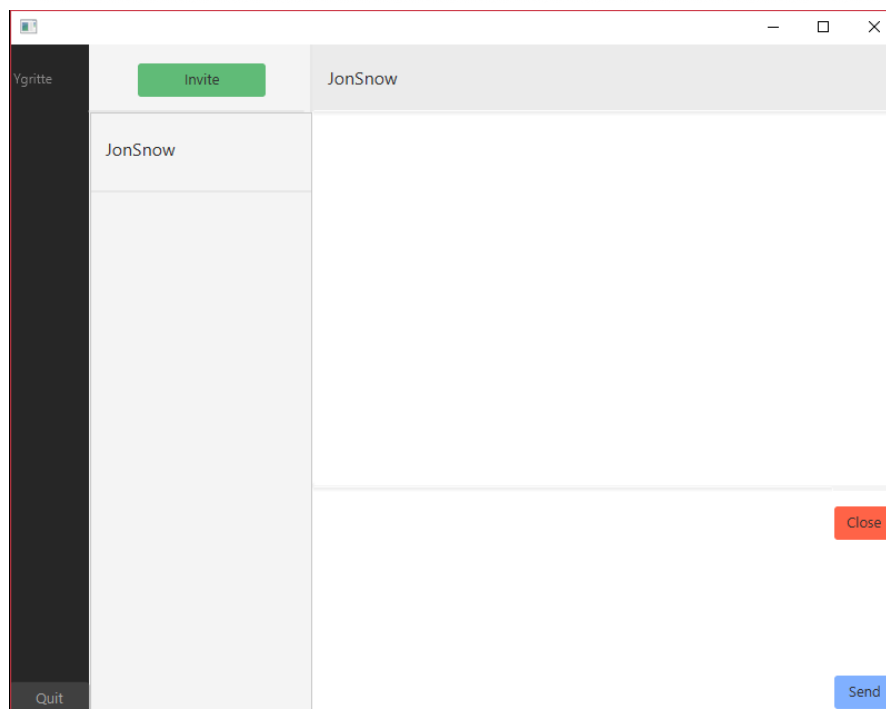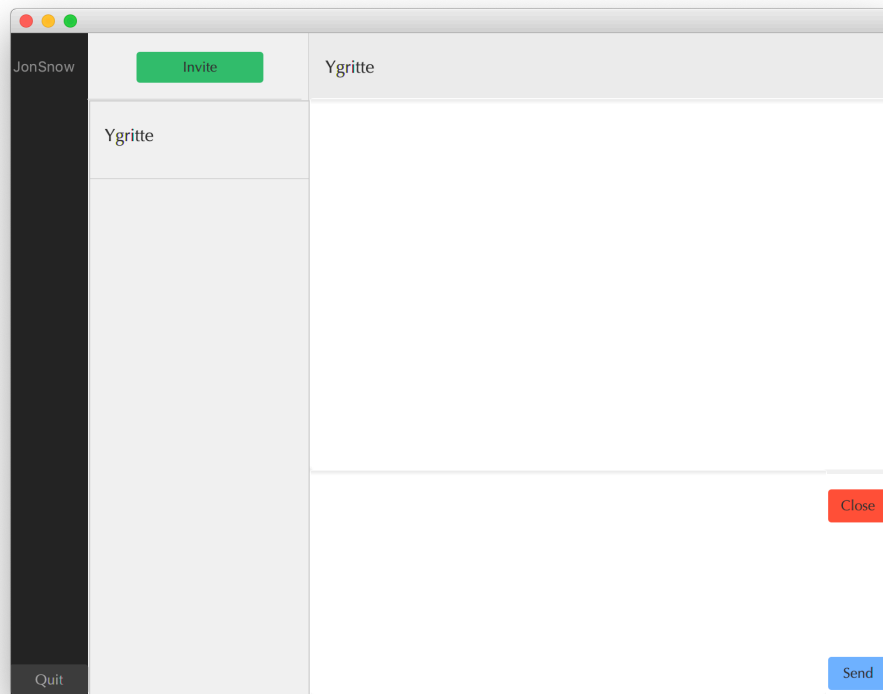

9. In this case, as you can see on the left upper corner, I registered an account with the user id being JonSnow.
10. The invite button is used to invite others for chatting. You have to know the user ID for the user who you want to chat with in advance. Just as if you want to call somebody, you have to know their phone number in advance, too.
11. FYI, the "client-1.0.jar" file does not support being opened twice at the same time on one host. So, If you want to test this software, you have to start another client on a second computer or a virtual machine. In this guide, I start a second client on a Windows, and register an account with the name being Ygritte.
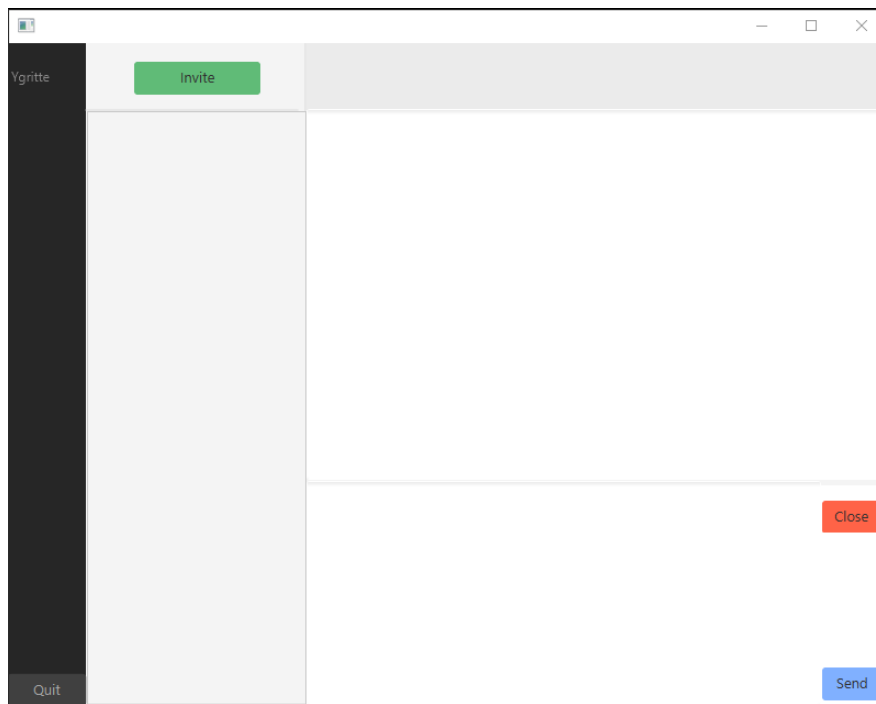
12. Now in the JonSnow client, click the invite button. Input "Ygritte".
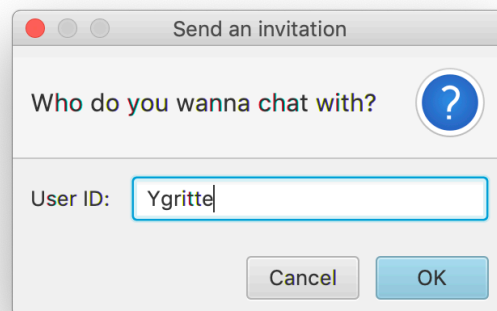
13. In Ygritte client, a window shows up. Ygritte can either click accept or refuse.
14. In this case, Ygritte clicks Accept. Now you can see a session is built between JonSnow and Ygritte.

15. As you can see in the pictures above, until now, there are 3 names in the interface. As mentioned above, the left upper corner one is your user id. The name in the middle stands for whom you share a session with. If you build a new session with a third person, the name of the third person will show right below JonSnow. The fourth person shows right below the third one and so on. The name on the upper area indicates which session are you going with.

16. Now you can chat.
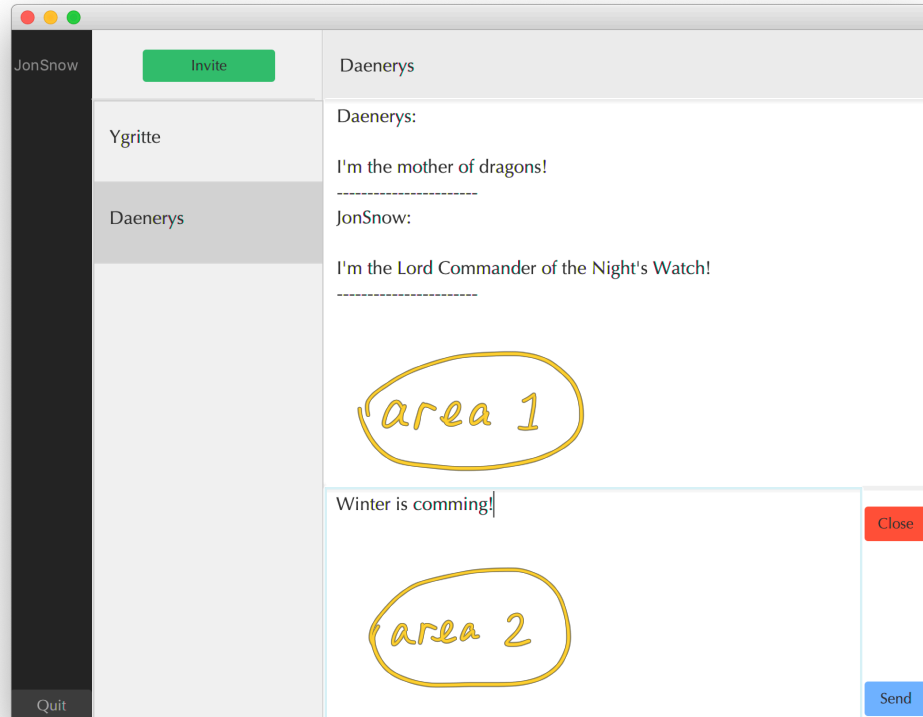
17. Area 1 is the chat record, area 2 is where you type. After you completing you typing, click send button. The other user will get your messages. In this case you now go with Daenerys session. If you want to send Ygritte a message, just click Ygritte session in the middle of the Interface. When you want to kill a session, click the pane that stands for the session and click close button. The session in both your client and the other user's client will get closed.
18. When you are done with chatting with others, click the Quit button at the left bottom corner to logout.