

comp 9331 assignment

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This system is design base on the threading. First the server need establish many connection with other client ,so this place need threading , and to insure each client have one connect ,so this place I use a loop ,every loop will capture a connection ,when it not accept any connection ,it just wait . When it have connected with client ,it will start and start waiting another connection. In the client side , it only need to get the address of server and connect to it .

In the server side ,first ,it need to know the name and password of the client, so it deal with the txt and record it as a dict ,and the dict will record all the information would be needed ,like the address, status , login time ,active time, and the connection (use to broadcast and send message). Then when it connected with client, it need know the users's information is correct and deal with it in the right way : user name right but password wrong , user has already input three times password wrong , user name is wrong ,and send the right information to the client.

After the client log in , the server will provide different function to the client . Also in the client side ,it should can listen to the broadcast and send the command and receive the answer.

Presence Broadcasts

When the client login or logout ,it will use the function and send a active number to choose different slogan to send , in the function ,it will use loop to select the user online to send the message

List of online users

This function will use a loop to add all the suit client to a list and return it to the client

Online history

This function will compare the login time with the time duration and select the right client to a list ,then return the list

Message Forwarding

Record the connection in the dict, then in the function find the receiver connection and use it send the message to the client. Also need consider if the client is be blocked and not exist.

Offline Messaging

In the message forwarding part ,the offline message will recorded in a dict ,when the server connect with the client , the server will send all the offline message to the client.

Message Broadcast

This is also use the connection recorded ,use loop to select all the suit client and get their connection then send the message to them

Blacklisting

This part is also use the dict ,add the client who is blocked by other to the list of the dict, when send message or broadcast ,search the list first to insure the client can receive or send message

When I do the code test ,maybe it is limited by my computer ,i use the Mac to test code and I can not receive the message in the real time , I print the information in the server code ,it is in the right order ,but in the client side , I need to input a command then I can see the message ,unless the message is print in the client code.i am still not so sure how to improve this part. And about the private chat ,i want to create two socket in the client code ,and use the same listen in the first , but it fail because the both socket can not connect with the original client which is already connected to the servers ,so may be I should use server to get Both client socket address and send to each client and let them connected to the new socket ,but in the socket ,how to input the different name and send to different user? I just think only one private chat first ,then think maybe more private chat ,and the user name is use to select the different socket .so this place I still working on it.