

Assignment 1 Report

The whole code is made under Python 3.5.

The work is made up by two section, "Client.py" and "Server.py". So I the report will also be two part to describe my design.

Client:

Client part is a easier part of the assignment. It can be seen in two function: receive information from client and receive information from server. It is important to keep two function keep running during the same time. So i choose to use "threading". It should be mentioned that I put log-in part in a individual while loop since the client just only exchange information with server before log-in successfully.

But the work have a small problem. I put ">" symbol before input and response, but there have any response from the server it will shown immediately and your input will be separated in two part.

I try to do extend work. My design idea is when the client A send "startprivate B" command to the Server, the server will response the IP and port of B to A. So that A can use them to make a socket to connect to the B. The Server also send a message to the B to notice B there is someone want to have a private talk with you. And B will be the server and waiting the message from A.

Server:

When i work on Server part i found a good python function called select(). It can monitor the socket whether there have a new action happen in them and choose those state changed socket. When the Serversocket been selected it means there have a new Clientsocket link to the Server. When the Clientsocket been selected it means there have a new message been sent to the Server.

I depart Server into several part of function, the biggest one is judgeCommand() function. It is to analyze messages from the Clients and send responses or call another function. I choose to keep responses in a list and send them after get and handle all messages from different sockets at first, but it keep have some bugs so i choose to send the response directly after handle the message.

Other function are the assist part of judgeCommand() function. There are about check block time, send off line message, create black list and so on.