Computer Engineering 4DN4 Laboratory 4 Online Group Chatting Application

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1. Description:

This lab is to develop client and server n that implements multi-group online chatting. The server code operates as a directory manager for online chat rooms. The clients can dynamically create, delete and join chat rooms. After joining a chat room, the client software exchanges messages with other clients using IP multicast communications. We defined the CMD as follows: connect getdir, makerrom, deleteroom, name, chat, bye

TCP socket is created to communicate with the server and UDP is used to communicate between the clients in the chat room. The client creates the chat room by sending the necessary info to the server which then creates a list containing the name of the chatroom, address and port number. The client also sends the necessary info to the server corresponding to the commands inputted by the user. The server splits the message send by the client and stores it in the correct variables. The select function is used to wait on a number of sockets to have data to be read. If at least one socket has something to be read, loop through that socket. If one socket is a new connection, add it to the chat room.

2. Demo date: 2019/04/03

Python file is attached in the zip file.