# CISC3001 Computer Networks

Course Project – Chat room with file transfer

DB625471 IP PAK LON

**1.Implementation part:**

Using TCP protocol for data transmitting using threading to handle multiple clients in server, build a thread for each client. File transfer is basically same with text transferring but the file transfer need continuously sending and no interrupt is allowed. I build up a bidirectional file transfer system which means the user can get file from server and also the can upload file to server. In User interface part, since I am not so familiar with that so basically I am following the instruction of the reference in moodle and no change on it since it’s good enough for me to implement the system I think there’s no difference in different operation systems because all the code and library I use is general for windows or Linux no specific method. Just need a python compiler. And I’ve tried it in both Windows and Linux and it seems available.

**2.Limitation of the program:**

The user interface is not good looking and not enough user friendly, if the user type a very long text , the text bar may crash. There’s may have some bugs exist in the program which I didn’t test it out, such as if the client close the program without typing quit() the server may down. I should build up a login system to specify different client, but I didn’t have enough time to implement it.

**3.conclusion:**

To be honest, I didn’t have a deeper knowledge of computer network in doing this project because the networking part is done by package, maybe it’s better to let us implement the data transmitting part with TCP protocol ourselves. I spent most of the time of my implementation to test the program for killing bugs since I am not so familiar with threading but I improve my programming skill using python a lot during this project

**4.Language and coding platform**

I choose python because I am learning python for machine learning and deep learning, it’s easy to use and many great package is run by python, my coding platform is visual code in windows10 which is my favorite IDE