Computer System Administration 2 – Python Weekly Report 5

Date: Sunday 23th March 2017

What I did:

In this week I further improved my echo server to be able to handle multiple client connections. It is using multi-threading which is a technique by which a single set of code can be used by several processors at different stages of execution. Multi-threading is achieved by using the python standard library, 'thread'.

Specification Table

echo_client.py

Inputs	Processing	Outputs
hostname port message	If hostname or port number not provided on command line: Ask user to provide them If port number is not an integer: Ask user to provide hostname and port number again Input message Encode message Send encoded message to server Decode reply message from server	Print reply from the server

echo_server.py

Inputs	Processing	Outputs
hostname port message	If hostname or port number not provided on command line: Ask user to provide them If port number is not an integer: Ask user to provide hostname and port number again Start server Receive Connection Start Thread Receive message Decode message Send decoded message to client	Print reply from the client

Output

(The .py files and their output will be uploaded separately)

What I learned

Using exception handling to handle problems during program execution gracefully which may have stopped the program from running.

Problems I have encountered

I did not have problems in this week's exercise.

What will be done next week

For next week I will TLS support to my echo client & server to improve the security of the server.