CSC258 Distributed Systems
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Programming Assignment #1
Focus: System Architecture / client-server

In this assignment you will develop a client/server application using the programming language of your choice. Python is recommended. Here is a good reference: https://realpython.com/python-sockets/

Outcomes:

1. Server code:

    - Establish a socket connection.

    - Receive data from the client that has client number and a hello message.

    - Process the client message by adding the time the message has been received to

    the original message and send it back to the client.

2. Client code:

    - Establish connection with the server.

    - Send a message to the server, with the client number that is generated starting from 1.

    - Receive the message from the server and display it back on the screen.

    - Close the connection.

3. Illustrate how you can have multiple clients call the server. Provide code for your solution.

4. make sure to handle errors in your code. Explain types of errors you expect and how to handle them.

The code must be fully documented with your name, and throughout the code.

You can use virtual environment setup on your computer of you can use Google shell editor (PaaS): https://cloud.google.com/shell/docs/editor-overview

Please provide complete instructions on how to run your code and the required environment.

Provide screenshots showing how each of the above requirements are met when running your code.