**CECS 327 Intro to Networking and Distributed System Assignment 4**

**Socket Programming (100 points)**

**Due Date:** 11/14/2021 @ 10:00 PM

**Deliverables:**

1. **Java source files for the client program and server program**
   1. File can be found turned in along with this document
2. **An “Instructions for Users” CLEARLY describing how to compile and run your client and server program**.
   1. Step 1: Open both the Client.java file and Server.java file
   2. Step 2: Open Terminal twice
   3. Step 3: cd into the location of Client.java and Server.java on each terminal
   4. Step 4: In the Terminal that is cd into the Server.java run the server by first compiling and running it.
      1. javac Server.java
      2. java Server
   5. Step 5: Enter a desired port into the server
   6. Step 6: In the Terminal that is cd into the Client.java run the client by first compiling and running it.
      1. javac Client.java
      2. java Client
   7. Step 7: Enter a desired address and a matching port to step 5 into the client
   8. Step 8: Notice that the client should accept the connection if you use 127.0.0.1 and any open port it will connect.
   9. Step 9: Type into client to interact with the server
3. **How to get this working on two separate computers?**
   1. To get this working on two separate computers, one computer must go into their router through a browser and port forward. Port forwarding essentially enables an outside system to access the port forwarded computer through their router. If computer 1 port forwarded port 4040 then computer two will be able to access computer one using our program by inputting computer 1’s local ip address and the port open.