Assignment #8 - Two Unique Servers

Assignment Due Date, Time, and Format

This assignment is due in two increments. The first increment is due on Saturday, April 16th, before midnight. The second increment is due on Saturday, April 23rd, before midnight. Submit a single zip file for each increment. The zip file should contain your C source code files and header files. Do not submit any other files.

For the first increment, name your zip file JonesSmith7.zip, where "Jones" and "Smith" are your last names and "7" is the assignment number. Submit the zip file by way of the COSC 4653 Assignment #7 link on Blackboard.

For the second increment, name your zip file JonesSmith8.zip, where "Jones" and "Smith" are your last names and "8" is the assignment number. Submit the zip file by way of the COSC 4653 Assignment #8 link on Blackboard.

Your C programs should compile, link and run with no error messages.

This is an individual or partner assignment. Do not exchange your solution with other students who are not in your partnership. For a partner assignment, only one partner needs to submit the zip file to Blackboard, but both partners are responsible for submitting the file on time.

Assignment Objectives

- Practice implementing an application involving multiple homogeneous clients and two heterogeneous (unique) servers
- Perform the network communication using either TCP or UDP packets

Assignment Summary

In this assignment you shall develop a set of three programs in C that comprise an application involving one or more homogeneous client programs and two heterogeneous server programs, with each running on separate computers. The server programs will each satisfy a separate set of requirements, and will each be used by a client or the other server.

Before starting your design and implementation, meet with the instructor to get his approval for your ideas.

In the first increment, implement enough of the application (for all three programs) so that all architectural elements are complete (modules, user-defined header files, type definitions, global data structures, and user-defined function prototypes) and the three programs (the client and the two servers) are able to initialize themselves but need not perform any network communication yet.

In the second (final) increment, implement the remaining requirements for the application.

Plan to perform a demonstration of your application on Tuesday, April 26th, in class.

Design and Implementation Constraints

- Follow the same design and implementation constraints listed for previous assignments implemented in C in this course