Lab 2: Socket Programming - Implementing Networked Applications

Christian Garcia December 4, 2023

1 Questions

1.1 Using the skeleton code from the previous lab, create a single file in C or C++ that will allow a user to create 2 sockets and connect them.

HINT: You will need to use command line arguments to properly initialize which socket is the "primary host" and "secondary host." **HINT:** It is highly recommended that you place all your networking functions in a header (.h) file.

1.2 Using your newly acquired knowledge of exchanging information over sockets, write two methods (one to send, one to receive) integers over the network.

1.3 Now that you have two sockets that are able to exchange data over the network, implement a function that calculates fibonacci. Use this to have the primary host send a fibonacci index to the secondary host and receive a fibonacci number from the secondary host.

The software shall...

- 1.3.1 Use a thread in the program
- 1.3.2 Have the primary host perform the following tasks...
 - 1. Send the fibonacci input to the secondary host
 - 2. Receive the fibonacci result from the secondary host
- 1.3.3 Have the secondary host perform the following tasks...
 - 1. Receive the fibonacci input from the primary host