Alex Fountain

Josh Crum

Other Guy

**Project 1 Documentation**

**Client Side:**

The client side connects to the server that is already running on a specified port. This port is put in by the user. The IP address is also requested by the program for the user to input. If the server is not running the client will not connect and will close the program. If the server is running then the client will connect and be prompted for a file name that they would like to transfer. The client then sends the file name to the server. If the file does not exist the then the client will close the application. If the program does exist the client will receive the file from the server. The file transfer will be based on a sliding window packet transfer. The window size is set to five. The way we are accomplishing the sliding window is by using an array. When the packet is received, the first character of the packet is stripped off. This character is a number put on by the server. The program then places a 1 in the array for what position the packet was in, writes it to the user’s file, and then checks if the packet was the lowest in the window. If it was then it sends a confirmation to the server and increments the window by 1 and checks again to see if the next packet has arrived yet. If the packet has arrived it will again increment and continue the loop till a packet hasn’t been received. After a five second period of time of a packet not being received, the program prompts the server to resend the missing packet. This continues till the buffer reader is null.

**Server Side:**