CLIENT:

UI:

Create Strings from a textbox

Maintain a list of names in the form of characters as well as a character for your own name, with a function to populate the list.

Allow user to select a specific name or all of them

On send, send the destination character (or FF if sending to all) to the packet creator, along with your name and the data string. (packet creation/handling)

Have a function for displaying data strings with their source name.

Don’t allow sending until a connection has been established.

Packet Creation/Handling:

Function to create packet:

Receives a destination char, source char, and data string

Create a size (data string length + 5)

Create packet (SOH, Dest, Source, Data)

Add CRC to packet

Send to sender

Connection Function:

Creates packet with an ENQ data string, null address, and “A” dest

Sends packet

Wait for response

If times out, resend up to two more times

If receives a packet, there should be an ACK with another data character. The other character is now this client’s name.

Wait for list.

Send ACK

If times out, resend up to two more times

Receive list, and send to population function (UI)

Sender function:

Receives a packet

Sends packet along wire.

Waits for ACK/NAK

If it receives a NAK, resends packet up to two more times

If it fails all three times, disconnect

Receive function:

Receives packet.

If from “A”, send data to list function, send ACK

If from a src, send to display function (UI), send ACK