

7612 Assignment 2 Design

"Oh good, more TCP client server applications" ~ Isaac on more client server applications

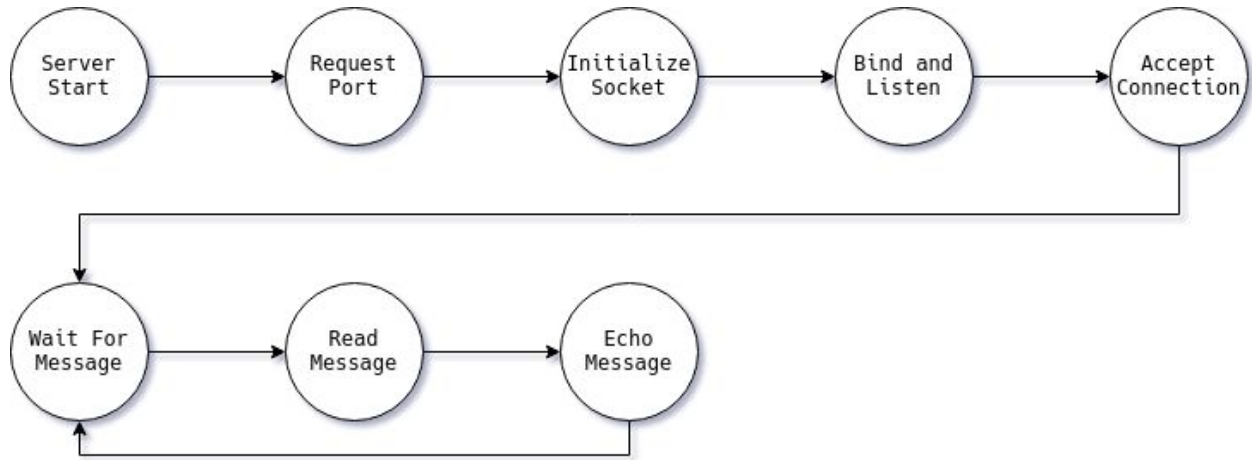
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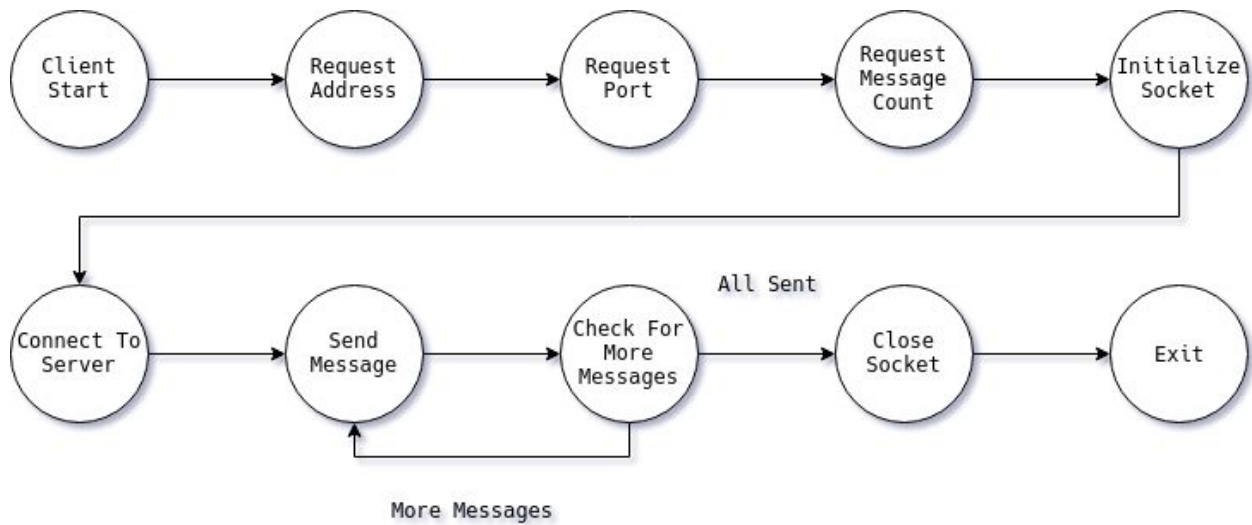
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FSM

Server



Client



Pseudocode

Server

Server Start

Allocate buffers
Allocate variables
Goto **Request Port**

Request Port

Prompt user for port
Read port
Convert input to port int
Goto **Initialize Socket**

Initialize Socket

Create socket
Goto **Bind and Listen**

Bind and Listen

Bind socket to port
Listen on socket
Goto **Accept Connection**

Accept Connection

Wait for connections
Accept connection
Goto **Wait For Message**

Wait For Message

Wait for messages
Goto **Read Message**

Read Message

Read message into buffer
Goto **Echo Message**

Echo Message

Send buffer back

Goto **Wait For Message**

Client

Client Start

Allocate buffers

Allocate variables

Goto **Request Address**

Request Address

Prompt user for address

Read address

Convert input to address

Goto **Request Port**

Request Port

Prompt user for port

Read port

Convert input to port int

Goto **Request Message Count**

Request Message Count

Prompt user for message count

Read message count

Convert input to int

Goto **Initialize Socket**

Initialize Socket

Create socket

Goto **Connect To Server**

Connect To Server

Connect to server with socket

Goto **Send Message**

Send Message

Send buffered message to the server

Increment the total message count

Goto **Check For More Messages**

Check For More Messages

Check if the requested total count is reached

If not

 Goto **Send Message**

Otherwise

 Goto **Close Socket**

Close Socket

Close the connection

Close the socket

Goto **Exit**

Exit

Cleanup buffers

exit