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We wanted to first create the tcp connection to create the sending of the message. We would use the last project to create the connection and once the connection is established, we set up a listener only on TS\_NODE\_ID 1 where 1 would be where the other nodes would message and get a response back. Node 1 would listen for port 41 which we would call `PROTOCOL_MESSAGE`.

When the listener gets triggered, then a function would be called within our linked state routing function which would read the packet, unpack it, then read the payload and store the source from the packet. In this case, our source came from 3 saying "Hello".

On the other hand the other node that sends the message, in this case 3, it would check if node 1 is in its neighbor list and would send the data. One thing it does is that it would wait till it has a location for node 1 then it would trigger a flag saying it already sent the packet.

After node 1 gets the message we would back "Hello World" back to all nodes that message this node as implementing a timer to send all known nodes would be too difficult to implement. We didn't want to overcomplicate the code base and change some of the already pre existing code therefore we went to send a message to all nodes that messaged node 1 which in this case is 1. There are also complications with changing some of the headers file already created for the other projects so we choose to ignore that.