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CIS 525 A

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Question 1:

After running make then type ./directory to start the directory server.

Next to start a server please type ./server followed by the specified port number and topic.

When the server starts it will connect to the directory and provide a port number and topic.

The following topics with an SSL certificate are: cows, cats, and dogs.

Directory server takes in two types of inputs from the user: the name of a topic or the character L which lists all the servers currently connected to the directory.

A client connects to the directory server and wants to view all chat servers.

|  |  |
| --- | --- |
| Input | Output |
| l | Here are all known servers:  cats  cows |

|  |  |
| --- | --- |
| Input | Output |
| cats | Server found at port 49523 |

If a user puts in a server that does not exist, they will be told the server is not found.

Client creates a new username on the cows chat server:

|  |  |
| --- | --- |
| Input | Output |
| Nick | The certificate for the server is shown  You are the first users in the chat.  Enter message (Up to 254 characters) |

If a user inputs a message that is beyond 254 characters the message is cut to only the first 254 characters.

If two or more users connect to the same chat server, they are able to communicate with each other.

Known bugs:

When a new chat server is created it takes in the topic name and find the cert file with the topic name and PEM at the end of the cert name.

The certificates work to allow users to send information back and forth between the client and the server he or she is connected to. Known bugs are when a client disconnects from a chat server using SIGTERM there is a chance a segmentation fault will occur. If the client disconnects from the directory server with SIGTERM the directory server will crash. If the server disconnects from the directory server there is a chance the directory server will crash