**Design Document**

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| Message | Purpose of the message | Data contained in the message |
| Username | To register the user and to disallow multiple connections from the same user | Name of the user |
| Known Users List (option 1) | retrieve the names of all known users to the server | Server sends all known users list to the client |
| Currently Connected Users List (option 2) | retrieve the names of all currently connected users to the server | Server sends all currently connected users list to the client |
| Messaging a particular user (option 3) | Sending a message to a particular user | Client sends the recipient’s name and the message to the Server and the Server in turn stores the messages of this user. |
| Send a text message to all currently connected users (option 4) | Sending a message to all users currently connected to the server | Client sends a message to server. |
| Send a text message to all known users (option 5) | Sending a message to all known users to the server | Client sends a message to server. |
| Get my messages (option 6) | To see the messages received by the user. | Server thread sends the list of all messages sent to this client along with the sender of the message and time stamp. |
| Exit (option 7) | To end the connection with server. | Message saying exit command received from server to the client. |