The Application will we written in Java, with the implementation of JSON for encoding the messages sent between clients, and JavaFX for the GUI. There will be 6 distinct classes:

- Server.package

    - ThreadedTCPServer.java
        - ip address
        - port
        - ArrayList with usernames
    - ClientHandler.java
        -

- Client.package

    - Client.java
        - ip address
        - port
        - username
        - loggedIn
    - MessageParser.java
        - parsed message
    - MessageReciever.java
        - recieved message
    - PayloadCreator

- GUI.package

    - MainScreen.java

The server will ideally be running all the time once it is finished. This way the clients can connect to the server whenever they want to.
The Clients will ask the user for a username when they sign in, and check if the given name is valid and not taken by any other clients.

When the user sends a message, the Server will receive it, parse it to JSON and send it back to the Clients, which will parse it to text again. The client will allow the user to login and ask the server for help when they are not logged in.
The Payload creator in the client will create a JSON object that will be sent to the server.