



# ZotChat Beta

User Manual v1.2  
By: ZotMeUp© (Team 7)

Development Team:

Anson Do  
Arian Reyes  
Xianzhang Li  
Adrian Gomez  
Kevin Huang

Affiliation:

University of California, Irvine  
Department of Electrical Engineering and Computer Science

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## Glossary

### A

Account Name/Username: A username that is linked to your account that you will use to sign in with

Account Password: The unique password that is linked to your account name which is also required to login with

Active Status: When the user is currently connected to the server and is online

### B

Blocking Friend: Preventing the blocked user from sending messages to you

### C

Central host: Communicates between hosts on the network

Chat history: Shows the log of previous chat sessions

Client: The person who is obtaining information from the server

Contacts: The accounts of other people that you added and can communicate with

### D

Deleting Friend: Removing someone from your contact list

### F

Friend Request: A request from someone who wants to be apart of your contact list

### G

GUI: to visualize the code using graphics

I

Instant Messaging: a network communication system which allow people send or receive messaging in real time

Idle Status: users will be shown in idle status when they do not chat in five minutes.

IP address: Internet Protocol address is a string of numbers for identifies each device in the network.

L

Log-in: Use your account name and password to enter in your account

O

Offline status: When the user is currently not connected to the server

P

Port Number: a 16-bit unsigned numbers from 0 to 65535

R

Recipient: The person who is receiving the message

S

Sender: The person who is sending the message

Server: provides the service to clients

Sign up: Create an account name and password to be saved in the system

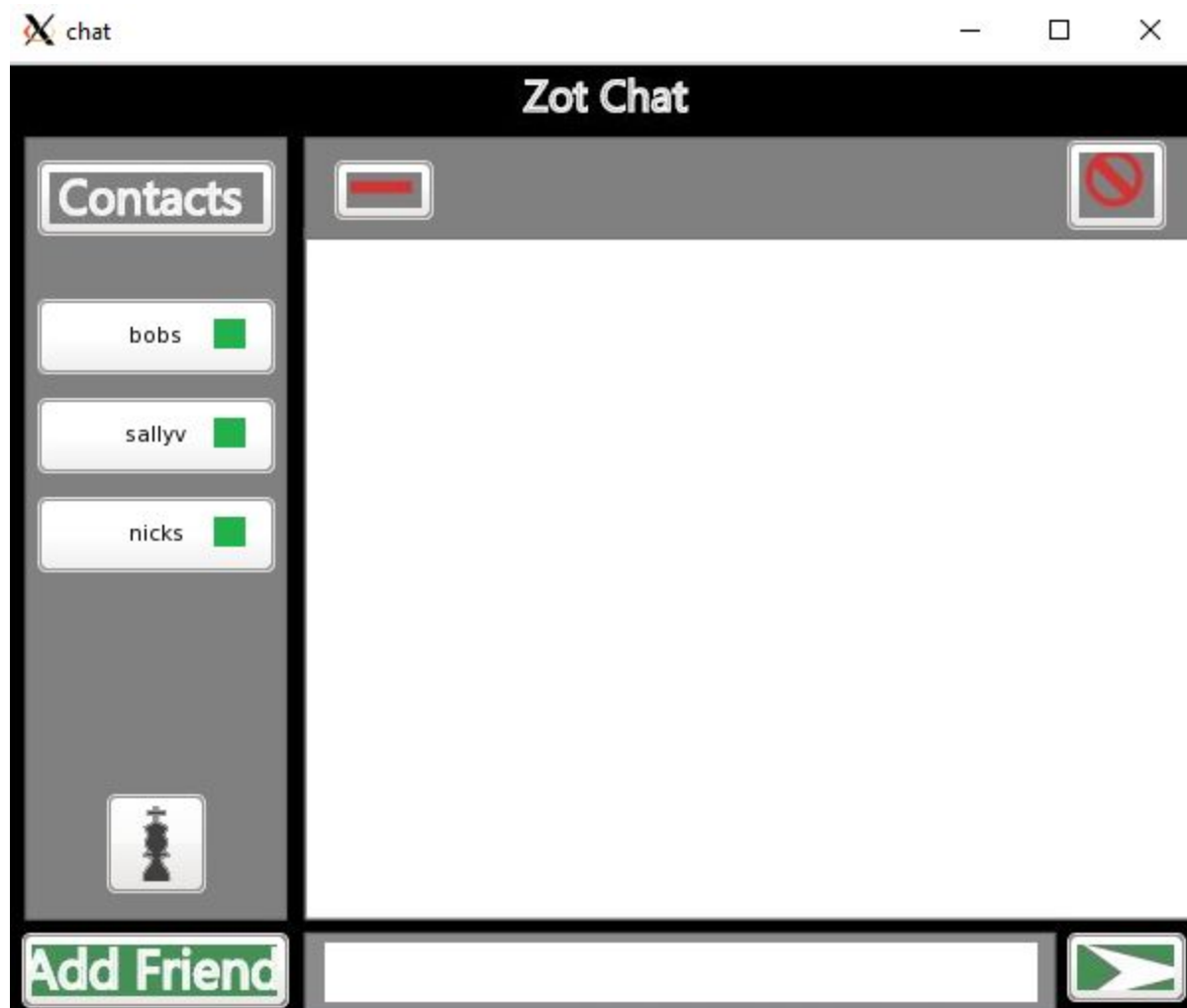
Sockets: a network that connecting two clients

U

Unread message: A message that has been sent to you but have not seen yet

# 1. Instant Messaging

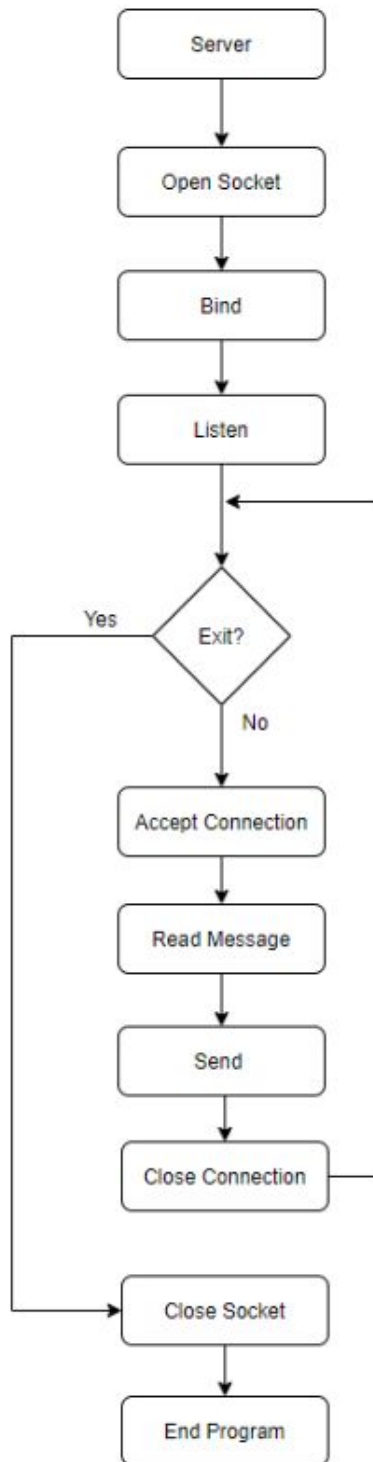
## 1.1 Usage Scenario



Here we see the main User Interface that the user will see when logging in for the first time. You can register an account and add other users to chat with. There is also a feature where you can play chess within the chat application.

## 1.1.2

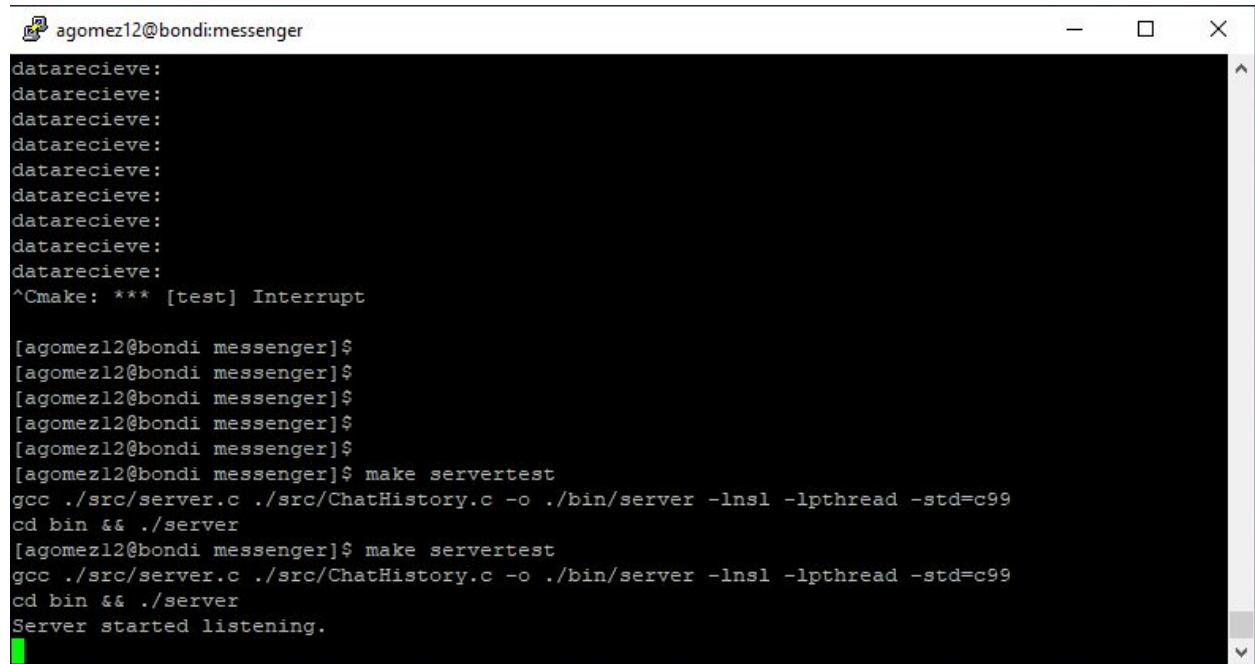
## Overall Server Control Flow



This is an overall flowchart of how the server will wait for an interruption. First, the server will connect to an open socket. Then it will begin listening. Once there is a message to read it will accept the connection, extract the message and send the message to the appropriate user. After, it will continue to listen until it times out or the program is shut down.

### 1.1.3

#### Successful Server Execution

A terminal window titled 'agomez12@bondi:messenger' with standard window controls. The terminal output shows a series of 'datarecieve:' prompts, an interrupt signal, and two successful compilations and executions of the server. The final line is 'Server started listening.' followed by a green cursor.

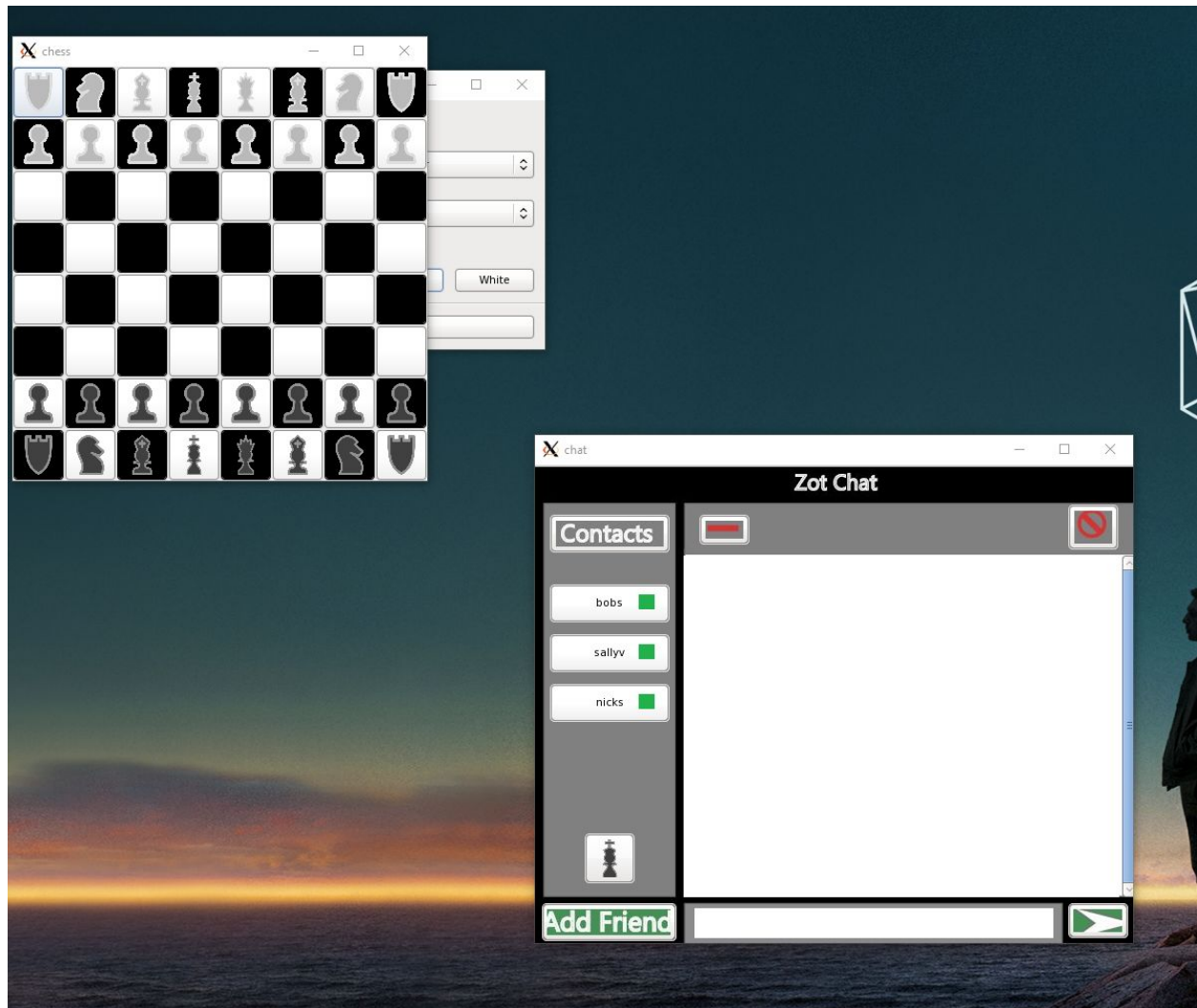
```
agomez12@bondi:messenger
datarecieve:
datarecieve:
datarecieve:
datarecieve:
datarecieve:
datarecieve:
datarecieve:
datarecieve:
datarecieve:
^Cmake: *** [test] Interrupt

[agomez12@bondi messenger]$
[agomez12@bondi messenger]$
[agomez12@bondi messenger]$
[agomez12@bondi messenger]$
[agomez12@bondi messenger]$
[agomez12@bondi messenger]$ make servertest
gcc ./src/server.c ./src/ChatHistory.c -o ./bin/server -lnsl -lpthread -std=c99
cd bin && ./server
[agomez12@bondi messenger]$ make servertest
gcc ./src/server.c ./src/ChatHistory.c -o ./bin/server -lnsl -lpthread -std=c99
cd bin && ./server
Server started listening.
```

This shows what a successful execution of the server will give.

## 1.1.4

## Chess and Messenger Usage Scenario



This shows the chess game that will appear once you click the “Chess Game” icon.



## 1.2 Goal

The goal of this program should be to enable simple social features found in any modern day chat features, such as a friends list, adding friends, deleting friends, and of course being able to chat to your friends through a simple gui. Within this chat gui as well, the goal is to be able to play a simple chess game through text, and be able to play this chess game with another person on the user's friends list through the same chat window.

## 1.3 Features:

- Login Verification
- Register new accounts
- Messaging through a server
- Chat history Log
- Name Tag for current person messaging
- Password Encryption
- Server client
- Chess Game Integration
- etc

## 2. Installation

### 2.1 System Requirements

System:	Linux
Disk Space:	128MB free
Ram:	512 MB or more
CPU:	1.2GHz or higher
Internet:	essential for the chat application

### 2.2 Setup and configuration

To install the chat app, copy (using ~cp) the chat\_beta\_src.tar.gz and chat\_beta\_src.tar.gz file from the host to your own Linx.

Type make servertest to compile and run the server.

Type make test command which can run the chat client.

Note: You need to run the server before running any clients.

### 2.3 Uninstalling

To uninstall the chat app, type:

```
rm chat_beta.tar.gz chat_beta_src.tar.gz
```

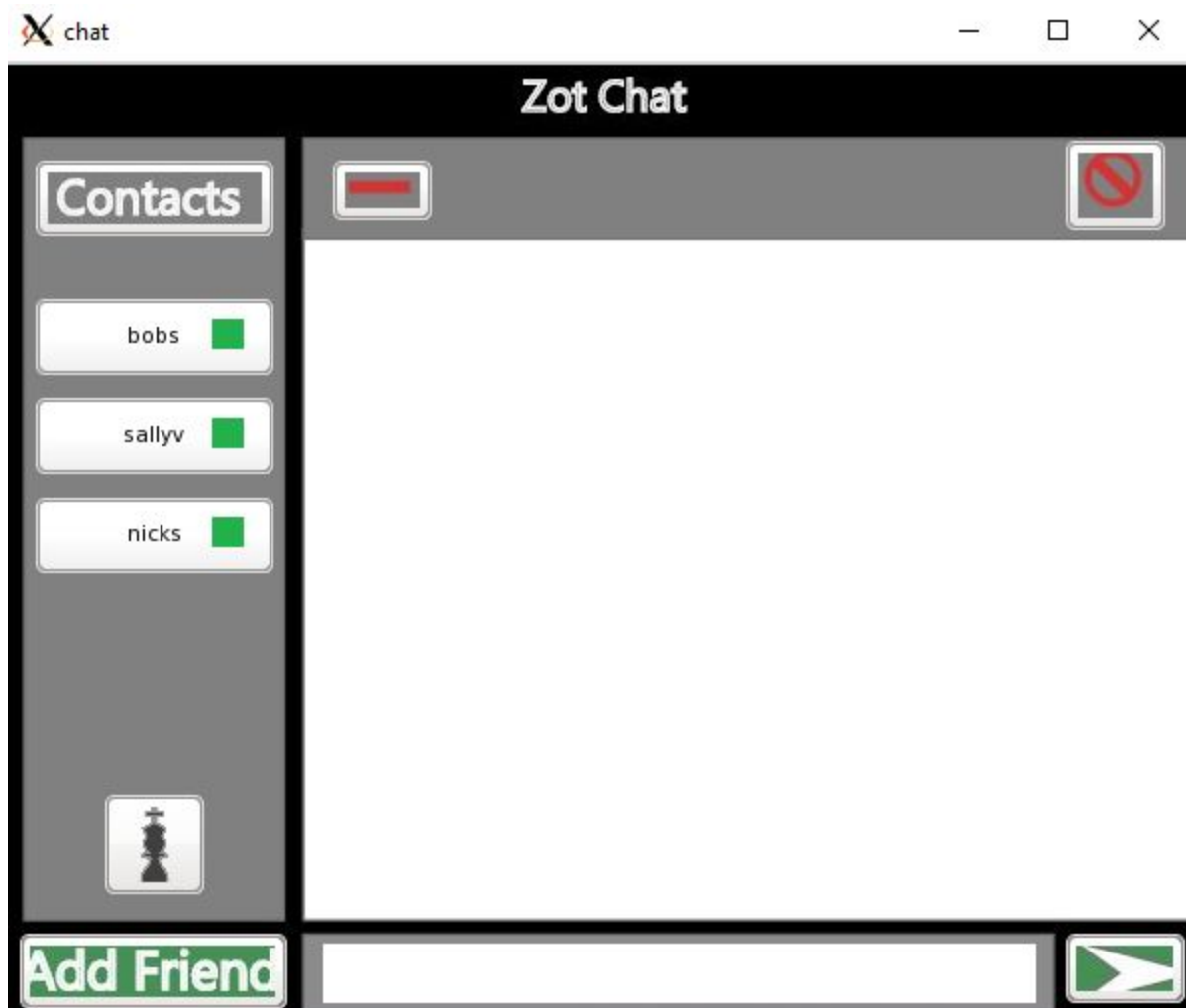
At the file directory

### 3. Chat Program Functions and Features

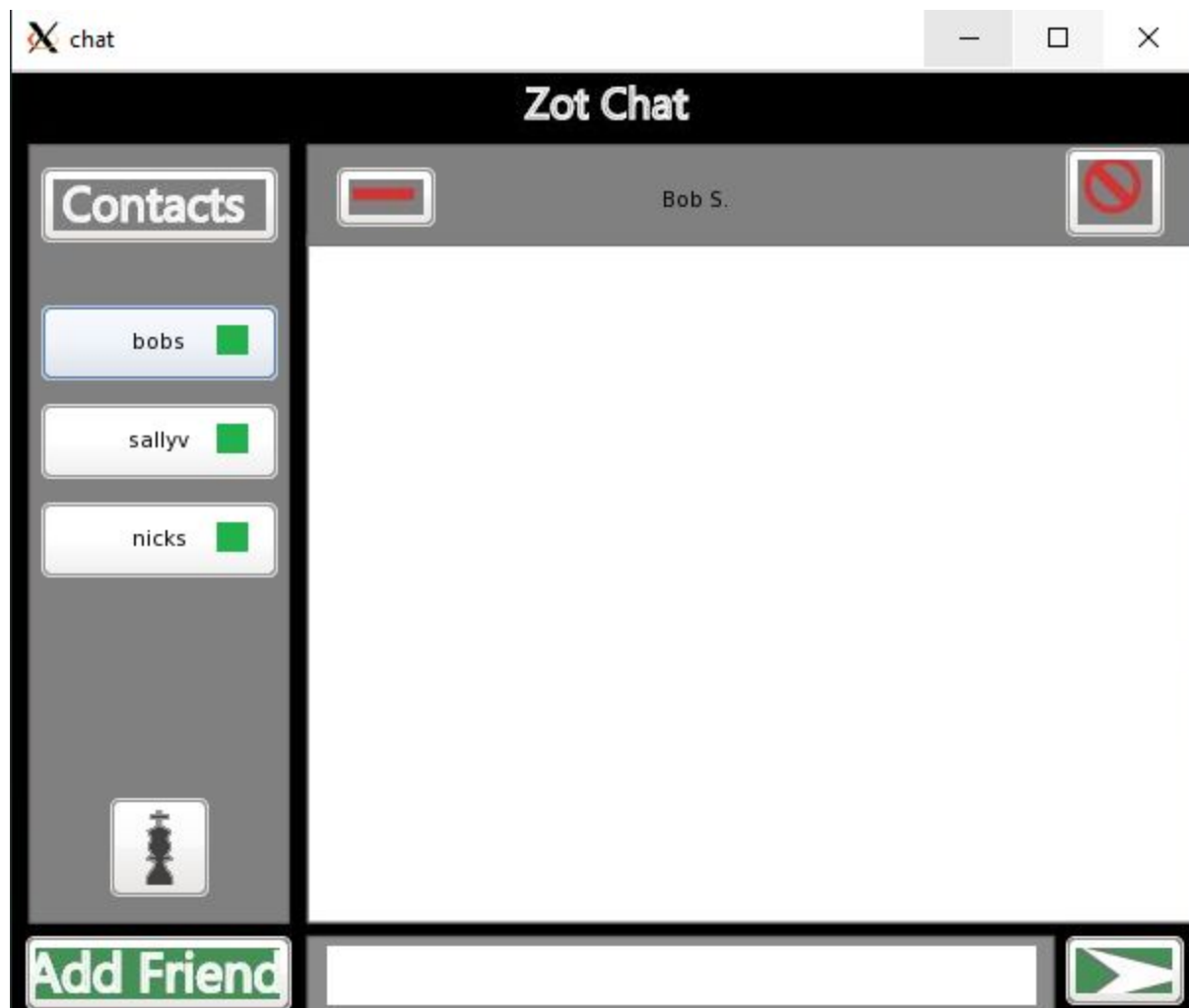
#### 3.1 Detailed Description of Client and Server Communication

##### Selecting a Contact to Message

Step 1: Click a contact that you wish to communicate with under the contacts button.

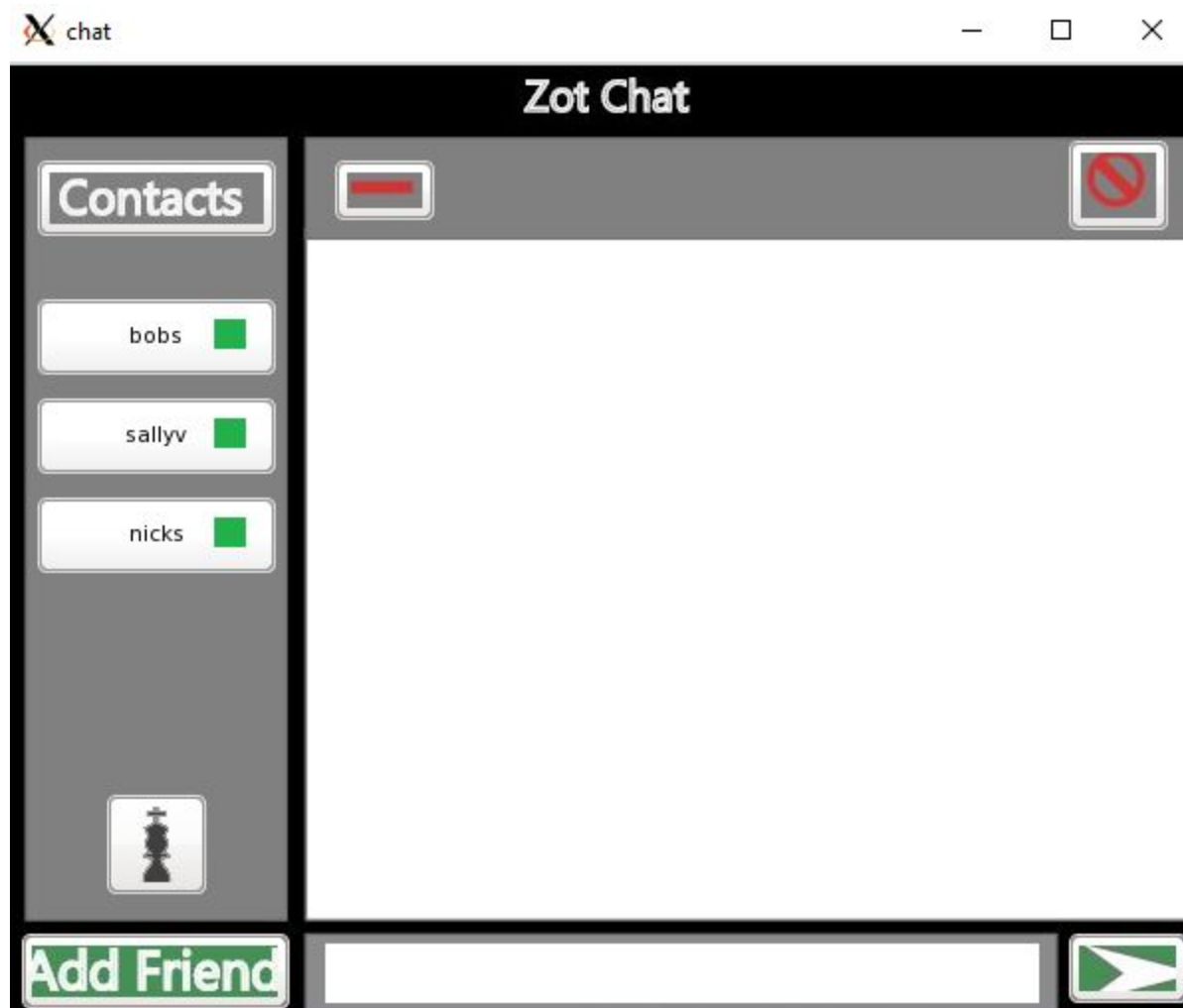


Step 2: You will enter the message room with the contact you selected.



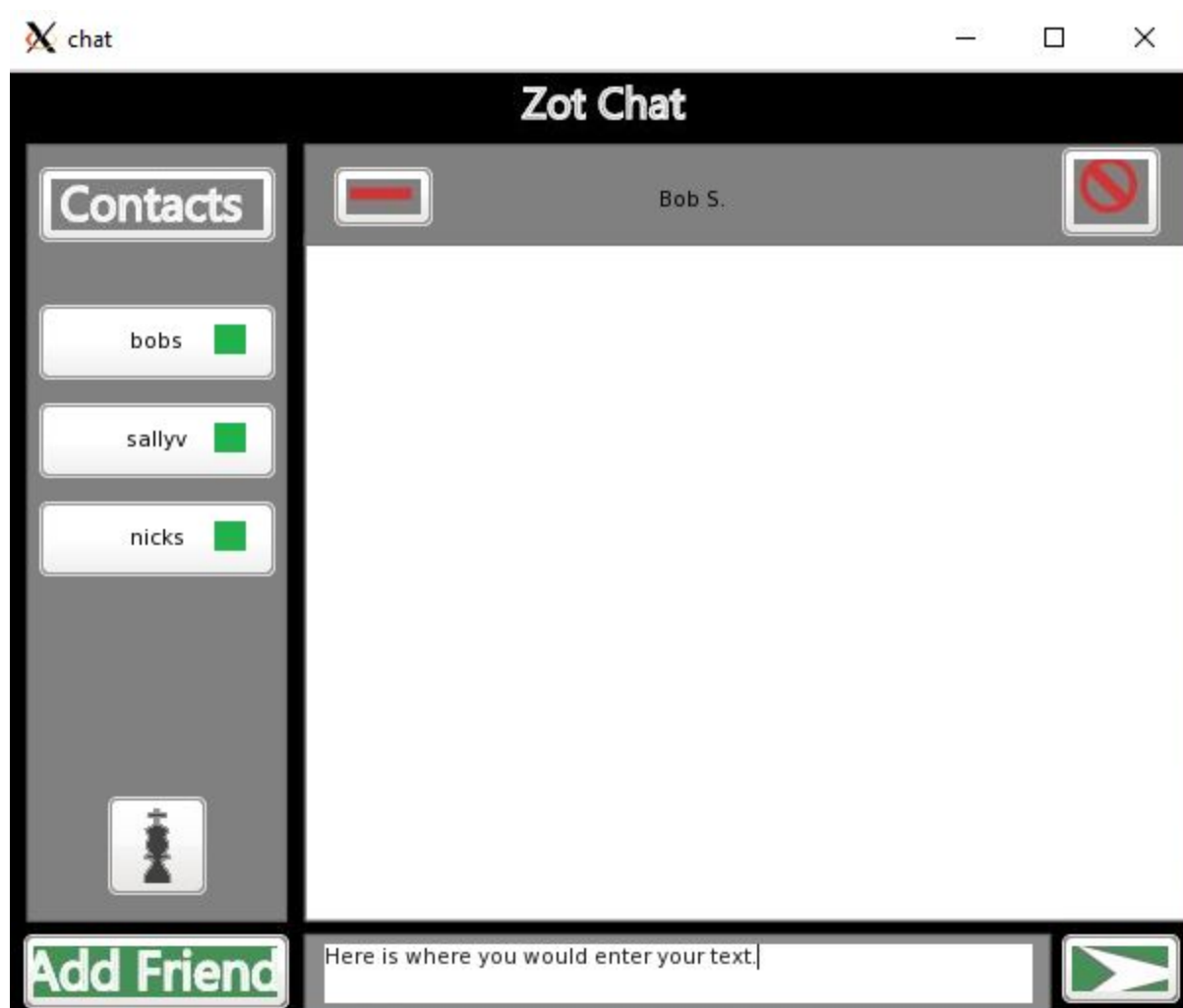
## Going Back to Main Contact Screen

Step 1: To go back to the Main contact screen, click the "Contacts" button. After, you will be back in the main chat room as shown below.

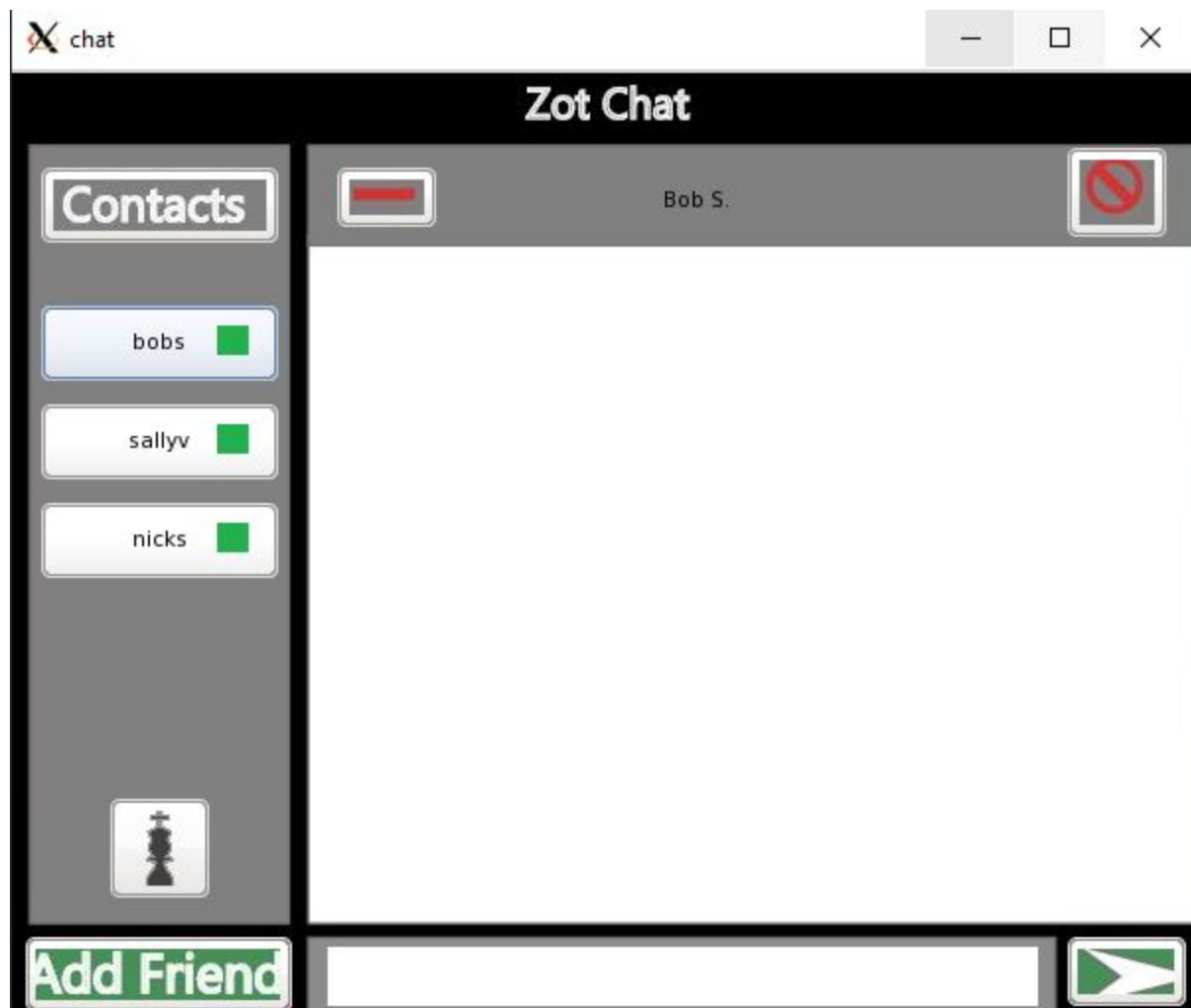


## Sending a Message

Step 1: Click the white box next to the “arrow” and “Add Friend” buttons and enter a message.



Step 2: Click the “Green Arrow” to send your message.



Step 3: Your recipient will receive a popup window to either accept or deny the message.

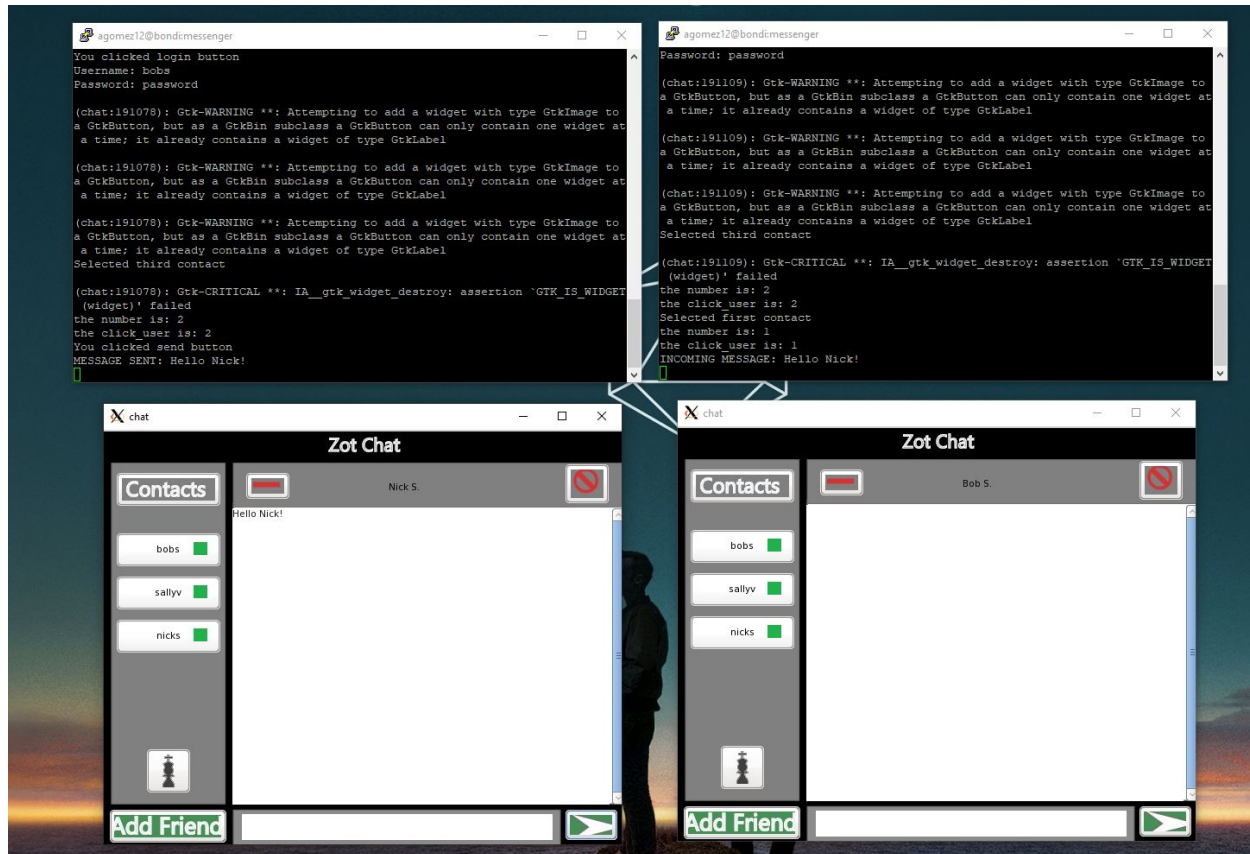


Step 4: After accepting the message, the message should appear onto the chat area.





Step 5: This is how it will appear on the other client on the terminal.

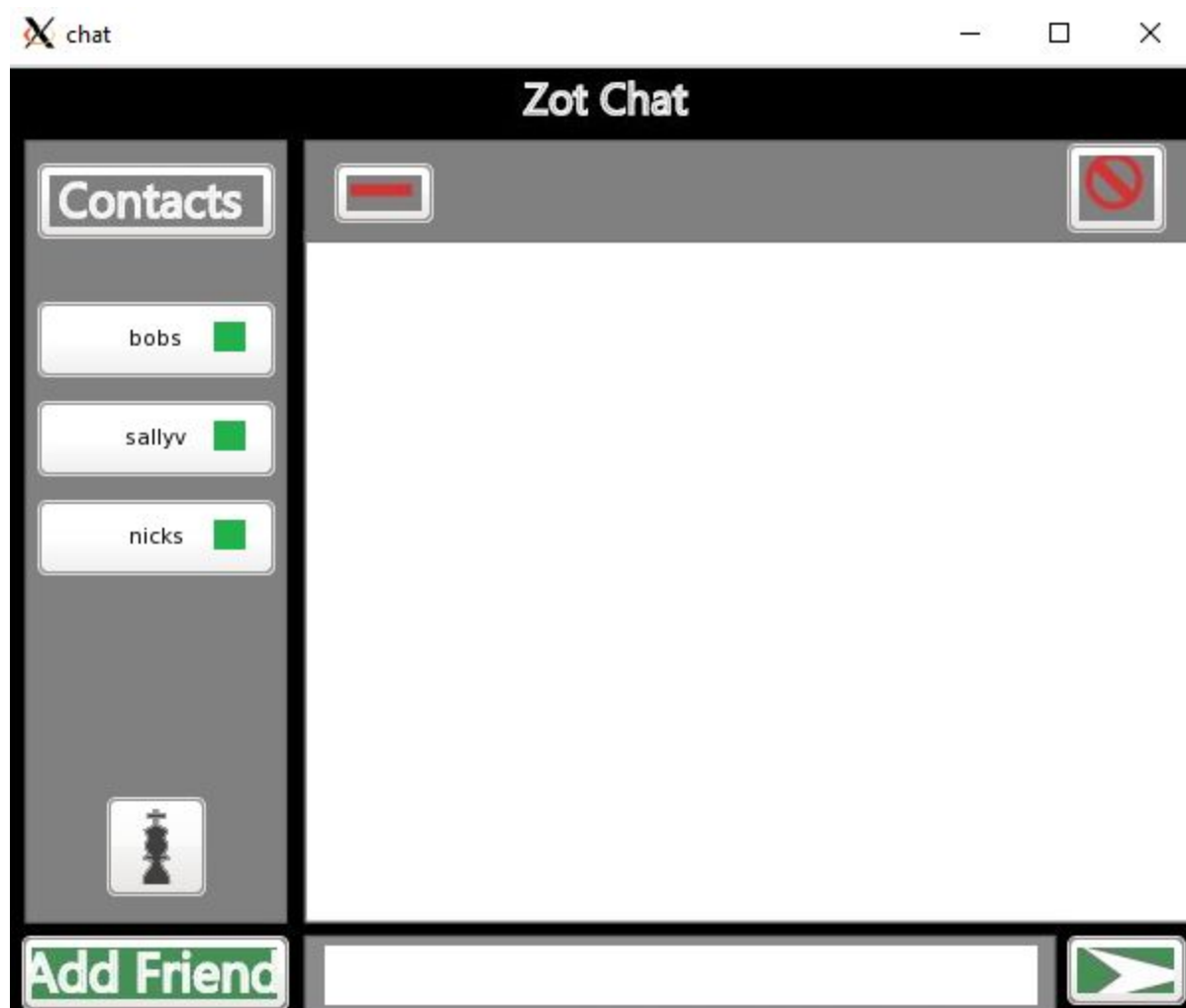


### Indicator for Contact Status

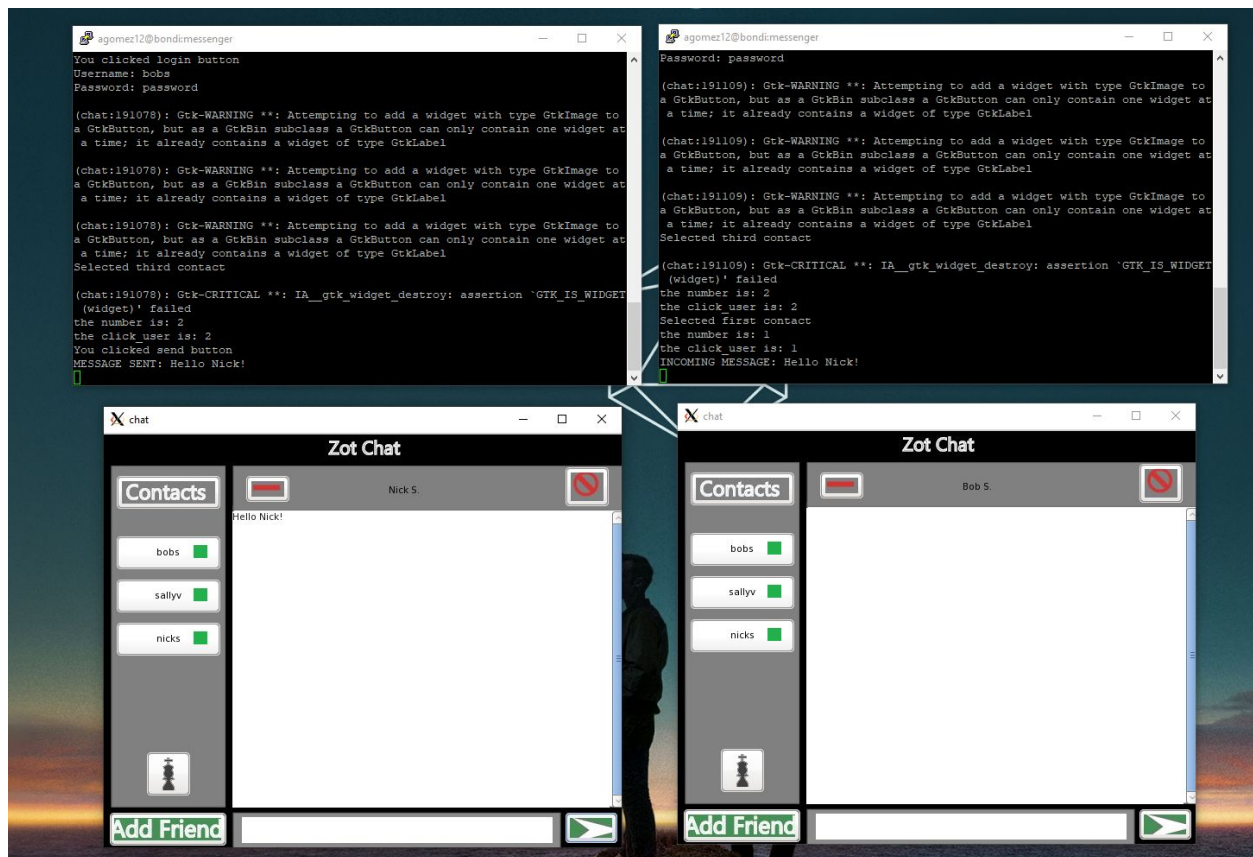
Green represents that the user is online.

Red represents that the user is not online.

Yellow represents that the user is idle.



## Recipient and Sender



**Recipient:** On the terminal, it will show the message you have received with "INCOMING MESSAGE" and the message that was received.

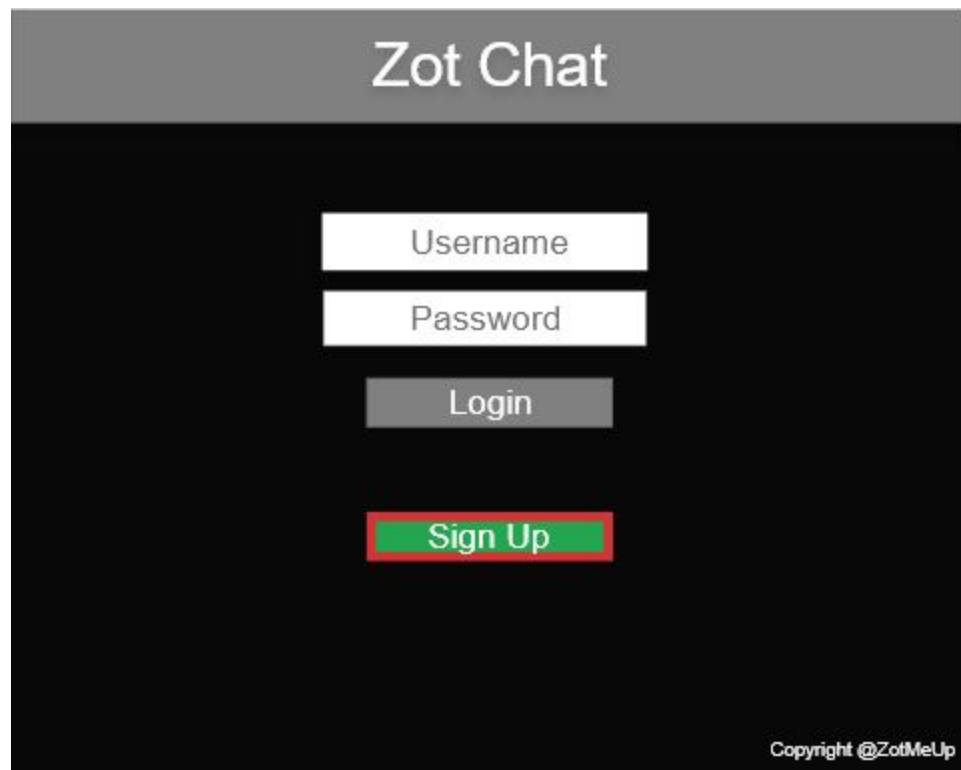
**Sender:** On the terminal, it will show the message you have sent with "MESSAGE SENT" and the message that was sent.

### 3.2 Detailed Description Signing Up and Logging In

#### Signing Up

Step 1:

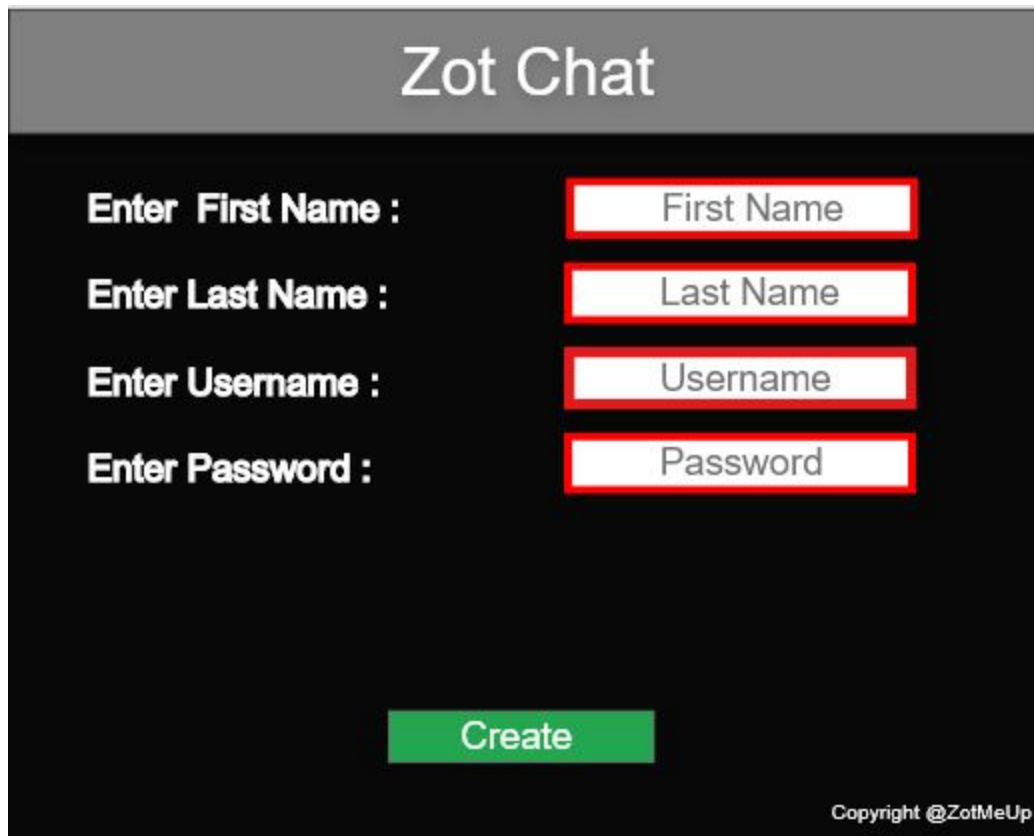
Click on the “Sign Up” box, this will send you to another screen.



The image shows a web interface for 'Zot Chat'. At the top, there is a grey header bar with the text 'Zot Chat' in white. Below this, on a black background, are four input fields and two buttons. The first two fields are labeled 'Username' and 'Password' in white text. Below them is a grey button labeled 'Login' in white text. At the bottom is a green button labeled 'Sign Up' in white text, which is highlighted with a red rectangular border. In the bottom right corner, there is small white text that reads 'Copyright @ZotMeUp'.

Step 2:

Click and provide your credentials in the boxes provided.



The image shows a registration form titled "Zot Chat" with a dark background. It contains four input fields for "First Name", "Last Name", "Username", and "Password", each with a red border. A green "Create" button is at the bottom center. The copyright notice "Copyright @ZotMeUp" is in the bottom right corner.

Zot Chat	
Enter First Name :	<input type="text" value="First Name"/>
Enter Last Name :	<input type="text" value="Last Name"/>
Enter Username :	<input type="text" value="Username"/>
Enter Password :	<input type="password" value="Password"/>
<input type="button" value="Create"/>	
Copyright @ZotMeUp	

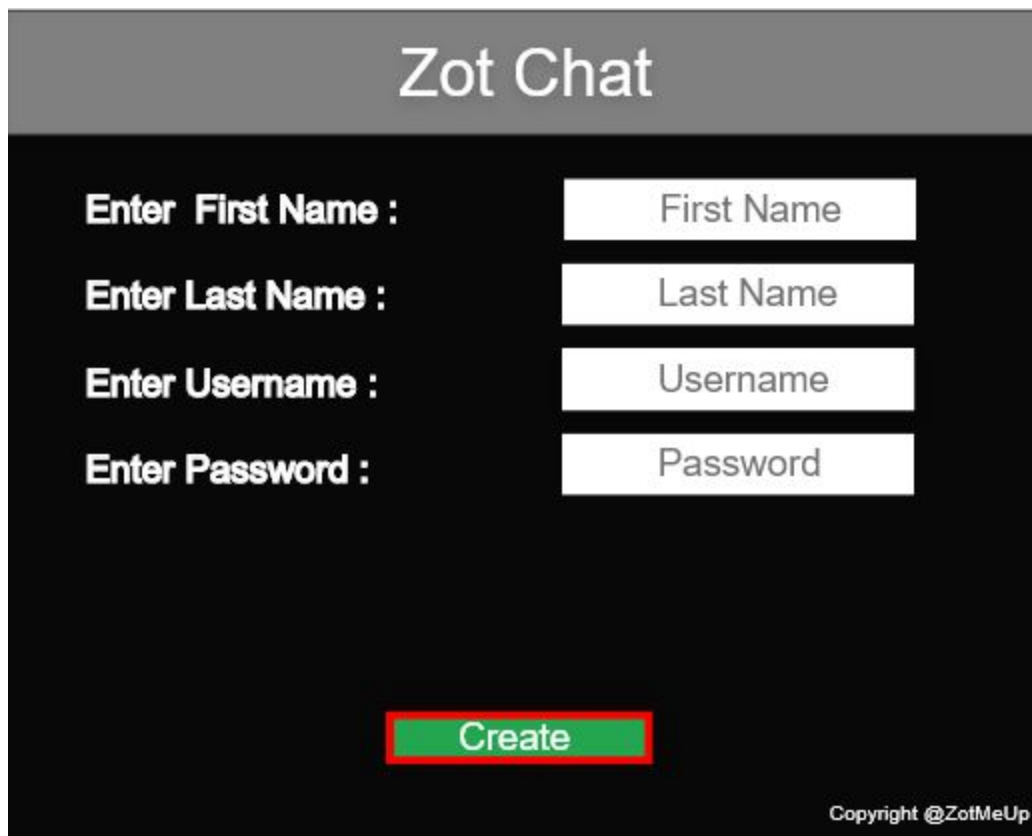
Step 3: Please verify that these credentials are correct before you proceed to the next step.

\*\*\*\*\* Special note \*\*\*\*\*

Please use the pre-made accounts in the README.md from the tar to login at this time.

Step 4:

Click on "Create" and your account will be created. You will be directed to your messaging home screen.



The image shows a web form titled "Zot Chat" for account creation. The form has a dark background with white text and input fields. It includes labels for "Enter First Name :", "Enter Last Name :", "Enter Username :", and "Enter Password :". Each label is followed by a white input field containing placeholder text: "First Name", "Last Name", "Username", and "Password". At the bottom center, there is a green "Create" button with a red border. In the bottom right corner, the text "Copyright @ZotMeUp" is visible.

Zot Chat	
Enter First Name :	First Name
Enter Last Name :	Last Name
Enter Username :	Username
Enter Password :	Password
<div>Create</div>	
Copyright @ZotMeUp	

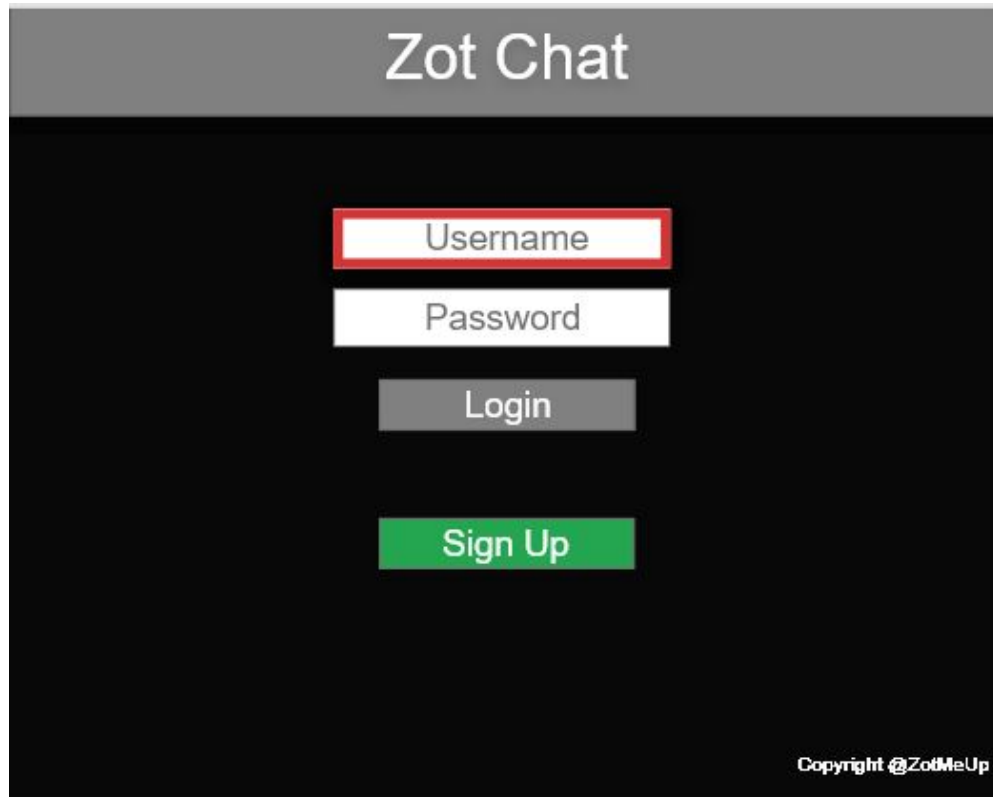
\*\*\*\*\* Special note \*\*\*\*\*

Please use the pre-made accounts in the README.md from the tar to login at this time.

## Logging In

Step 1:

Click on the "Username" box and enter your credentials.



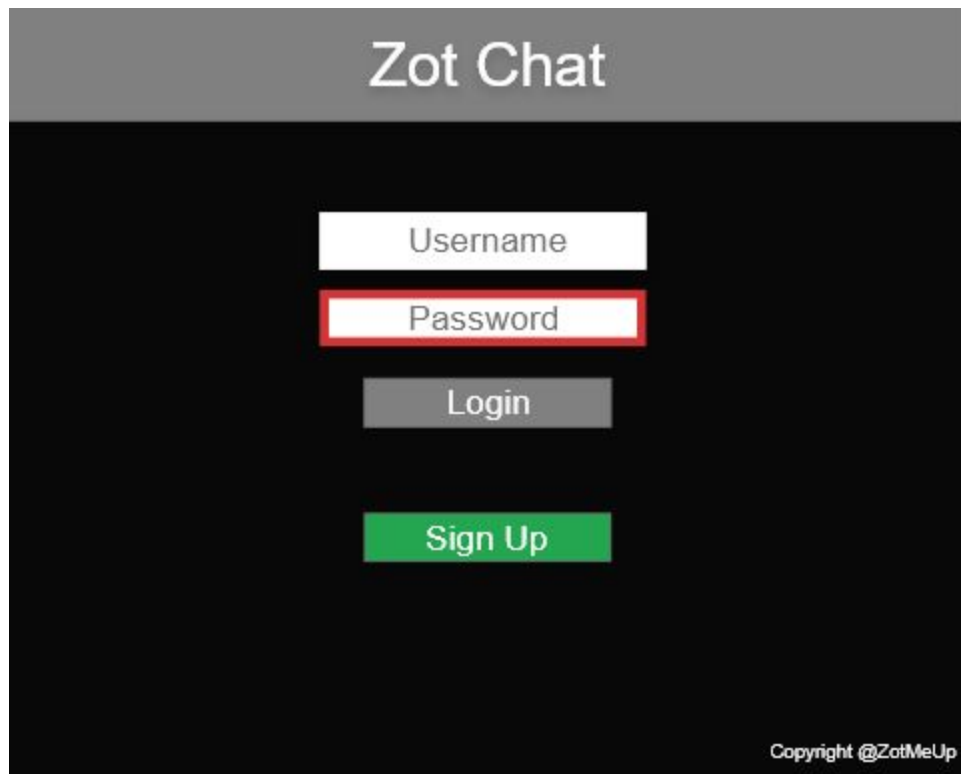
The image shows a login interface for 'Zot Chat'. It features a dark background with a grey header bar at the top containing the text 'Zot Chat'. Below the header, there are two input fields: 'Username' and 'Password'. The 'Username' field is highlighted with a red border. Below these fields are two buttons: a grey 'Login' button and a green 'Sign Up' button. In the bottom right corner, there is a small text string 'Copyright @ZotMeUp'.

\*\*\*\*\* Special note \*\*\*\*\*

Please use the pre-made accounts in the README.md from the tar to login at this time.

Step 2:

Click on the "Password" box and enter your credentials.



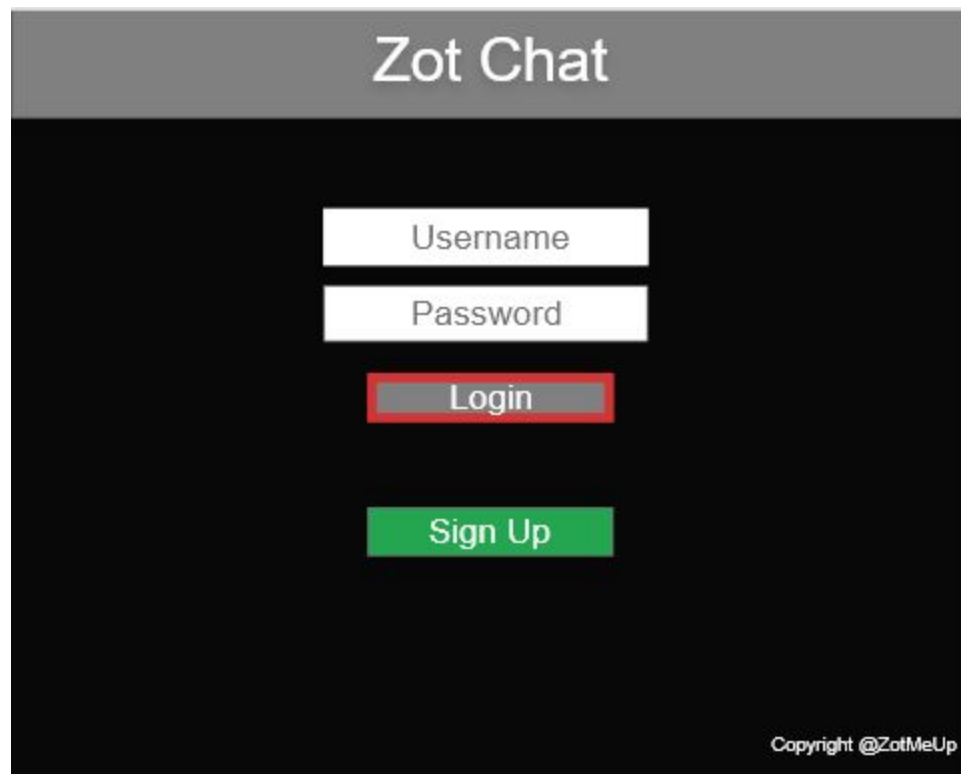
The image shows a login and sign-up interface for 'Zot Chat'. The title 'Zot Chat' is displayed in a grey header bar. Below the header, on a black background, are two white input fields: 'Username' and 'Password'. The 'Password' field is highlighted with a red border. Below these fields are two buttons: a grey 'Login' button and a green 'Sign Up' button. In the bottom right corner, there is a small copyright notice: 'Copyright @ZotMeUp'.

Step 3:

Please make sure that your credentials are correct then proceed to the next step.



Step 4: Click on the “Login” box and you will be directed to your home messaging screen.



The image shows a login interface for 'Zot Chat'. It features a dark background with a grey header bar at the top containing the text 'Zot Chat'. Below the header, there are two white input fields: 'Username' and 'Password'. Below these fields is a grey 'Login' button with a red border, and a green 'Sign Up' button. In the bottom right corner, there is a small copyright notice: 'Copyright @ZotMeUp'.

Zot Chat

Username

Password

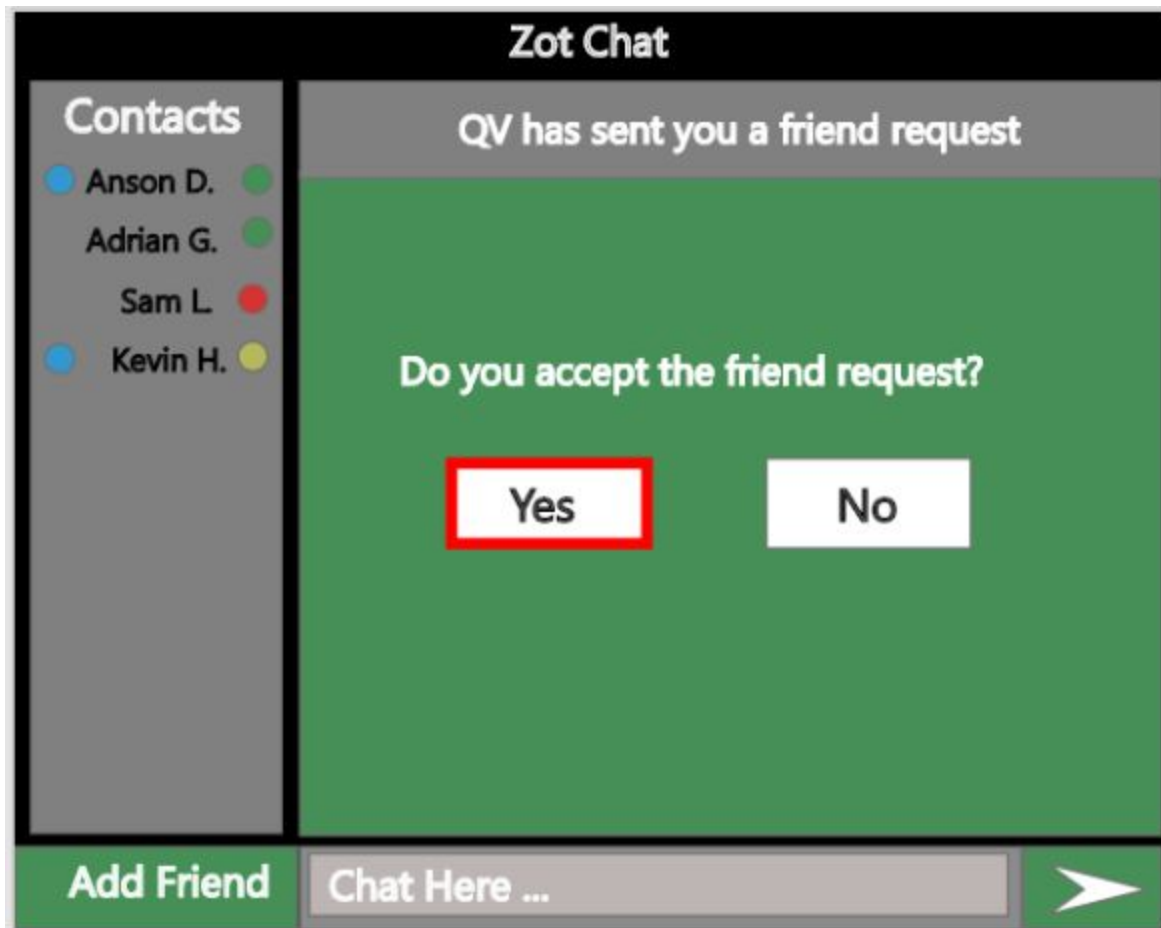
Login

Sign Up

Copyright @ZotMeUp

### 3.3.1 Accepting/ Rejecting Friend Requests.

Step 1: A screen will interrupt your window to the "Accepting friend request screen."

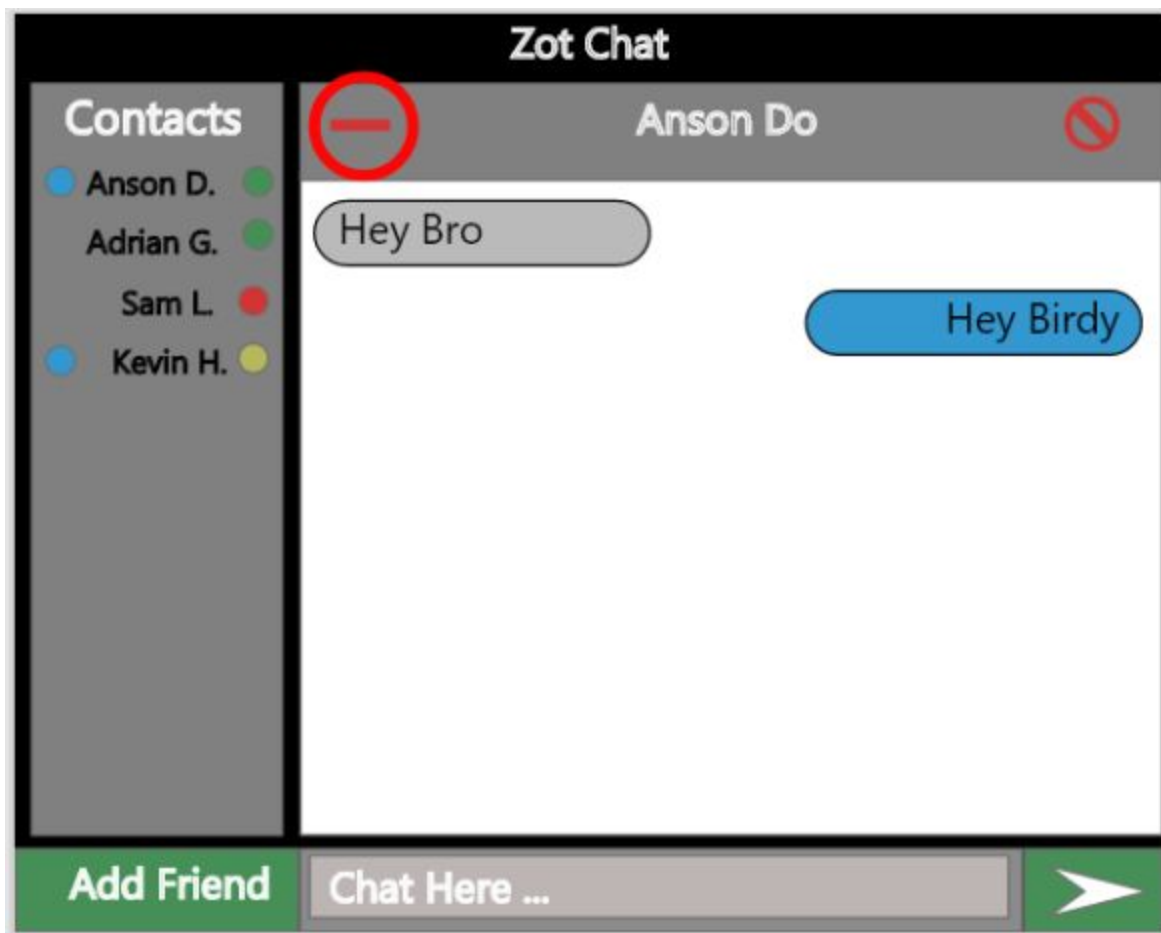


If the request is accepted, the user will be added to your contacts list.  
If not, you will be returned to the screen you were previously on.  
(Work in Progress)

### 3.3.2 Deleting/ Blocking a friend.

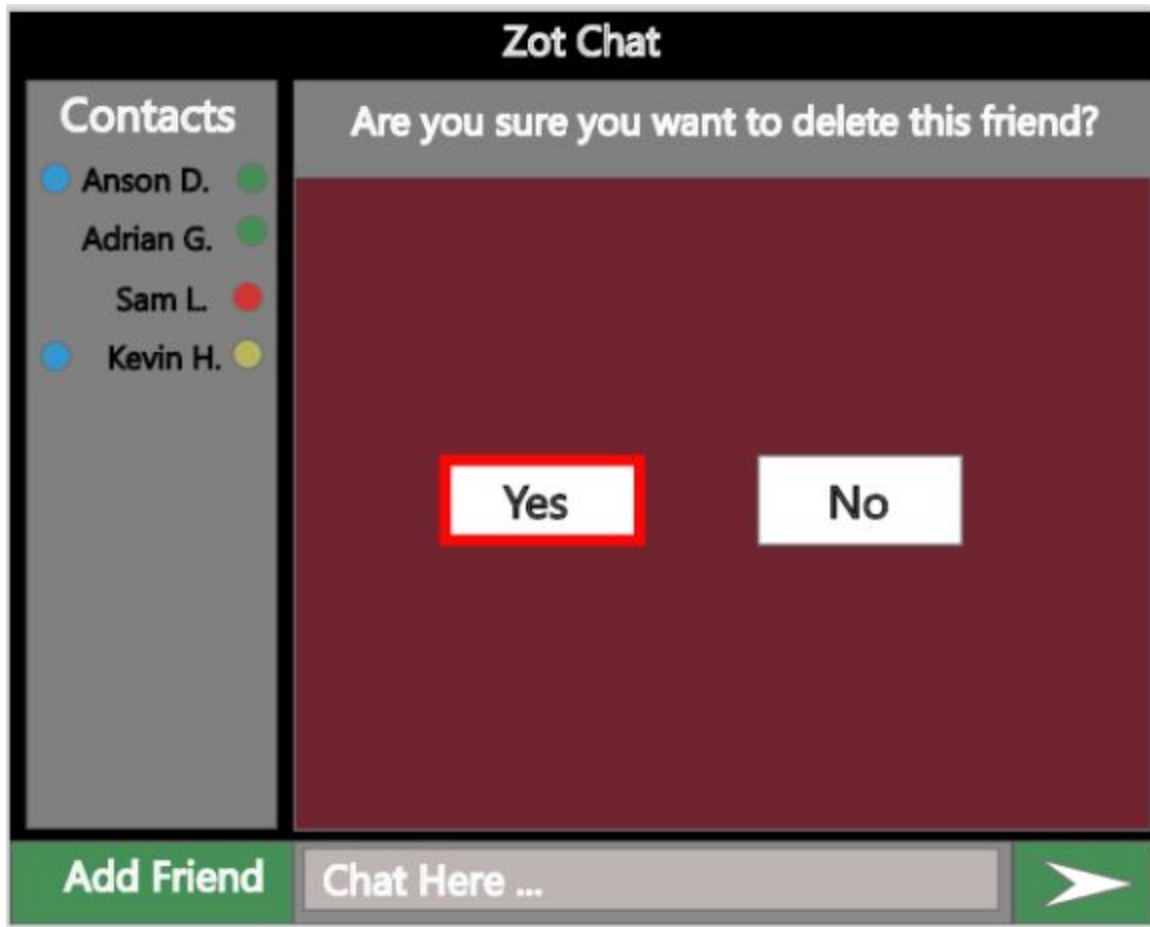
#### Deleting a friend

Step 1: Click the "-" sign in the chat of the person you wish to delete.



(Work in Progress)

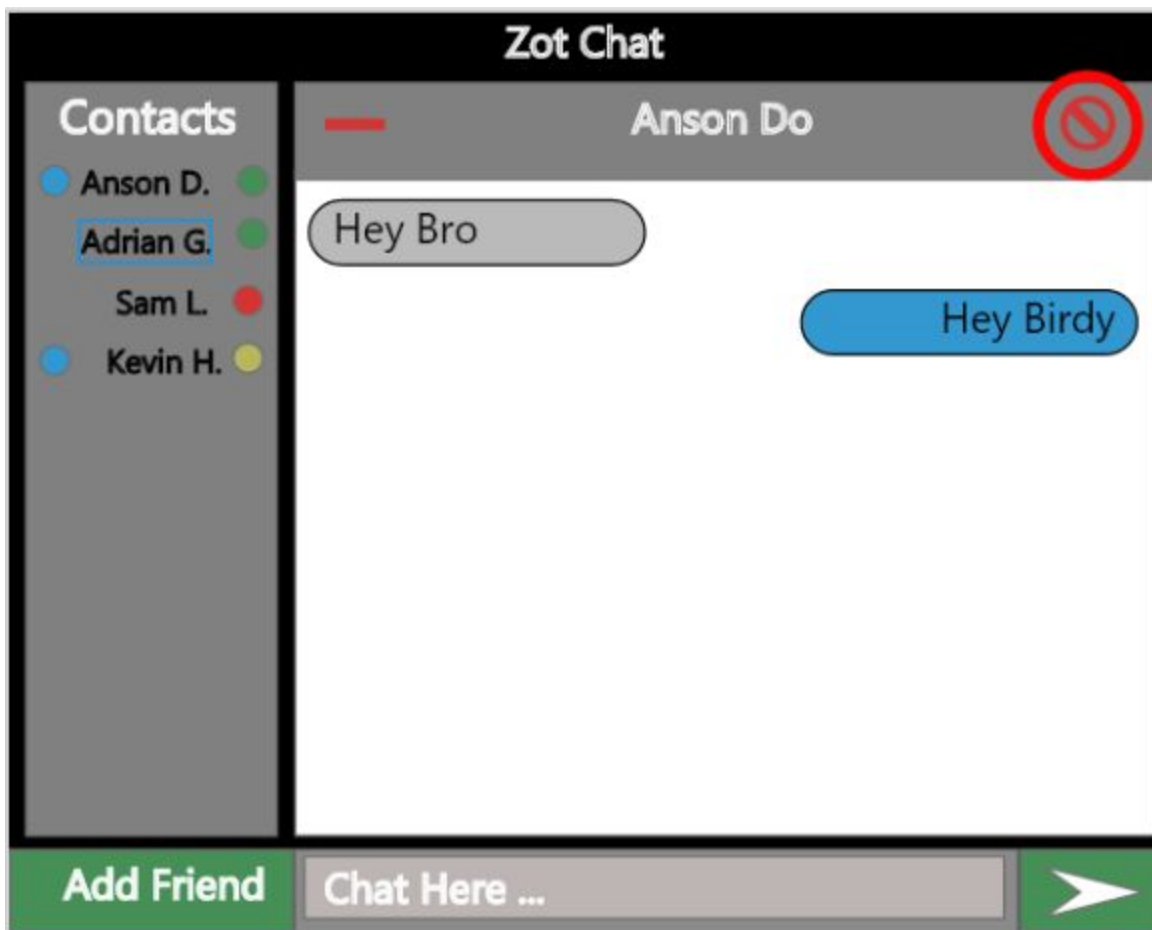
Step 2: A screen will direct you to confirm or deny the request and return you to either the main screen or back to the chat.



(Work in Progress)

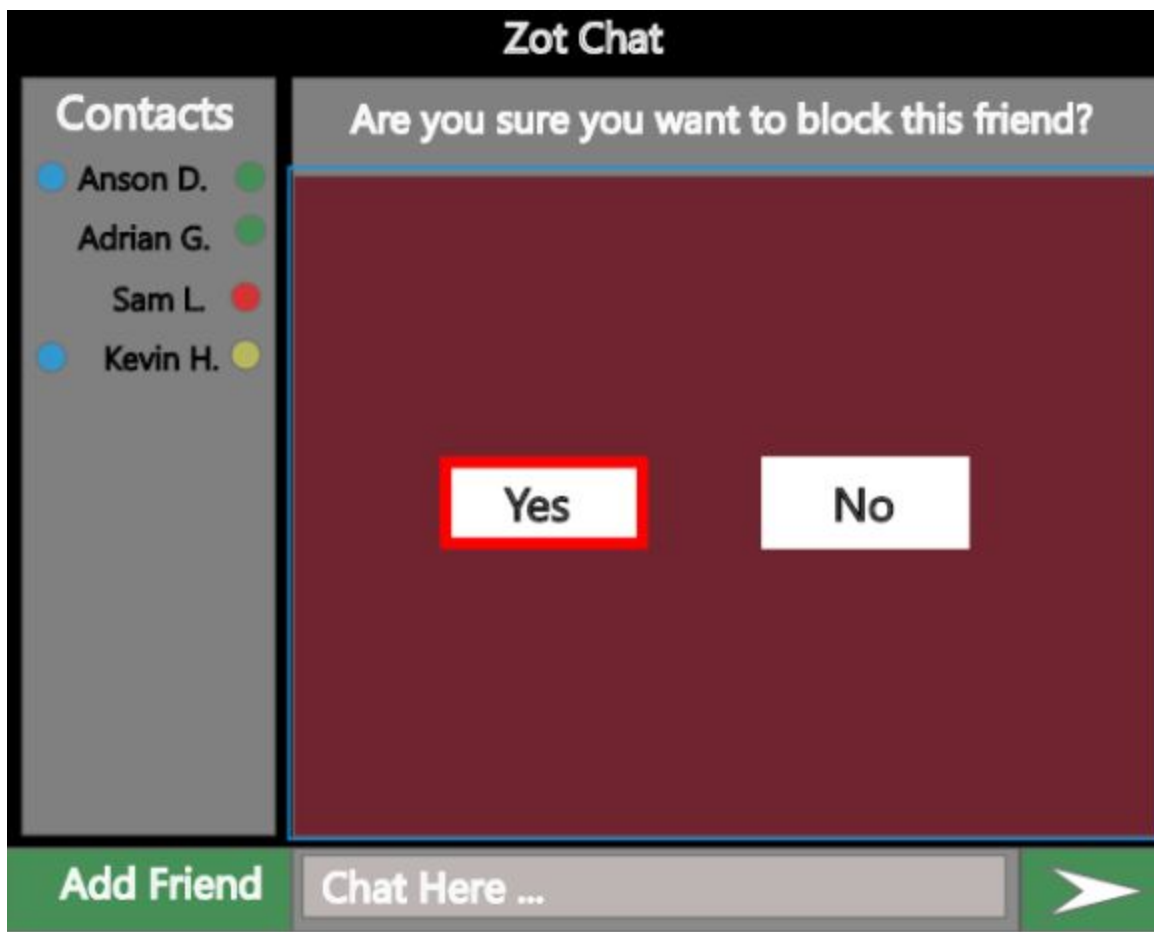
## Blocking a friend

Step 1: To block a friend, click the block status next to the name.



(Work in Progress)

Step 2: A screen will direct you to either confirm or deny the block request. Once selected, it will either return you to the home screen or back to the chat if “no” is selected.

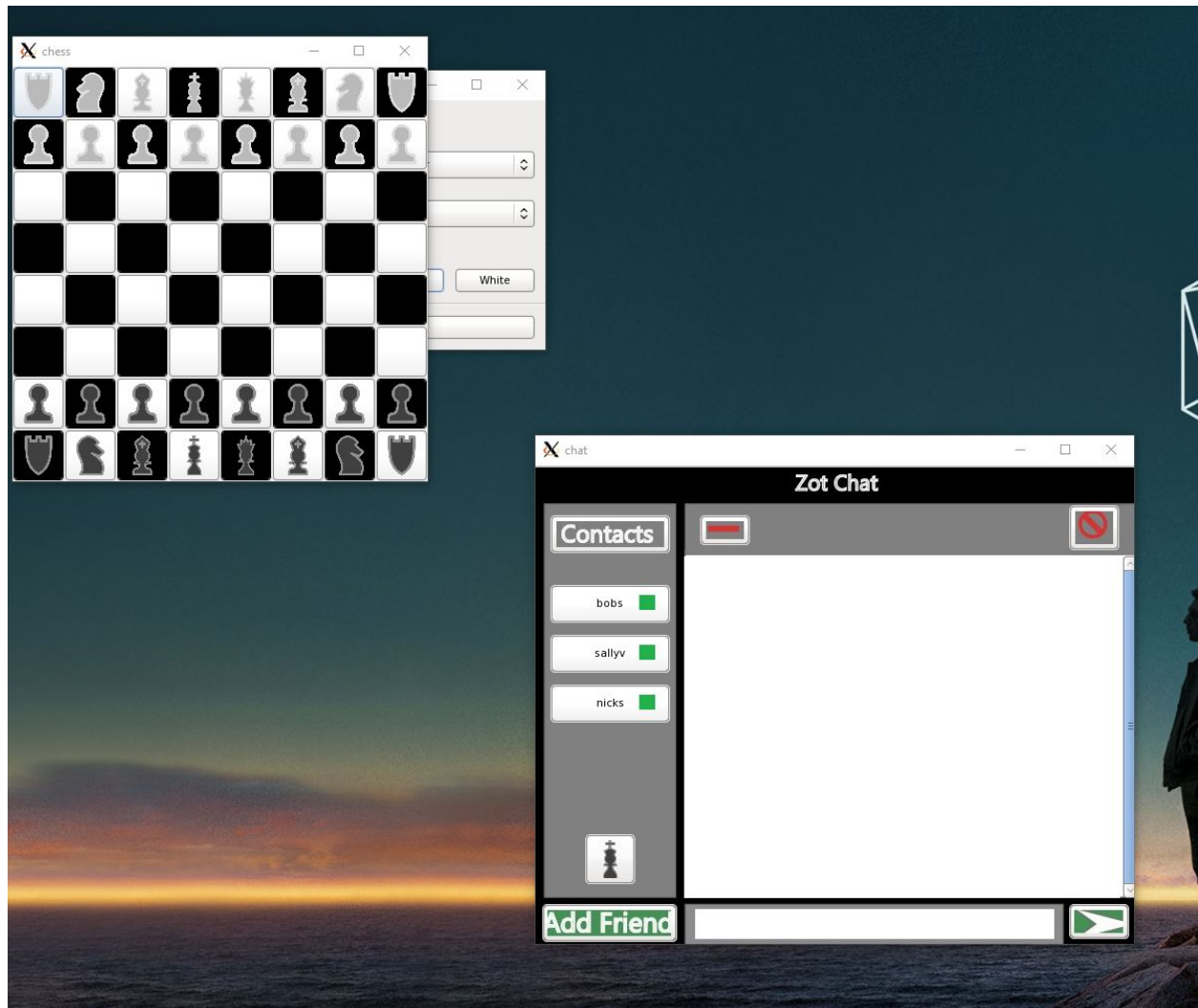


(Work in Progress)

## 4. Chess Program Functions and Features

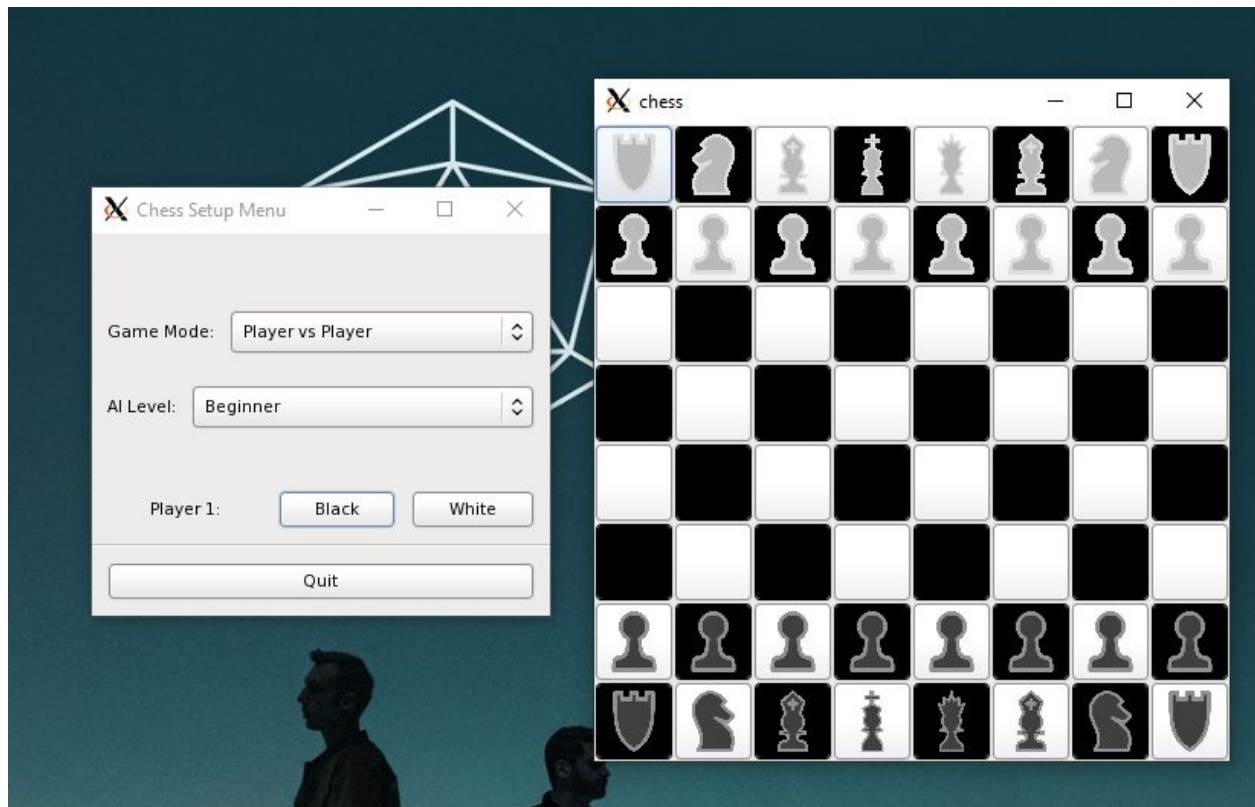
### 4.1 Integrated GUI Chess Game

When the “Chess Button” is clicked, there will be a new window that appears for the settings of the chess game you wish to play.



## 4.2 Input for Chess Game

The chess program opens with the “Chess Setup Menu”. From here, the user can adjust the settings and the next window that will open is the settings that the user applied. From here, the user can play a normal game of chess.





## Copyright

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- Stock Messaging Icon from [https://www.iconfinder.com/icons/171351/chat\\_messages\\_icon](https://www.iconfinder.com/icons/171351/chat_messages_icon)
- All rights reserved. This program and the accompanying materials are made available by ZotMeUp©. Illegal distribution of this software is forbidden.

## ERROR MESSAGES

Error	Meaning	How to Resolve
100	Wrong username	Try to type a valid username
101	Wrong password	Try to type the correct password
102	Could not connect to server	Try to make sure you have the correct IP
103	Username taken	Try another username

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