

CS594

Intended Status: IRC Class Project

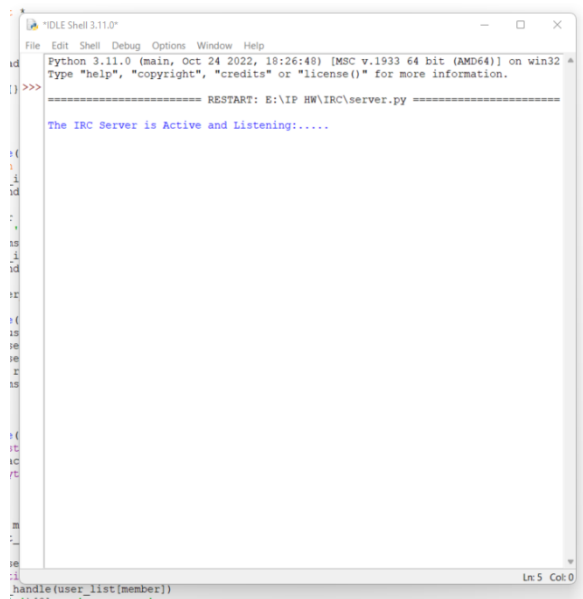
GROUP MEMBERS: HANESH KOGANTI

POLEPALLI SAI GANESH

MOUNISHA KONDURU

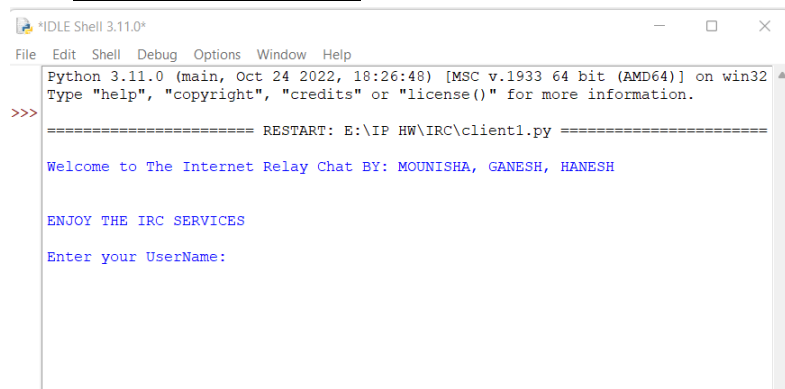
Internet Relay Chat

1) Starting the server:



```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:\IP HW\IRC\server.py =====
The IRC Server is Active and Listening:.....
```

2) Starting the client:



```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:\IP HW\IRC\client1.py =====
Welcome to The Internet Relay Chat BY: MOUNISHA, GANESH, HANESH

ENJOY THE IRC SERVICES

Enter your UserName:
```

3) Client registration:

```
*IDLE Shell 3.11.0*
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>
===== RESTART: E:\IP HW\IRC\client1.py =====

Welcome to The Internet Relay Chat BY: MOUNISHA, GANESH, HANESH

ENJOY THE IRC SERVICES

Enter your UserName: Gani

You Have Been Enrolled successfully!!

To see the Instructions type "help"

Gani:
```

4) List of Instructions:

```
Gani:
help

Use the Commands Below

join-room          Usage: join-room [room-name]
exit-room          Usage: exit-room [room-name]
chat-room          Usage: chat-room [room-name] [message]
pvt-msg            Usage: pvt-msg [recipient-name] [message]
list               Usage: list rooms / list users / list members [room-name]
my-rooms           Usage: my-rooms
broadcast-msg      Usage: broadcast-msg all [message]
quit-irc           Usage: quit-irc

Gani: help          Usage: help
```

5) Creating a room:

```
help
Gani:
join-room 308

You have joined a Newly created Room
Gani:
```

6) **Joining a room:**

```
Welcome to The Internet Relay Chat BY: MOUNISHA, GANESH, HANESH

ENJOY THE IRC SERVICES

Enter your UserName: mouni

You Have Been Enrolled successfully!!

To see the Instructions type "help"

mouni:
join-room 308

You have joined an Existing Room
mouni:
```

7) **Send message to room:**

```
You have joined a Newly created Room
Gani:
chat-room 308 hello
```

```
You have joined an Existing Room
mouni:
```

```
Gani - 308 says: hello
```

8) **Private message to user in the same or different room:**

```
Gani:
pvt-msg honey welcome to 308!!
Gani:
pvt-msg mouni glad you joined 308!!
Gani:
```

```
Gani says: glad you joined 308!!
```

```
Gani says: welcome to 308!!
```

9) **Number of rooms:**

```
Gani:
list rooms

rooms: '308', '219'
Gani:
```

10) **Number of active users:**

```
Gani:
list users

users: 'Gani', 'mouni', 'honey'
Gani:
```

11) **List of the members in the same room:**

```
Gani:
list members 308

User mouni joined room 219
Gani:
members:
'Gani', 'mouni', 'honey'
Gani:
list members 219

members: 'Gani', 'mouni'
Gani:
```

12) **Client can join multiple rooms:**

```
join-room 219

You have joined an Existing Room
mouni:
```

13) MY rooms:

```
mouni:
my-rooms

My Rooms:  '308', '219'
mouni:
```

14) Multiple clients can connect to a server:

```
*IDLE Shell 3.11.0*
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD
Type "help", "copyright", "credits" or "license()" for more informa
>>>
===== RESTART: E:\IP HW\IRC\server.py =====

The IRC Server is Active and Listening:.....
{'Gani': 2051}
{'308': ['Gani']}
{'Gani': 2051, 'mouni': 2056}
{'308': ['Gani', 'mouni']}
{'Gani': 2051, 'mouni': 2056, 'honey': 2061}
{'308': ['Gani', 'mouni', 'honey']}
{'308': ['Gani', 'mouni', 'honey'], '219': ['Gani']}
{'308': ['Gani', 'mouni', 'honey'], '219': ['Gani', 'mouni']}
```

15) Broadcasting the message to all members in group:

```
members. Gani, mouni
Gani:
broadcast-msg all Glad you guys joined 308!! Hearty welcome
Gani:
```

```
mouni:

Gani says: Glad you guys joined 308!! Hearty welcome
```

```
honey:

Gani says: Glad you guys joined 308!! Hearty welcome
```

16) Exit room:

```
honey:  
quit-irc
```

```
Quiting out of the IRC Server  
Hope you had fun Enjoying our IRC services!
```

```
mouni:  
quit-irc
```

```
User honey Left IRC Server  
mouni:
```

```
Quiting out of the IRC Server  
Hope you had fun Enjoying our IRC services!
```

```
User honey Left IRC Server  
Gani: Command_Error1: Invalid Command.  
Please type an valid command
```

```
User mouni Left IRC Server
```

17. Server can gracefully handle client crashes

```
Enter your UserName: gani
```

```
Registration_Error: This Username is Already in use.  
Please Enter a Different UserName  
Enter your UserName:
```

18. Client can gracefully handle server crashes

```
Gani:  
join room 308  
Command_Error1: Invalid Command.  
Please type an valid command  
Gani:
```

Enter your UserName: Gani P

```
Username_Error2: The Username should not contain any spaces  
Please type an valid UserName Again  
Enter your UserName:
```
