

Screenshots

1. Starting the server

```
Last login: Thu Mar  9 14:02:48 on ttys002
→ ~ cd Desktop
→ Desktop cd DS\ project1
→ DS project1 python3 server.py
Server has been initialized!

Welcome to Instant Messaging System!!!

|
```

2. Connecting a client to the server

```
Last login: Thu Mar  9 14:03:55 on ttys001
→ ~ cd Desktop
→ Desktop cd DS\ project1
→ DS project1 python3 client.py localhost 6000
Please wait while service loads...

Enter Username: ZOE

Connected to the Server

Enter "ONLINE" to check the members online
Enter "CONNECT <username>", with username of a client to connect to
Enter "END" to stop communicating with any client
Enter "LOGOFF" to disconnect from chat service
Enter "HELP" anytime to read instructions again

|
```

4. Execution of a client program

```
→ ~ cd Desktop
→ Desktop cd DS\ project1
→ DS project1 python3 client.py localhost 6000
Please wait while service loads...

Enter Username: ZOE

Connected to the Server

Enter "ONLINE" to check the members online
Enter "CONNECT <username>", with username of a client to connect to
Enter "END" to stop communicating with any client
Enter "LOGOFF" to disconnect from chat service
Enter "HELP" anytime to read instructions again

ONLINE

HTTP/1.1 200 OK
ONLINE: LEMON, ZOE, TANSY

CONNECT <LEMON>

Enter "ONLINE" to check the members online
Enter "CONNECT <username>", with username of a client to connect to
Enter "END" to stop communicating with any client
Enter "LOGOFF" to disconnect from chat service
Enter "HELP" anytime to read instructions again

Connection established with requested client.

Hello
LEMON: Hi
How are you
END
Your session has been closed
CONNECT <LEMON>
Requested user is already chatting with someone else.

CONNECT <ZOE>
Cannot connect to yourself
LOGOFF

HTTP/1.1 200 OK
→ DS project1 |
```

5. Execution of the server program

```
Last login: Thu Mar  9 14:12:37 on ttys004
➔ ~ cd Desktop
➔ Desktop cd DS\ project1
➔ DS project1 python3 server.py
Server has been initialized!

Welcome to Instant Messaging System!!!

Listening port assigned is ('localhost', 64555)
Listening port assigned is ('localhost', 52235)
Listening port assigned is ('localhost', 63155)

GET /ONLINE/ HTTP/1.1
PUT /ONLINE/ HTTP/1.1

CONNECT <LEMON>
GET /CONNECT/ HTTP/1.1
PUT /CONNECT/ HTTP/1.1

/END_SESSION/ HTTP/1.1 PUT
/END_SESSION/ HTTP/1.1

CONNECT <TANSY>
GET /CONNECT/ HTTP/1.1
PUT /CONNECT/ HTTP/1.1

CONNECT <LEMON>
GET /CONNECT/ HTTP/1.1
PUT /CONNECT/ HTTP/1.1

/LOGOFF/ HTTP/1.1 PUT
/LOGOFF/ HTTP/1.1
|
```