CSC 138 Project: Python Chat Room

Name	Email	Role	Section
Daniela Perez	danielaperez3@csus.edu	Programmer + Documentation	04
Terry Weatherman	tweatherman@csus.edu	Programmer	04
Drew Izzo	drewizzo@csus.edu	Lead programmer	04

Methodology

server.py:
- Binds server to host and user using the provided port and starts listening on the provided port.
- Uses recv to get messages from client.

JOIN:
- Error Checking: If the username is already being used, the user cannot be admitted. This is done by comparing the username with existing usernames in the users array.
- If there are more than 10 users active, it sends the user a message that the chat is full.

```
[danielaperez3@ecs-pa-coding3 project]$ python3 server.py 8001
Server is listening on 8001
Connected with (('130.86.188.35', 44950))
dani joined the chat!
```

```
[[danielaperez3@ecs-pa-coding3 project]$ python3 client.py ecs-coding3.csus.edu 8001
Enter JOIN followed by your username: JOIN username
JOIN dani
[SERVER: dani joined the chat!
```

```
[JOIN jocelyn
Sorry the chat is full, please try later
```

BCST:
- Creates index to match broadcaster to username array.
- The message is displayed to all users, accompanied by the username of the broadcaster.

```
[BCST hello, everyone!
dani: BCST hello, everyone!
```

```
SERVER: drew joined the chat!
dani: BCST hello, everyone!
```

MESG:
- Users can privately message other users.
- Error checking: If the username isn't in the array, an error message is sent to the user.

```
dani: BCST hello, everyone!
[MESG drew hi, drew
```

```
SERVER: drew joined the chat!
dani: BCST hello, everyone!
dani: MESG drew hi, drew
```

LIST:
- Lists all active users by displaying the array containing usernames.

```
[LIST
Online: dani, drew
```

QUIT:
- Removes the user from the array.
- Closes their connection and program is exited.

```
[QUIT
[danielaperez3@ecs-pa-coding3 project]$
```

```
dani: MESG drew hi, drew
dani has left the chat
```

client.py:
- Connects to the server using given host and port.
- Uses recv to get messages from chat server.
- Uses threads for incoming and outgoing messages.