

server.py and client.py uses python3

OUT has an error where it is still listening for messages but the user does still exits out of the server and database .

I used lists of dictionaries for my data saved in server.py I contemplated using dictionary of dictionary since it is faster but found the indentation harder.

My data:

```
Users = [
    {
        u_id:
        username:
        password:
        ip_address:
        port_number:
        time:
    }
]
blocked_users = [
    {
        username:
        time:
        attempts:
    }
]
rooms = [
    {
        r_id:
        users: []
        messages:[
            {
                m_id:
                user:
                time:
                message:
            }
        ]
    }
]
server_messages = [
    {
        m_id:
        username:
        time:
        message:
    }
]
```

When sending data between user and server, I decided to use pickle instead of json. Looking back I think json would've been the better choice since I can send it in a readable format. I knew that pickle can send more types of variables but didn't make use of that

How server works is that it waits for data, interprets it and uses string concatenating to receive the data and separate the commands from the messages and username. If I used json here I could've made it better and directly get the info.

Client just attempts to connect to server, once server is connected it sends a command and waits for ack. Once ack is received it prints out something.

UDP similarly listens for file and if received opens mp4 file sends it through and the targetUser downloads it in a directory called their name.