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| Client – Server Challenge |
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**Challenge Title: Client Server Challenge**

**Challenge Overview:** Define and implement a UDP protocol and implement the required messages to manage the user registration process between a client and a server.

The challenge should be implemented in Python.

We ask you to provide:

1. The definition of the encoding scheme used for representing the data payload and an explanation of your decision.
2. Python code with fully working implementation of the protocol and the required messages between a client and server.

Note: you are free to use any Python library you might find helpful

**Requirements:**

Next, you can see the messages you are required to implement and all user related information:

**User information**

User information should contain the following fields:

* Name
* Surname
* Email
* Phone number

**Client**

A client should be able to send the following messages:

* Register user:
* Contains the user information to register a new user on the server side.
* Delete user
* Contains the user information to delete a given user on the server side.
* Get users
* Requests the server to reply with a list of registered users.

A client should be able to read and process the following message:

* Users
* Contains a list of registered users.
* Once the message is properly decoded, the list of registered users should be printed on terminal in JSON format.

**Server**

For the sake of simplicity, the server will store users in-memory using the most convenient data structure of your choice.

A server should be able to read and process the following messages:

* Register user
* Check whether the user exist or not.
* If it does exist, fields must be updated with the new values.
* If it doesn’t exist, a new user must be registered.
* Delete user
* Check whether the user exist or not.
* If it does exist, the user must be deleted.
* Get users
* Request a list of registered users.
* Once the message is properly decoded, a message containing the list of users must be sent back to the client.

A server should be able to send the following message:

* Users
* Contains a list of registered users.

**Submission:**

1. Commit your code to https://github.com/
2. Include a README.md file with instructions on how to run the automation script and any additional information.

**Note:** Make sure to provide any necessary setup instructions, including the installation of dependencies, in your README file.