

README FOR ASSIGNMENT-1

DETAILS:

The Assignment involves two code files:

- mqtt_client.py : Contains the implementation of client and it's methods
- mqtt_server.py: Contains the implementation of server and it's methods

PROCEDURE TO RUN:

First the server is created followed by the clients.

The server can be run as:

python3 mqtt_server.py

(The server should be always on during the whole duration of application.)

The client can be run as:

python3 mqtt_client.py

Each of the above invocation will create a client. Each client will require to login or register and the utility menu is as follows:

1) Register

2) Login

Enter Your Choice(1/2):

Depending on the choice, the login/register of user takes place (with authentication and error check)

Once login/register is done, a utility menu appears on the client screen with the following options:

1) Join a Group

2) Leave a Group

3) Send Message To User

4)Send Message To Group

5)Go offline

Enter Your Choice(1/2/3):

Depending on the option, the user gets to send/recv messages to group/ person and join/leave a group.

A short description of each choice:

- 1) Join a group: The User will be asked for the group-id of the group he wants to join.
- 2) Leave a group: The User will be asked to provide the group-id of the group he wants to leave.
- 3) Send Message to User: The User will be asked for the other person's id for sending the msg
- 4) Send Message to Group: The User gives the group-id (pre-check of membership is done)
- 5) Go offline: This is required for offline message handling scenario

The correctness checks for each of these options have been implemented for robustness.