

Implementation of Messenger Application using MQTT

In this assignment, you will be creating a messenger application using MQTT. This messenger application will be similar to the messaging applications like WhatsApp, Line, etc, but using the publish subscribe model of communication using MQTT.

You can design the application the way you want. You are welcome to use any innovative ideas into the application. You can choose any language to code and any kind of interface to show your running application. You can introduce any new information/idea that is required in your application. Your application should support the following features.

1. User registration on the application.
2. One on one chat between two users.
3. Group chat where the participants can join and leave at any time. Only the current participants of the group will be able to receive the message sent by any of the current participants of the group.

Expected in the evaluation:

1. Your application should be demonstrated with at least 10 users. One terminal for each of the users.
2. Your application should be demonstrated with at least 2 groups with at least 3 members in each group. There should be one user part of both the groups
3. Should demonstrate a new user joins the group and able to be part of the group and start receiving the message
4. Should demonstrate an user leaves the group and stops getting the messages in the group.

NOTE:

1. You need to submit your code in google classroom in a zip file. The evaluation will be done using the code submitted in google classroom only.
2. The assignment can be done jointly (maximum 2 students). If you are doing jointly, you need to add individual contributions as part of the submission.