SAMSUNG R&D DELHI

INTERNSHIP WEEKLY REPORT
WEEK THREE

10 June, 2022

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Introduction

This week was also focused on MQTT only. Last week I was learning basic things about MQTT and programming normal things like subscribe and publish, etc. But this week was more about how to do some tasks. First task was to get data from a csv file and separate it according to number and alphabet and then publish it to two different servers. The second task was to have the list of all clients connected to the server. The third task was to send files, earlier we were sending text only. I also attended seminars one about UPMS, it was about how projects and teams were managed at Samsung. The next day I attended a seminar on Machine Learning & Deep Learning. This week was even more interesting than the previous week.

TASKS

- In the first task I had to read the csv file line by line and check if it was only a number or otherwise a string.
- Since each line was read as a string first I made a function to separate them.
- Then I connected to a different server, one to localhost and other online and then I published numbers in one and string on the other. [GitHub]
- In the second task maybe due to some privacy reason no client can know about who else is part of a given server.

- So to do [this task](#) first every client has to announce their connecting and disconnecting to the server.
- Next I had [a client](#) which subscribed to the topic where all the clients published their arrival and departure.
- Also I maintained a hash table where I maintained the list of all the clients with their username.
- I also attended two seminars, one about UPMS and the other on Machine Learning & Deep Learning.
- The [third task](#) was to send files with MQTT.
- Earlier we were just sending just text messages with this service. Now to send files like images , videos etc first we change data into open and read data and change into byte form and then publish.
- Although we were able to send files through this it is not a good service for that. MQTT was made for light messages between IOT devices and there it is thriving.

Problems

- I thought the second task would have been a topic which managed all the clients. And I tried finding that. But due to privacy reasons there was no such thing. Although there was a topic which stores the total number of clients. But this was just the number.

Conclusion

I think this week was productive. I was able to complete three tasks. MQTT is rapidly gaining popularity in the IOT community. And I was happy to learn and program things.