

Publish Data to IBM cloud

Date	30 October 2022
Team ID	PNT2022TMID09351
Project Name	Signs with Smart Connectivity for Better RoadSafety

Python Code

```
publish.py - C:\Users\surya\Desktop\SURVAANT RPOJECT\Python Script\publish.py (3.11.0)
File Edit Format Run Options Window Help

import paho.mqtt.client as paho
import time
import random

def on_publish(client,userdata,mid):
    print("Publish the data")

client=paho.Client()
client.on_publish=on_publish
client.connect('broker.mqttdashboard.com',1883)
client.loop_start()
while True:
    temp=random.randint(1,30)
    (re,mid)=client.publish('iottopic',str(temp),qos=1)
    print(temp)
    time.sleep(1)
```

```
subscribe.py - C:\Users\surya\Desktop\SURVAANT RPOJECT\Python Script\subscribe.py (3.11.0)
File Edit Format Run Options Window Help

import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,grated_qos):
    print("subscriber:"+str(mid)+str(grated_qos))

def on_message(client,userdata,msg):
    print(msg.topic+" "+str(msg.qos)+" "+str(msg.payload))

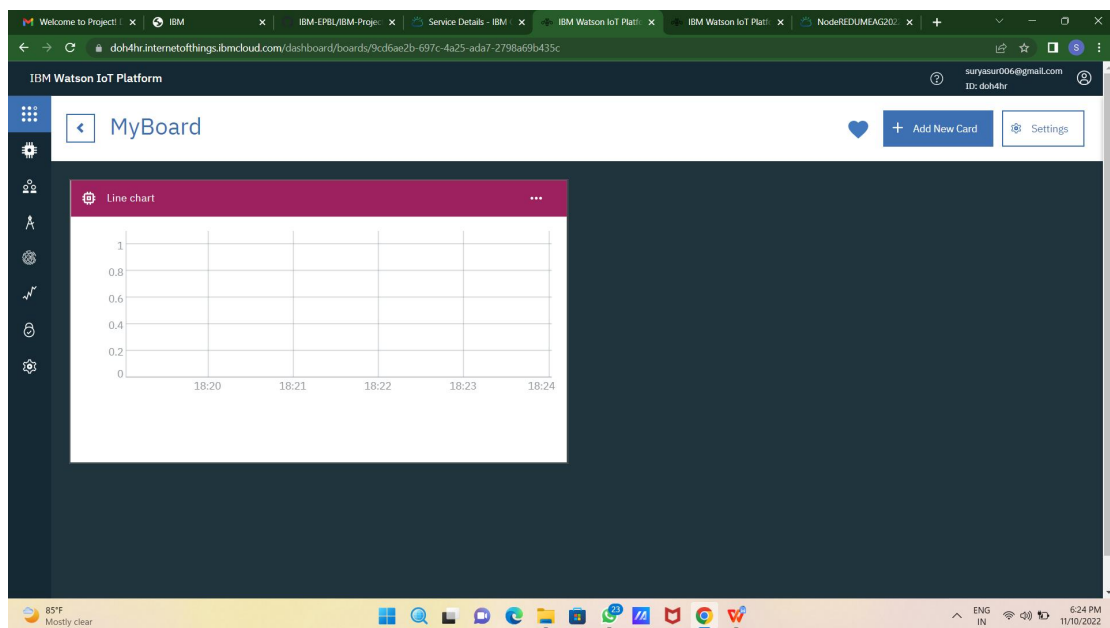
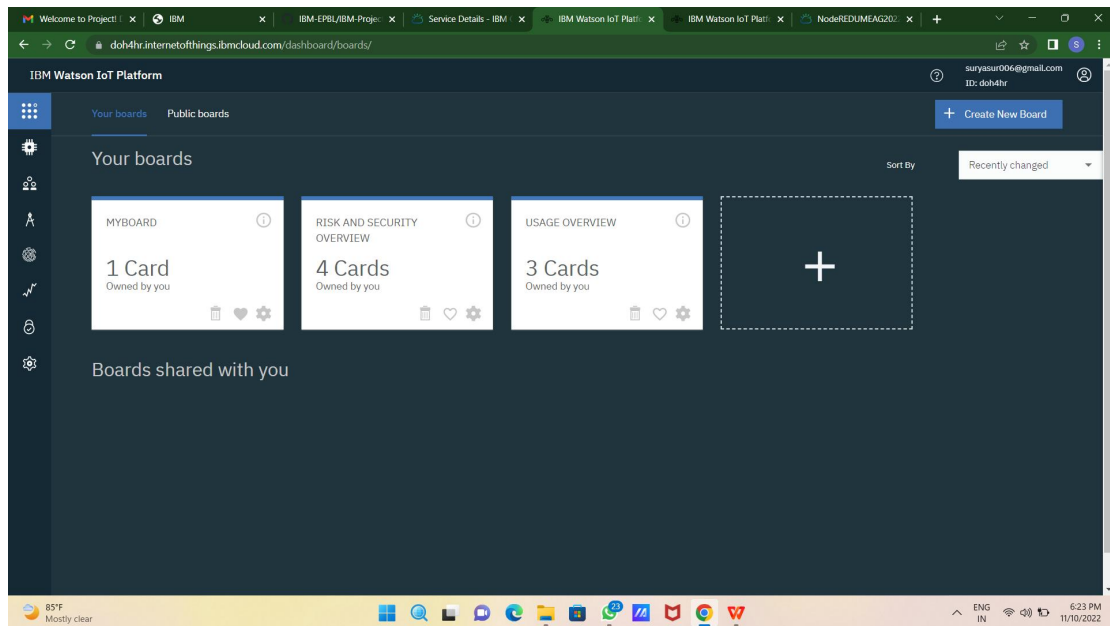
client=paho.Client()
client.on_subscribe=on_subscribe
client.on_message=on_message
client.connect('broker.mqttdashboard.com',1883)
client.subscribe('iottopic',qos=1)
client.loop_forever()
```

```
Update ibm_code.py - C:\Users\surya\Desktop\SURYA\NT RPROJECT\Python Script\Update ibm_code.py (3.11.0)
File Edit Format Run Options Window Help
#IBM Watson IoT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import wiotp.sdk.application
import time
import random
myConfig = {
    "identity": {
        "orgId": "doh4hr",
        "typeId": "NodeMCU",
        "deviceId": "12345" },
    "auth": { "token": "123456789" }
}
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

```
"IDLE Shell 3.11.0"
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\surya\Desktop\SURYA\NT RPROJECT\Python Script\publish.py ===
20
Publish the data
8
Publish the data
19
Publish the data
14
Publish the data
16
Publish the data
11
Publish the data
2
Publish the data
4
Publish the data
30
Publish the data
28
Publish the data
18
8
|
```



#IBM Watson IOT Platform

```
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```

```
import wiotp.sdk.device
```

```
import wiotp.sdk.application
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```
import time
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import random
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```