

Develop a python script Publish Data to the IBM Cloud

Date	12 September 2022
Team ID	PNT2022TMID13499
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

Safety Gadget for child safety Monitoring & Notification :

```

publish.py - E:/IBM/Others/Develop a python script/publish.py (3.6.5)
File Edit Format Run Options Window Help

#Through python coding we are going to access the subscriber
import paho.mqtt.client as paho
import time
import random

def on_publish(client, usrdata, 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(10)
  
```

```

Python 3.6.5 Shell
File Edit Shell Debug Options Window Help
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MS
C v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more informati
n.
>>>
===== RESTART: E:/IBM/Others/Develop a python script/
publish.py =====
7
Publish the data
19
Publish the data
10
Publish the data
  
```

```

subscribe.py - E:/IBM/Others/Develop a python script/subscribe.py (3.6.5)
File Edit Format Run Options Window Help

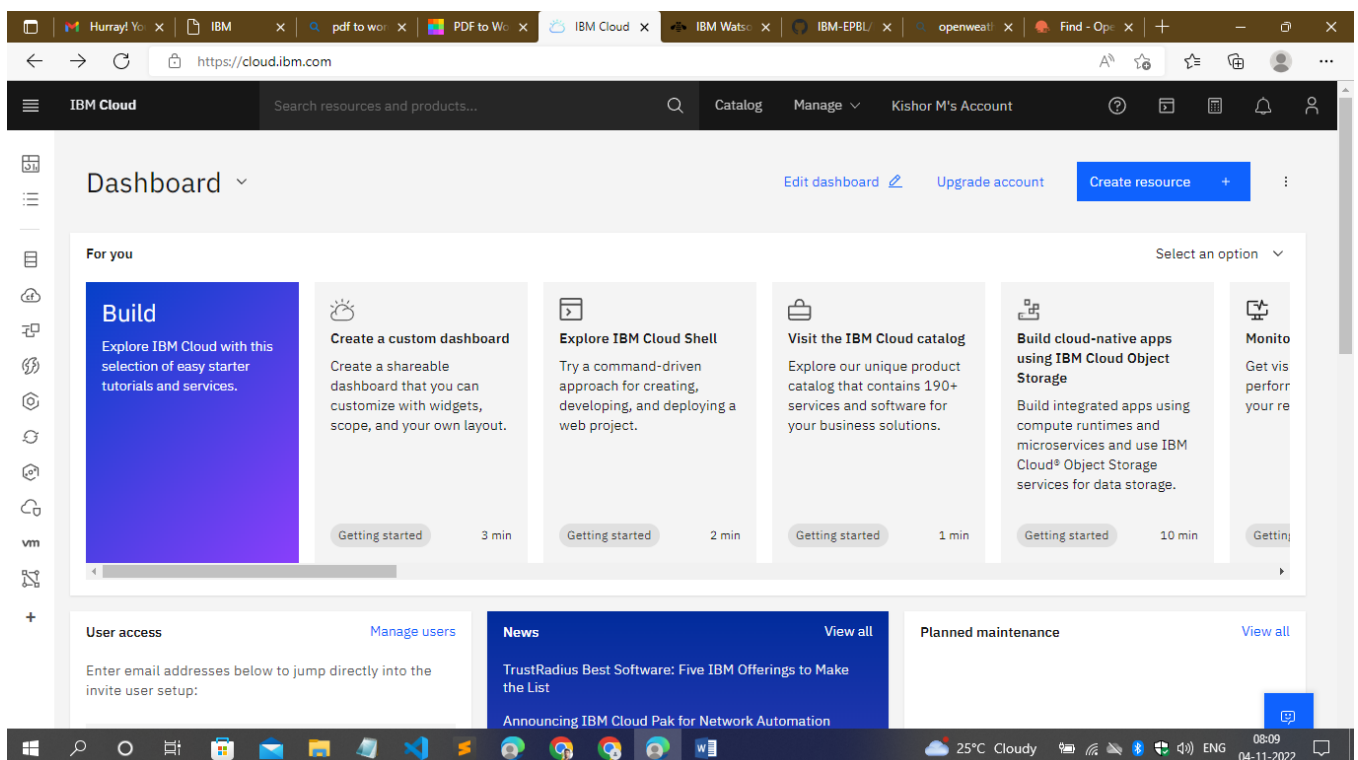
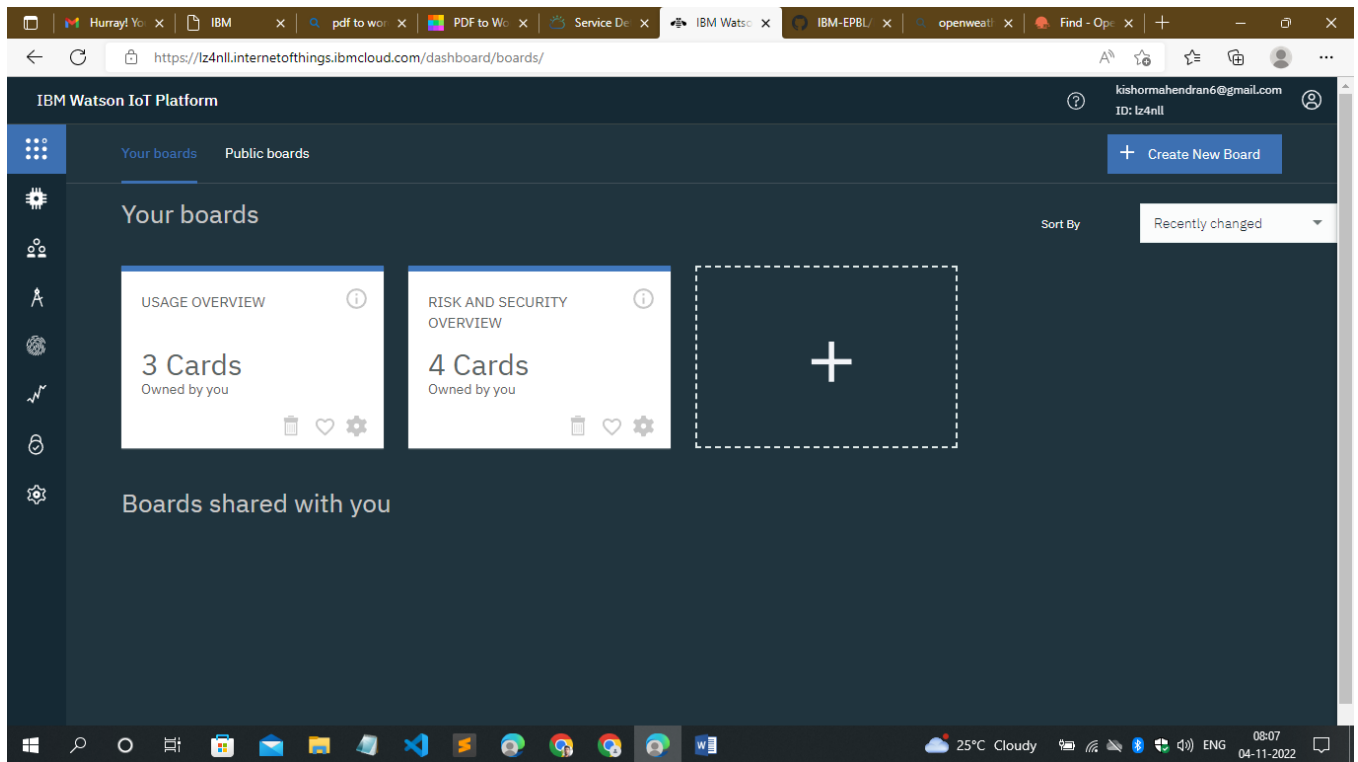
import paho.mqtt.client as paho
def on_subscribe(client,userdata,mid,grated_qos):
    print("subscriber:" + str(mid)+str(granted_qos))

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()
  
```

```

Python 3.6.5 Shell
File Edit Shell Debug Options Window Help
Publish the data
13
Publish the data
3
Publish the data
25
Publish the data
19
Publish the data
2
Publish the data
7
Publish the data
9
Publish the data
  
```



Program :

#IBM Watson IOT

Platform #pip install

wiotp-sdk import

wiotp.sdk.device import

time import random

```

myConfig = {
"identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345" },
    "auth": { "token": "12345678" }
}
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()

```