PROJECT DEVELOPMENT

PHASE Delivery of Sprint -1

Date	12 November 2022
Team ID	PNT2022TMID22125
Project Name	Gas Leakage Monitoring And Alerting System

Sprint-1

Python code:

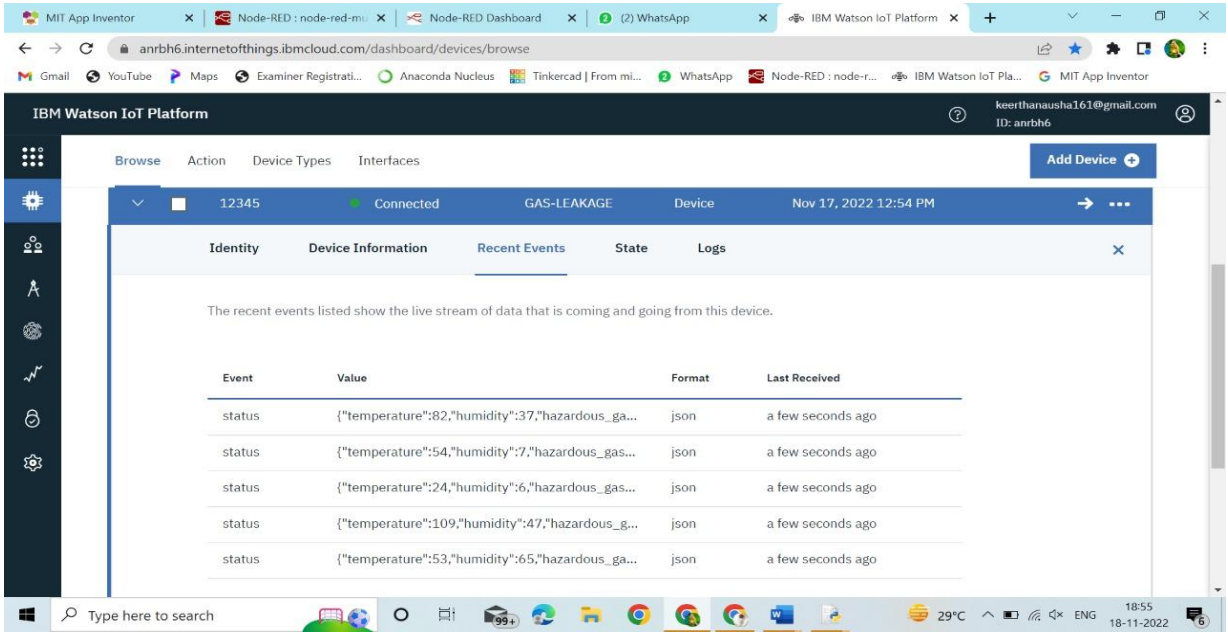
```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "anrbh6",
        "typeId": "GAS-LEAKAGE",
        "deviceId":"12345"
    },
    "auth": {
        "token": "WL!rm4FNDOm+1UTvzL"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
```

```
    m=cmd.data['command']
    if(a=="alarm ON"):
        print("Alarm is turned ON")
    elif(a=="alarm OFF"):
        print("Alarm is turned OFF")
    print(" ")

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



while True:
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    haz_gas=random.randint(0,100)
    myData={'temperature':temp, 'humidity':hum,'hazardous_gas':haz_gas}
    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()
```

IBM WASTON OUTPUT:

PYTHON SHELL :

```
File Edit Shell Debug Options Window Help
Python 3.9.8 (tags/v3.9.8:bb3fdcf, Nov  5 2021, 20:48:33) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Nandakumar V\Documents\python\ibm_iot.py ==========
2022-11-18 19:29:04,811  wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:anrbh6:GAS-LEAKAGE:12345
Published data Successfully: %s {'temperature': -6, 'humidity': 32, 'hazardous_gas': 5}
Published data Successfully: %s {'temperature': 82, 'humidity': 12, 'hazardous_gas': 55}
Published data Successfully: %s {'temperature': 31, 'humidity': 95, 'hazardous_gas': 7}
Published data Successfully: %s {'temperature': 12, 'humidity': 90, 'hazardous_gas': 61}
Published data Successfully: %s {'temperature': 61, 'humidity': 12, 'hazardous_gas': 83}
Published data Successfully: %s {'temperature': 89, 'humidity': 83, 'hazardous_gas': 25}
Published data Successfully: %s {'temperature': -8, 'humidity': 28, 'hazardous_gas': 26}
Published data Successfully: %s {'temperature': 42, 'humidity': 23, 'hazardous_gas': 87}
Published data Successfully: %s {'temperature': 114, 'humidity': 54, 'hazardous_gas': 80}
```



IBM WASTON GRAPH: