Project Development Phase

SPRINT 2

Date	15 November 2022
Team ID	PNT2022TMID36194
Project Name	Gas leakage monitoring and alerting system

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = {
   "identity": {
      "orgId": "9q9raj",
      "typeId": "manikandan",
      "deviceId":"6009"
   },
   "auth": {
      "token": " a-9q9raj-alnlrmedqm "
   }
}

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()

import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "9q9raj",
        "typeId": "manikandan",
        "deviceId":"6009"
    },
    "auth": {
        "token": "a-9q9raj-alnlrmedqm"
    }
}

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:
    Gas_Value = random.randint(10,100)

    myData={'Gas Level':Gas_Value}
    if Gas_Value > 80:
      Gas_Value = "Warning"
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print(myData)
```

```
        print(Gas_Value)

        client.commandCallback = myCommandCallback

        time.sleep(2)
client.disconnect()
```

OUTPUT

Demo.py - C:\Users\ELCOT\Desktop\Demo.py (3.7.4)

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```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "9q9raj",
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    temp=random.randint(-20,125)
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    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()
```

Python 3.7.4 Shell

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```
Published data Successfully: %s {'temperature': 94, 'humidity': 99}
Published data Successfully: %s {'temperature': 107, 'humidity': 20}
Published data Successfully: %s {'temperature': -7, 'humidity': 0}
Published data Successfully: %s {'temperature': 112, 'humidity': 45}
Published data Successfully: %s {'temperature': 15, 'humidity': 17}
Published data Successfully: %s {'temperature': 97, 'humidity': 69}
Published data Successfully: %s {'temperature': 116, 'humidity': 68}
Published data Successfully: %s {'temperature': 90, 'humidity': 10}
Published data Successfully: %s {'temperature': 82, 'humidity': 35}
Published data Successfully: %s {'temperature': -16, 'humidity': 79}
Published data Successfully: %s {'temperature': 85, 'humidity': 26}
Published data Successfully: %s {'temperature': -10, 'humidity': 29}
Published data Successfully: %s {'temperature': 50, 'humidity': 17}
Published data Successfully: %s {'temperature': 21, 'humidity': 59}
Published data Successfully: %s {'temperature': 103, 'humidity': 91}
Published data Successfully: %s {'temperature': 22, 'humidity': 17}
Published data Successfully: %s {'temperature': 46, 'humidity': 28}
Published data Successfully: %s {'temperature': 111, 'humidity': 14}
Published data Successfully: %s {'temperature': 93, 'humidity': 74}
Published data Successfully: %s {'temperature': 112, 'humidity': 80}
Published data Successfully: %s {'temperature': -5, 'humidity': 75}
Published data Successfully: %s {'temperature': -17, 'humidity': 91}
Published data Successfully: %s {'temperature': 18, 'humidity': 68}
Published data Successfully: %s {'temperature': -5, 'humidity': 23}
Published data Successfully: %s {'temperature': 68, 'humidity': 9}
Published data Successfully: %s {'temperature': 12, 'humidity': 79}
Published data Successfully: %s {'temperature': 21, 'humidity': 27}
Published data Successfully: %s {'temperature': 71, 'humidity': 67}
Published data Successfully: %s {'temperature': 121, 'humidity': 93}
Published data Successfully: %s {'temperature': 41, 'humidity': 67}
Published data Successfully: %s {'temperature': 2, 'humidity': 53}
Published data Successfully: %s {'temperature': 34, 'humidity': 37}
Published data Successfully: %s {'temperature': -1, 'humidity': 72}
Published data Successfully: %s {'temperature': 80, 'humidity': 2}
Published data Successfully: %s {'temperature': 74, 'humidity': 34}
Published data Successfully: %s {'temperature': 7, 'humidity': 27}
Published data Successfully: %s {'temperature': 112, 'humidity': 72}
Published data Successfully: %s {'temperature': -17, 'humidity': 78}
Published data Successfully: %s {'temperature': -4, 'humidity': 72}
```

IBM WATSON IOT OUTPUT