

# Project development phase:

## Sprint 1:

Team ID	PNT2022TMID11545
Date	02/11/2022
Team Members	Vishnunathan R Chokkar.A Sabari Kumar. G.J Shandosh Balaji. G

## Python Script:

```
import wiotp.sdk.device
from time import*
from random import*
myConfig = {
    "identity": {
        "orgId": "dg4pct",
        "typeId": "ESP32",
        "deviceId": "281201"
    },
    "auth": {
        "token": "28122001"
    }
}
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:
    tur = randint(20, 300)
    ph = randint(1, 14)
```

```

    temp = randint(0, 100)
    myData = {'Temperature': temp, 'Turbidity': tur,
'pHvalue': ph}
    client.publishEvent(eventId="status",
msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    sleep(6)
client.disconnect

```

The screenshot shows the PyCharm IDE with a Python script named `python.py` and its execution output in the Run console.

**Source File: IBM python.py**

```

1  import wiotp.sdk.device
2  from time import*
3  from random import*
4  myConfig = {
5      "identity": {
6          "orgId": "dg4pct",
7          "typeId": "ESP32",
8          "deviceId": "281201"
9      },
10     "auth": {
11         "token": "28122001"
12     }
13 }
14 def myCommandCallback(cmd):
15     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])

```

**Run: IBM python.py**

```

C:\Users\Admin\PycharmProjects\pythonProject\venv\Scripts\python.exe "C:/Users/Admin/PycharmProjects/pythonProject/IBM python.py"
Published data Successfully: %s {'Temperature': 82, 'Turbidity': 127, 'pHvalue': 14}
2022-11-18 11:45:50,332 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:dg4pct:ESP32:281201
Published data Successfully: %s {'Temperature': 49, 'Turbidity': 186, 'pHvalue': 9}
Published data Successfully: %s {'Temperature': 81, 'Turbidity': 69, 'pHvalue': 10}
Published data Successfully: %s {'Temperature': 96, 'Turbidity': 26, 'pHvalue': 10}
Published data Successfully: %s {'Temperature': 75, 'Turbidity': 20, 'pHvalue': 2}
Published data Successfully: %s {'Temperature': 63, 'Turbidity': 243, 'pHvalue': 12}
Published data Successfully: %s {'Temperature': 38, 'Turbidity': 74, 'pHvalue': 12}
Published data Successfully: %s {'Temperature': 52, 'Turbidity': 86, 'pHvalue': 9}

```

The Run console shows the script executing successfully, publishing data to the IBM IoT Platform. The output includes the command `Published data Successfully: %s` followed by a JSON object containing Temperature, Turbidity, and pHvalue. The console also shows a log message: `2022-11-18 11:45:50,332 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:dg4pct:ESP32:281201`.