

SPRINT 1

Date	06 November 2022
Team ID	PNT2022TMID22120
Project Name	Project-Smart Farmer-Iot Enabled Smart Farming Application

SPRINT 1 – PYTHON CODE TO GET CONNECTED WITH IBM IOT WATSON PLATFORM

The screenshot displays the Spyder Python IDE interface. The main editor window shows a Python script named `temp.py` with the following code:

```
7 """
8
9 #IBM Watson IOT Platform
10 #pip install wiotp-sdk
11 import wiotp.sdk.device
12 import time
13 import random
14 myConfig = {
15     "identity": {
16         "orgId": "a4peyu",
17         "typeId": "Nodered_123",
18         "deviceId": "56789"
19     },
20     "auth": {
21         "token": "_QisKfKGI4WapUP1CP"
22     }
23 }
24 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
25 client.connect()
26
27 def myCommandCallback(cmd):
28     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
29     m=cmd.data['command']
30     if (m=="motoron"):
31         print ("Motor is switched on")
32     elif (m=="motoroff"):
33         print("Motor is switched OFF")
34     print(" ")
35
36 while True:
37     temp=random.randint(-20,125)
38     hum=random.randint(0,100)
39     myData={'temperature':temp, 'humidity':hum}
40     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPu
41     print("Published data Successfully: %s", myData)
42     client.commandCallback = myCommandCallback
43     time.sleep(2)
44 client.disconnect()
45
```

The right-hand pane shows the 'Console' tab with the following output:

```
2022-11-19 00:46:43,079 wiotp.sdk.device.client.DeviceClient INFO Connected
successfully: d:a4peyu:Nodered_123:56789
Published data Successfully: %s {'temperature': 51, 'humidity': 5}
Published data Successfully: %s {'temperature': 77, 'humidity': 44}
Published data Successfully: %s {'temperature': 84, 'humidity': 77}
Published data Successfully: %s {'temperature': 65, 'humidity': 7}
Published data Successfully: %s {'temperature': 68, 'humidity': 38}
```

The bottom status bar indicates the Python interpreter is ready, the environment is `base (Python 3.9.12)`, and the system clock shows 12:46 AM on 19-11-2022.

IBM Watson IoT Platform

Browse

Action

Device Types

Interfaces

Device Simulator

101

Search by Device ID

Device ID

Status

Device Type

Class ID

Date Added

Descriptive Location

56789

Connected

Nodered_123

Device

Nov 18, 2022 9:32 PM

Identity

Device Information

Recent Events

State

Logs

Device ID

56789

Device Type

Nodered_123

Date Added

Nov 18, 2022 9:32 PM

Added By

sowmiyamanickam248@gmail.com

Connection Status

Connected

Connection Time: Nov 19, 2022 12:22 AM

Client Address: 115.247.148.38 SecureToken

Items per page 50

1-1 of 1 item

1 of 1 page

1

1 Simulation running

Type here to search

25°C Mostly clear

12:39 AM 19-11-2022