

## PROJECT DEVELOPMENT-DELIVERY OF SPRINT PHASE 1

DATE	18 NOVEMBER 2022
TEAM ID	PNT2022TMID26610
PROJECT NAME	Name Project – Smart Farmer-IoT Enabled smart Farming Application

### Python code:

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "osr5tj",
        "typeId": "EPS07_Controller",
        "deviceId": "0707"
    },
    "auth": {
        "token": "@DOm9&k8Fehe_ntg5n"
    }
}
client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None)
client.connect()

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

```
m=cd.data['command']
if(m=="motoron"):
    print("Motor is switched on")
elif(m=="motoroff"):
    print("Motor is switched OFF")
print(" ")
while True:
    soil=random.randint(0,100)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'soil_moisture':soil, 'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,onPublish
=None)
    print("Published data Successfully:%s", myData)
    time.sleep(2)
    client.commandCallback=myCommandCallback
client.disconnect()
```

```

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import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "osztj",
        "typeId": "EP507_Controller",
        "deviceId": "0707"
    },
    "auth": {
        "token": "9D0m9&k8Fehe_ntg5n"
    }
}
client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None)
client.connet()

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if(m=="motoron"):
        print("Motor is switched on")
    elif(m=="motortoff"):
        print("Motor is switched OFF")
    print(" ")
while True:
    soil=random.randint(0,100)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'soil_moisture':soil, 'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,onPublish =None)
    print("Published data Successfully:%s" , myData)
    time.sleep(2)
    client.commandCallback=myCommandCallback
client.disconnect()

```

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= RESTART: C:\Users\B.SOMESHWARAN\Desktop\IBM\Project Development Phase\sprint -1\api python mit app.py

2022-11-13 10:02:58,056 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: di:17lsro:MyDeviceType:12345

```

Published data Successfully: %s ('temperature': 122, 'humidity': 88, 'soilmoisture': 11, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 1
014, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': -17, 'humidity': 4, 'soilmoisture': 97, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 29, 'humidity': 36, 'soilmoisture': 96, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 81, 'humidity': 68, 'soilmoisture': 90, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 10, 'humidity': 4, 'soilmoisture': 3, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 1014
, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 32, 'humidity': 53, 'soilmoisture': 35, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': -17, 'humidity': 99, 'soilmoisture': 81, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 1
014, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 116, 'humidity': 58, 'soilmoisture': 52, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 1
014, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 21, 'humidity': 4, 'soilmoisture': 77, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 101
4, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')

```

= RESTART: C:\Users\B.SOMESHWARAN\Desktop\IBM\Project Development Phase\sprint -1\api python mit app.py

2022-11-13 10:03:19,663 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: di:17lsro:MyDeviceType:12345

```

Published data Successfully: %s ('temperature': 59, 'humidity': 13, 'soilmoisture': 36, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': -20, 'humidity': 40, 'soilmoisture': 54, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 1
014, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': -9, 'humidity': 74, 'soilmoisture': 24, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 27, 'humidity': 96, 'soilmoisture': 17, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 18, 'humidity': 76, 'soilmoisture': 96, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 28, 'humidity': 69, 'soilmoisture': 94, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 10
14, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')
Published data Successfully: %s ('temperature': 6, 'humidity': 72, 'soilmoisture': 98, 'status': 'motor off', 'api_temperature': 298.14, 'api_pressure': 101
4, 'api_humidity': 94, 'api_weather_description': 'light intensity drizzle')

```

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