

SPRINT 2

Dump the server/software to cloud

Team ID	PNT2022TMID52810
Project Name	Project - Signs with smart connectivity for Better road safety

Dump the code from Sprint 1 to cloud so it can be accessed from anywhere

PYTHON SCRIPT:

```
import wiotp.sdk.device
import time
import random
import requests,json
import datetime
myConfig = {
    "identity": {
        "orgId": "tmwrsv",
        "typeId": "Sprint",
        "deviceId":"sprint12"
    },
    "auth": {
        "token": "KxMwjzjw)BijreluFk"
    }
}
CITY = "Coimbatore"
API_KEY = "9111b726e6aa664188c5a2924f15f78e"
URL=
"https://api.openweathermap.org/data/2.5/weather?q=Coimbatore,%20IN&appid=9111b726e6aa664188c5a2924f15f78e"
response = requests.get(URL)
if response.status_code == 200:
    data = response.json()
    main = data['main']
    temp = round(main['temp'] - 273,2)
    humy = main['humidity']
    pres = main['pressure']
    rept = data['weather']
    report = rept[0]['description']
    time = datetime.datetime.now()
    morning = time.replace(hour=11, minute=59, second=0, microsecond=0)
    if time <= morning:
        me = '8.30 AM - 9.30 AM'
    else:
        me = '3.45 PM - 5.00 PM'
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
```

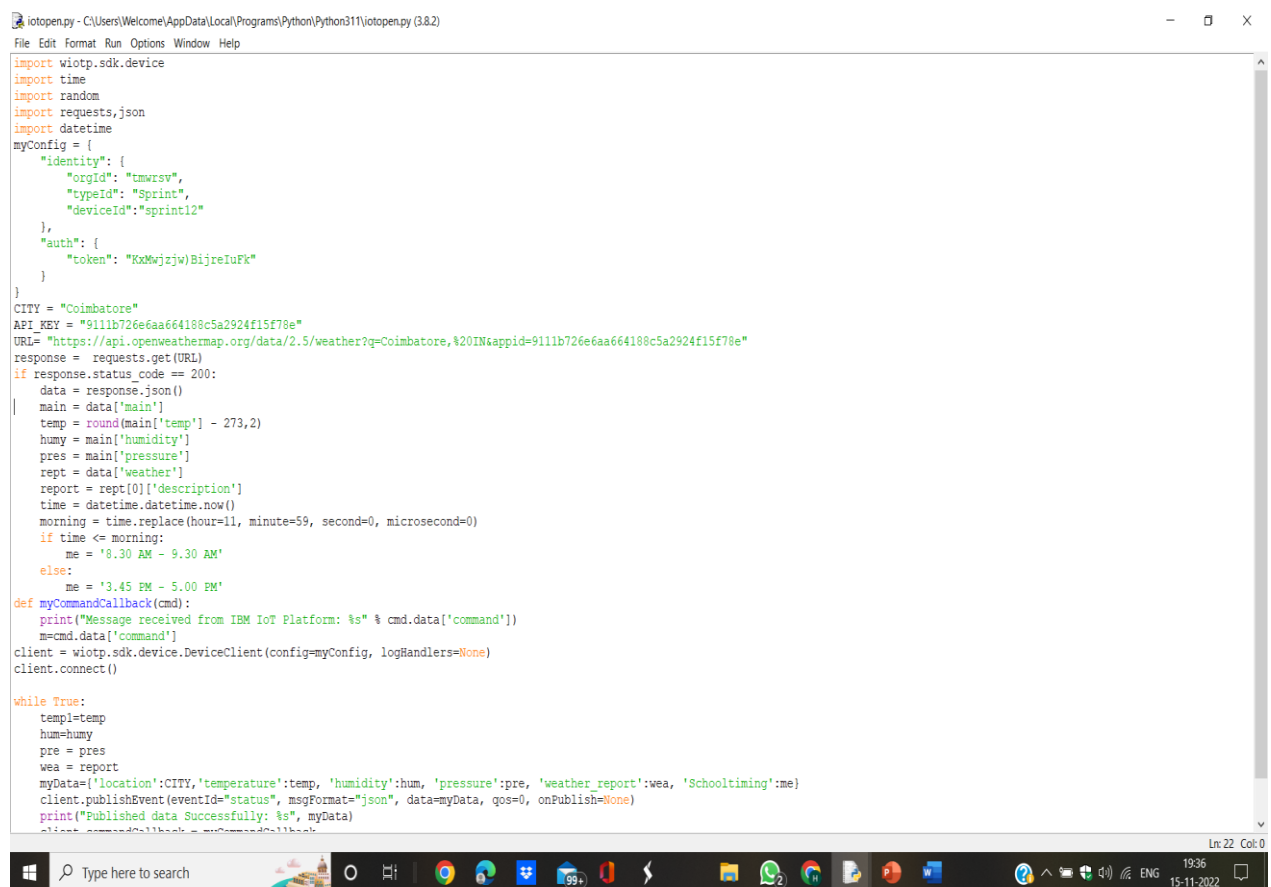
```

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

while True:
    temp1=temp
    hum=humy
    pre = pres
    wea = report
    myData={'location':CITY,'temperature':temp, 'humidity':hum, 'pressure':pre,
'weather_report':wea, 'Schooltiming':me}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
client.disconnect()

```

PYTHON IDE:



The screenshot shows a Python IDE window titled 'iotopen.py - C:\Users\Welcome\AppData\Local\Programs\Python\Python311\iotopen.py (3.8.2)'. The script defines a configuration object for the IBM Watson IoT Platform, sets the location to 'Coimbatore', and fetches weather data from an OpenWeatherMap API. It then publishes this data to the IoT Platform and prints a success message. The script also includes a command callback function and a while loop to keep the device connected and publishing data.

```

iotopen.py - C:\Users\Welcome\AppData\Local\Programs\Python\Python311\iotopen.py (3.8.2)
File Edit Format Run Options Window Help
import wiotp.sdk.device
import time
import random
import requests,json
import datetime
myConfig = {
    "identity": {
        "orgId": "tmwrsrv",
        "typeId": "Sprint",
        "deviceId": "sprint12"
    },
    "auth": {
        "token": "KxMwjzjwBijreLuFk"
    }
}
CITY = "Coimbatore"
API_KEY = "9111b726e6aa664188c5a2924f15f78e"
URL= "https://api.openweathermap.org/data/2.5/weather?q=Coimbatore,%20IN&appid=9111b726e6aa664188c5a2924f15f78e"
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    data = response.json()
    main = data['main']
    temp = round(main['temp'] - 273,2)
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    m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    temp1=temp
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    myData={'location':CITY,'temperature':temp, 'humidity':hum, 'pressure':pre, 'weather_report':wea, 'Schooltiming':me}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback

```

PYTHON IDE OUTPUT:

[illegible]

IBM WATSON IOT PLATFORM OUTPUT:

tmwrsv.internetofthings.ibmcloud.com/dashboard/devices/browse

2004201ec@cit.edu.in
ID: tmwrsv

IBM Watson IoT Platform

Browse

Action

Device Types

Interfaces

Add Device

All Devices

Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Q Search by Device ID

Device Simulator

	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
>	1110	Disconnected	iot_new	Device	Nov 12, 2022 4:15 PM	
>	sprint12	Connected	Sprint	Device	Nov 14, 2022 11:06 PM	
>	weather_tdy	Disconnected	weather	Device	Nov 13, 2022 7:09 PM	

Items per page 50

1-3 of 3 items

1 of 1 page

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1 Simulation running

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tmwrsv.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform 2004201ec@cit.edu.in ID: tmwrsv

Browse Action Device Types Interfaces

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"location":"Coimbatore","temperature":26.03,"h...	json	a few seconds ago
status	{"location":"Coimbatore","temperature":26.03,"h...	json	a few seconds ago
status	{"location":"Coimbatore","temperature":26.03,"h...	json	a few seconds ago
status	{"location":"Coimbatore","temperature":26.03,"h...	json	a few seconds ago
status	{"location":"Coimbatore","temperature":26.03,"h...	json	a few seconds ago

> ☐ weather_tdy ☒ Disconnected weather Device Nov 15 2022 11:02 PM 1 Simulation running

Items per page 50 1-3 of 3 Items

Sprint delivery pla...pdf SmartHomeAutom...pdf Show all

Type here to search

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tmwrsv.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform 2004201ec@cit.edu.in ID: tmwrsv

Browse Action Device Types Interfaces

Identity Device Information

The recent events listed show the live

Event	Value
status	{"location":"Coin
status	{"location":"Coin
status	{"location":"Coin
status	{"location":"Coin
status	{"location":"Coin

> ☐ weather_tdy ☒ Disconnected weather Device Nov 15 2022 11:02 PM 1 Simulation running

Items per page 50 1-3 of 3 Items

Sprint delivery pla...pdf SmartHomeAutom...pdf Show all

Type here to search

Event Payload

Event Name status

Time Received Nov 15, 2022 11:02 PM

```
1 {
2   "location": "Coimbatore",
3   "temperature": 26.03,
4   "humidity": 73,
5   "pressure": 1014,
6   "weather_report": "mist",
7   "Schooltiming": "3.45 PM - 5.00 PM"
8 }
```