

Assignment-3

S. Vaideeshwaran

18BLC1106

Develop a code to upload the water tank level and light intensity values to the IBM IoT platform and visualize them in the web application.

Python code:

```
import wiotp.sdk.device
import time
import random

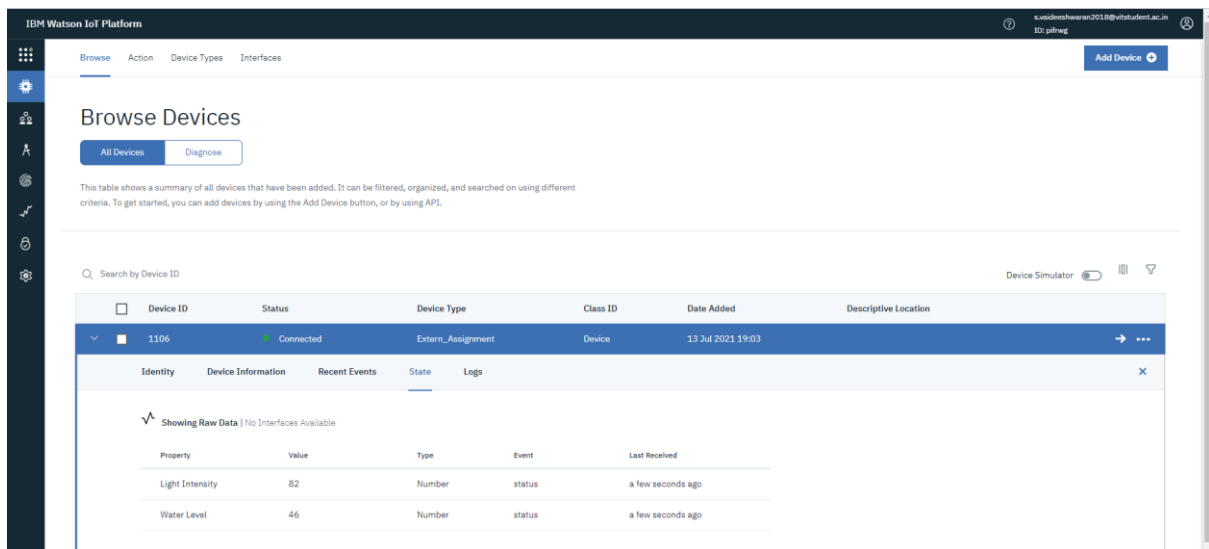
myConfig = {
    "identity": {
        "orgId": "pifrwg",
        "typeId": "Extern_Assignment",
        "deviceId": "1106"
    },
    "auth": {
        "token": "18BLC1106_Externship_Assignment"
    }
}

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

while True:
    inten=random.randint(0,125)
    level=random.randint(0,100)
    myData={'Light Intensity':inten, 'Water Level':level}
    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()
```

IBM Devices:



IBM Watson IoT Platform

Browse Devices

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.

Search by Device ID

Device Simulator

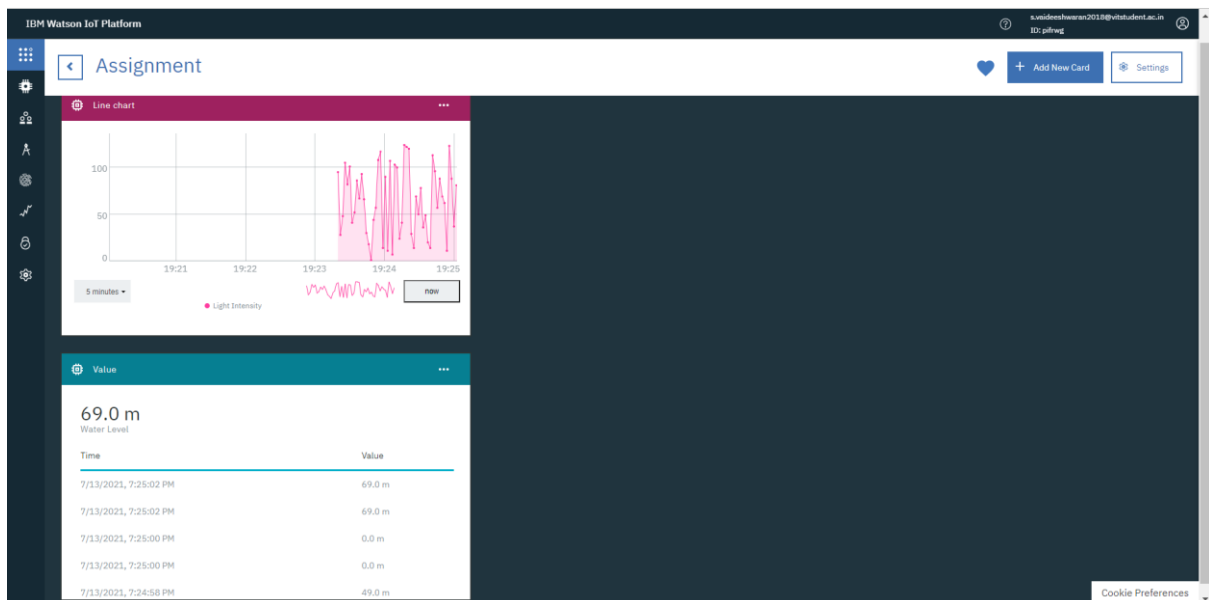
Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1106	Connected	Extern_Assignment	Device	13 Jul 2021 19:03	

Identity Device Information Recent Events State Logs

Showing Raw Data | No Interfaces Available

Property	Value	Type	Event	Last Received
Light Intensity	82	Number	status	a few seconds ago
Water Level	46	Number	status	a few seconds ago

Dashboard:



IBM Watson IoT Platform

Assignment

Add New Card Settings

Line chart

5 minutes

Light Intensity

Value

69.0 m

Water Level

Time	Value
7/13/2021, 7:25:02 PM	69.0 m
7/13/2021, 7:25:02 PM	69.0 m
7/13/2021, 7:25:00 PM	0.0 m
7/13/2021, 7:25:00 PM	0.0 m
7/13/2021, 7:24:58 PM	49.0 m

Cookie Preferences

Python Shell Output:

```
===== RESTART: C:/Python39/code/assignment_3.py =====
2021-07-13 19:16:20,644 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:pifrwg:Extern_Assignment:1106
Published data Successfully: %s {'Light Intensity': 31, 'Water Level': 30}
Published data Successfully: %s {'Light Intensity': 84, 'Water Level': 41}
Published data Successfully: %s {'Light Intensity': 78, 'Water Level': 7}
Published data Successfully: %s {'Light Intensity': 6, 'Water Level': 88}
Published data Successfully: %s {'Light Intensity': 88, 'Water Level': 4}
Published data Successfully: %s {'Light Intensity': 74, 'Water Level': 92}
Published data Successfully: %s {'Light Intensity': 28, 'Water Level': 68}
Published data Successfully: %s {'Light Intensity': 41, 'Water Level': 24}
Published data Successfully: %s {'Light Intensity': 26, 'Water Level': 96}
Published data Successfully: %s {'Light Intensity': 68, 'Water Level': 30}
Published data Successfully: %s {'Light Intensity': 63, 'Water Level': 64}
Published data Successfully: %s {'Light Intensity': 29, 'Water Level': 24}
Published data Successfully: %s {'Light Intensity': 46, 'Water Level': 79}
Published data Successfully: %s {'Light Intensity': 21, 'Water Level': 73}
Published data Successfully: %s {'Light Intensity': 60, 'Water Level': 18}
Published data Successfully: %s {'Light Intensity': 51, 'Water Level': 91}
Published data Successfully: %s {'Light Intensity': 31, 'Water Level': 79}
Published data Successfully: %s {'Light Intensity': 14, 'Water Level': 91}
Published data Successfully: %s {'Light Intensity': 77, 'Water Level': 57}
Published data Successfully: %s {'Light Intensity': 112, 'Water Level': 49}
Published data Successfully: %s {'Light Intensity': 30, 'Water Level': 66}
Published data Successfully: %s {'Light Intensity': 122, 'Water Level': 100}
Published data Successfully: %s {'Light Intensity': 23, 'Water Level': 14}
Published data Successfully: %s {'Light Intensity': 87, 'Water Level': 50}
Published data Successfully: %s {'Light Intensity': 107, 'Water Level': 73}
Published data Successfully: %s {'Light Intensity': 9, 'Water Level': 7}
Published data Successfully: %s {'Light Intensity': 35, 'Water Level': 23}
Published data Successfully: %s {'Light Intensity': 85, 'Water Level': 81}
Published data Successfully: %s {'Light Intensity': 28, 'Water Level': 87}
Published data Successfully: %s {'Light Intensity': 8, 'Water Level': 65}
Published data Successfully: %s {'Light Intensity': 66, 'Water Level': 84}
Published data Successfully: %s {'Light Intensity': 46, 'Water Level': 30}
Published data Successfully: %s {'Light Intensity': 39, 'Water Level': 57}
Published data Successfully: %s {'Light Intensity': 55, 'Water Level': 29}
Published data Successfully: %s {'Light Intensity': 29, 'Water Level': 30}
Published data Successfully: %s {'Light Intensity': 52, 'Water Level': 83}
Published data Successfully: %s {'Light Intensity': 18, 'Water Level': 74}
```

Ln: 575 Col: 4