

Date	17 nov 2022
Team ID	PNT2022TMID42666
Project Name	Smart waste management system for metropolitan cities
Story Points	15

Sprint 2

Develop the python code to find the GPS location using Latitude and Longitude (random values) and send it to Node red using IBM Watson platform and view location of bins on map

```

import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "oqmviv",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

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:
    temp=random.randint(0,100)
    weight=random.randint(0,50)
    location="south street, kk nagar, covai"
    myData={'temperature':temp, 'weight':weight, 'location':location}
    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()

```

Python output

```
root@cyber: /home/jawa/Desktop/programing/bash
File Actions Edit View Help
root@cyber: /home/jawa/Desktop/programing/bash
aa a.py a.py.save first.sh sec.sh try.sh
jawa@cyber:~/Desktop/programing/bash$ sudo su
[sudo] password for jawa:
root@cyber: /home/jawa/Desktop/programing/bash# nano a.py
root@cyber: /home/jawa/Desktop/programing/bash# python3 a.py
2022-11-17 19:27:43,338 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:oqmviv:NodeMCU:12345
Published data Successfully: %s {'temperature': 83, 'weight': 32, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 28, 'weight': 4, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 45, 'weight': 46, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 17, 'weight': 17, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 35, 'weight': 3, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 19, 'weight': 36, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 46, 'weight': 44, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 38, 'weight': 48, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 44, 'weight': 33, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 37, 'weight': 24, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 41, 'weight': 44, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 12, 'weight': 25, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 80, 'weight': 21, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 67, 'weight': 18, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 74, 'weight': 30, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 86, 'weight': 2, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 49, 'weight': 35, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 80, 'weight': 6, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 47, 'weight': 42, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 64, 'weight': 28, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 16, 'weight': 18, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 64, 'weight': 27, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 56, 'weight': 10, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 1, 'weight': 6, 'location': 'south street, kk nagar, covai'}
Published data Successfully: %s {'temperature': 49, 'weight': 27, 'location': 'south street, kk nagar, covai'}
```