Project Development Phase
Sprint - 1

Date	13-12-2022
Team ID	PNT2022TMID48642
Project Name	Signs with Smart Connectivity for Better Road Safety

```
import wiotp.sdk.device
import time
import random
import requests, json

myConfig = {
    "identity": {
        "orgId": "XXX",
        "typeId": "XXX",
        "deviceId":"XXX"
    },
    "auth": {
        "token": "XXX"
    }
}

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()
```

```
BASE_URL = "https://api.openweathermap.org/data/2.5/weather?"
CITY = "Hyderabad"
URL = BASE_URL + "q=" + "delhi" + "&appid=" +
"c4aa755540f66e8c800cbfd67df6ddcb"


while True:
    response = requests.get(URL)
    if response.status_code == 200:
        data = response.json()
        main = data['main']
        temperature = main['temp']
        humidity = main['humidity']
        pressure = main['pressure']
        report = data['visibility']
        repo=random.randint(0,5)
        if repo==1:
            prt="SLOW DOWN , SCHOOL IS NEAR"
        elif repo==3:
            prt="SLOW DOWN , HOSPITAL NEARBY"
        elif repo==5:
            prt="NEED HELP, POLICE STATION NEARBY"
        else:
             prt=""
        speed=random.randint(0,150)
        if speed>=100:
            prt3="SLOW DOWN , Speed Limit Exceeded"
        elif speed>=60 and speed<100:
```

```
            prt3="Moderate Speed"
        else:
            prt3=""
        sign=random.randint(0,5)
        if sign==1:
            prt2="Right Diversion ->"
        elif sign==3:
            prt2="Left Diversion <-"
        elif sign==5:
            prt2="U Turn"
        else:
            prt2=""
        if temperature<=50:
            prt4="Fog Ahead, Drive Slow"
        else:
            prt4="Clear Weather"


    else:
        print("Error in the HTTP request")
    myData={'Temperature':temperature, 'Message':prt, 'Sign':prt2, 'Speed':prt3,
'Visibility':prt4}
    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(5)
client.disconnect()
```