

### **PROJECT DEVELOPMENT – DELIVERY OF SPRINT – 3**

<b>Date</b>	<b>07 November 2022</b>
<b>Team ID</b>	<b>PNT2022TMID46406</b>
<b>Project Title</b>	<b>Signs With Smart Connectivity for Better RoadSafety</b>

### **SPRINT-3 (USN - 5)**

**Using GPS module, hospitals & school areas are tracked and data is gathered then it's execute in a web user interface.**

## STEP 1: Developing a python script from Open Weather API.

```
sprint3.py - C:\Users\ADMIN\Desktop\sprint3.py (3.7.0)
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import wiotp.sdk.device
import requests

# importing library files for connecting with CLOUD,sdk=software development kit import requests
# for API request import json
# converting it to json(key:values)
myConfig = {
    "identity": {
        "orgId": "uaortj",
        "typeId": "Weather_data",      # configuration wit CLOUD,finding identity
        "deviceId":"Weatherdata"
    },
    "auth": {
        "token": "weather123data"     # authenticating with cloud device
    }
}

# TRAFFIC AND FATAL SITUATION ALERT MESSAGE DISPLAYING IN WEB UI WHWN THE
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
# initialising device client with above myconfig detail
client.connect()
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" %cmd.data['command'])
    m=cmd.data['command']
    ALERT=""
# THIS IF CONDITION BLOCK IS FOR TRAFFIC AND FATAL SITUATION ALERT MESSAGE DISPLAYING IN WEB UI WHEN THE MESSAGE WAS RECEIVED FROM THE ROAD SAFETY OFFICE
    if (m=="TRAFFIC"):
        ALERT="TRAFFIC - TAKE DIVERSION"
        print("*****//TAKE DIVERSION//*****")
    elif(m=="ACCIDENT"):
        ALERT="ACCIDENT - TAKE DIVERSION"
        print("*****//TAKE DIVERSION//*****")
    else:
        ALERT="HAVE A NICE DAY!"
        print("HAVE A NICE DAY!")
    mydata={"SITUATION":ALERT,}
    client.publishEvent("123456","json",mydata)
while True:
    print("=====")
    weatherData = requests.get('https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=b23b5fad240356d80f95242dcfld6cad')
    b = weatherData.json()
```

**STEP 2:** By running the above Python Script, we can see the conditions of the current location using Open Weather API and IBM Cloud.

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    client.publishEvent("123456","json",mydata1)
while True:
    print("=====")
    weatherData = requests.get('https://api.openweathermap.org/data/2.5/weat
    b = weatherData.json()
    temp = b["main"]["temp"]
```

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"Python 3.7.0 Shell"

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```
: '30KM/HR and switch on the headlight', 'DescriptionOfWeather': 'mist', 'visibi
lity': 4000, 'RecommendationForVis ibility': 'Visibility range is ideal for vehi
cles', 'WindSpeed': 2.06)
=====
Temperature is higher than ideal value
{'temperature': 300.14, 'TemperatureRecommendation': 'Temperature is higher than
ideal value', 'humidity': 74, 'WeatherCondition': 'Mist', 'SpeedRecommendation'
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