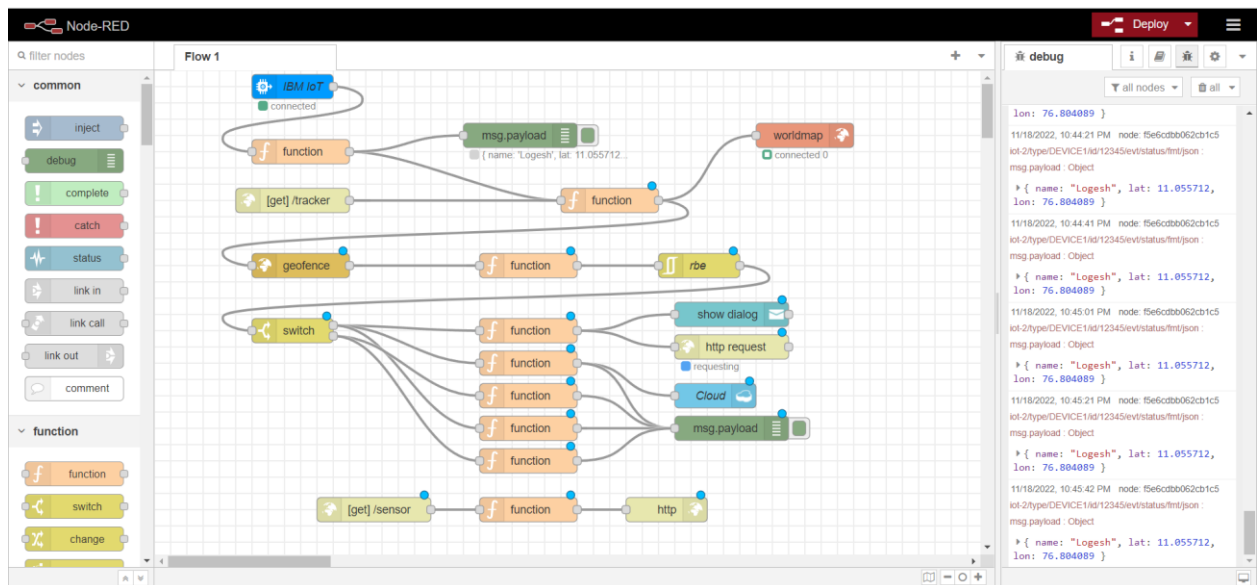


# Develop The Web Application Using Node-RED

**TEAM ID: PNT2022TMID22325**

Aim: Develop the web application using Node-RED Steps Followed:

- Opened a Node-RED project.



- Added code to get child location in python

```
*childtracker.py - D:\python\childtracker.py (3.7.0)*
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time
import ibmiotf.application
import ibmiotf.device

myConfig = {
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}

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

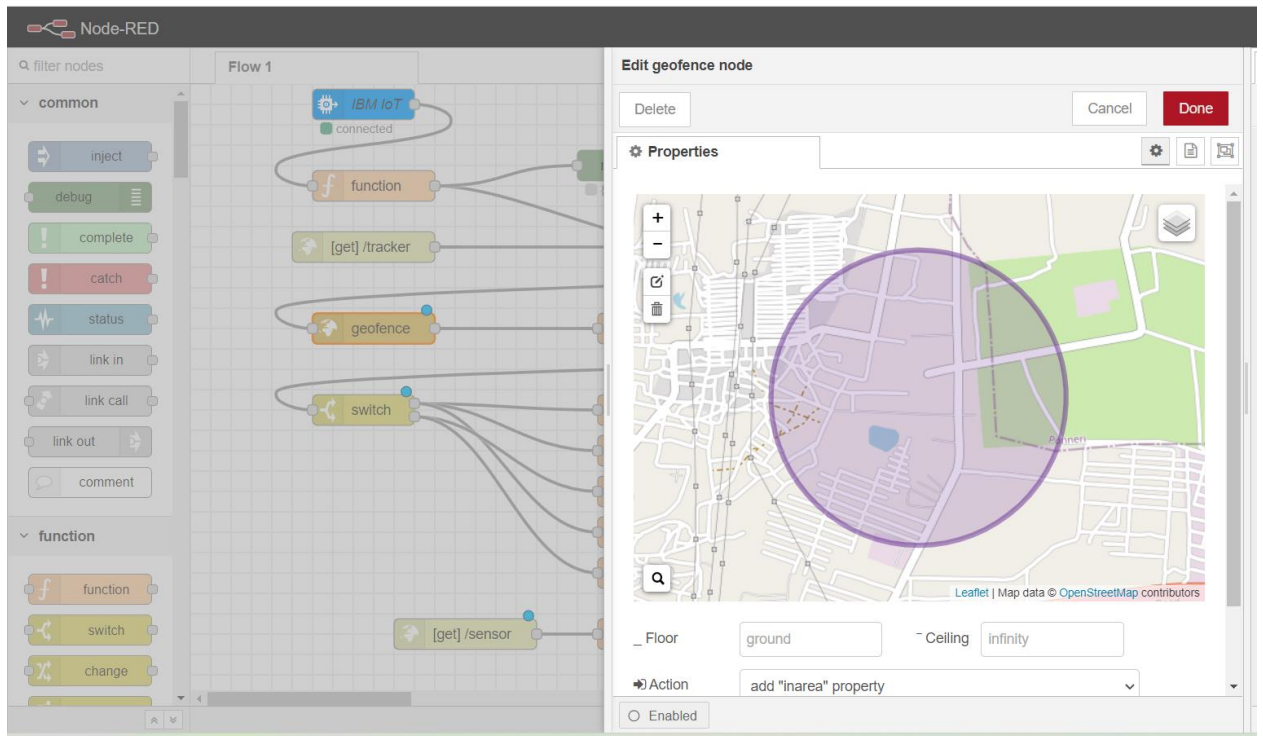
while True:
    name= "Logesh"

    latitude= 11.055712
    longitude= 76.804089
    mydata={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=mydata, qos=0,
    print("Data published to IBM IoT platform: ",mydata)
    time.sleep(20)

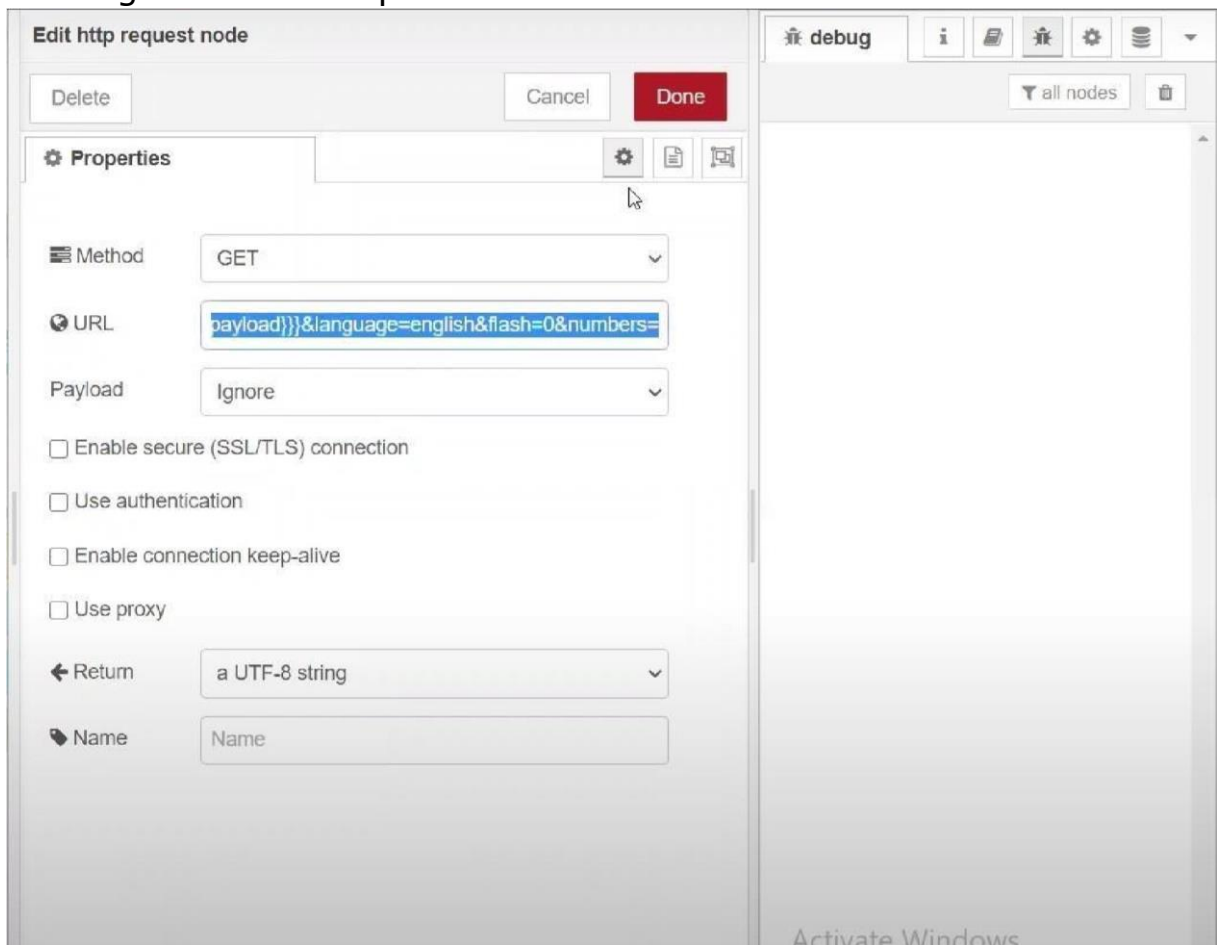
client.disconnect()
```

Ln: 1 Col: 0

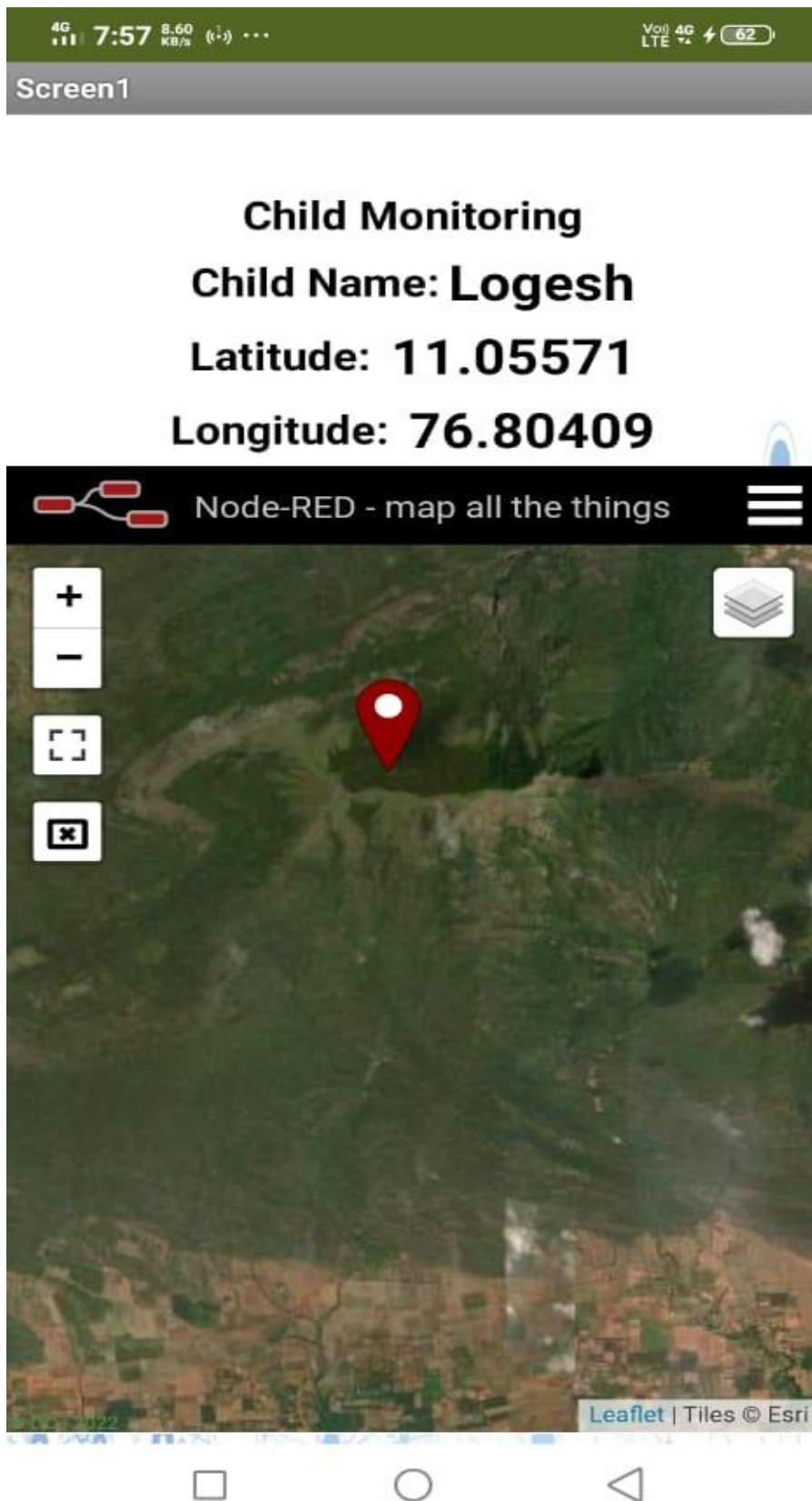
## Created the GeoFence



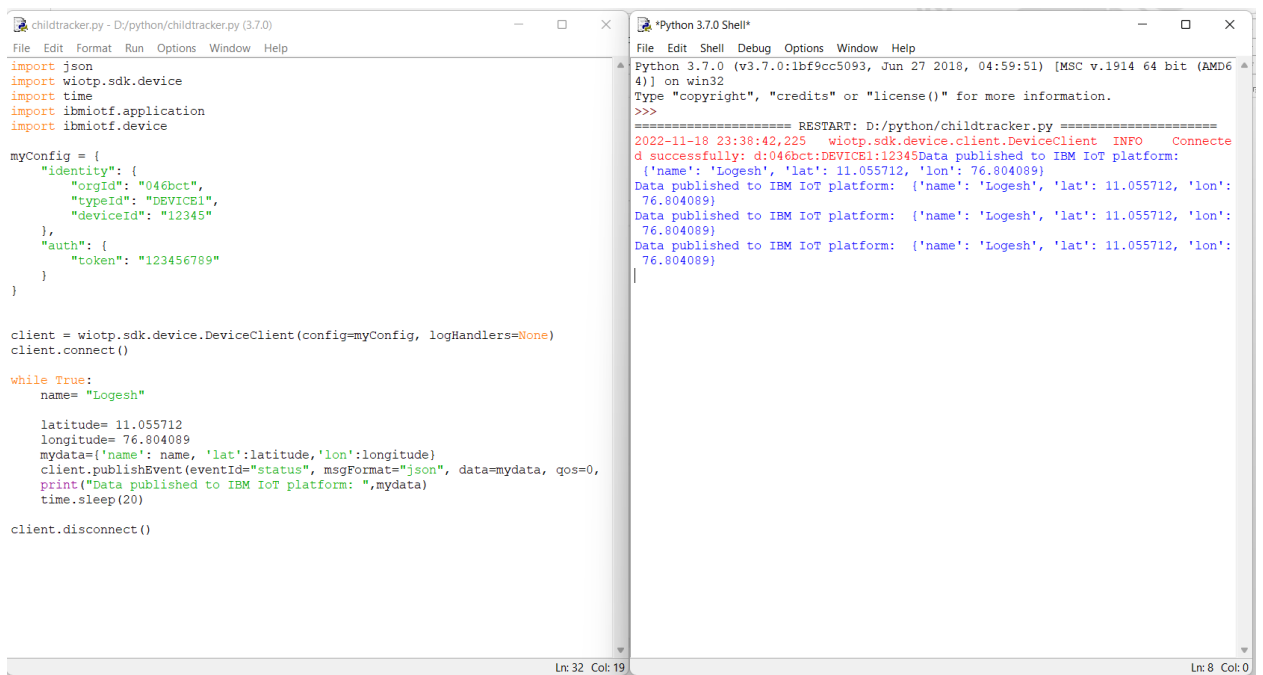
## Editing the HTTP Request URL



- Located the child



- Python script sending requests to IBM Cloud



The image shows two side-by-side windows. The left window is a text editor titled 'childtracker.py - D:/python/childtracker.py (3.7.0)'. It contains a Python script that imports necessary modules, defines a configuration dictionary, creates a DeviceClient, and enters a loop to publish data to the IBM IoT platform. The right window is a 'Python 3.7.0 Shell' showing the execution output. It displays the restart of the script, the successful connection to the IBM IoT platform, and the repeated publishing of data points for 'Logesh' with specific latitude and longitude coordinates.

```
childtracker.py - D:/python/childtracker.py (3.7.0)
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time
import ibmiotf.application
import ibmiotf.device

myConfig = {
    "identity": {
        "orgId": "046bct",
        "typeId": "DEVICE1",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}

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

while True:
    name = "Logesh"

    latitude= 11.055712
    longitude= 76.804089
    mydata={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=mydata, qos=0,
    print("Data published to IBM IoT platform: ",mydata)
    time.sleep(20)

client.disconnect()
```

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/python/childtracker.py =====
2022-11-18 23:38:42,225 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:046bct:DEVICE1:12345Data published to IBM IoT platform:
{'name': 'Logesh', 'lat': 11.055712, 'lon': 76.804089}
Data published to IBM IoT platform: {'name': 'Logesh', 'lat': 11.055712, 'lon':
76.804089}
Data published to IBM IoT platform: {'name': 'Logesh', 'lat': 11.055712, 'lon':
76.804089}
Data published to IBM IoT platform: {'name': 'Logesh', 'lat': 11.055712, 'lon':
76.804089}
|
```

After running the script, the web UI shows "Person is not in the particular area"

Result: Successfully developed the web application using Node-RED