

# Develop the Web Application Using Node-RED

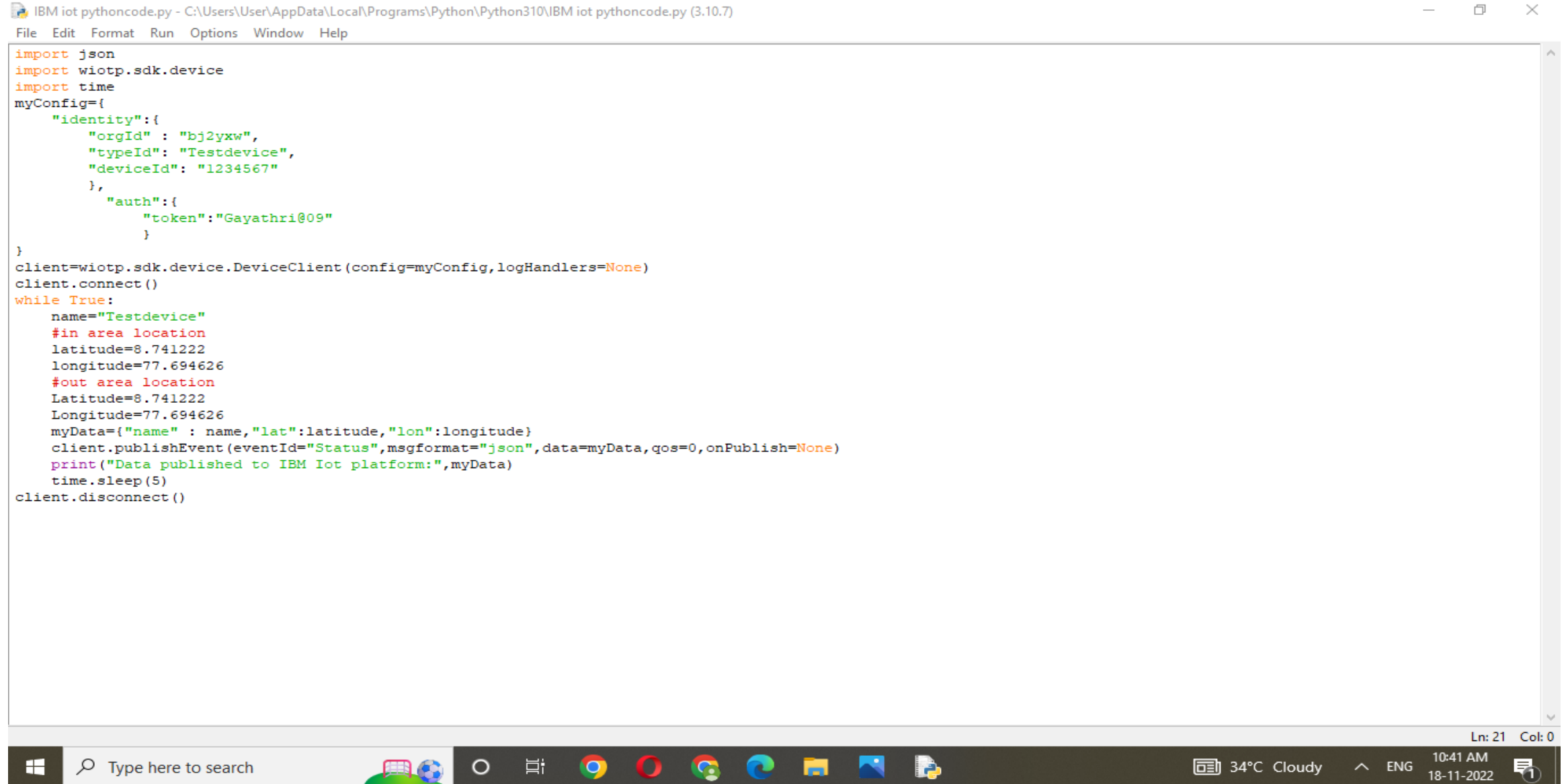
TEAM ID : PNT2022TMID33842

## STEPS:

### 1.Open a Node-RED Project

The screenshot shows a web browser window with three tabs: 'IBM', 'Node-RED : node-red-psywz-202', and 'Node-RED map all the things'. The address bar shows the URL 'node-red-psywz-2022-11-15.au-syd.mybluemix.net/red/#flow/29c86a4bc85126f8'. The Node-RED interface is displayed, featuring a left sidebar with a search bar containing 'world' and two categories: 'location' (with nodes like 'worldmap', 'worldmap in', 'tracks', 'convex - hull') and 'FIWARE' (with 'NGSI to worldmap'). The main workspace shows a flow diagram with nodes including 'IBM IoT' (connected), multiple 'function' nodes, 'world map' (connected), 'msg.payload', 'http request', 'show dialog', 'child', 'rbe', 'switch', and 'geofence'. A right sidebar shows the 'config' panel with a list of flows: 'On all flows' (1 hidden), 'Flow 1', 'Flow 2', and 'Flow 3'. The Windows taskbar at the bottom shows the search bar, task view, and several open applications, along with system information: 34°C Cloudy, ENG, 11:56 PM, 17-11-2022.

## 2.Add code to get the child location in Python



```
IBM iot pythoncode.py - C:\Users\User\AppData\Local\Programs\Python\Python310\IBM iot pythoncode.py (3.10.7)
File Edit Format Run Options Window Help

import json
import wiotp.sdk.device
import time
myConfig={
    "identity":{
        "orgId" : "bj2yxw",
        "typeId": "Testdevice",
        "deviceId": "1234567"
    },
    "auth":{
        "token":"Gayathri@09"
    }
}
client=wiotp.sdk.device.DeviceClient (config=myConfig,logHandlers=None)
client.connect()
while True:
    name="Testdevice"
    #in area location
    latitude=8.741222
    longitude=77.694626
    #out area location
    Latitude=8.741222
    Longitude=77.694626
    myData={"name" : name,"lat":latitude,"lon":longitude}
    client.publishEvent (eventId="Status",msgformat="json",data=myData,qos=0,onPublish=None)
    print("Data published to IBM Iot platform:",myData)
    time.sleep(5)
client.disconnect()
```

Ln: 21 Col: 0

Type here to search

34°C Cloudy ENG 10:41 AM 18-11-2022

### 3.Create the GeoFence

IBM Node-RED : node-red-psywz-202 Node-RED map all the things

node-red-psywz-2022-11-15.au-syd.mybluemix.net/red/#flow/29c86a4bc85126f8

IIPGCMS | Grievance Circuit design Hom... GOVERNMENT COL... Node-RED : node-r...

Node-RED

world Flow 1

location

- worldmap
- worldmap in
- tracks
- convex - hull

FIWARE

- NGSI to worldmap

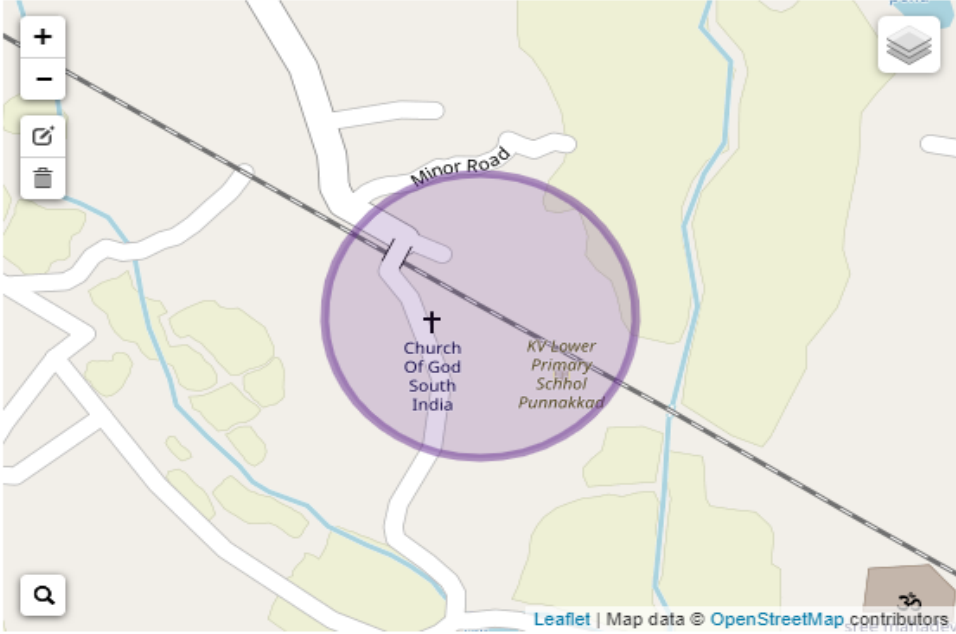
IBM IoT connected

function

Edit geofence node

Delete Cancel Done

Properties



Leaflet | Map data © OpenStreetMap contributors

Enabled

config

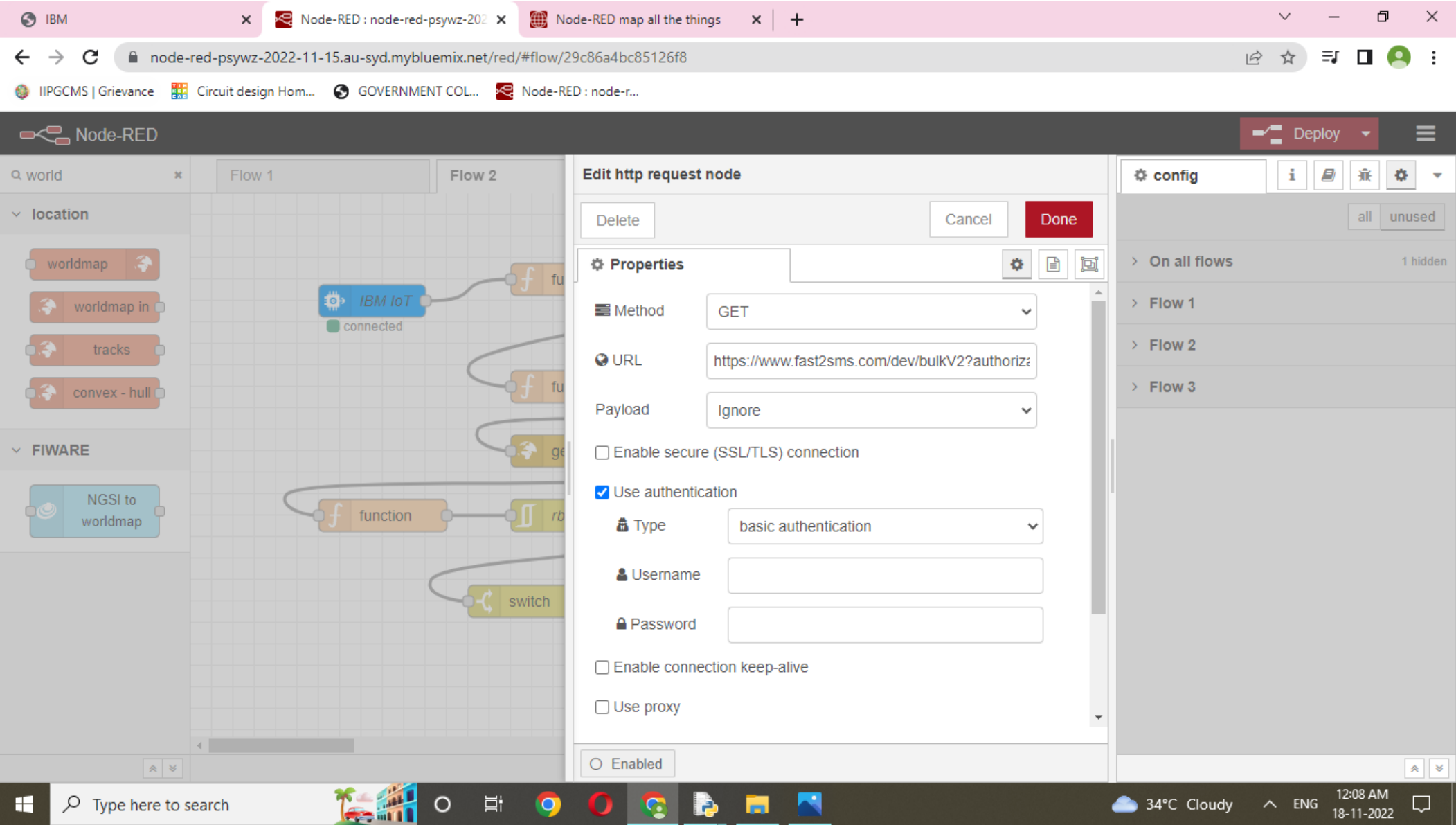
all unused

- On all flows 1 hidden
- Flow 1
- Flow 2
- Flow 3

Type here to search

34°C Cloudy ENG 12:07 AM 18-11-2022

# 4.Edit the HTTP request URL





# 5. Locate the child

Node-RED : node-red-psywz-202 x Node-RED map all the things x Node-RED x +

node-red-psywz-2022-11-15.au-syd.mybluemix.net/worldmap/

IIPGCMS | Grievance Circuit design Hom... GOVERNMENT COL... Node-RED : node-r...

Node-RED - map all the things

+

-

Lat, Lon 8.60897, 77.88542

Leaflet | Tiles © Esri

Type here to search

34°C Cloudy

ENG

03:51 PM

17-11-2022

## 6.Create the geofence node

IBM Node-RED : node-red-psywz-202 Node-RED map all the things

node-red-psywz-2022-11-15.au-syd.mybluemix.net/red/#flow/29c86a4bc85126f8

IIPGCMS | Grievance Circuit design Hom... GOVERNMENT COL... Node-RED : node-r...

Node-RED

world Flow 1

location

- worldmap
- worldmap in
- tracks
- convex - hull

FIWARE

- NGSI to worldmap

IBM IoT connected

function

Edit geofence node

Delete Cancel Done

Properties

Map view showing a geofence (purple circle) centered on a location. The geofence is labeled "Minor Road" and "Church Of God South India". The map also shows "KV Lower Primary School Punakkad".

Leaflet | Map data © OpenStreetMap contributors

config

all unused

On all flows 1 hidden

Flow 1

Flow 2

Flow 3

Enabled

Type here to search

34°C Cloudy ENG 12:07 AM 18-11-2022



7. Python script send request to IBM Cloud and after running the script the web UI shows "Person is not present in the particular area"

