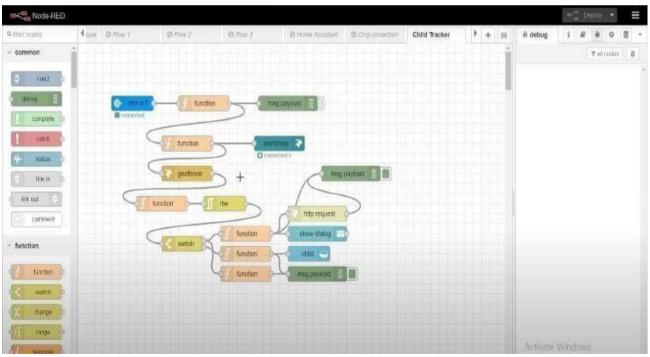
# **DEVELOP A WEB APPLICATION USING NODE-RED SERVICE**

| Date          | 14 November 2022                                     |
|---------------|--|
|               |  |
| Team ID       | PNT2022TMID15750                                     |
|               |  |
| Project Name  | Industry-Specific Intelligent Fire Management System |
| Maximum Marks | 8 Marks  |

## 1. To Develop the web application using Node-RED

# Steps:

• Open a Node-RED project



Add code to get child location in python

```
file Edit Format Run Options Window Help
import joon
import wiotp.sdk.device
import time

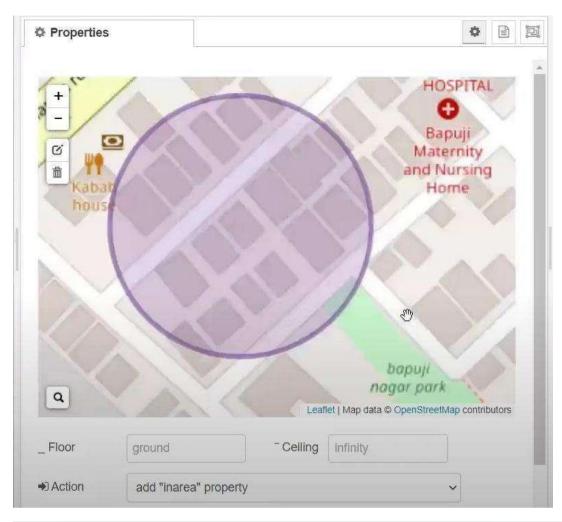
myConfig = {
    "identity":{
        "cygId": "88653s",
        "typeid": "iot_device",
        "deviceId": "wokwi_us"
} "auth": {
        "token":")1(u!YYO)NmKr9sk(k"
}
} client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
client.connect()

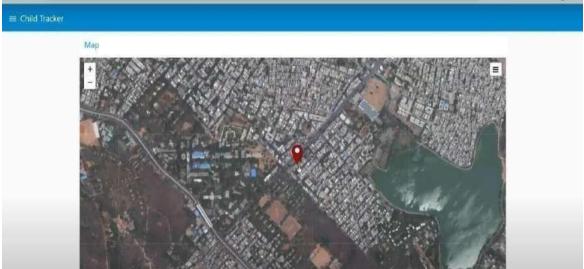
While True:
    name="Smartbridge"
    fin area location
    latitude 17.4225176
    longitude 78.5458842

    fout area location
    flatitude= 17.4219272
    flongitude 78-5488733

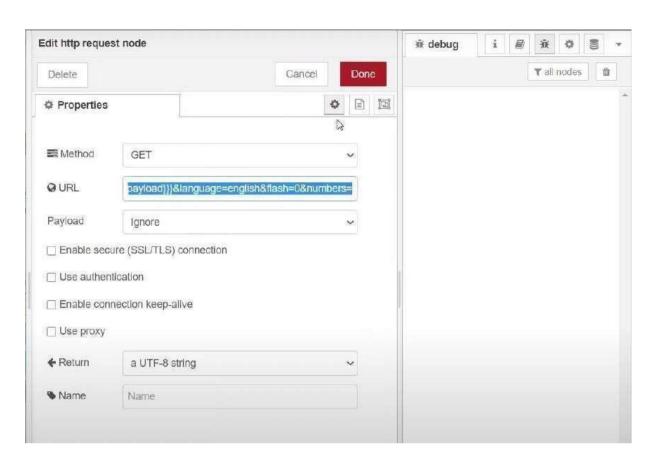
myData={'name': name, 'lat': latitude, 'len': longitude}
client.publishEvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None}
print("Data published to IBM IOT platfrom: ", myData)
time.sleep (5)
| blient.disconnect()
```

• Create the Geofence



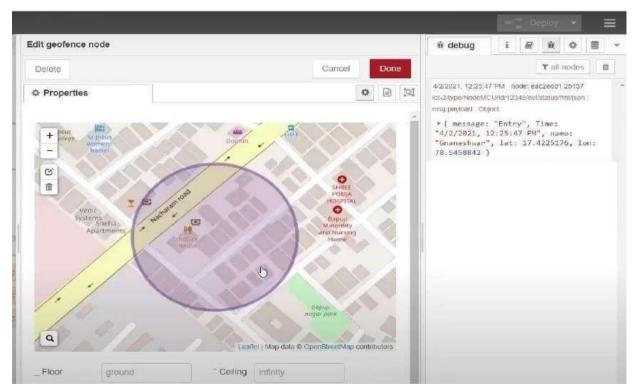


Edit the HTTP Request URL



Locate the child

### Create the geofence node



Python script send requests to IBM Cloud

```
Node red app.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/Node red app.py (3.7.0)
                                                                                                              IPython console
File Edit Format Run Options Window Help
                                                                                                              Console 2/A 🔯
import json
import wiotp.sdk.device
                                                                                                              Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
 import time
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
 myConfig = {
     "identity":{
                                                                                                               Data published to IBM IoT platfrom:
         entity":{
"orgId": "88653s",
"typeid": "iot_device",
"deviceId": "wokwi_us"
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
     "auth": {
          "token":")1(u!YYO)NmKr9sk(k"
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
 client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
While True:
name="Smartbridge"
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
     #in area location
                                                                                                              Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
    latitude 17.4225176
                                                                                                               Data published to IBM IoT platfrom:
    longitude 78.5458842
                                                                                                               Data published to IBM IoT platfrom:
     #out area location
                                                                                                               Data published to IBM IoT platfrom:
     #latitude= 17.4219272
#longitude 78-5488783
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
     myData={'name': name, 'lat': latitude, 'len': longitude}
client.publishEvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None}
print("Data published to IBM IOT platfrom: ", myData)
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
     time.sleep (5)
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
    blient disconnect()
                                                                                                              Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                              Data published to IBM IoT platfrom:
```

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



### **Conclusion:**

Development of the web application using Node-RED Successfully.