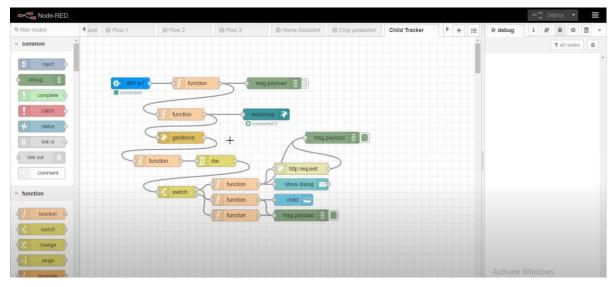
### **Develop The Web Application Using Node-RED**

Date	16 October 2022
Team ID	PNT2022MID40851
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	

Aim: Develop the web application using Node-REDSteps Followed:

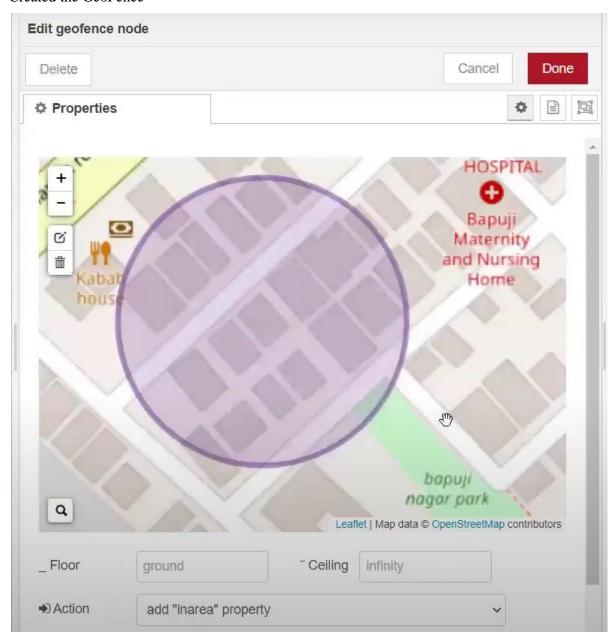
### > Opened a Node-RED project



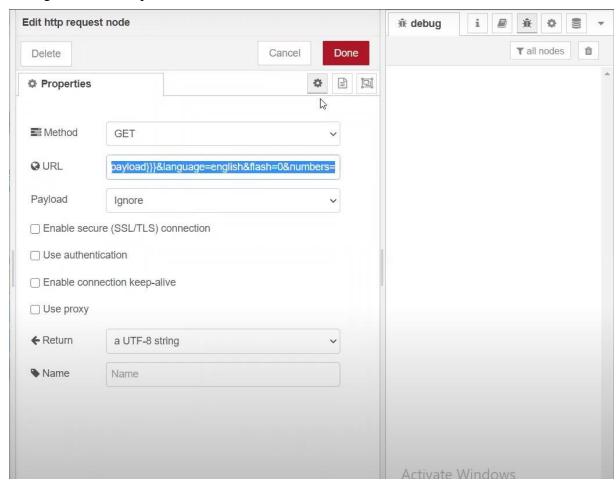
### ➤ Added code to get child location in python

```
import json
import wiotp.sdk.device
import time
myConfig = {
    "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
    "auth": {
        "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
While True:
        name= "Smartbridge"
        #in area location
        latitude= 17.4225176
        longitude= 78.5458842
        #out area location
        #latitude= 17.4219272
        #longitude= 78.5488783
        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 platfrom: ",myData)
        time.sleep(5)
client.disconnect()
```

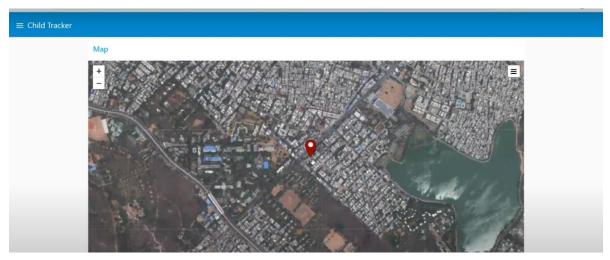
## > Created the GeoFence



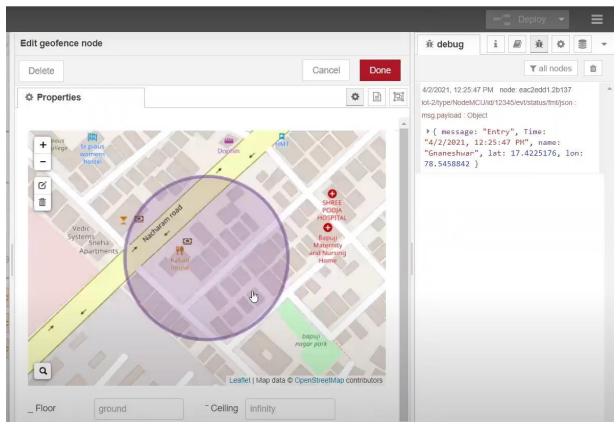
# ➤ Editing the HTTP Request URL



### ➤ Located the child



### > Created the geofence node



> Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                   child.py
                                                                                                        Console 2/A 🔯
                                                                                                        Data published to IBM IoT platfrom:
▲ 1 import json
                                                                                                        Data published to IBM IoT platfrom:
   2 import wiotp.sdk.device
                                                                                                        Data published to IBM IoT platfrom:
   3 import time
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
   5 myConfig = {
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
  10
                                                                                                        Data published to IBM IoT platfrom:
          auth": {
                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
              "token": "12345678"
                                                                                                        Data published to IBM IoT platfrom:
  14}
                                                                                                        Data published to IBM IoT platfrom:
  15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
                                                                                                        Data published to IBM IoT platfrom:
  16 client.connect()
                                                                                                        Data published to IBM IoT platfrom:
 18 while True:
19 name= "Smartbridge"
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
  20
         #in area location
                                                                                                        Data published to IBM IoT platfrom:
  21
                                                                                                        Data published to IBM IoT platfrom:
  22
         #Latitude= 17.4225176
                                                                                                        Data published to IBM IoT platfrom:
  23
24
25
         #Longitude= 78.5458842
                                                                                                        Data published to TBM ToT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
         #out area location
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
         latitude= 17.4219272
                                                                                                        Data published to IBM IoT platfrom:
  28
         longitude= 78.5488783
myData={'name': name, 'lat':latitude,'lon':longitude}
                                                                                                        Data published to IBM IoT platfrom:
         client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub print("Data published to IBM IoT platfrom: ",myData)
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        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:
  34 client.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:
                                                                                                        Data published to IBM IoT platfrom:
```

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



Result: Successfully developed the web application using Node-RED