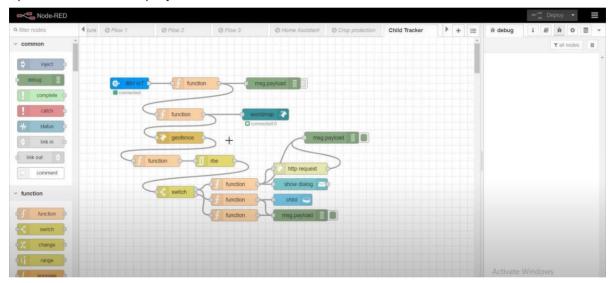
## **Develop A Web Application Using Node-RED**

Date	09 November 2022
Team ID	PNT2022TMID14810
Project Name	IoT Based Safety Gadget for ChildSafety
	Monitoring & Notification
Maximum Marks	2 Marks

### Steps Followed:

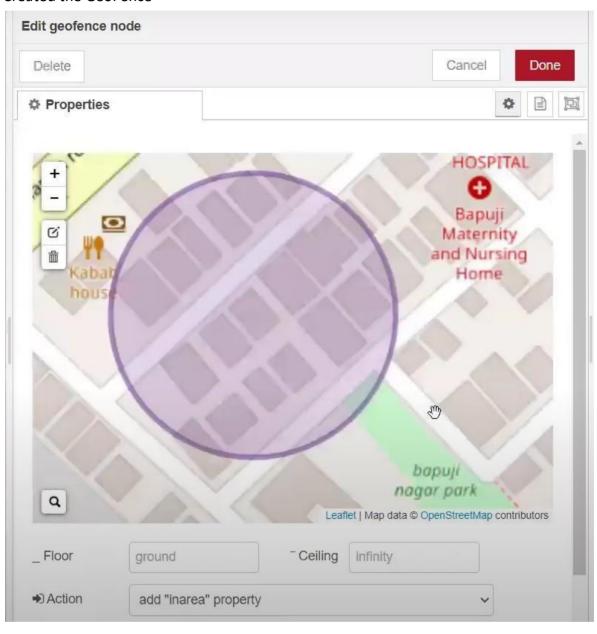
• Opened a Node-RED project



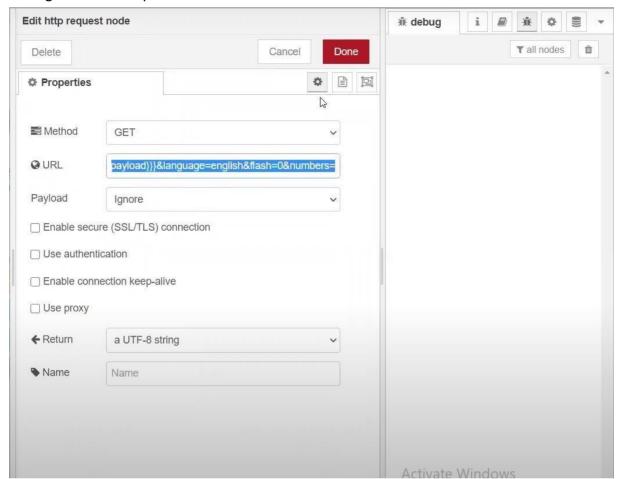
Added code to get child location in python

```
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()
```

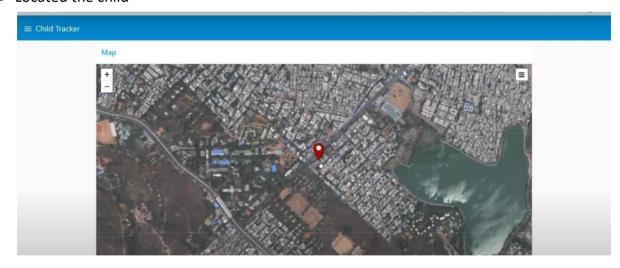
### • Created the GeoFence



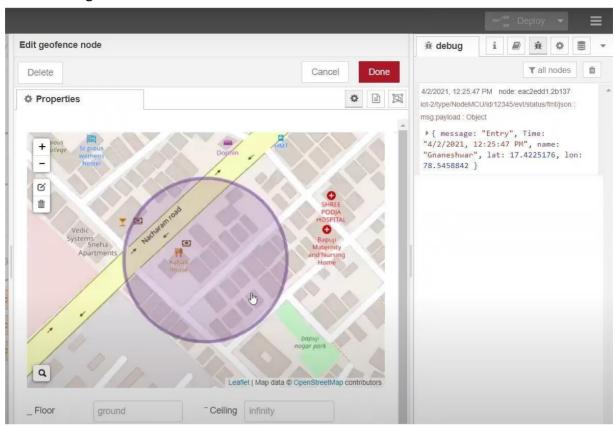
# • Editing the HTTP Request URL



### Located the child



• Created the geofence node



Python script sending requests to IBM Cloud

```
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 = {
                                                                                                       Data published to IBM IoT platfrom:
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
             "deviceId": "12345"
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
          auth": {
                                                                                                       Data published to IBM IoT platfrom:
              "token": "12345678"
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       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:
                                                                                                       Data published to IBM IoT platfrom:
 18 while True:
19 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
#longitude= 78.5458842
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT 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
                                                                                                       Data published to IBM IoT platfrom:
        myData={'name': name, 'lat':latitude,'lon': <a href="longitude">longitude</a>} 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:
```

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



## **Result:**

Successfully developed a web application using Node-RED