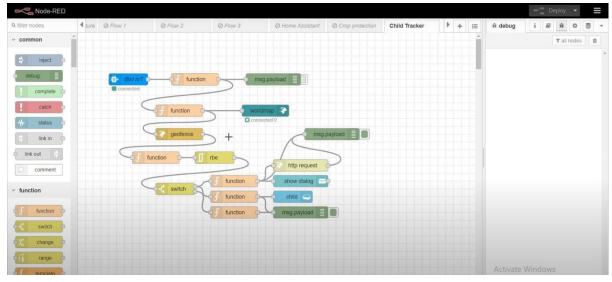
#### **Develop A Web Application Using Node-RED**

Date	19 November 2022
Team ID	PNT2022TMID49271
Project Name	Project - IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

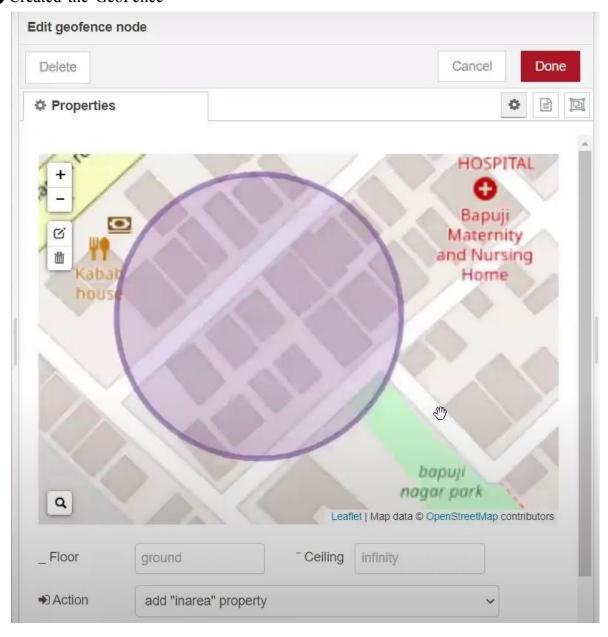
### • Opened a Node-RED project



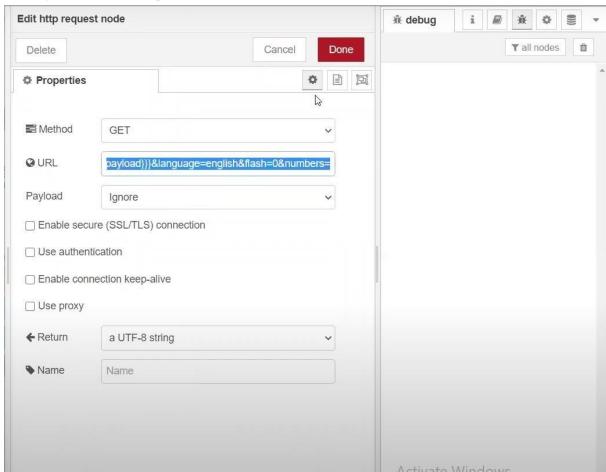
## Added code to get child location in python

```
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



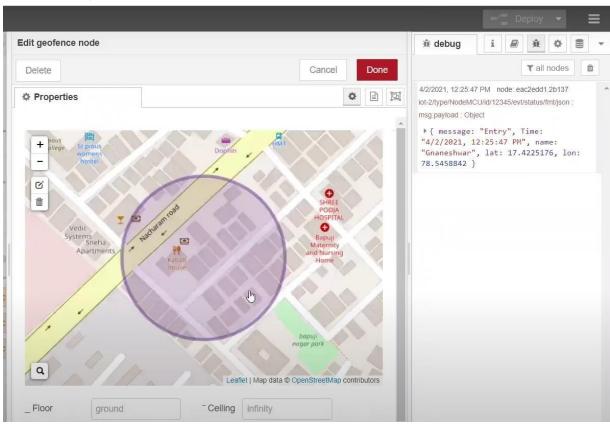
• Editing the HTTP Request URL



• Located the child



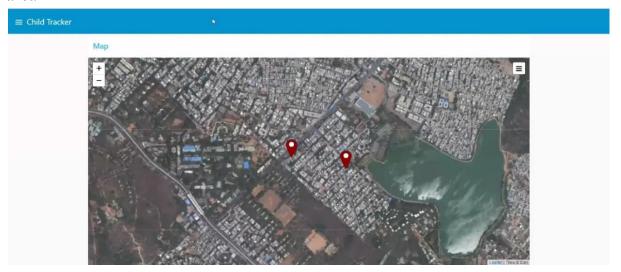
• Created the geofence node



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 = {
                                                                                                                  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:
  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:
                                                                                                                  Data published to IBM IoT platfrom:
  18 while True:
                                                                                                                  Data published to IBM IoT platfrom:
         name= "Smartbridge"
                                                                                                                  Data published to IBM IoT platfrom:
  20
          #in area location
                                                                                                                  Data published to IBM IoT platfrom:
  21
                                                                                                                  Data published to IBM IoT platfrom:
          #Latitude= 17.4225176
                                                                                                                  Data published to IBM IoT platfrom:
  23
          #longitude= 78.5458842
                                                                                                                  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
          Inditudes 178.5488783
myData={'name': name, 'lat':latitude, 'lon':longitude}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
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:
                                                                                                                  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:
  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 the particular area"



# **Result:**

Successfully developed a web application using Node-RED