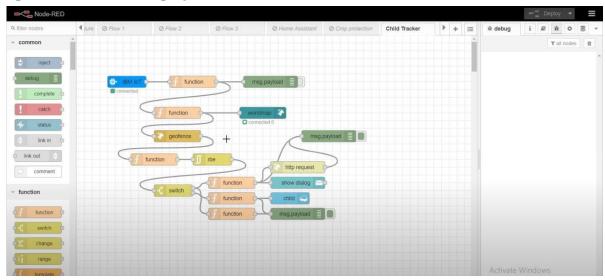
# **Develop A Web Application Using Node-RED**

Date	13 November 2022
Team ID	PNT2022TMID37031
Project Name	Project - IoT Based Safety Gadget For ChildSafety Monitoring & Notification

## **Steps Followed:**

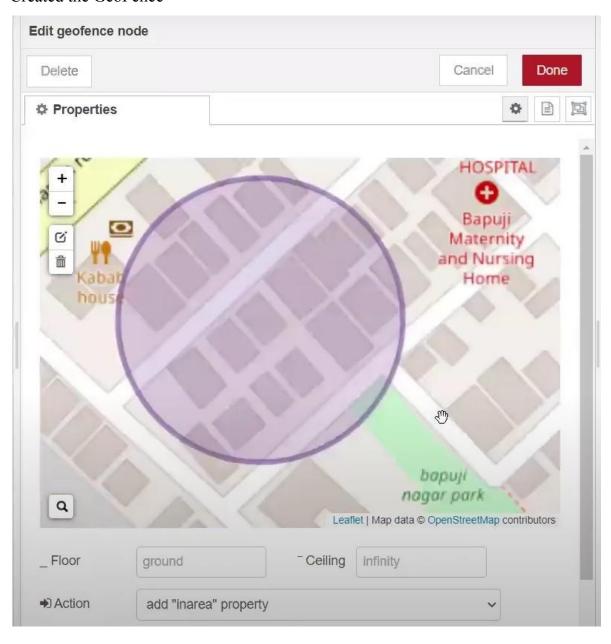
• Opened a Node-RED project



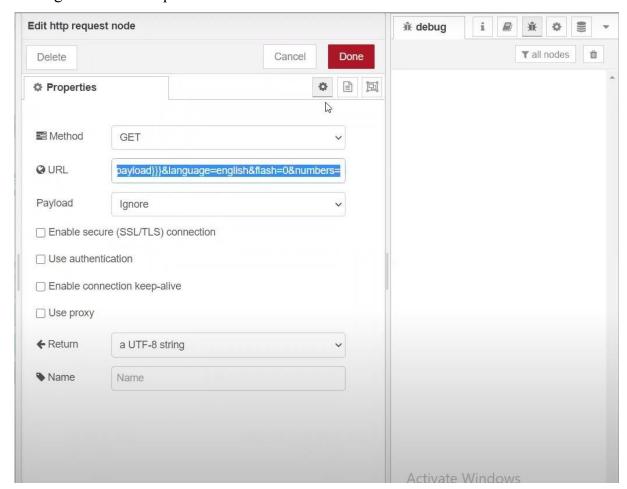
Added code to get child location in python

```
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()
```

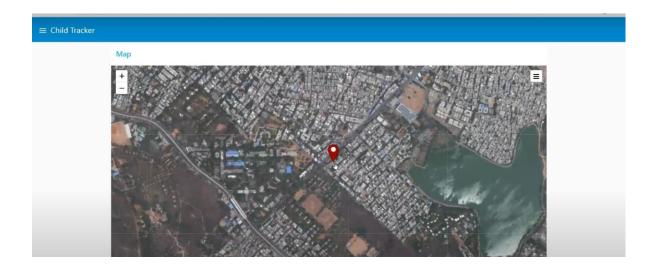
#### • Created the GeoFence



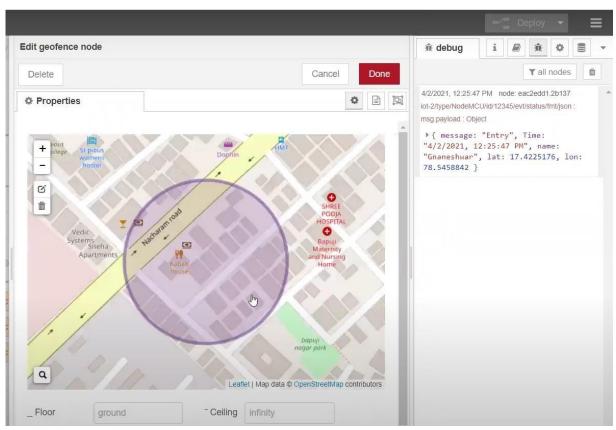
### • Editing the HTTP Request URL



### • Located the child



• Created the geofence node



Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                       ₽ × IPython console
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 = {
          nrig = {
"identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                            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:
          "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:
                                                                                                            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
24
         #longitude= 78.5458842
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
         #out area location
                                                                                                            Data published to IBM IoT platfrom:
  26
27
                                                                                                            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}
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:
         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"



Successfully developed a web application using Node-RED