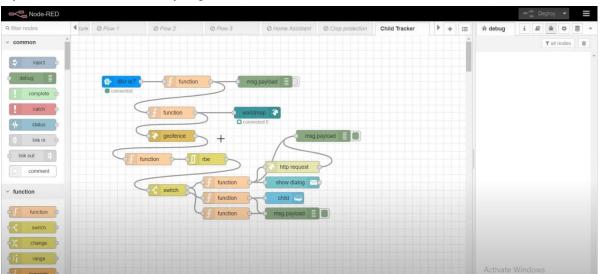
Date	10 November 2022
Team ID	PNT2022TMID01040
Project Name	Project - IoTBasedSafetyGadgetForChild SafetyMonitoring& Notification

## Develop The Web Application Using Node-RED

Aim: Develop the web application using Node-RED

Steps Followed:

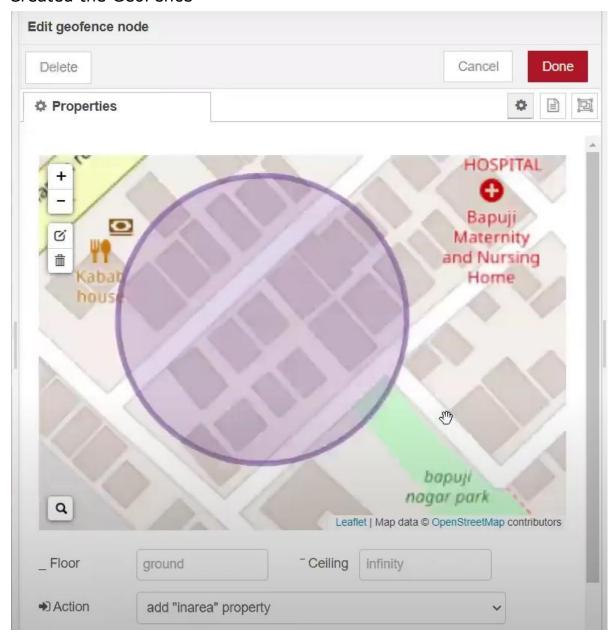
## • Opened a Node-RED project



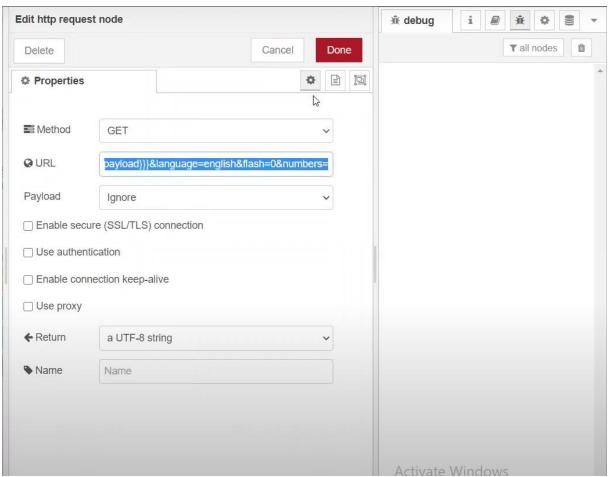
## • Added code to get child location in python

```
import json
import wiotp.sdk.device
import time
myConfig = {
     mfig = {
  "identity": {
      "orgId": "hj5fmy",
      "typeId": "NodeMCU",
      "deviceId": "12345"
     "auth": {
           "token": "12345678"
\verb|client| = \verb|wiotp.sdk.device.DeviceClient| (\verb|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()
```

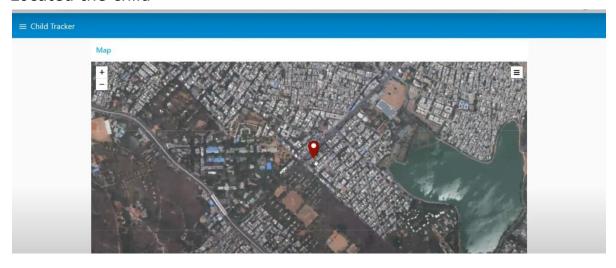
## • Created the GeoFence



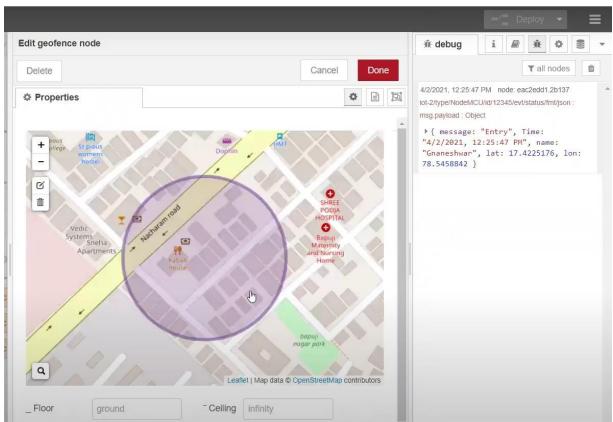
• Editing the HTTP Request URL



• Located the child



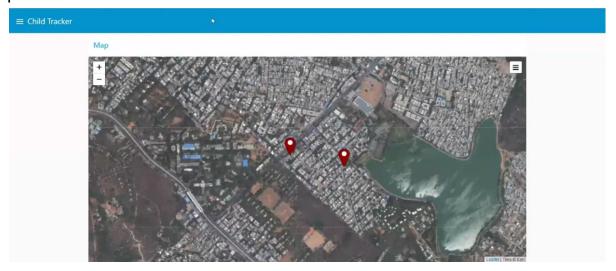
• Created the geofence node



Python script sending requests to IBM Cloud

```
₽ × IPython console
Editor - C:\Users\HP\Desktop\child.py
child.py
                                                                                                  Console 2/A 🗵
                                                                                                      Data published to IBM IoT platfrom:
   1 import ison
                                                                                                      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:
19 name= "Smartbridge"
                                                                                                      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:
         #Latitude= 17.4225176
                                                                                                      Data published to IBM IoT platfrom:
         #longitude= 78.5458842
  23
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
         #out area location
                                                                                                      Data published to IBM IoT platfrom:
  26
                                                                                                      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':longitude}
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:
  30
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      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 the particular area"



Result: Successfully developed the web application using Node-RED