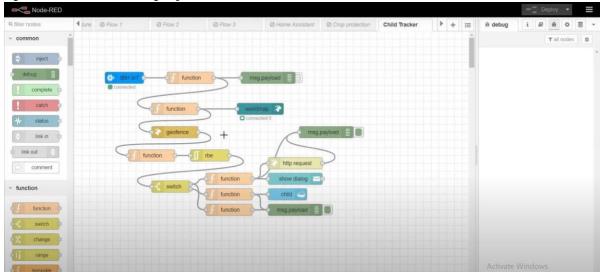
## Develop A Web Application Using Node-RED

Date	07 November 2022
Team ID	PNT2022TMID03720
Project Name	IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

## Steps Followed:

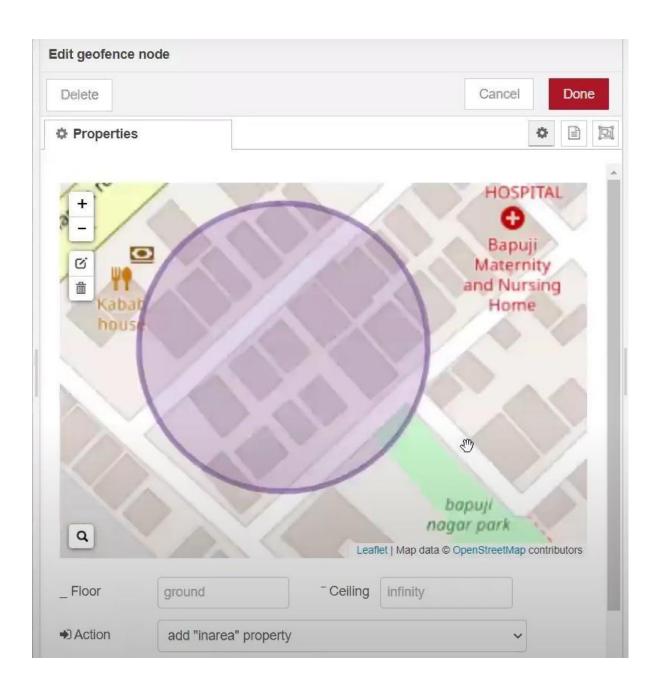
• Opened a Node-RED project



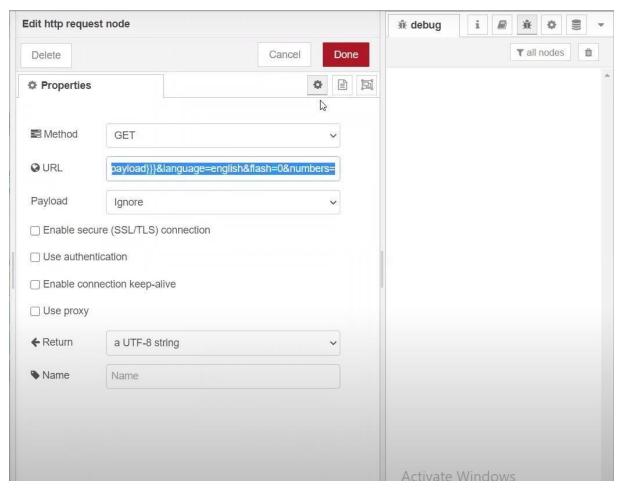
• Added code to get child location in python

```
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()
Thile True:
            name= "Smartbridge"
            #in area location
            latitude= 17.4225176
            longitude= 78.5458842
            #out area location
            #latitude= 17.4219272
           #latitude= 17.32192/2
#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()
```

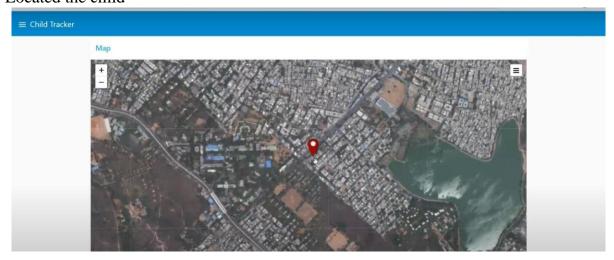
• Created the Geofence



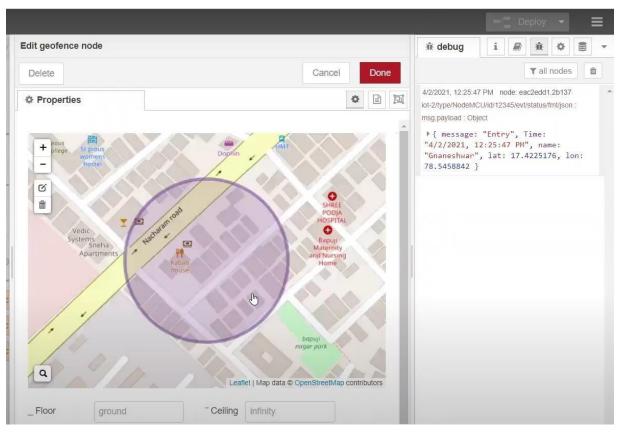
## • Editing the HTTP Request URL



## • Located the child



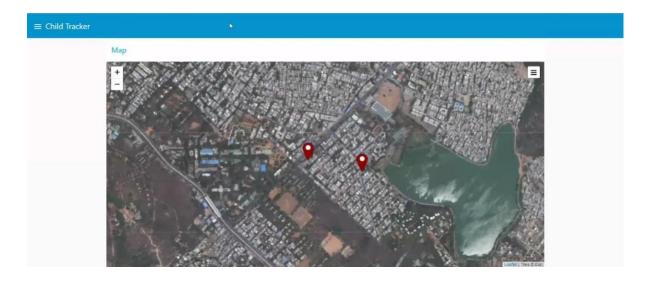
Created the Geofence



Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                                  ₽ × IPython console
                                                                                                   Console 2/A 🗵
child.py
                                                                                                      Data published to IBM IoT platfrom:
  1 import json
2 import wiotp.sdk.device
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                      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",
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      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:
        },
"auth": {
                                                                                                      Data published to IBM IoT platfrom:
  11
                                                                                                      Data published to IBM IoT platfrom:
              "token": "12345678"
                                                                                                      Data published to IBM IoT platfrom:
  13
                                                                                                      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:
  20
         #in area location
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
  22
         #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:
  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':<mark>longitude</mark>}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
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:
         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:
  36
                                                                                                      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