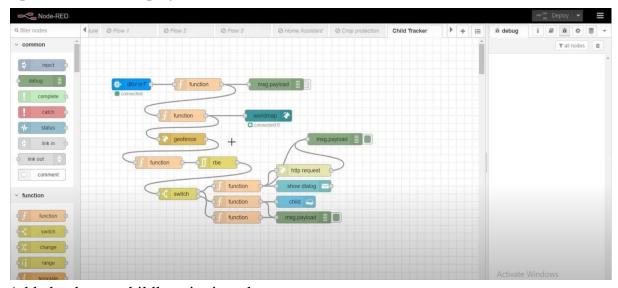
#### Develop A Web Application Using Node-RED

| Date         | 19 November 2022   |
|--------------|--|
| Team ID      | PNT2022TMID44690   |
|              | Project-IoT Based Safety Gadget For ChildSafety<br>Monitoring & Notification |
| MaximumMarks | 2 Marks  |

#### StepsFollowed:

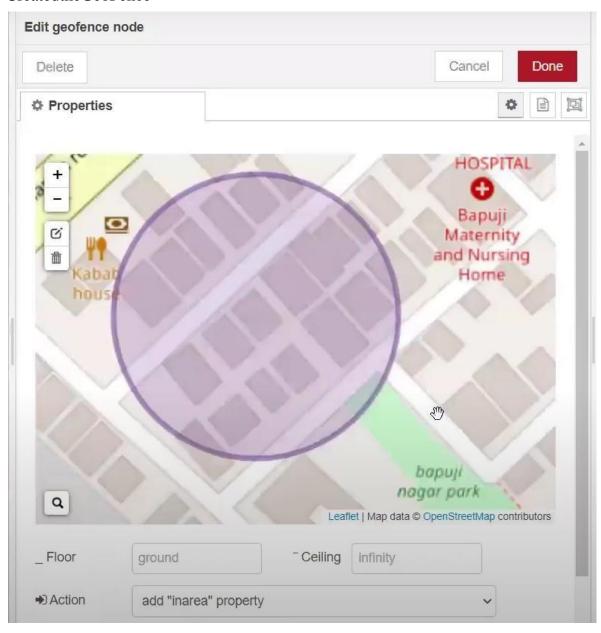
### • OpenedaNode-REDproject



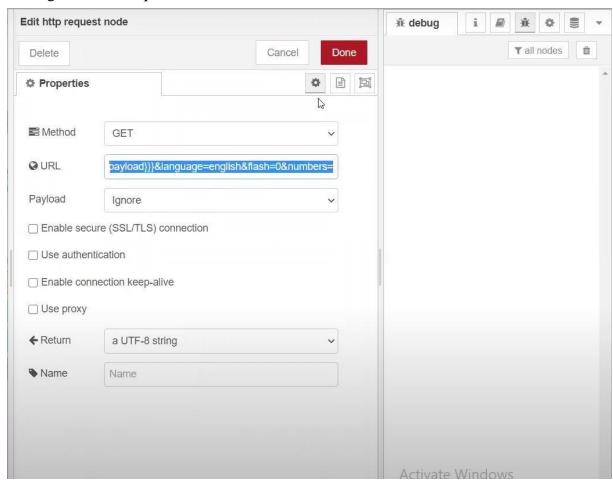
#### • Addedcodetogetchildlocationinpython

```
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)
client.disconnect()
```

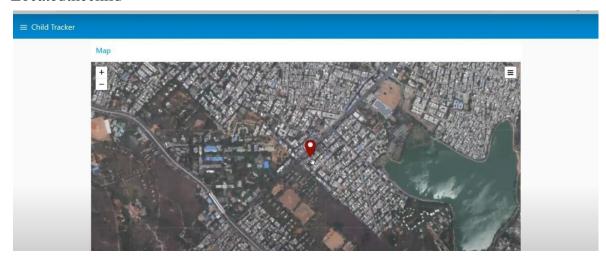
## • CreatedtheGeoFence



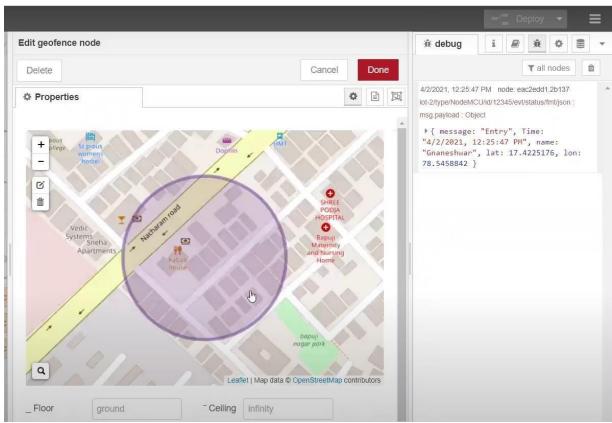
# $\bullet \ \ Editing the HTTPR equest URL$



#### • Locatedthechild



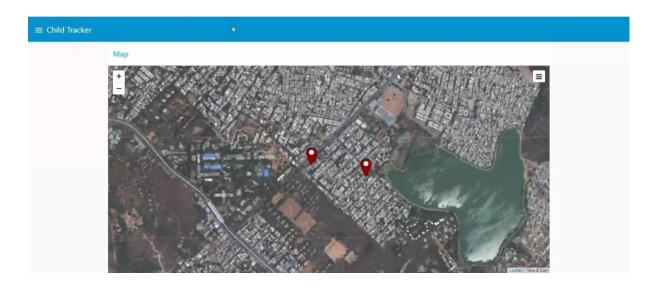
Createdthegeofencenode



• PythonscriptsendingrequeststoIBMCloud

```
child.py
                                                                                                       Console 2/A 🗵
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
   2 import wiotp.sdk.device
   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:
                                                                                                       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:
  20
         #in area location
                                                                                                       Data published to IBM IoT platfrom:
  21
                                                                                                        Data published to IBM IoT platfrom:
  22
         #Latitude= 17.4225176
                                                                                                       Data published to IBM IoT platfrom:
         #longitude= 78.5458842
                                                                                                       Data published to IBM IoT platfrom:
  24
                                                                                                        Data published to IBM IoT platfrom:
  25
         #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, onPub
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                        Data published to IBM IoT platfrom:
  28
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        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:
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
```

• Afterrunningthescript, the webUI shows "Person is not in the particular area"



Result: Successfully developed a web application using Node-RED