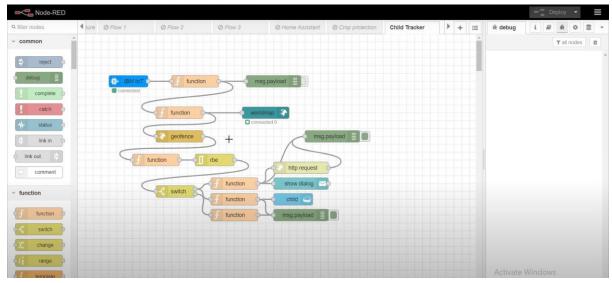
Develop The Web Application Using Node-RED

Aim: Develop the web application using Node-RED Steps Followed:

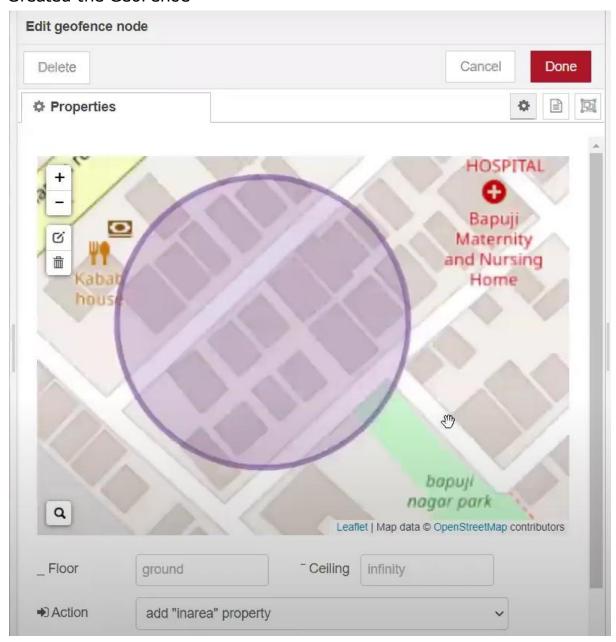
• Opened a Node-RED project



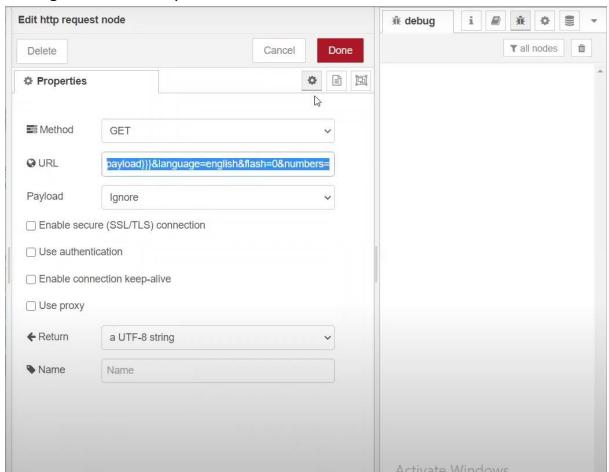
• Added code to get child location in python

```
import 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()
```

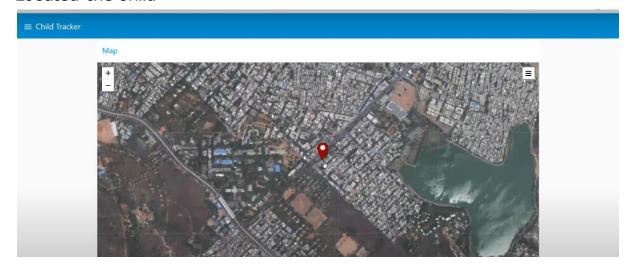
• Created the GeoFence



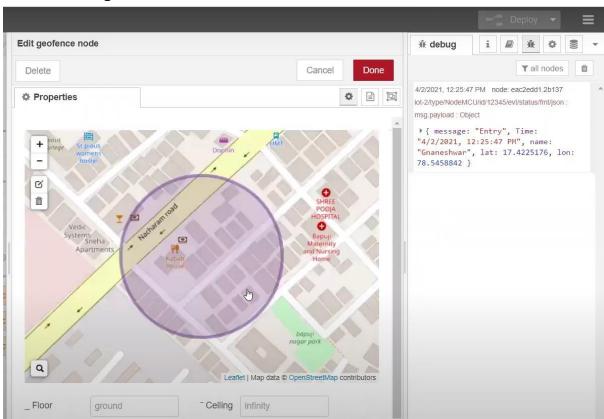
• Editing the HTTP Request URL



• Located the child



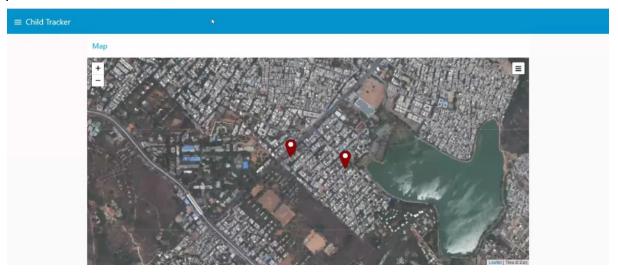
Created the geofence node



Python script sending requests to IBM Cloud

```
⊕ × IPython console
child.py
                                                                                                   Console 2/A 🗵
                                                                                                        Data published to IBM IoT platfrom:
1 import json
                                                                                                       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",
    "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:
        },
"auth": {
"+oker
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
              'token": "12345678"
 12
                                                                                                       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
22
                                                                                                        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:
 24
                                                                                                        Data published to IBM IoT platfrom:
 25
         #out area location
                                                                                                       Data published to IBM IoT platfrom:
 26
                                                                                                        Data published to IBM IoT platfrom:
 27
         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,
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:
                                                                                                        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"



 ${\it Result: Successfully developed the web application using Node-RED}$