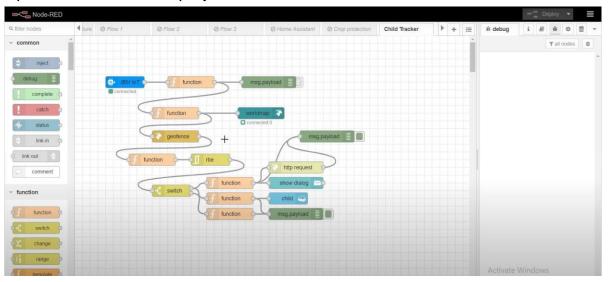
Develop The Web Application Using Node-RED

Aim:

Develop the web application using Node-RED.

Steps Followed:

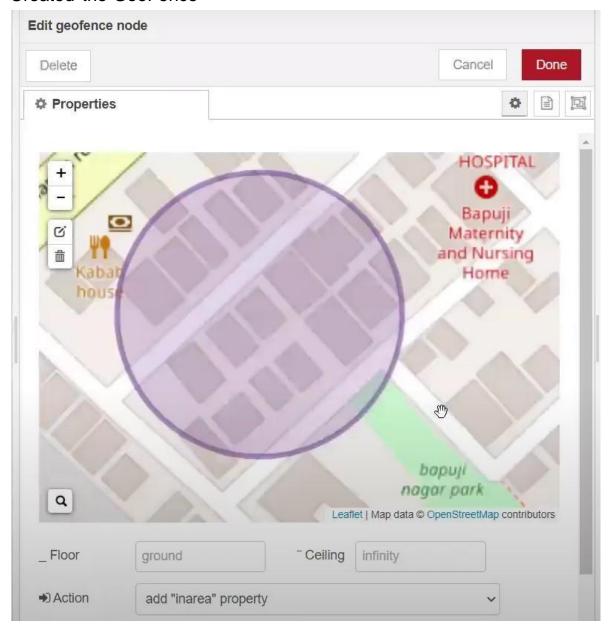
Opened a Node-RED project



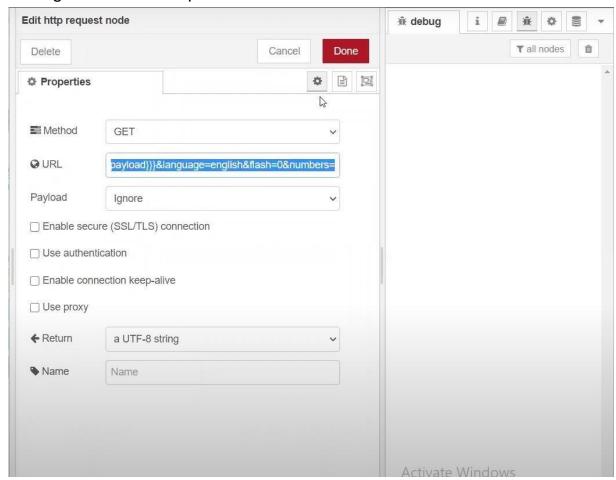
Added code to get child location in python

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

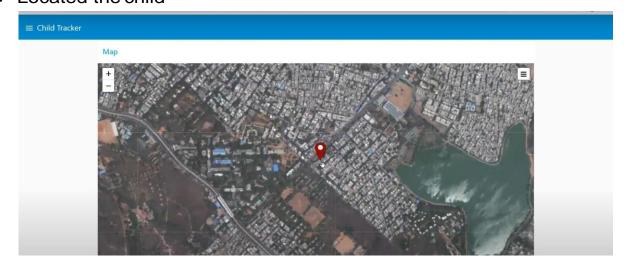
• Created the GeoFence



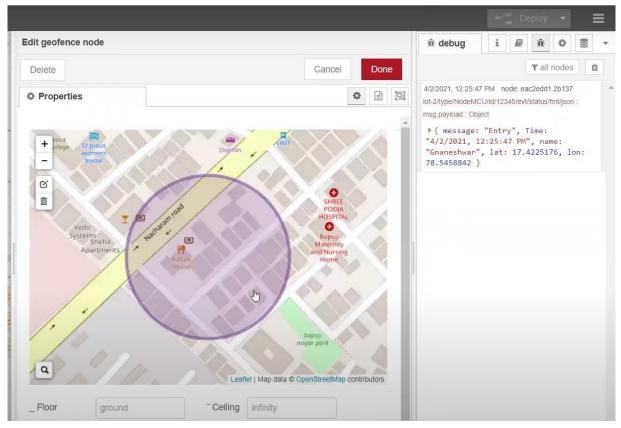
• Editing the HTTP Request URL



Located the child



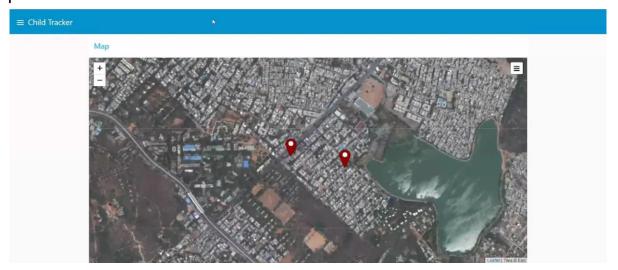
Created the geofence node



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:
Data published to IBM IoT platfrom:
   3 import time
                                                                                                        Data published to IBM IoT platfrom:
   5 myConfig = {
                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
              "deviceId": "12345"
                                                                                                        Data published to IBM IoT platfrom:
  10
                                                                                                        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:
                                                                                                        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:
                                                                                                        Data published to IBM IoT platfrom:
  25
26
         #out area location
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
        Data published to IBM IoT platfrom:
  28
                                                                                                        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:
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:
```

• After running the script, the web UI shows "Person is not in the particular area"



Result:

Successfully developed the web application using Node-RED