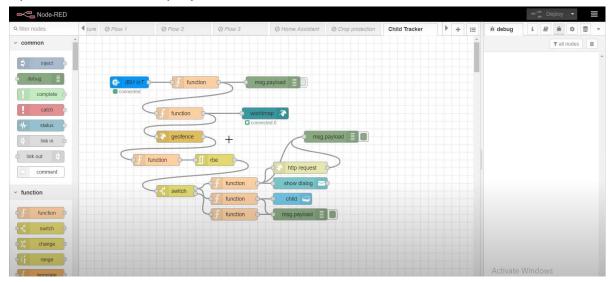
## Develop The Web Application Using Node-RED

## TEAM ID: PNT2022TMID14748

Aim: Develop the web application using Node-RED

Steps:

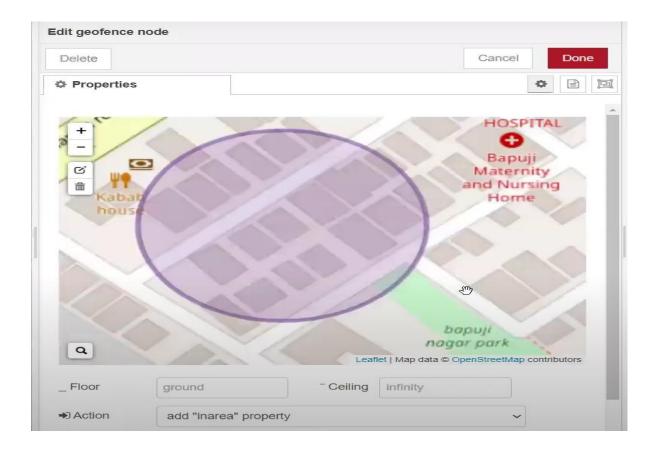
• Opened a Node-RED project



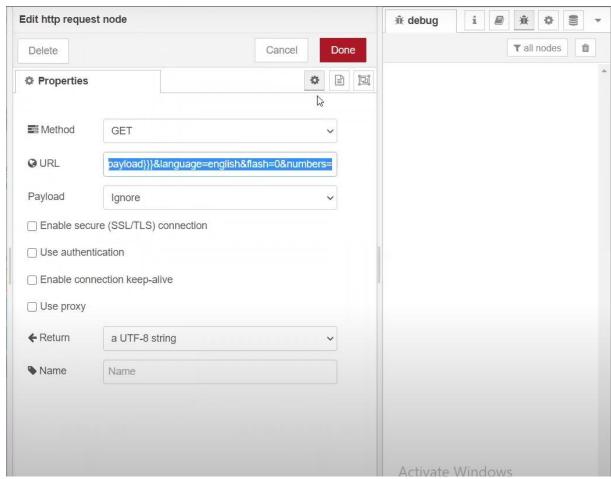
• Added code to get child location in python

```
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()
```

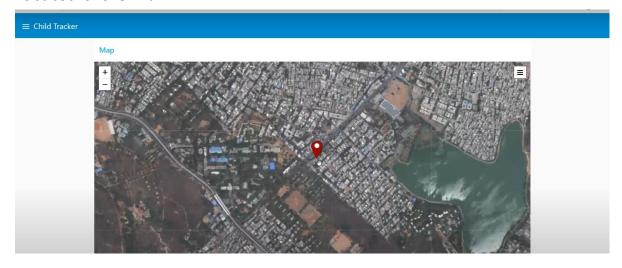
## • Created the GeoFence



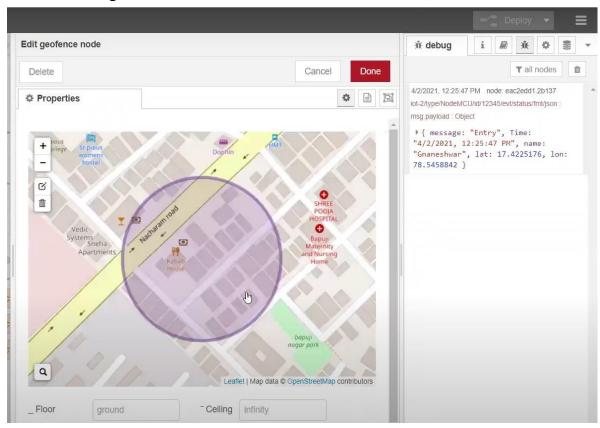
• Editing the HTTP Request URL



• Located the Child



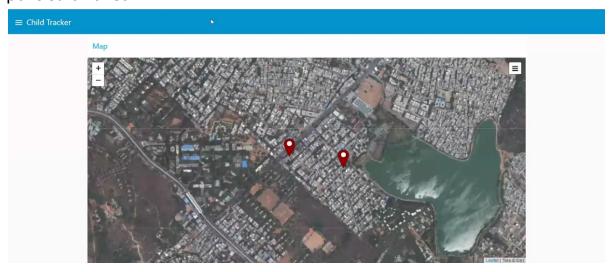
Created the geofence node



Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
child.py
                                                                                                                               Console 2/A 🛛
                                                                                                                               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:
Data published to IBM IoT platfrom:
    3 import time
                                                                                                                               Data published to IBM IoT platfrom:
    5 myConfig = {
           nfig = {
"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:
                                                                                                                               Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
            'auth": {
    "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:
           #in area location
  20
                                                                                                                               Data published to IBM IoT platfrom:
                                                                                                                               Data published to IBM IoT platfrom:
           #latitude= 17.4225176
#longitude= 78.5458842
                                                                                                                               Data published to IBM IoT platfrom:
  23
                                                                                                                               Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  24
25
           #out area location
                                                                                                                               Data published to IBM IoT platfrom:
                                                                                                                               Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
           latitude= 17.4219272
  28
           longitude= 78.5488783
                                                                                                                               Data published to IBM IoT platfrom:
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, onPub
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                                               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:
   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"



**Result:** Successfully developed the web application using Node-RED.