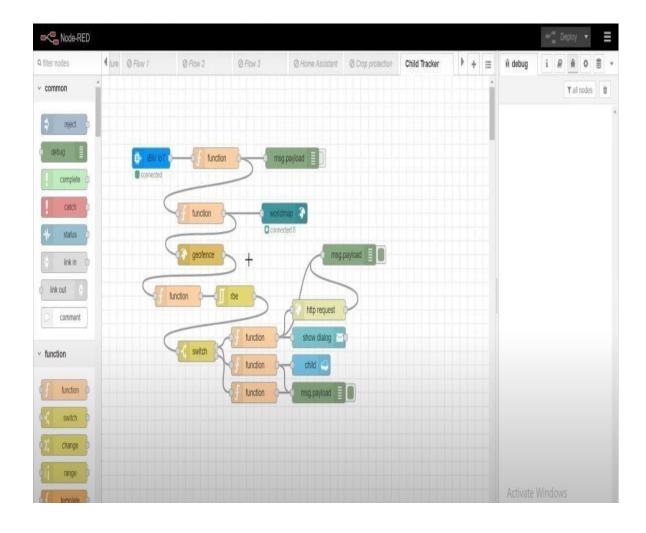
<u>INDUSTRY – SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM</u> <u>DEVELOP A WEB APPLICATION USING NODE-RED SERVICE</u>

Team Id	PNT2022TMID53736
Project Name	Industry-Specific Intelligent Fire Management System

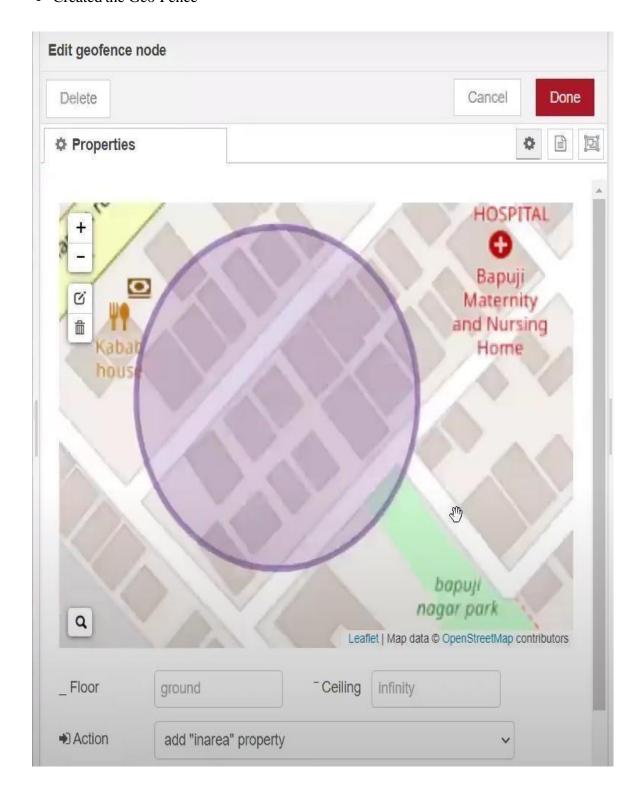
• Node-RED project:



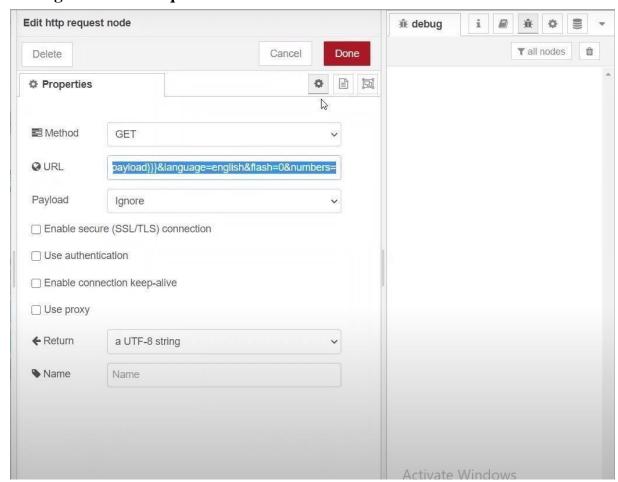
• Adding code to get child location in python

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

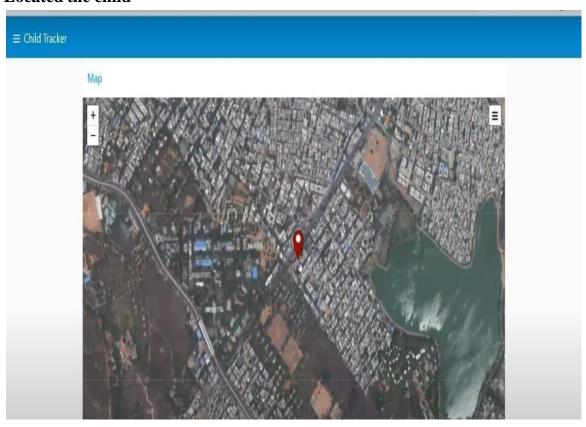
• Created the Geo Fence



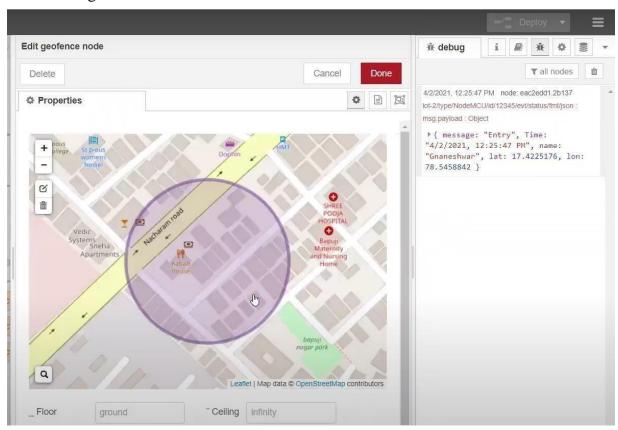
• Editing the HTTP Request URL



• Located the child



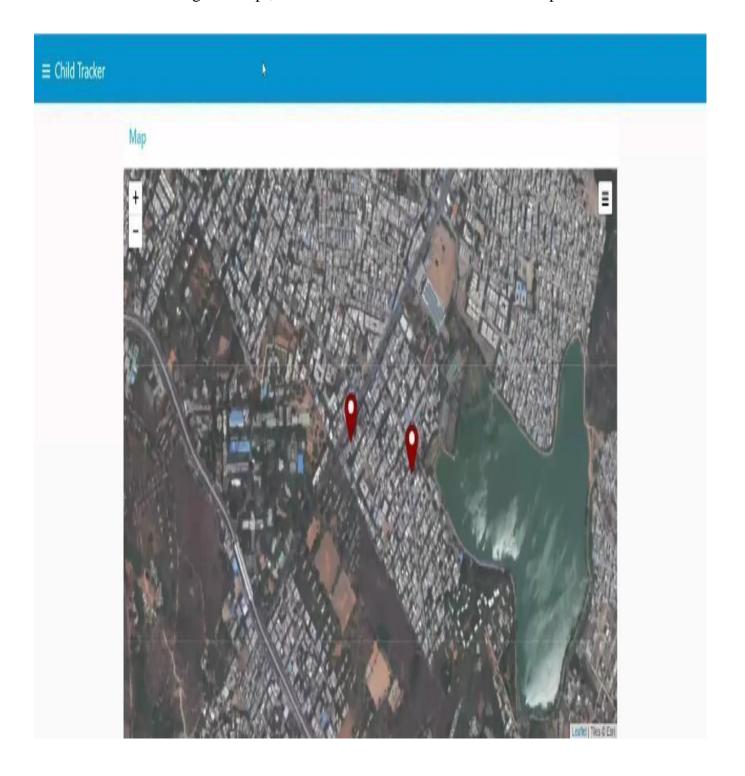
• Created the geofence node



Python script sending requests to IBM Cloud

```
∄ × IPython console
child.py
                                                                                                                    Console 2/A 🖾
                                                                                                                    Data published to IBM IoT platfrom:
1 import json
2 import wiotp.sdk.device
                                                                                                                     Data published to IBM IoT platfrom:
                                                                                                                     Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
   5 mvConfig = {
          "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:
           '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:
Data published to IBM IoT platfrom:
  16 client.connect()
                                                                                                                     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
                                                                                                                     Data published to IBM IoT platfrom:
  21
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
          #Latitude= 17.4225176
          #longitude= 78.5458842
                                                                                                                     Data published to IBM IoT platfrom:
  24
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
          #out area Location
  26
27
                                                                                                                     Data published to IBM IoT platfrom:
          latitude= 17.4219272
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  28
          longitude= 78.5488783
          myData={'name': name, 'lat':latitude, 'lon': <a href="longitude">longitude</a>} 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:
                                                                                                                     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 a web application using Node-RED