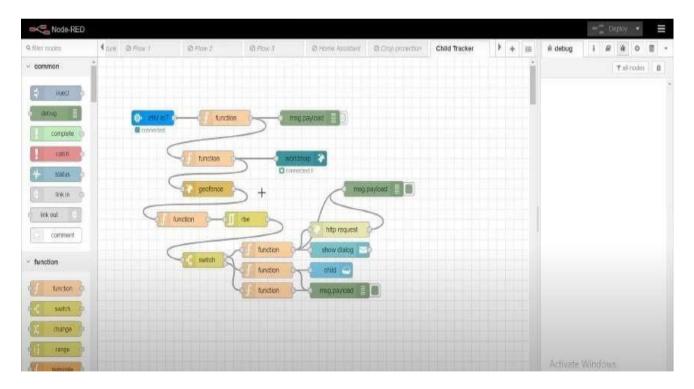
# **DEVELOP A WEB APPLICATION USING NODE-RED SERVICE**

Date	06 November 2022
Team ID	PNT2022TMID47980
Project Name	Industry-Specific Intelligent Fire Management System
Maximum Marks	8 Marks

### 1. To Develop the web application using Node-RED

# Steps:

• Open a Node-RED project



### · Add code to get child location in python

```
Modered app.py-Cuber/ELCOT/AppDatal.ocal/Programs/Python/Python3//Node red app.py (3.7.0)
File Edd Formst Run Options Window Help
Import jaon
Import Jaon
Import Miorp. add. device
Import Lime

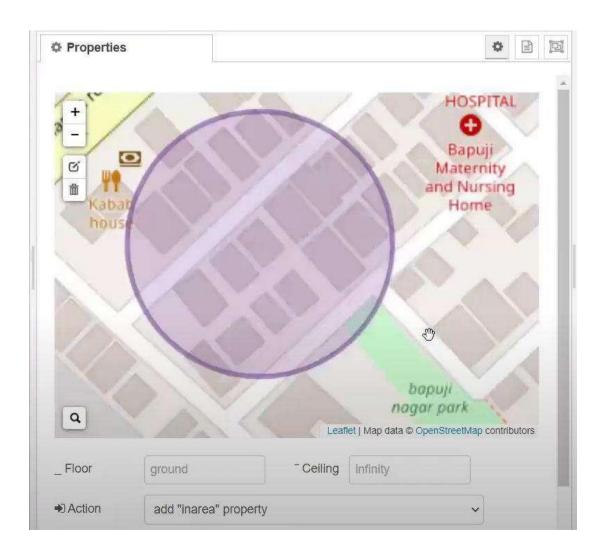
myConfig = {
    "identity":{
        "cordid": "86653s",
        "tupeid": "ior. device",
        "deviceId": "workwi_us"
    }
    auth": {
        "tokem':")[u!YYO]NmKr9sk(k"
    }
} client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
client.connect()

While True:
    name="Smartbridge"
    fin area location
    latitude 17.4225176
    longitude 78.5458842

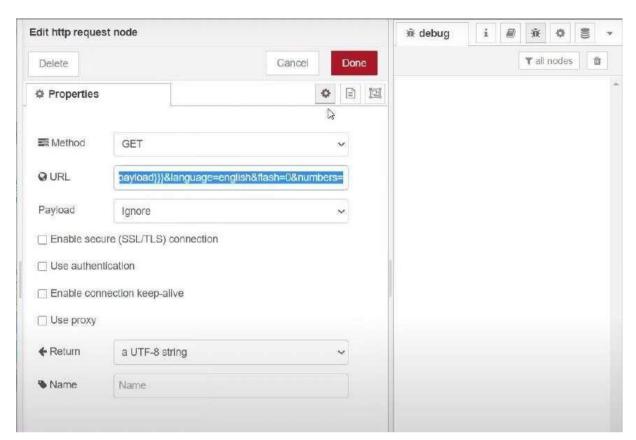
Sout area location
    flatitude= 17.4218272
    flongitude 78.5458893

myData={'name': name, 'lat': latitude, 'len': longitude}
    client.publishEvent(eventid="status", msgFormat="json", data-myData, qos=0, onFublish=None)
    print("Phata published to IBM IOT platfrom: ", myData)
    time.sleep (5)
    plient.disconnect()
```

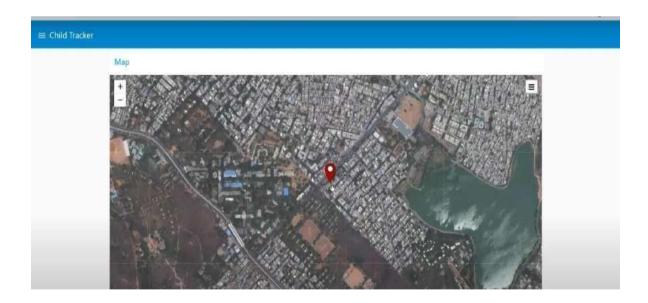
#### · Create the Geofence



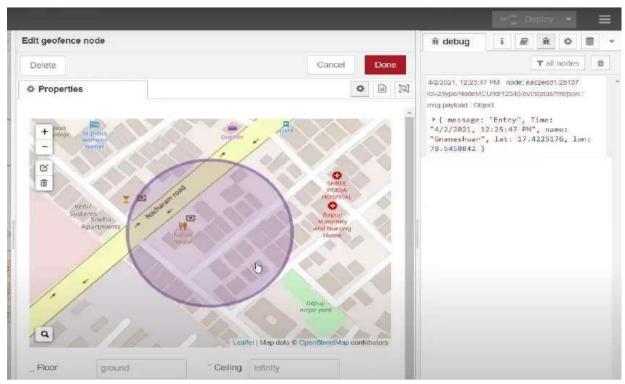
• Edit the HTTP Request URL



Locate the child



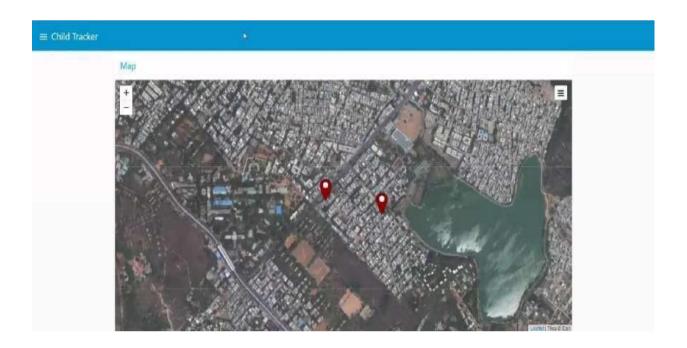
Create the geofence node



Python script send requests to IBM Cloud

```
IPython console
Node red app.py - C:/Users/ELCOT/AppData/Local/Programs/Python/Python37/Node red app.py (3.7.0)
File Edit Format Run Options Window Help
                                                                                                            Console 2/A 🔯
 import json
import wiotp.sdk.device
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
 import time
                                                                                                            Data published to IBM IoT platfrom:
 myConfig = {
                                                                                                            Data published to IBM IoT platfrom:
     "identity":{
                                                                                                            Data published to IBM IoT platfrom:
         entity":{
    "orgId": "88653s",
    "typeid": "iot_device"
    "deviceId": "wokwi_us"
                                                                                                            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":")1(u!YYO)NmKr9sk(k"
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
client.connect()
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
While True:
name="Smartbridge
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
     #in area location
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
     latitude 17.4225176
                                                                                                            Data published to IBM IoT platfrom:
     longitude 78.5458842
                                                                                                            Data published to IBM IoT platfrom:
     #out area location
                                                                                                            Data published to IBM IoT platfrom:
     #latitude= 17.4219272
#longitude 78-5488783
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
     myData={'name': name, 'lat': latitude, 'len': longitude}
client.publishEvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None}
print("Data published to IBM IOT platfrom: ", myData)
                                                                                                            Data published to IBM IoT platfrom:
                                                                                                            Data published to IBM IoT platfrom:
     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".



### **Conclusion:**

Development of the web application using Node-RED Successfully.