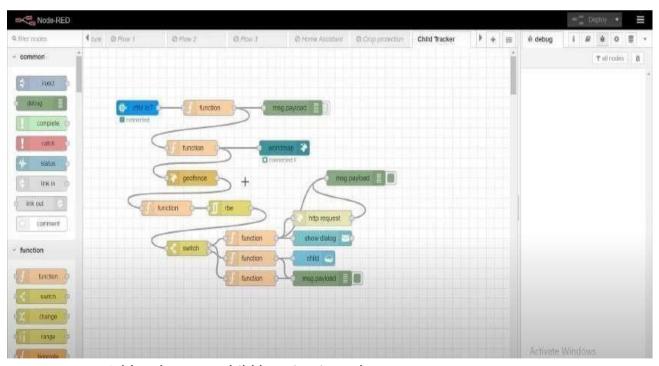
DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

| Date | 14 November 2022 |
|---------------|--|
| Team ID | PNT2022TMID54479 |
| 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

```
file Edit Format Run Options Window Help
import joon
import windorp.sdk.device
import time

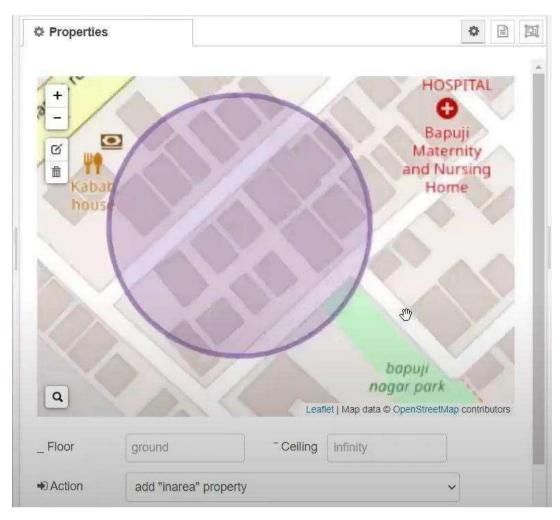
myConfig = {
    "identity":{
        "corgid": "88653s",
        "typeid": "iot_device",
        "deviceid": "wokwi_us"
    }
    "auth": {
        "token":")1(u!YYO)NmKr9sk(k"
    }
} client = wiotp.sdk.device.DeviceClient(config-myConfig, logHandlers=None)
client.connect()

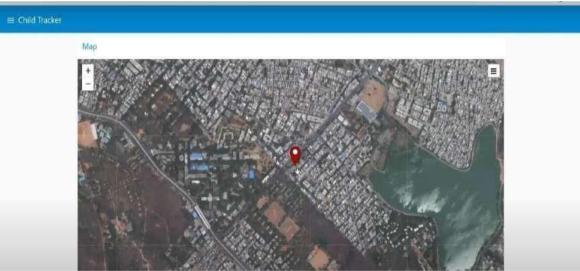
While True:
    name="Smartbridge"
    fin area location
    latitude 17.4225176
    longitude 78.5458842

    fout area location
    flacitude= 17.4219272
    flongitude 78-5488783

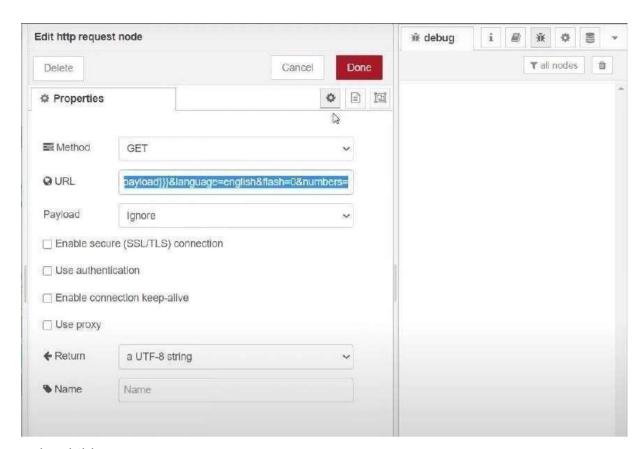
myData=('name': name, 'lat': latitude, 'len': longitude)
    client.publishEvent(eventid="status", msgFormat="json", data-myData, qos-0, onPublish=None)
    print("Data published to IBM IOT platfrom: ", myData)
    time.sleep (5)
    plient.disconnect()
```

• Create the Geofence



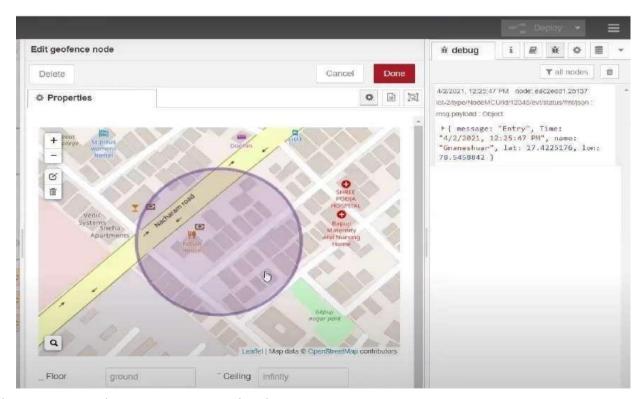


Edit the HTTP Request URL



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:
                                                                                                              Data published to IBM IoT platfrom:
myConfig = {
     nfig = {
  "identity":{
   "orgId": "88653s",
   "typeid": "iot_device",
   "deviceId": "wokwi_us"
                                                                                                              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)
                                                                                                              Data published to IBM IoT platfrom:
 client.connect()
                                                                                                              Data published to IBM IoT platfrom:
 While True:
                                                                                                              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:
Data published to IBM IoT platfrom:
     longitude 78.5458842
     #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)
time.sleep (5)
                                                                                                              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:
```

• 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.