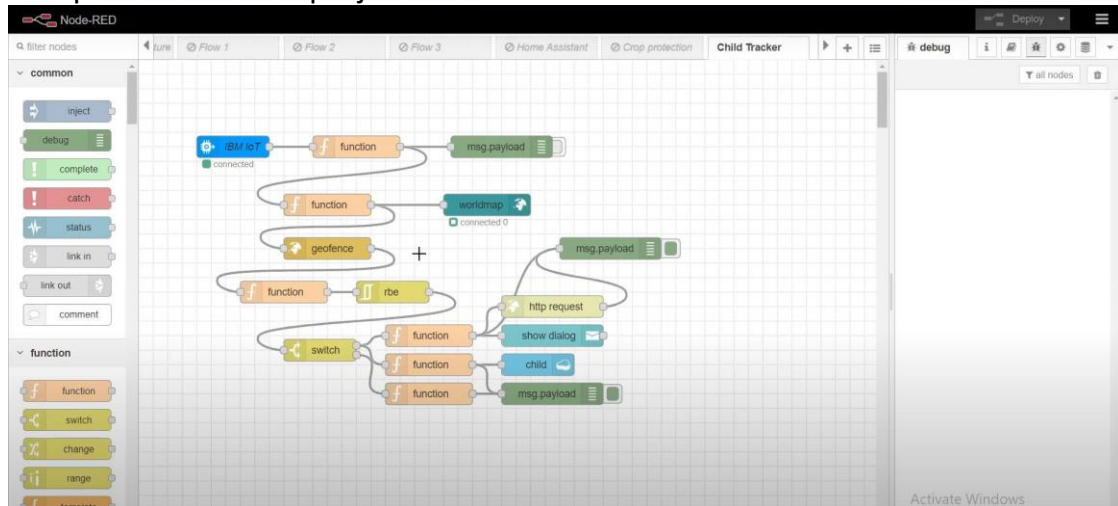


Develop The Web Application Using Node-RED

1. To Develop the web application using Node-RED

Steps :

1. Open a Node-RED project



2. Add 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

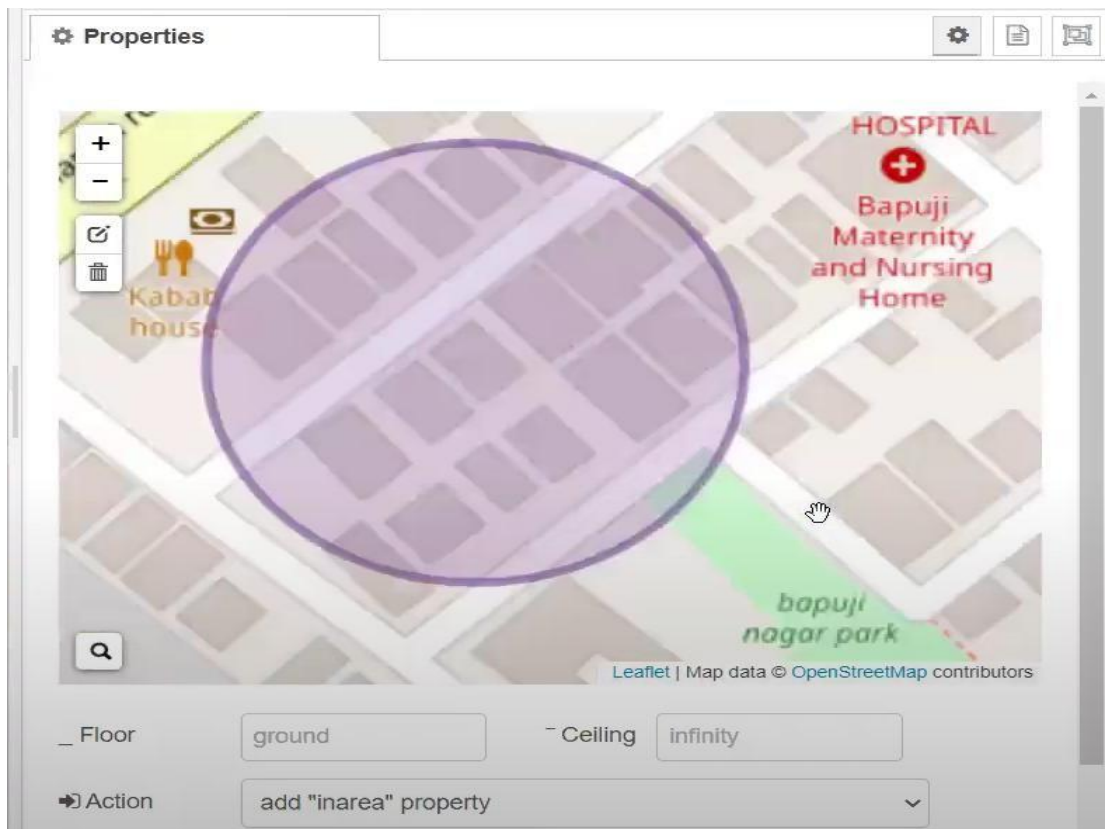
    latitude= 17.4225176
    longitude= 78.5458842

    #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 platform: ",myData)
    time.sleep(5)

client.disconnect()
```

3. Create the GeoFence



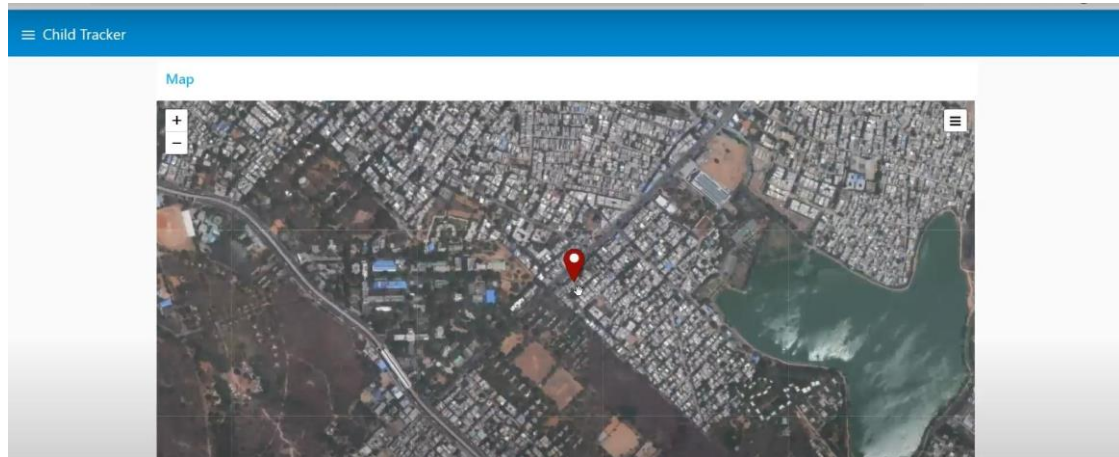
4. Edit the HTTP Request URL

The screenshot shows the 'Edit http request node' dialog box. At the top, there are buttons for 'Delete', 'Cancel', and 'Done'. Below these is a 'Properties' tab with a gear icon. The main area contains several configuration options:

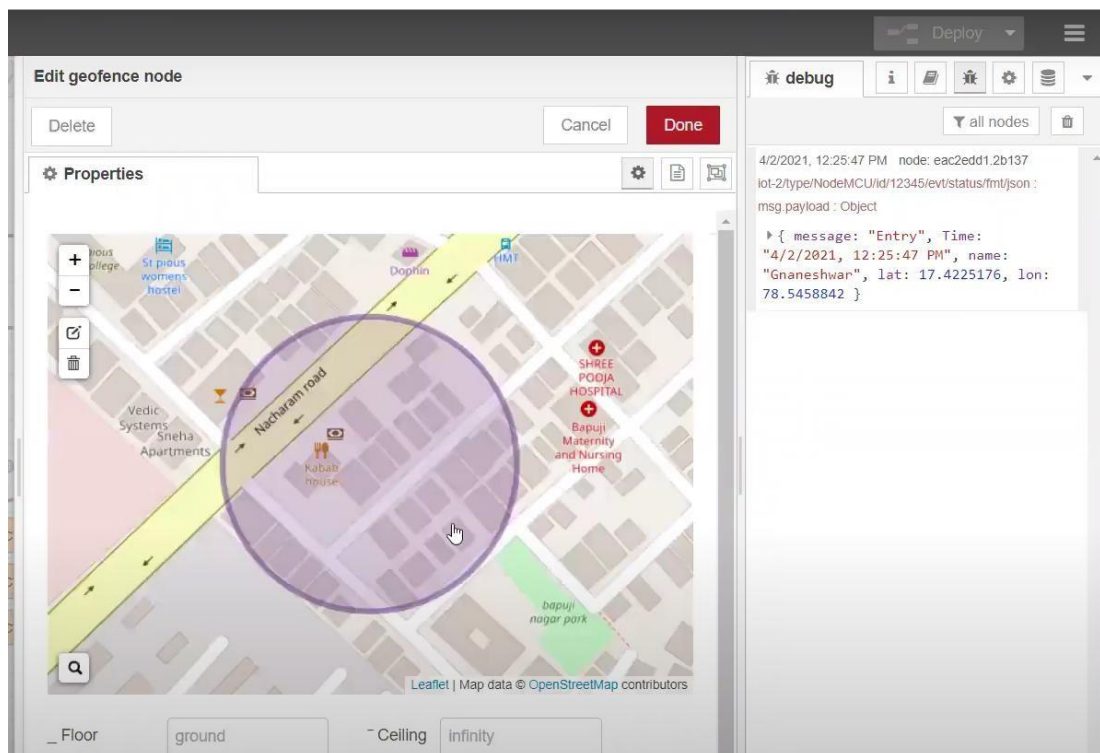
- Method:** A dropdown menu currently set to 'GET'.
- URL:** A text input field containing the text `payload}}}&language=english&flash=0&numbers=`. This text is currently selected with a blue highlight.
- Payload:** A dropdown menu currently set to 'Ignore'.
- Options:** Four unchecked checkboxes: 'Enable secure (SSL/TLS) connection', 'Use authentication', 'Enable connection keep-alive', and 'Use proxy'.
- Return:** A dropdown menu currently set to 'a UTF-8 string'.
- Name:** A text input field containing the text 'Name'.

On the right side of the dialog, there is a 'debug' tab and a toolbar with icons for 'all nodes' and a trash icon.

5. Locate the child



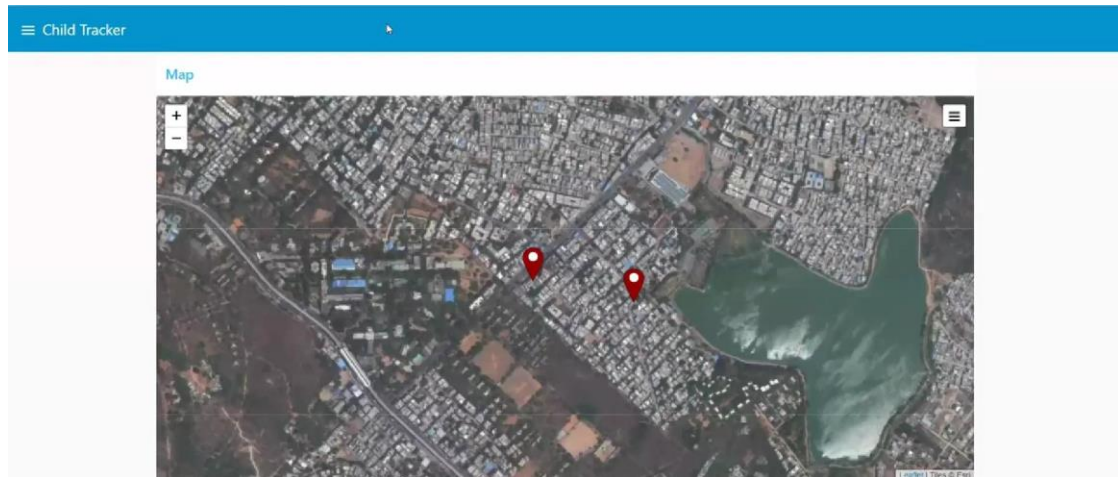
6. Create the geofence node



7. Python script send requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\chuld.py
child.py
1 import json
2 import wiotp.sdk.device
3 import time
4
5 myConfig = {
6     "identity": {
7         "orgId": "hj5fmy",
8         "typeId": "NodeMCU",
9         "deviceId": "12345"
10    },
11    "auth": {
12        "token": "12345678"
13    }
14}
15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
16 client.connect()
17
18 while True:
19     name = "Smartbridge"
20     #in area location
21
22     #Latitude= 17.4225176
23     #Longitude= 78.5458842
24
25     #out area location
26
27     latitude= 17.4219272
28     longitude= 78.5488783
29     myData={'name': name, 'lat':latitude, 'lon':longitude}
30     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
31     print("Data published to IBM IoT platform: ",myData)
32     time.sleep(5)
33
34 client.disconnect()
36
```

7. After running the script, the web UI shows “Person is not in the particular area”



Conclusion:

Developed the web application using Node-RED Successfully