

DEVELOP THE WEB APPLICATION USING -RED NODE

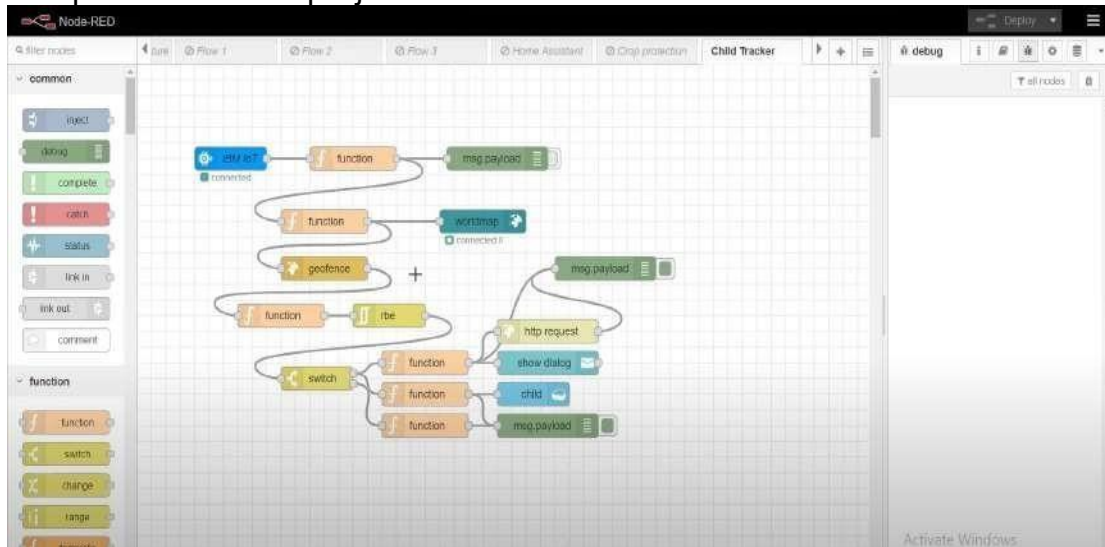
| | |
|---------------------|---|
| Title | IoT Based Safety Gadget for Child Safety Monitoring and Notification. |
| Domain Name | Internet of Things (IOT) |
| Team Lead | MOHAMED ANAS J |
| Team Member | MAHESH KUMAR P MOULISHANKAR K DINESH KUMAR R |
| Mentor | DIVYA E |
| Team ID | PNT2022TMID07784 |
| College Name | SNS College of Engineering |
| Department | Electronics and Communication Engineering |

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

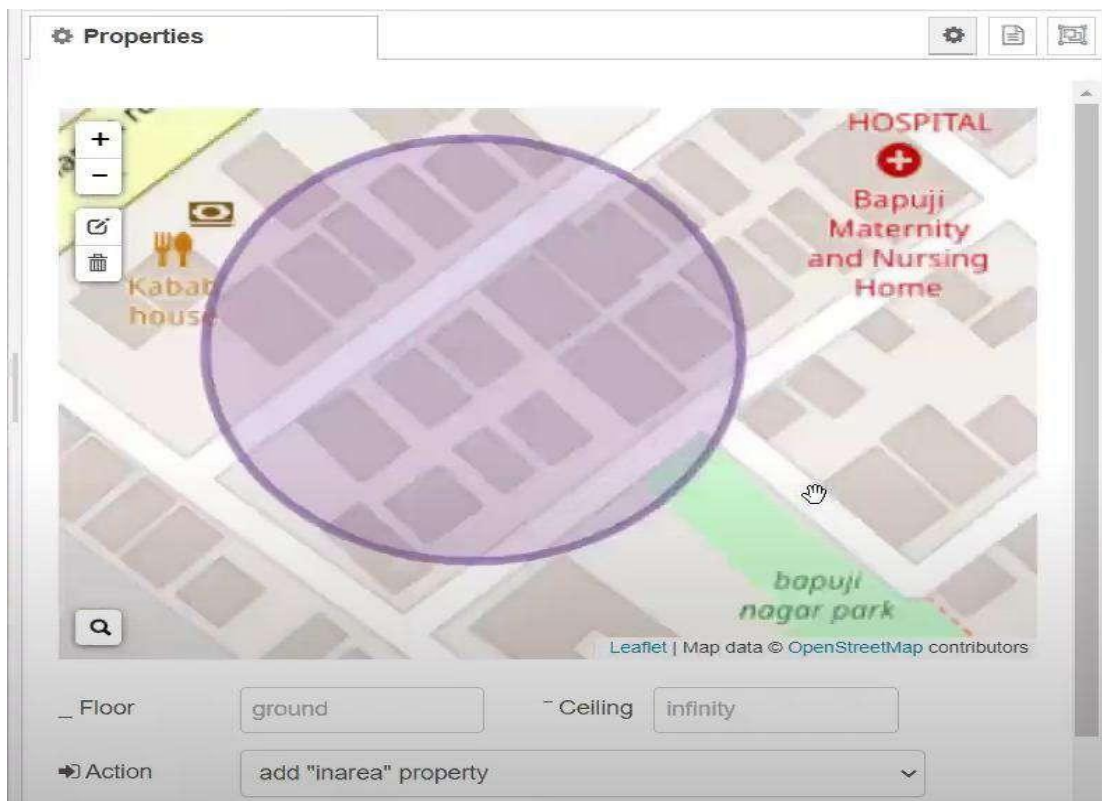
    latitude= 17.4225176
    longitude= 78.5458842

    #out area location

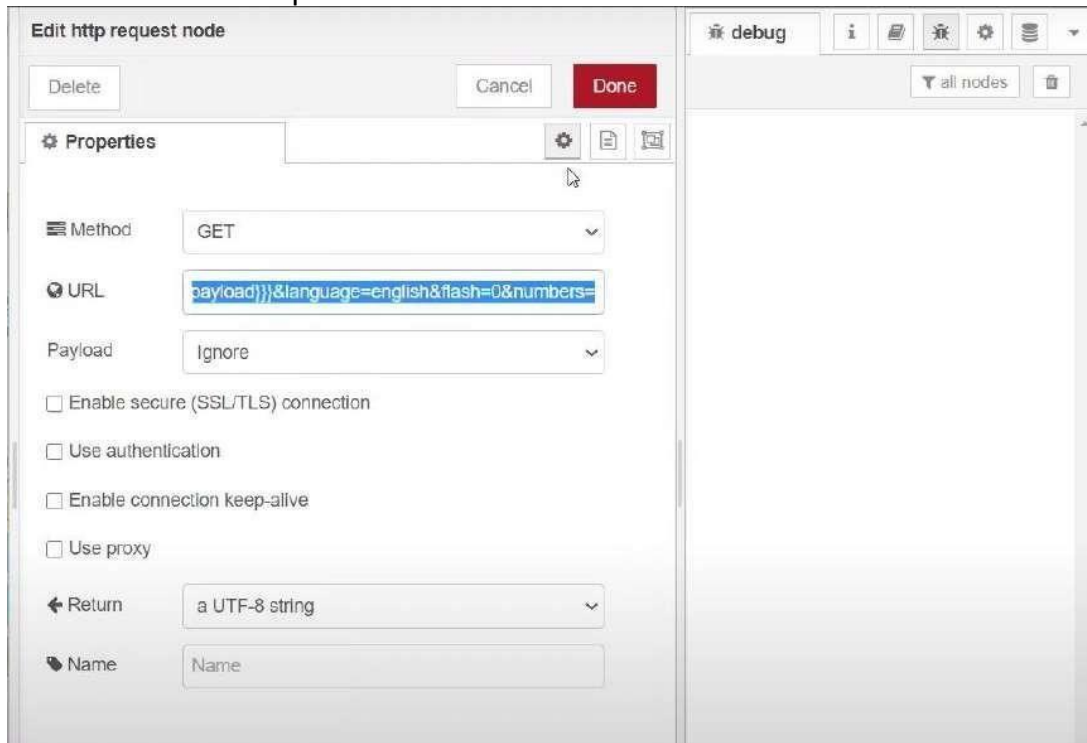
    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

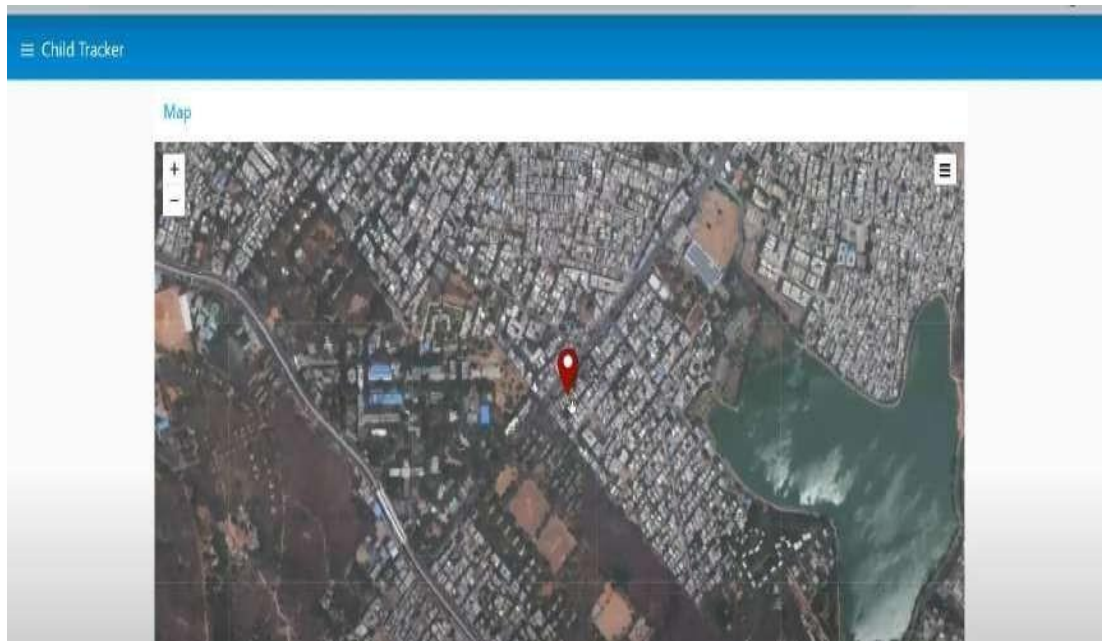
3. Create the GeoFence



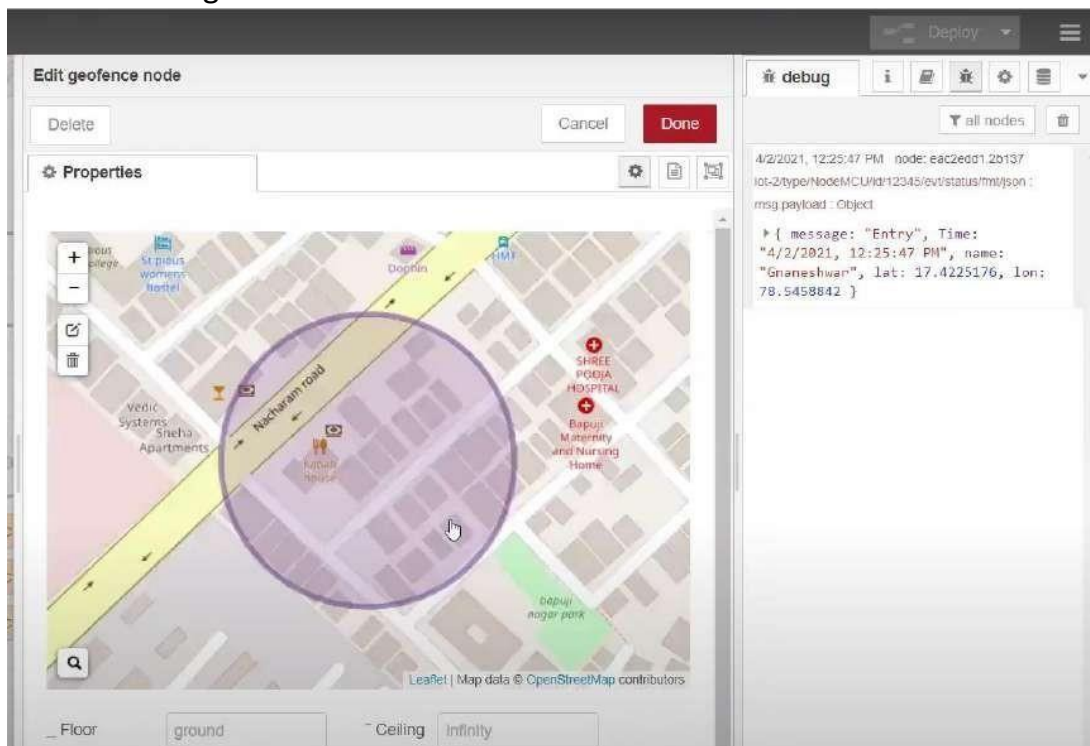
4. Edit the HTTP Request URL



5. Locate the child



6. Create the geofence node

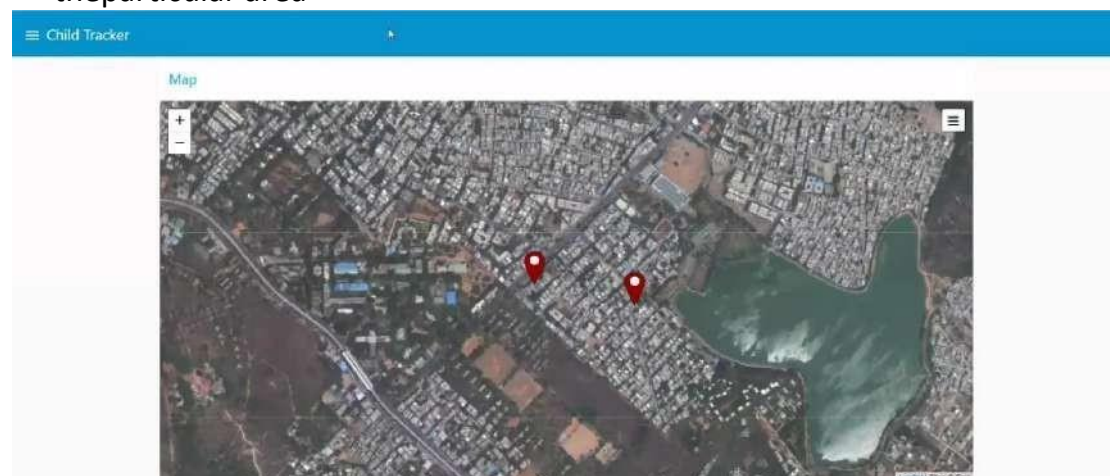


7. Python script send requests to IBM Cloud.

```
Editor - C:\Users\HP\Desktop\chid.py | Python console
```

```
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()  
35  
36
```

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



Conclusion:

Developed the web application using Node-RED Successfully