

Date: 16-11-2022
Team Id: PNT2022TMID19539
Project Name: IoT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum marks: 4

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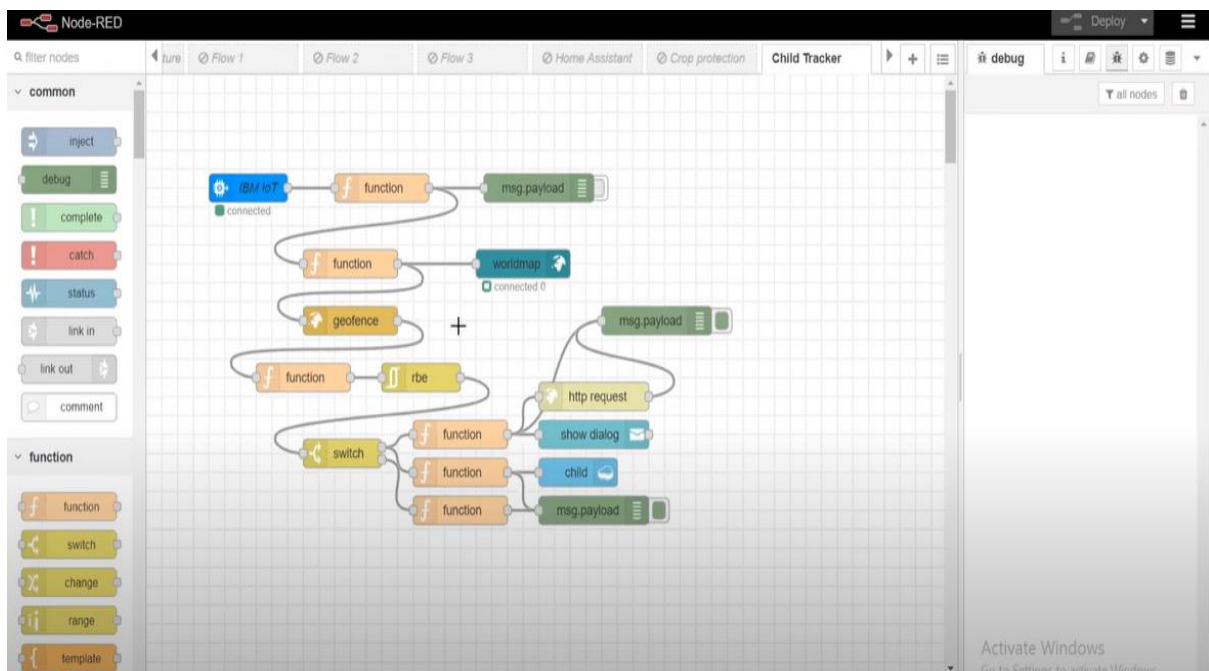
Project Name: IoT Based Safety Gadget for Child Safety Monitoring and Notification

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### ***IoT Based Safety Gadget for Child Safety Monitoring and Notification:***

### *Develop a web application using Node-Red Services Steps:*

### 1. Open a Node-Red Project:



## 2.Add code to get location in Python:

```
import json
import wiotp.sdk.device
import time

myConfig = {
    "identify": {
        "orgId": "fy2vxg",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name = "Sri Eshwar College of Engineering"
    #in area location

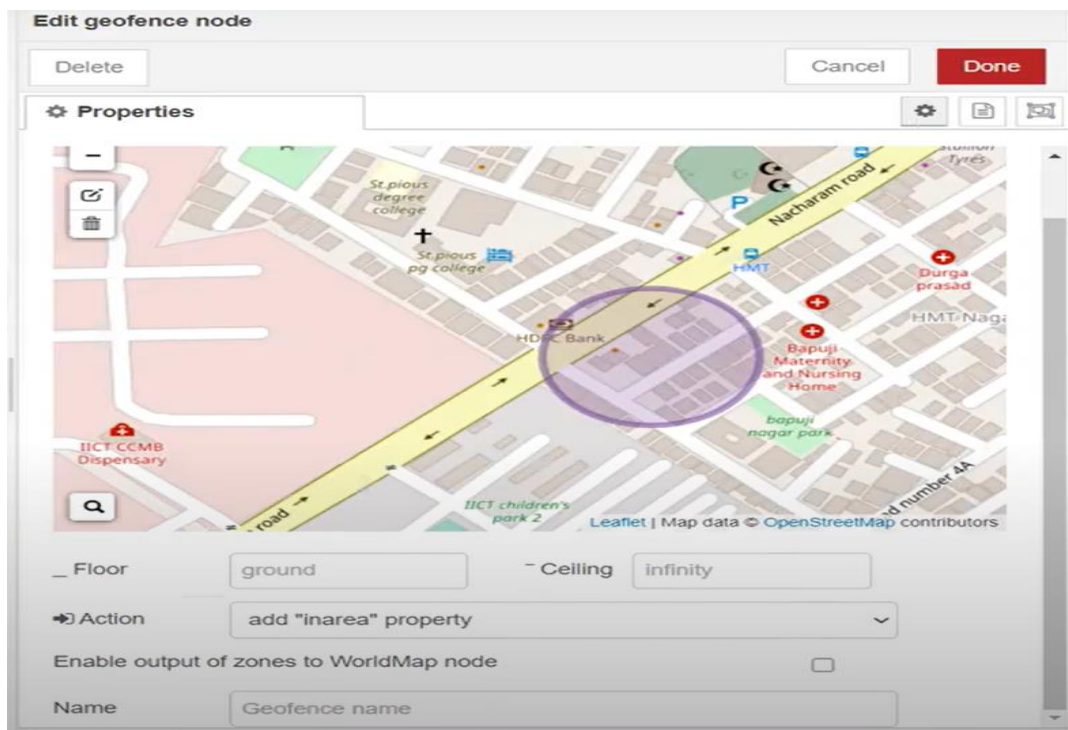
    #latitude= 17.4225176
    #longitude= 78.5458842

    #out area location

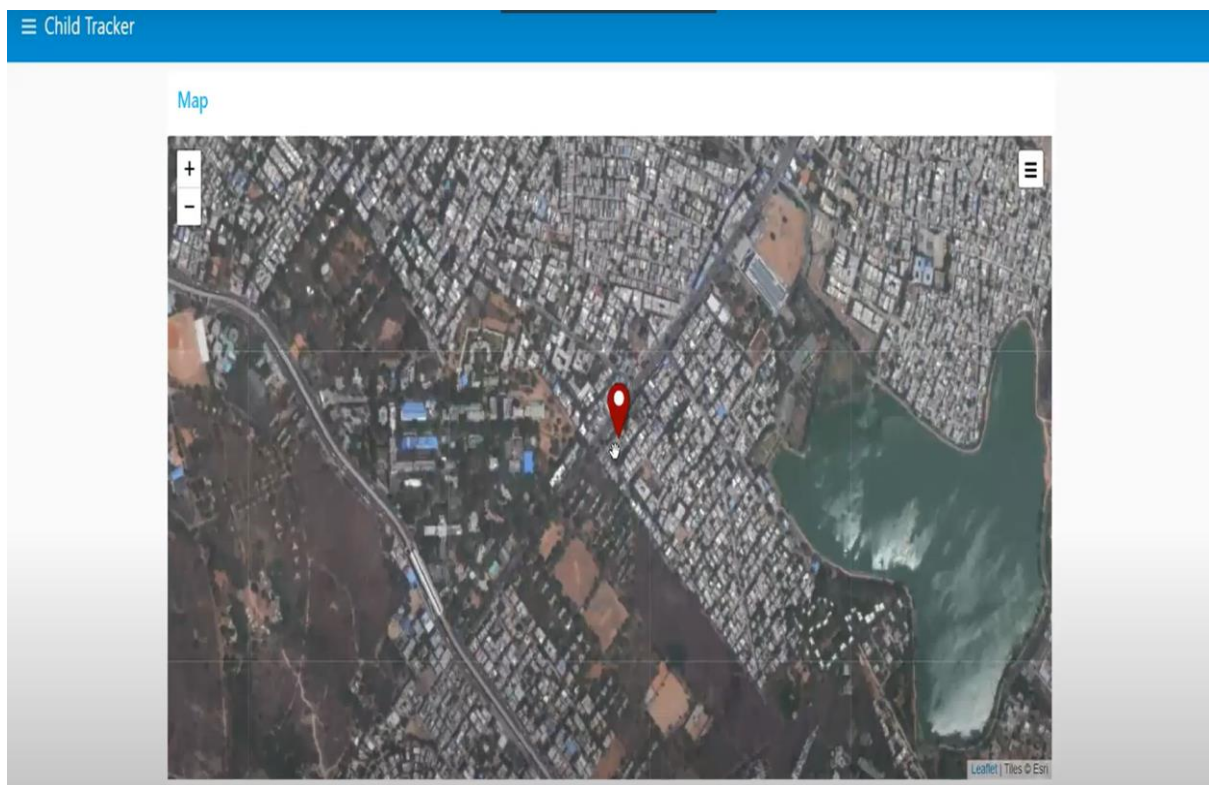
    latitude= 17.4219272
    longitude= 78.5488783
    myData={'name':name,'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="Status",msgformat="json",data=myData,,qos=0,onPublish=None)
    print("Data published to IM IoT platform:",myData)
    time.sleep(5)

client.disconnect
```

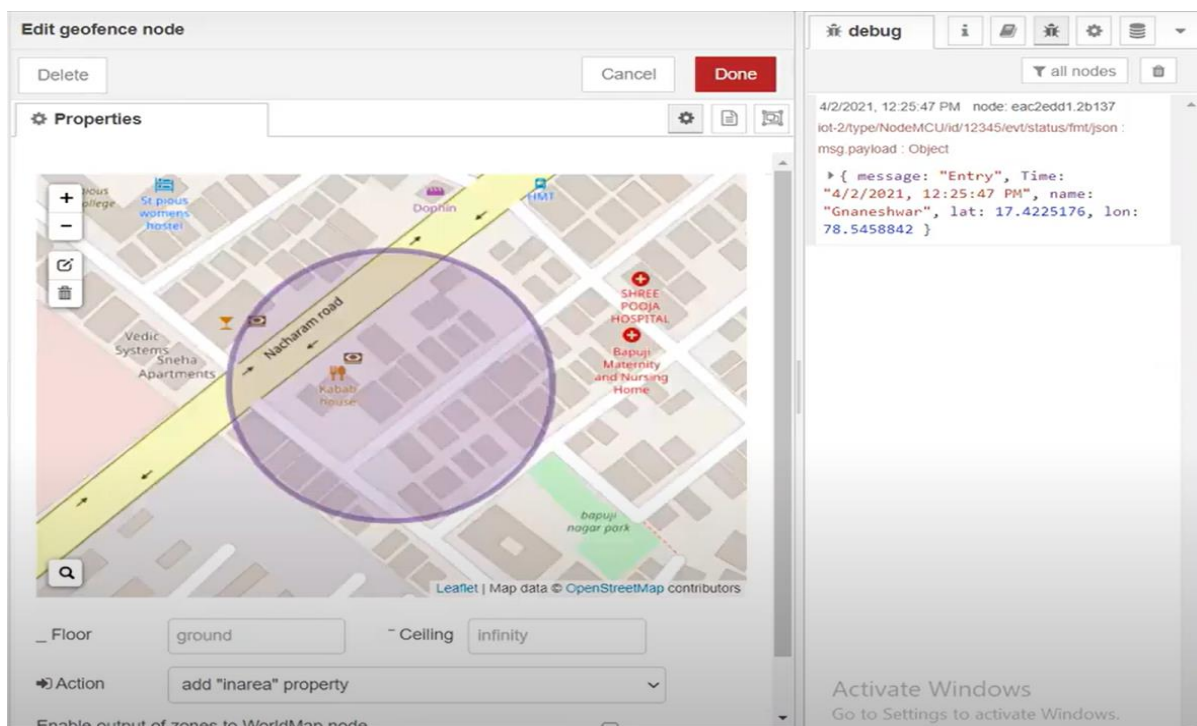
## 3.Create the Geofence:



#### 4. Locate the place:



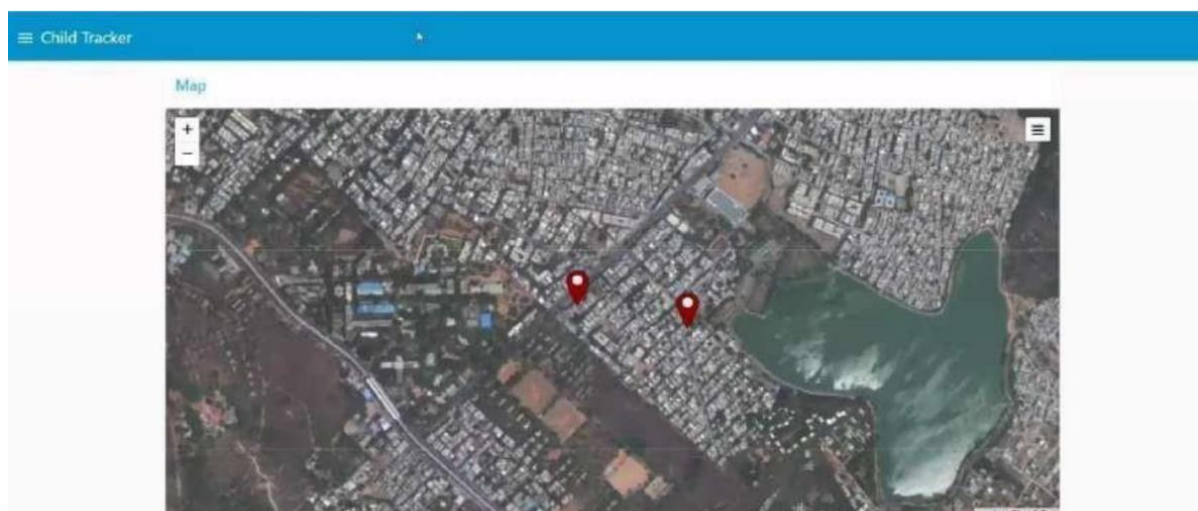
#### 5. Create the Geofence:



6. Python scripts sent requests to IBM cloud:

```
1 import json
2 import wiopb.sdk.device
3 import time
4
5 myConfig = {
6     "identity": {
7         "orgId": "hjsfmy",
8         "typeId": "NodeMCU",
9         "deviceId": "12345"
10     },
11     "auth": {
12         "token": "12345678"
13     }
14 }
15 client = wiopb.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', msFormat='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
```

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



## 8. Conclusion:

Developed the web application using Node-Red Successfully.