

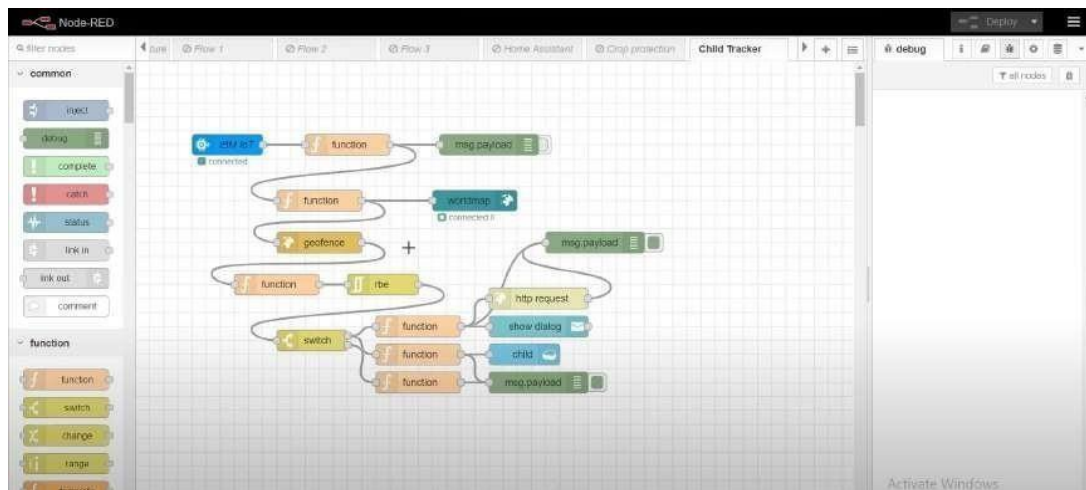
## Develop a web application using Node-Red Services

Date	14 September 2022
Team ID	PNT2022TMID00392
Project Name	Project – IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

# IoT Based Safety Gadget for Child Safety Monitoring & Notification

## Develop a web application using Node-Red ServicesSteps :

## Open a Node-RED project



## Add code to get 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= "Smarthbridge"
    #in area location

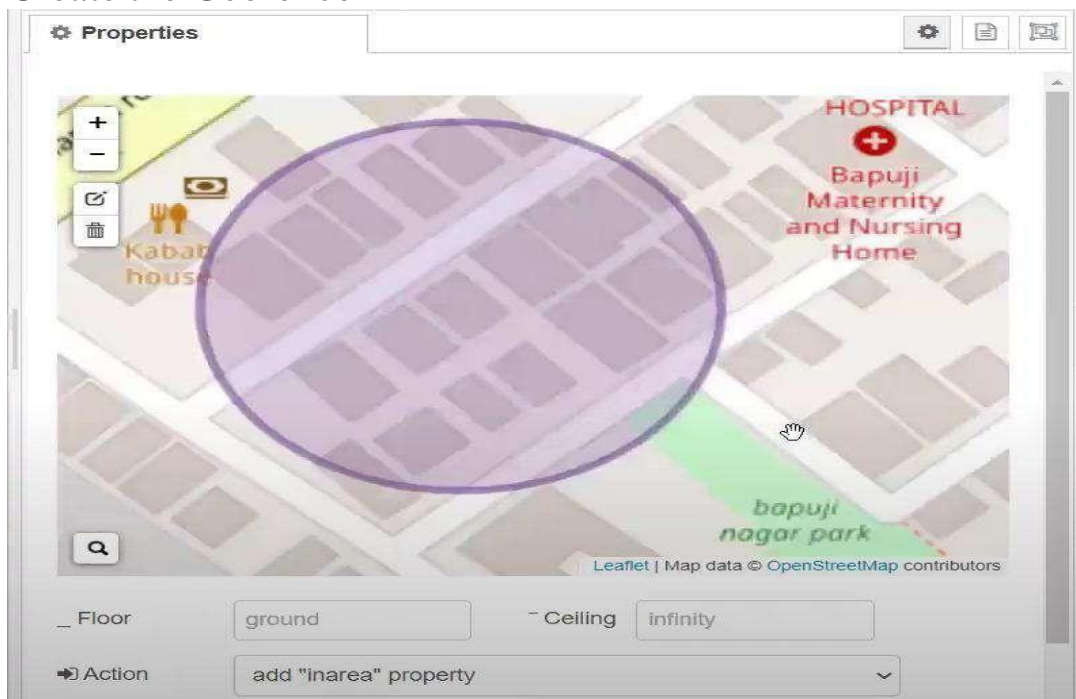
    latitude= 17.4225176
    longitude= 78.5458842

    #out area location

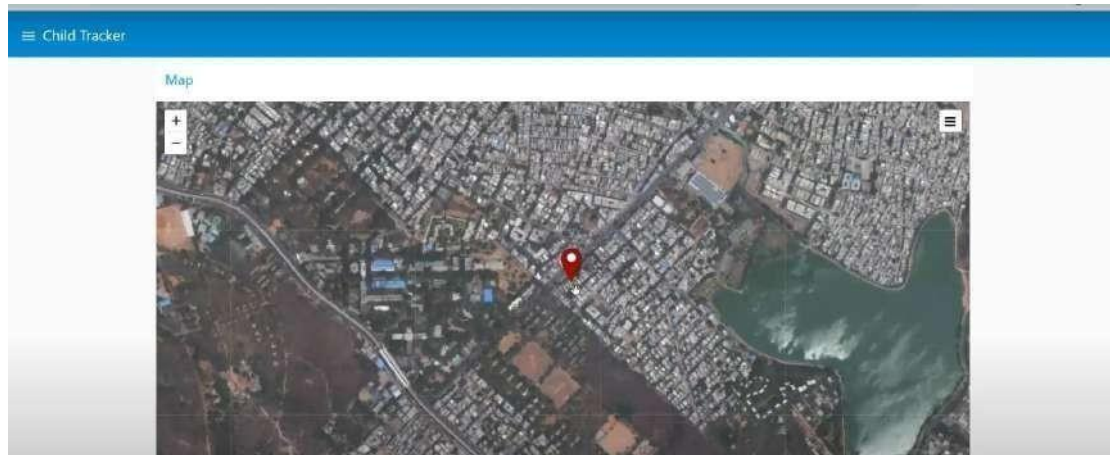
    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

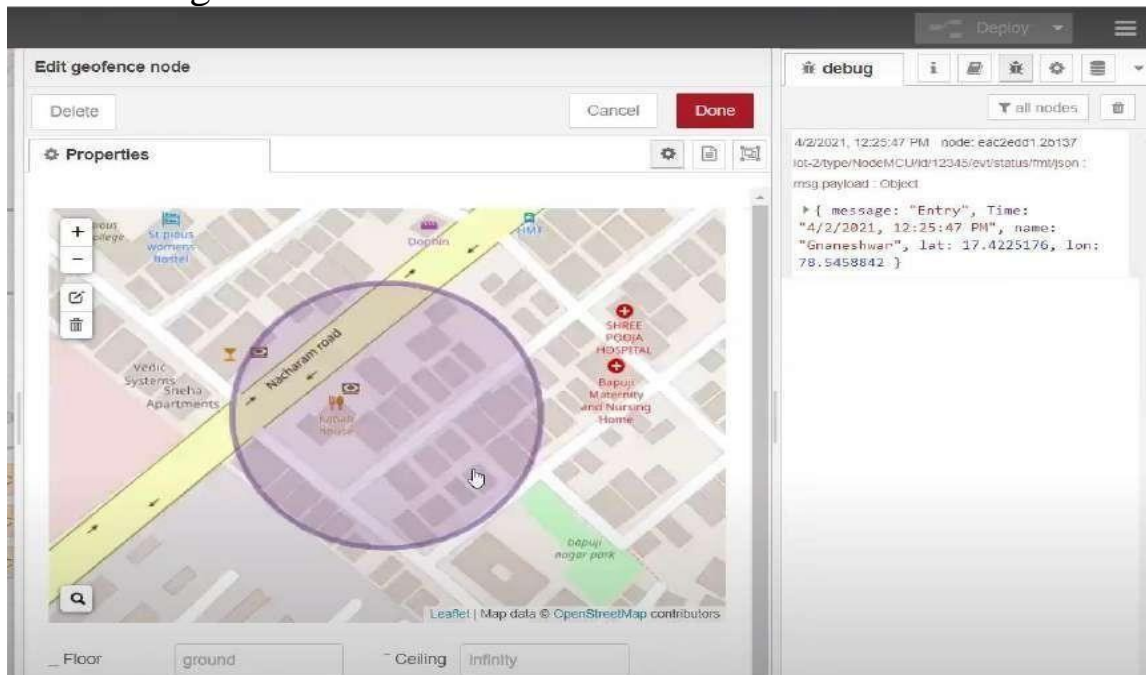
## Create the Geofence



## Locate the place



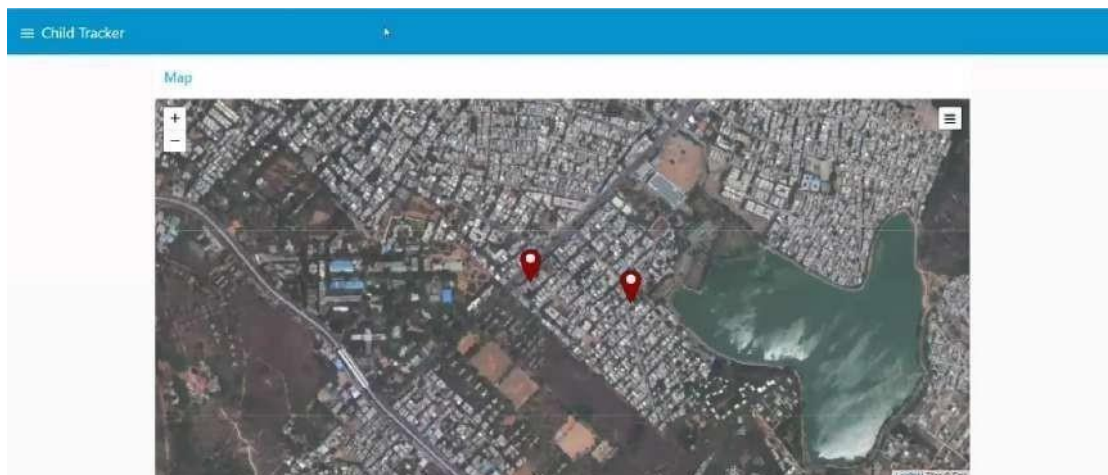
## Create the geofence



## Python script send requests to IBM Cloud

```
Editor - C:\Users\HP\OneDrive\Desktop\chlid.py
chlid.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= 17.4225776
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
```

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



Conclusion :  
Developed the web application using Node-RED Successfully