

## **DEVELOP THE WEB APPLICATION USING -RED NODE**

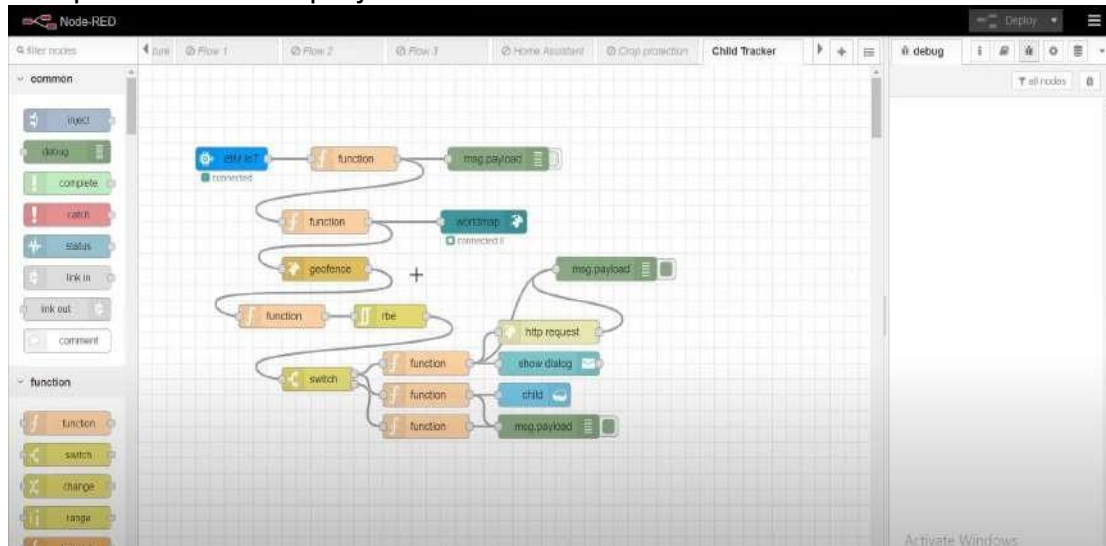
<b>Title</b>	IoT Based Safety Gadget for Child Safety Monitoring and Notification.
<b>Domain Name</b>	Internet of Things (IOT)
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<b>College Name</b>	Mailam Engineering College
<b>Department</b>	Electronics and Communication Engineering

## 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

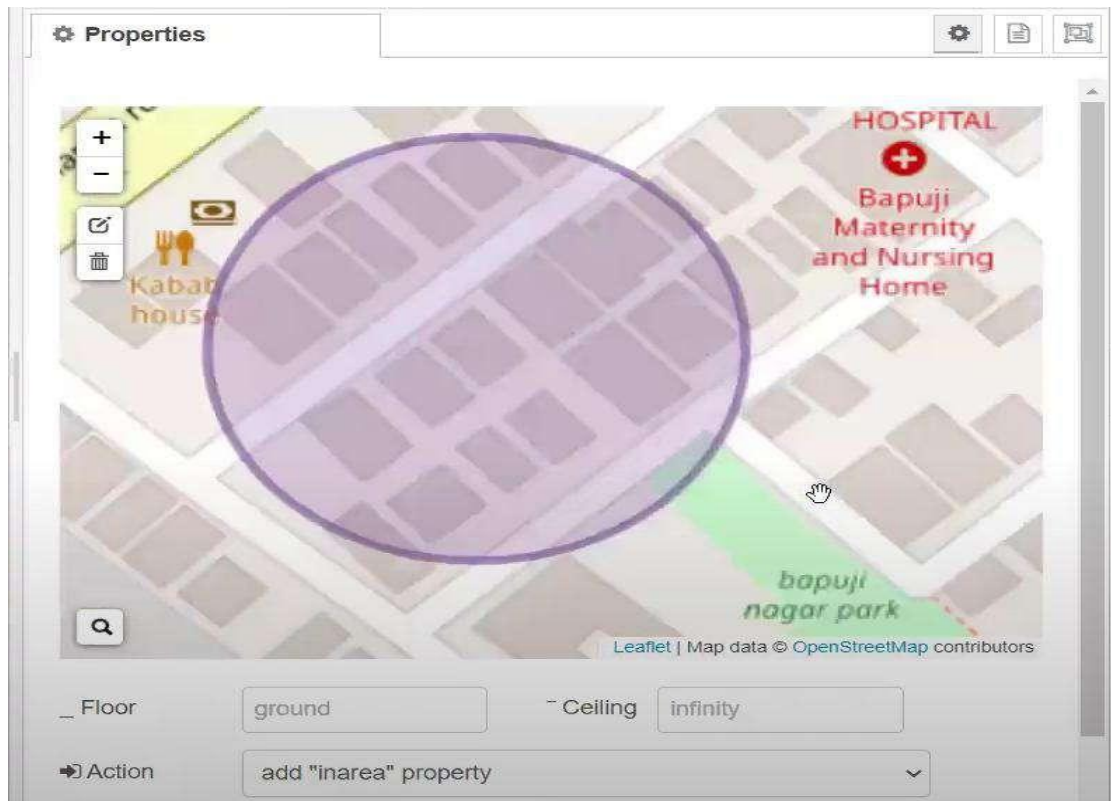
    latitude= 17.4225176
    longitude= 78.5458842

    #out area location

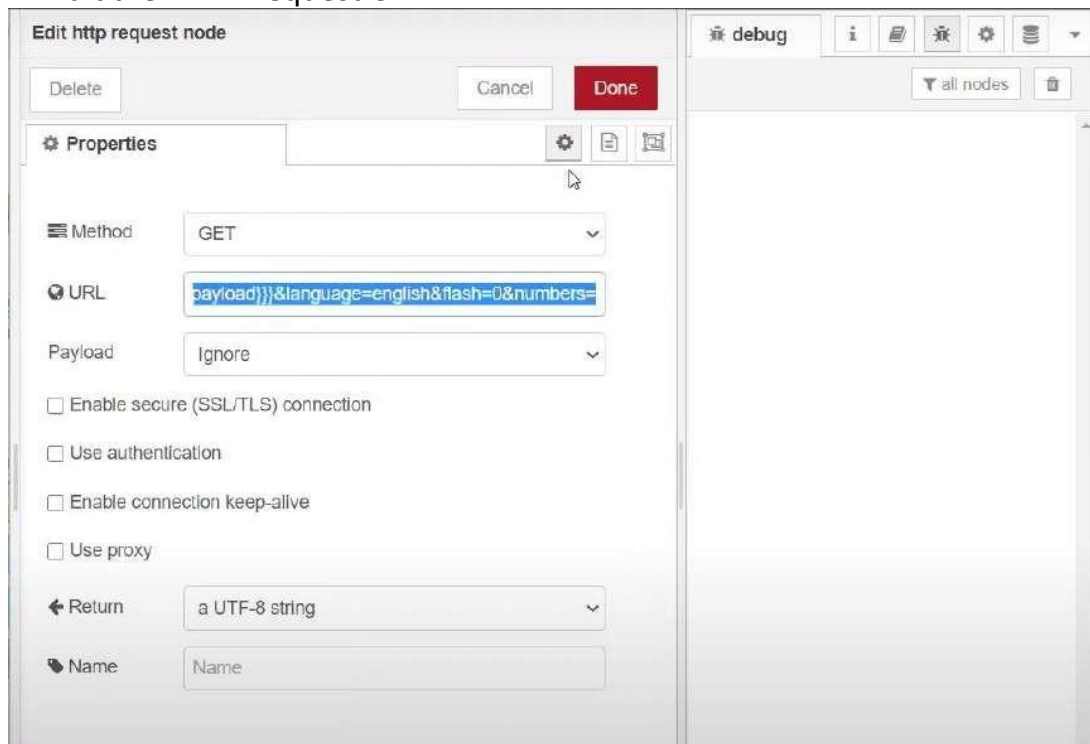
    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

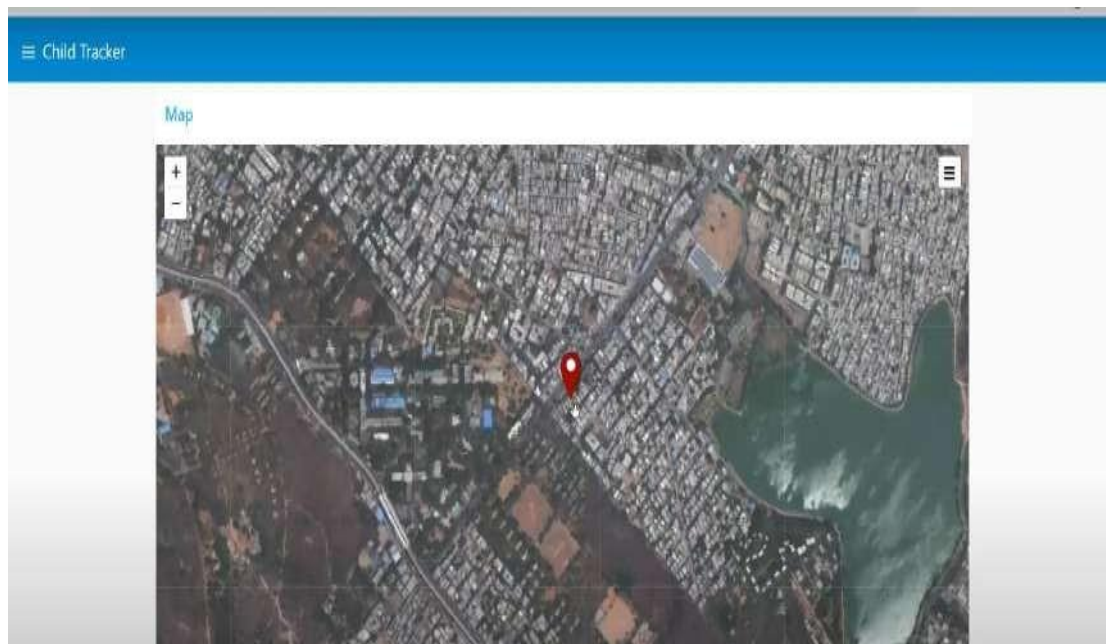
### 3. Create the GeoFence



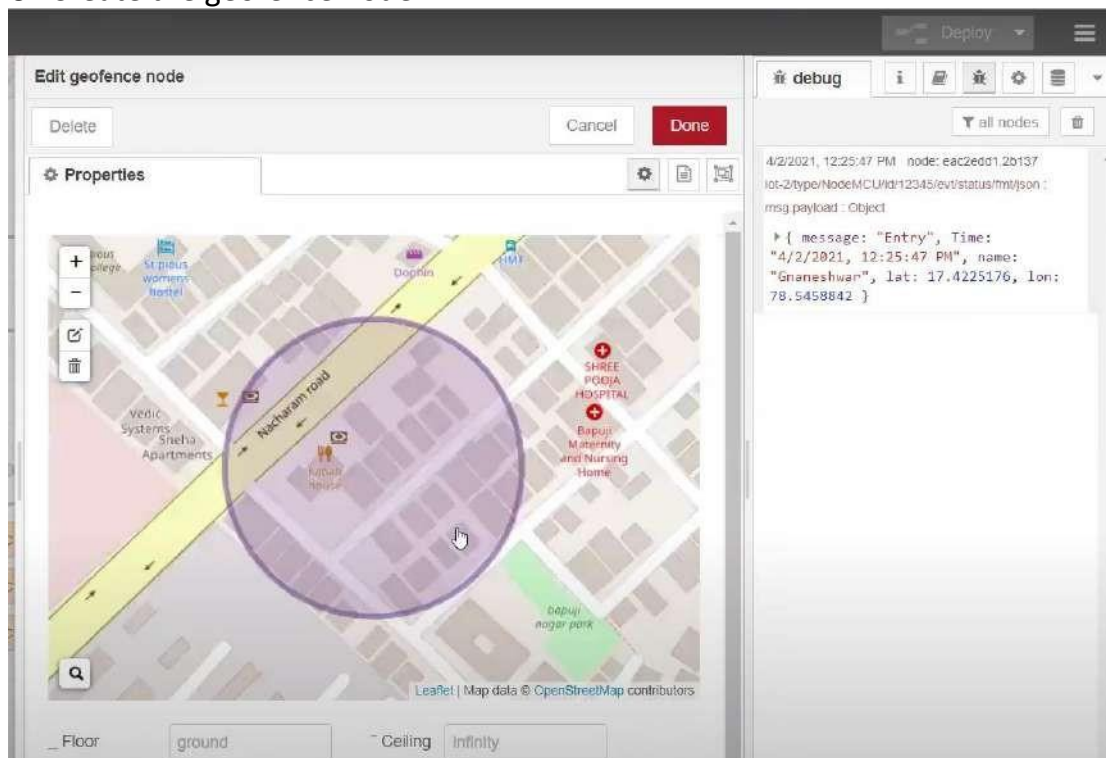
### 4. Edit the HTTP Request URL



## 5. Locate the child



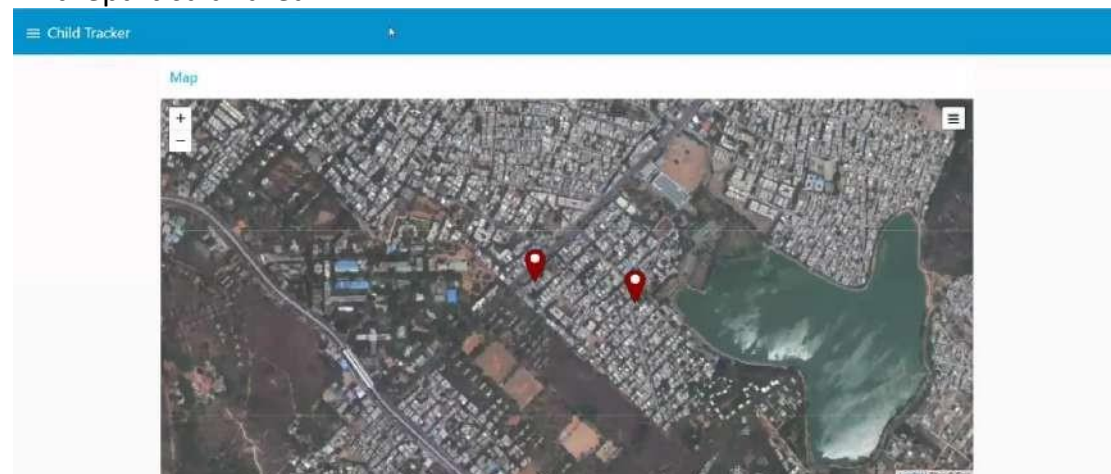
## 6. Create the geofence node



7. Python script send requests to IBM Cloud.

```
Editor - C:\Users\HP\Desktop\child.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()
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