

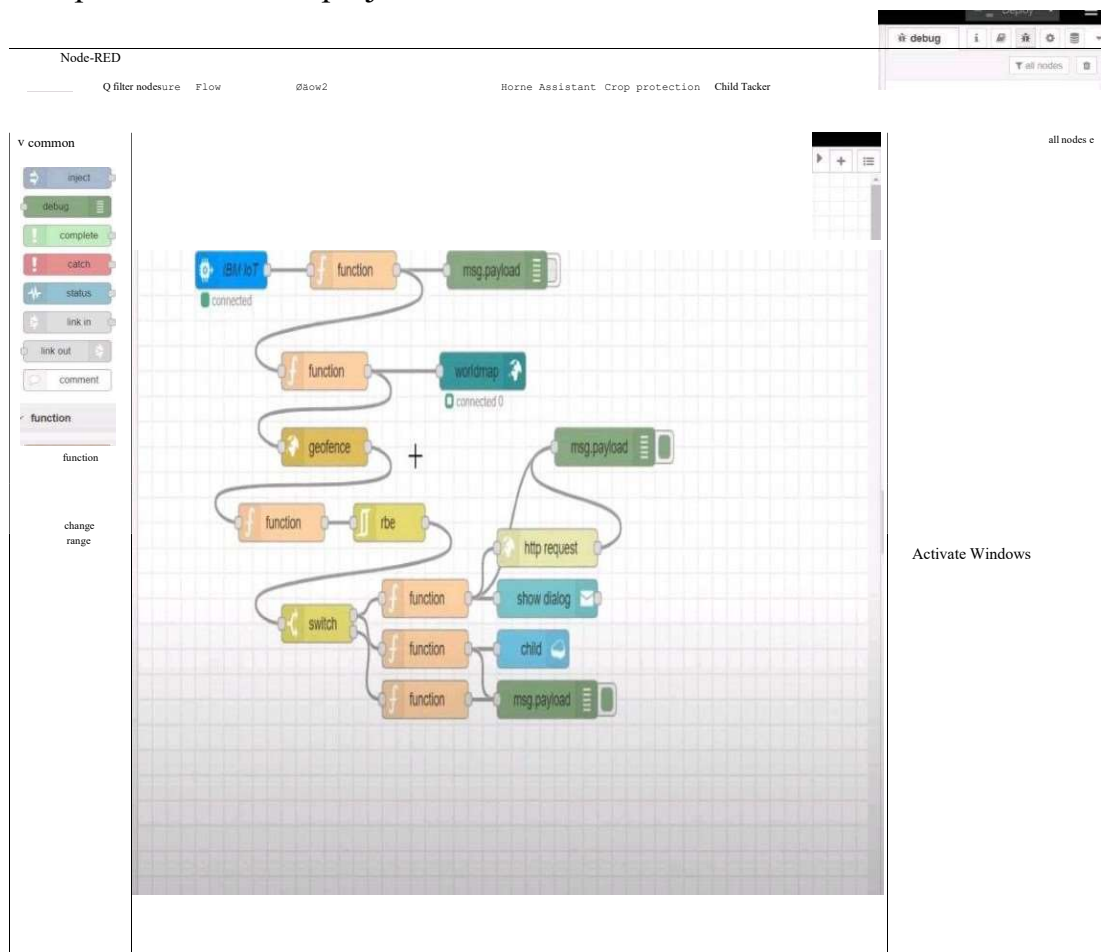
Develop The Web Application Using Node-RED

Team ID	PNT2022TMID24203
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification

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
import time
import sys

myconfig = {
    "identity": {
        "orgId": "Sfray",
        "typeId": "NodeMCV",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

client = wiotp.DeviceClient(
    config=myconfig,
    logHandler=None
)

client.connect()

name = "Smartbridge"
areaLocation = {
    "latitude": 17.4225176,
    "longitude": 78.5458842
}

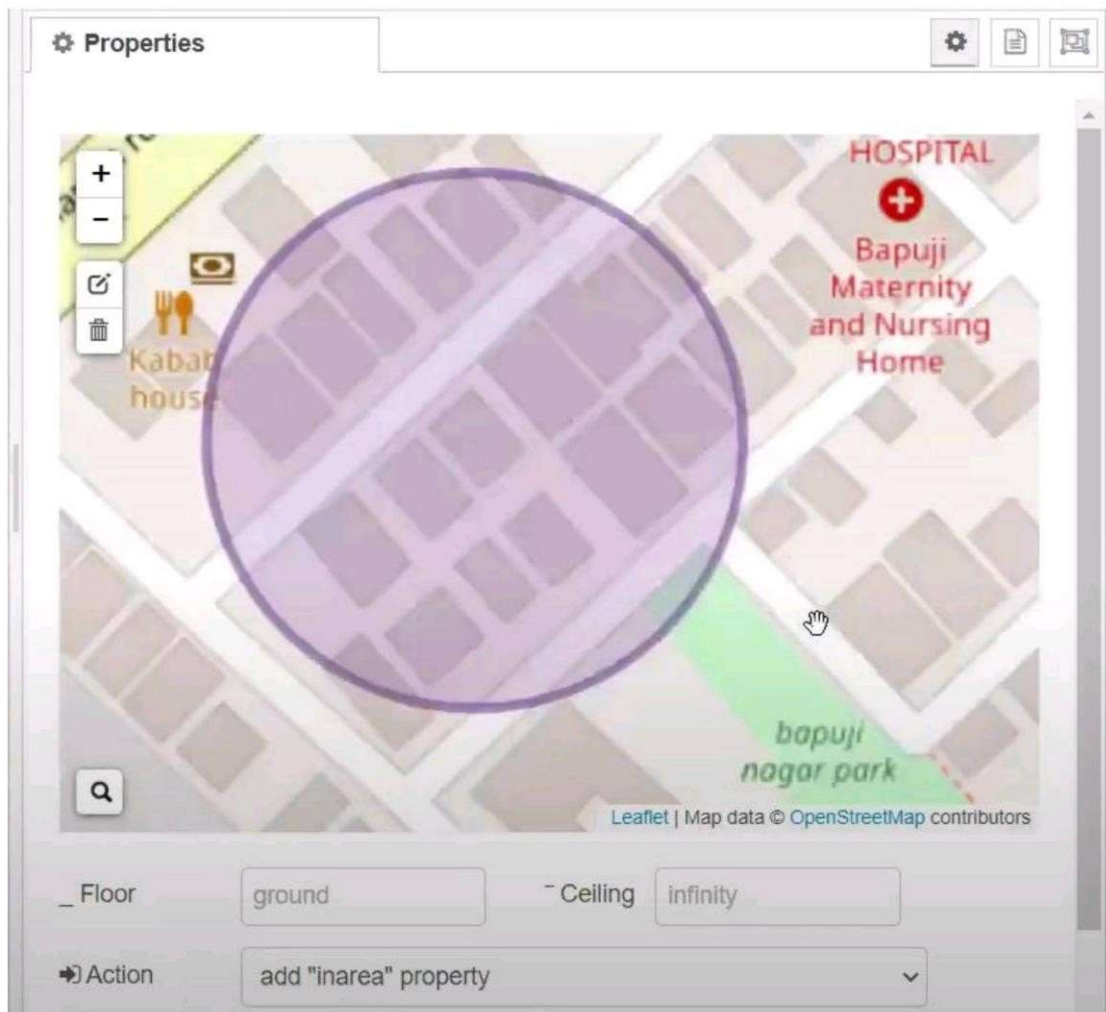
data = {
    "name": name,
    "latitude": areaLocation["latitude"],
    "longitude": areaLocation["longitude"]
}

client.publish(
    eventId="location",
    status="published",
    data=data,
    qos=0,
    onPublish=None
)

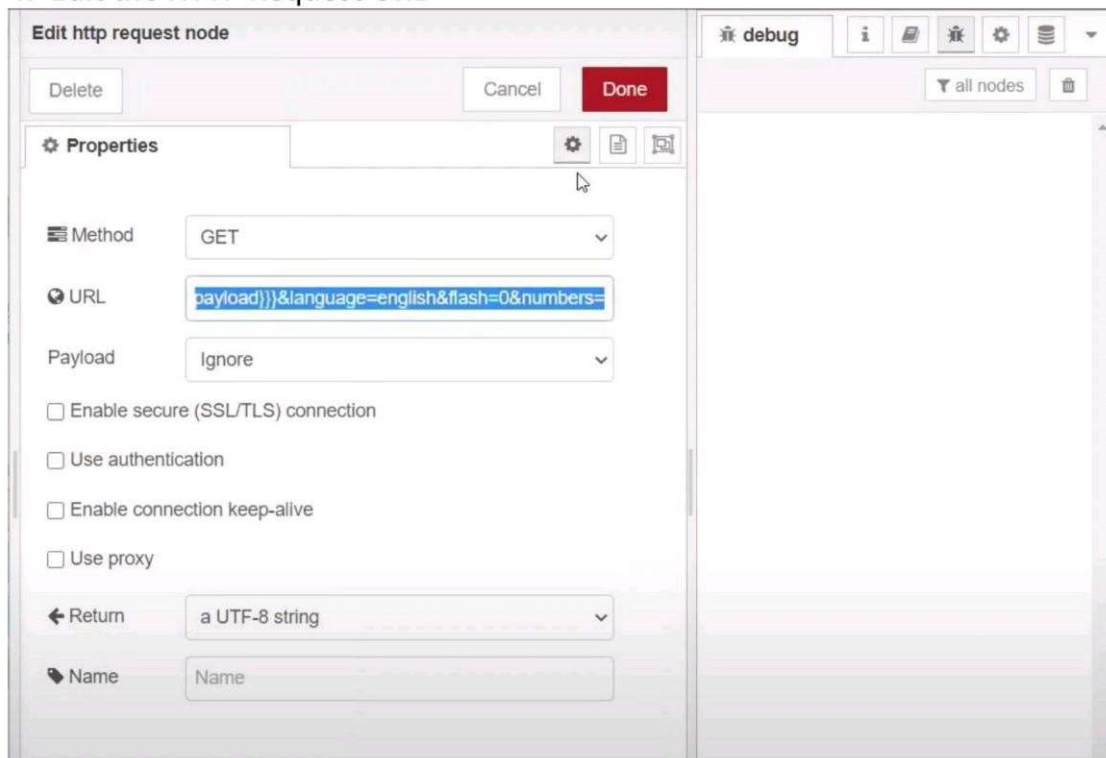
client.disconnect()

```

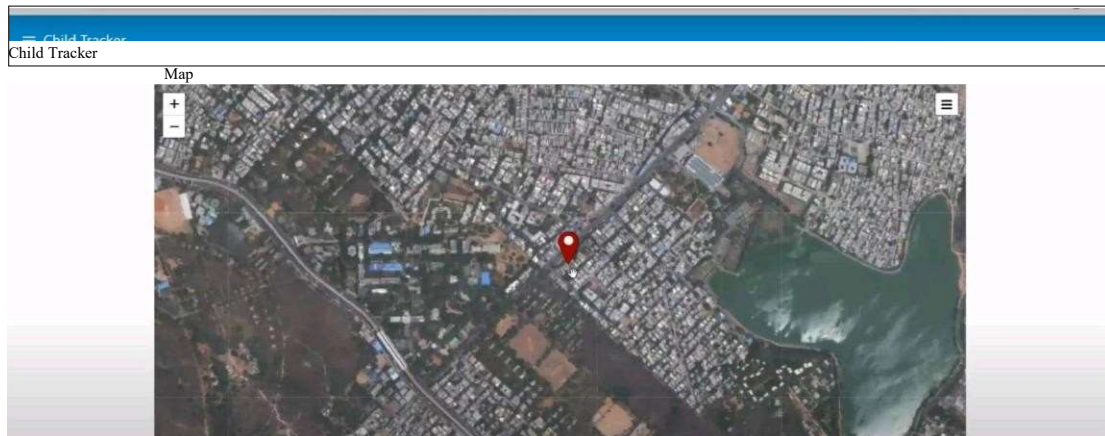
3. Create the GeoFence



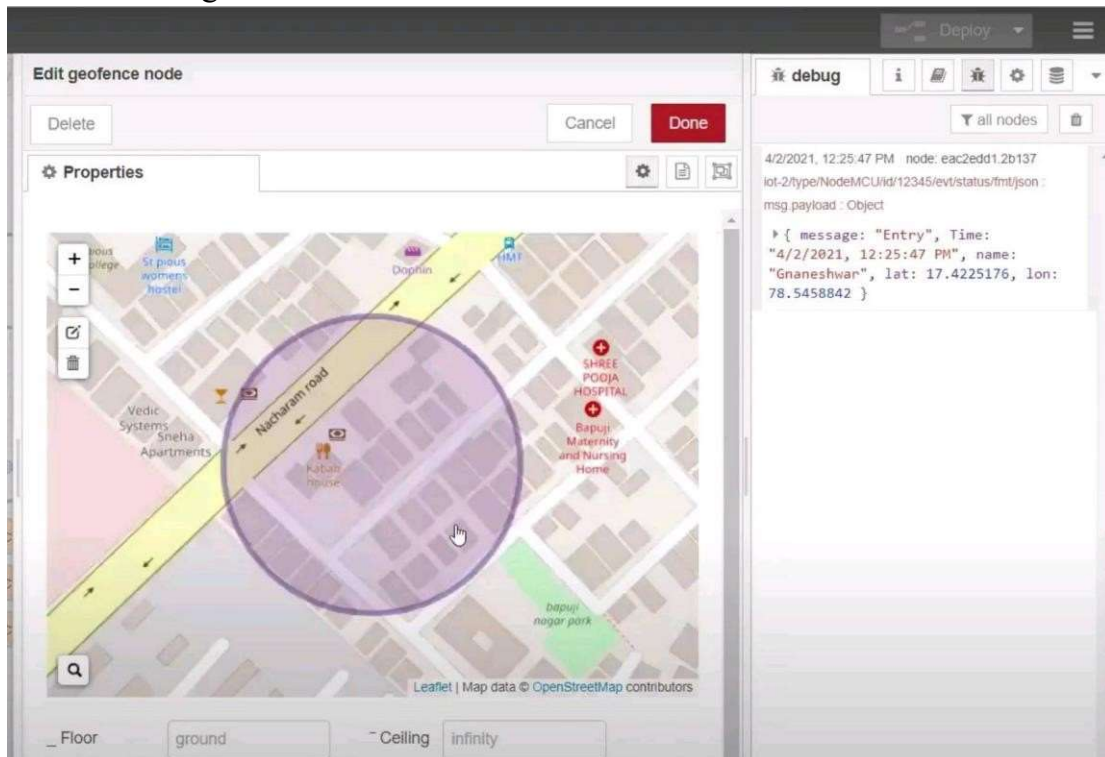
4. Edit the HTTP Request URL



5. Locate the child



6. Create the geofence node



7. Python script send requests to IBM Cloud



```

1 import json
2 import wioprotocol
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 }
16 client = wioprotocol.DeviceClient(config=myConfig,
17 logHandlers=None)
18 client.connect()
19
20 while True:
21     name = "Smartbridge"
22     # in area location
23
24     *latitude =
25     17.4225176
26     longitude = 78.
27     5458842
28
29     # out area
30     location
31
32     latitude = 17.4219272
33     longitude = 78.5488783
34
35     myData = { 'name': name, 'lat': latitude, 'lon': longitude }
36
37     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
38 print("Data published to IBM IoT platform: ", myData)
39
40     time.sleep(5)
41
42 client.disconnect()

```

onPub

