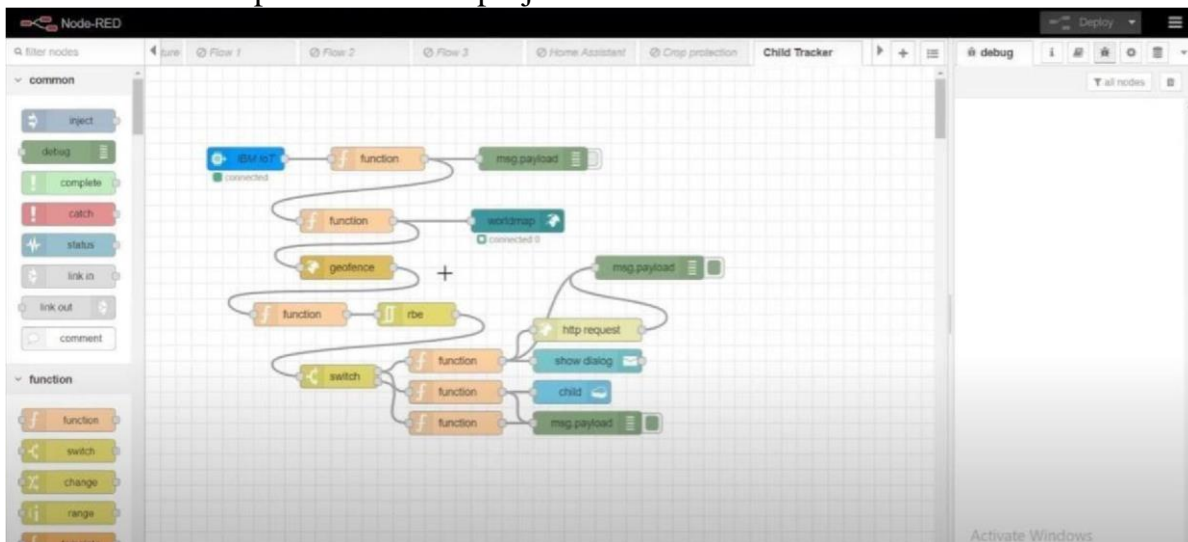


Develop A Web Application Using Node-RED

Date	26 October2022
Team ID	PNT2022TMID23712
Project Name	Project- IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

Steps Followed:

- Open Node-RED project



- Added 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

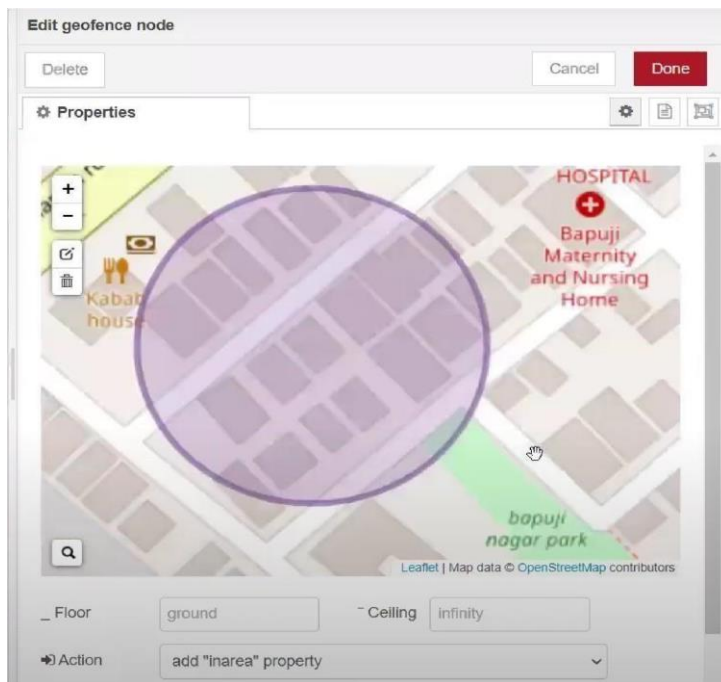
    latitude= 17.4225176
    longitude= 78.5458842

    #out area location

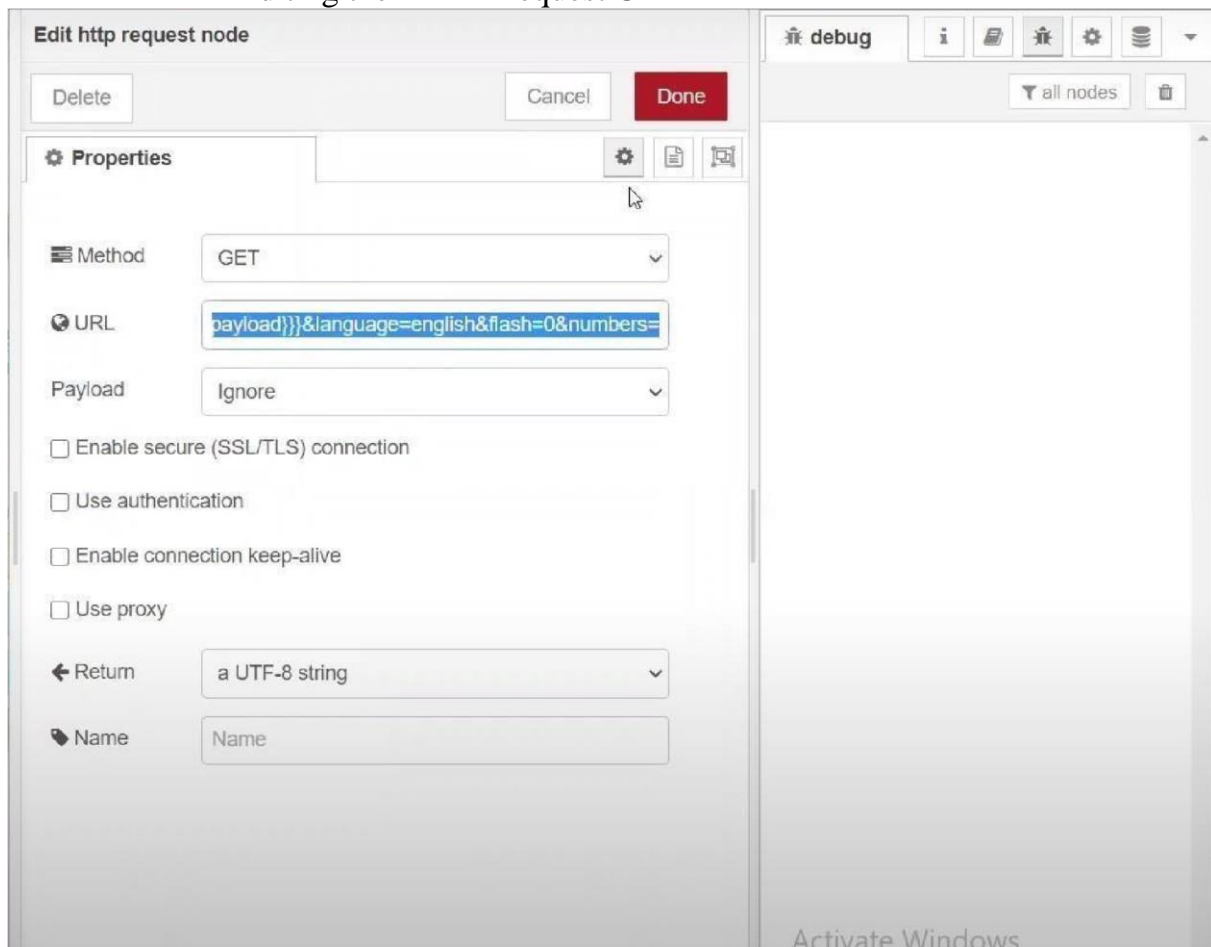
    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={'name': name, 'lat':latitude, 'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

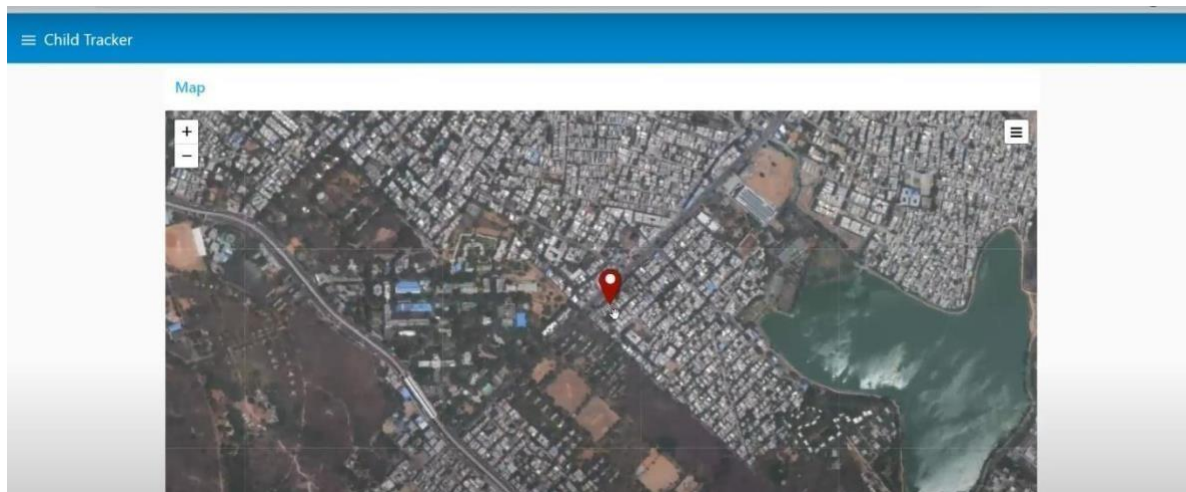
Created the GeoFence



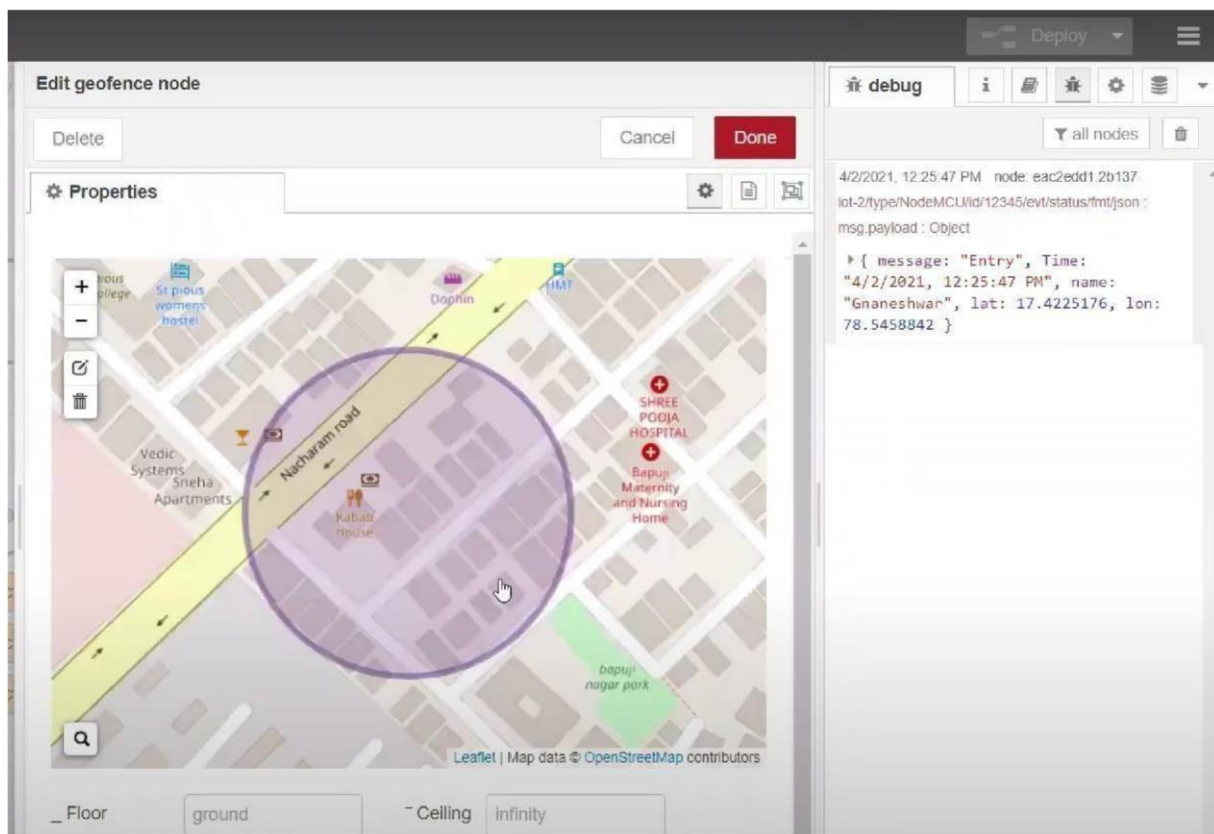
Editing the HTTP Request URL



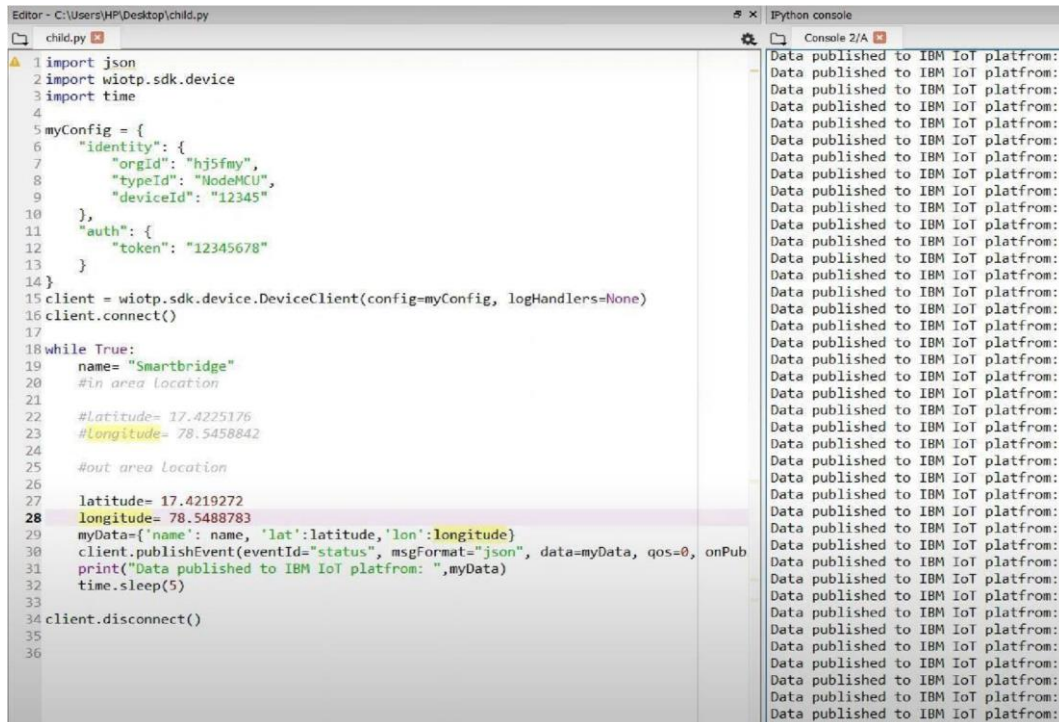
- Located the child



Created the geofence node



- PythonscriptsendingrequeststoIBMCloud



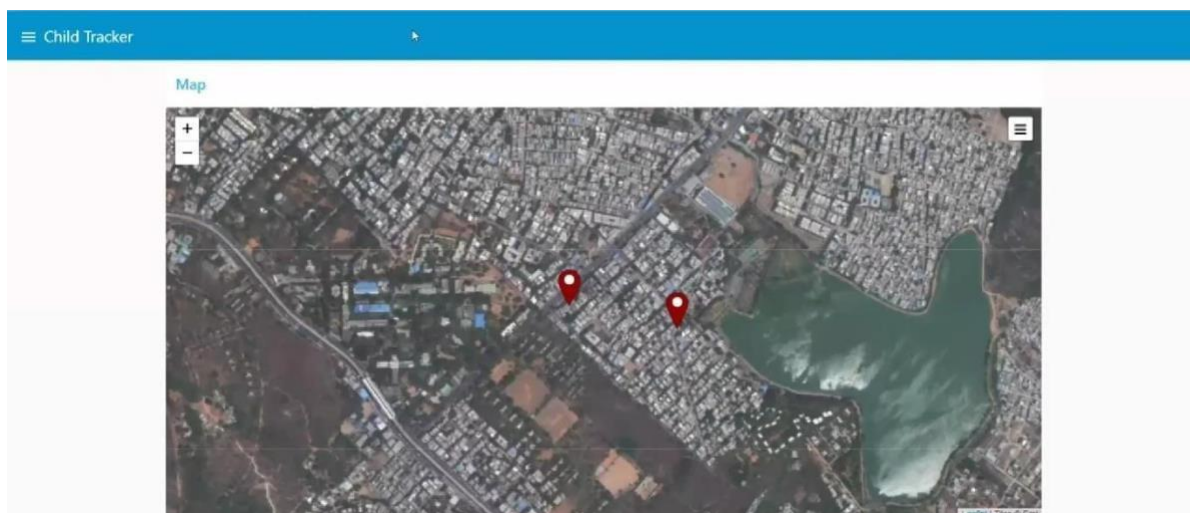
The screenshot shows a Python script in an IDE window titled 'child.py'. The script imports json, wiotp.sdk.device, and time. It defines a configuration object 'myConfig' with identity and authentication details. A 'client' is created and connected. A 'while True' loop publishes data to the IBM IoT platform. The console on the right shows the output: 'Data published to IBM IoT platform:' repeated 20 times.

```

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

```

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



Result: Successfully developed a web application using Node-RED