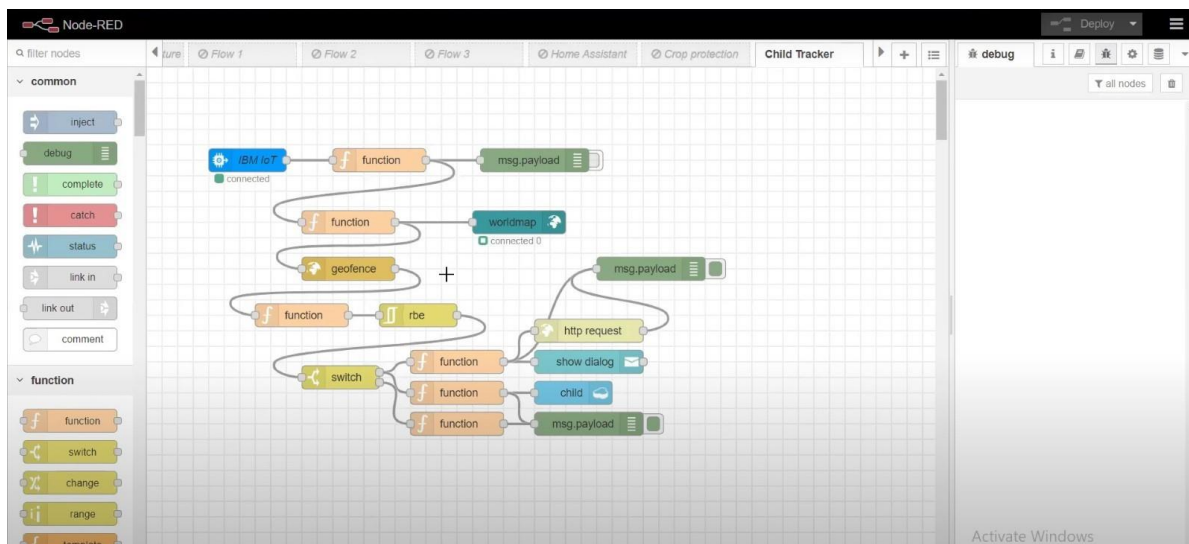


Develop A Web Application Using Node-RED

Date	26 October 2022
Team ID	PNT2022TMID25977
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification

Steps Followed:

- Opened a 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

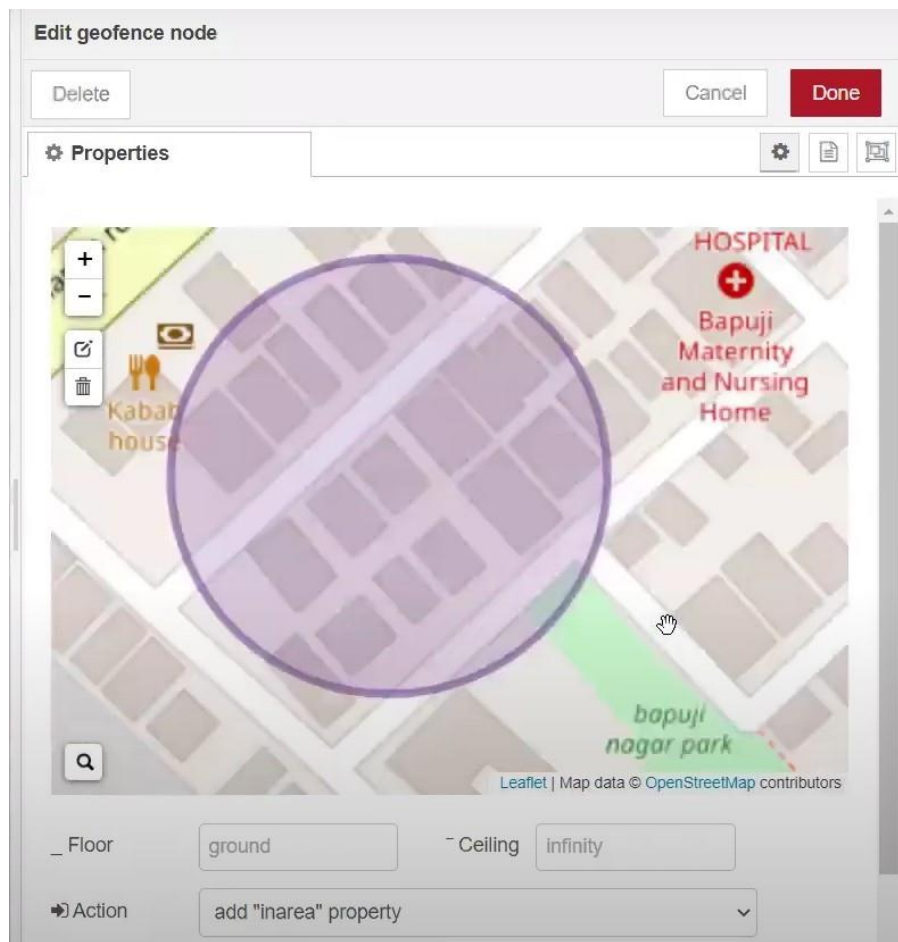
    latitude= 17.4225176
    longitude= 78.5458842

    #out area location

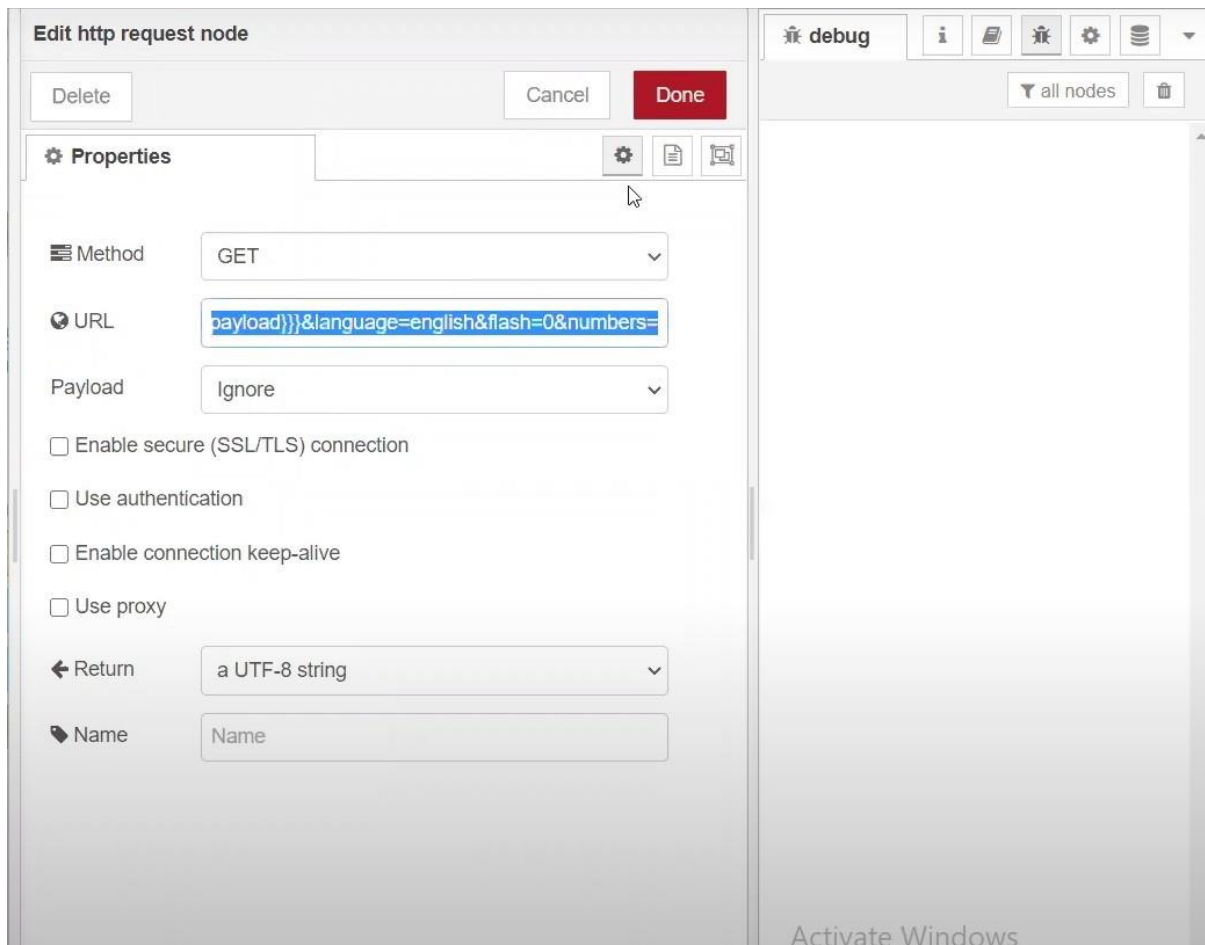
    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platfrom: ",myData)
    time.sleep(5)

client.disconnect()
```

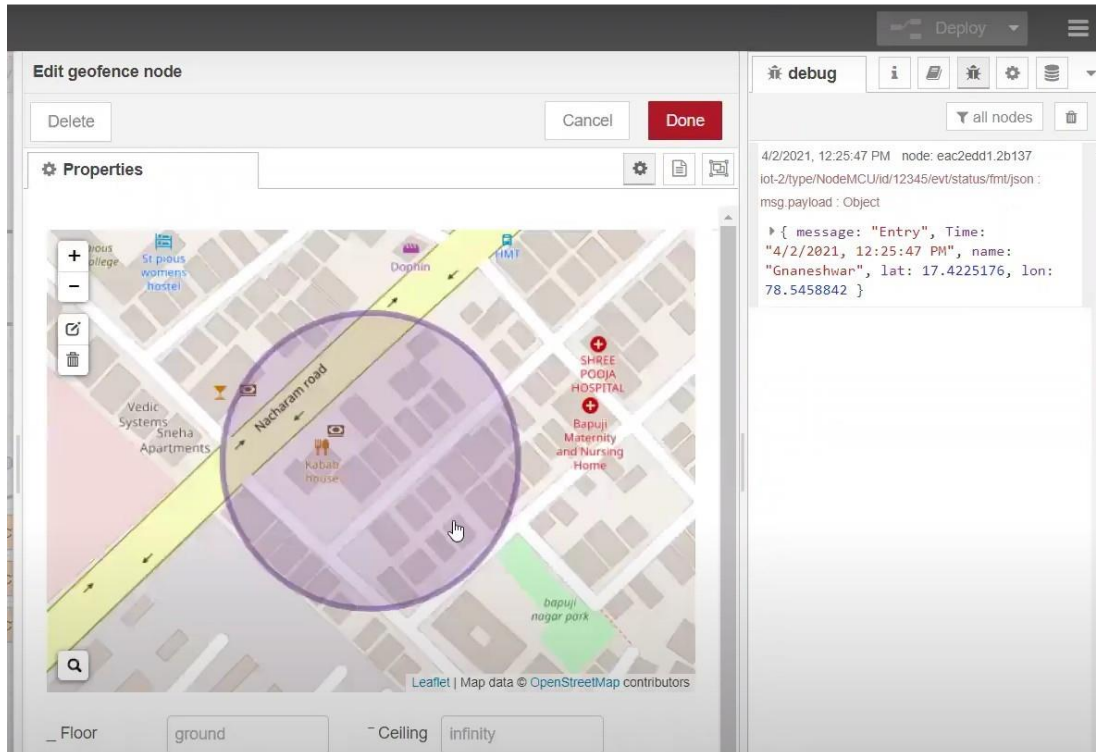
- Created the Geofence



- Editing the HTTP Request URL



- Created the geofence node



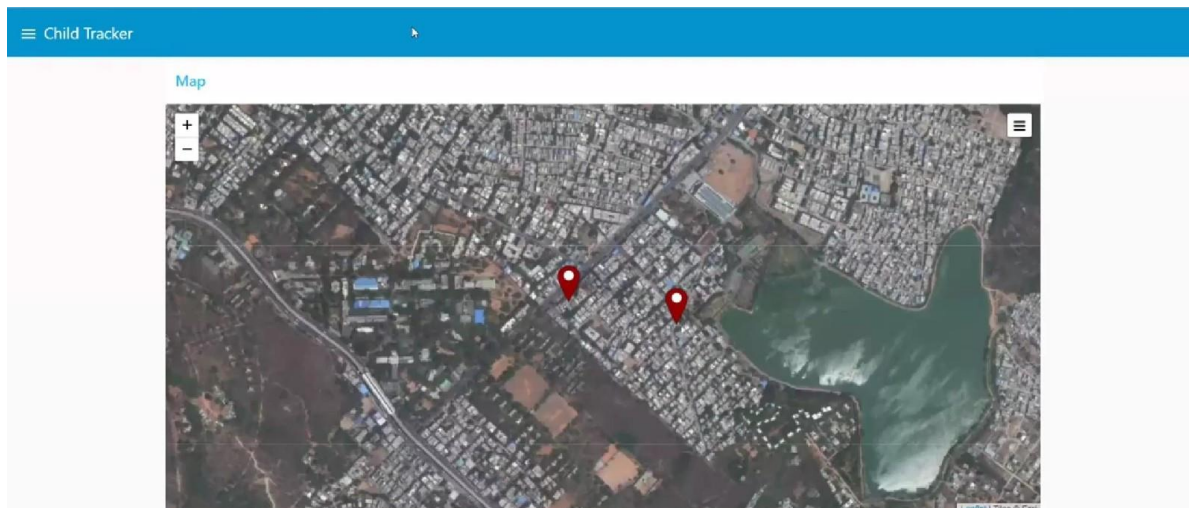
- Python script sending requests to IBM Cloud

The screenshot shows two panes in Visual Studio Code:

- Left Pane (Editor - C:\Users\HP\Desktop\child.py):** Contains Python code for connecting to the IBM IoT platform.

```
1 import json  
2 import wiotsdk.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 = wiotsdk.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,  
31                         print("Data published to IBM IoT platform:" ,myData)  
32     time.sleep(5)  
33  
34 client.disconnect()
```
- Right Pane (Console 2/A x):** Displays the output of the program, which consists of repeated messages: "Data published to IBM IoT platform:". The label "onPub" is visible next to one instance of the message.

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



Result: Successfully developed a web application using Node-RED