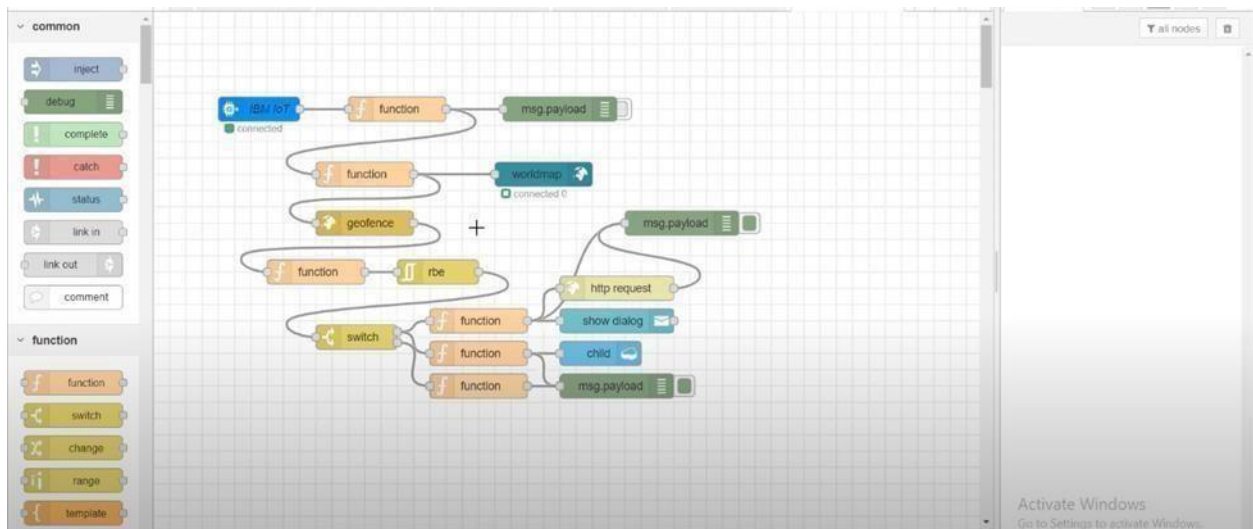


Team ID	PNT2022TMID30107
Project Name	Smart Waste Management for Metropolitan Cities

NODE RED SERVICE

Step 1: Connect the blocks.



```
import json
import wiotp.sdk.device
import time

myConfig = {
    "identity": {
        "orgId": "b55fmy",
        "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= 78.5458642

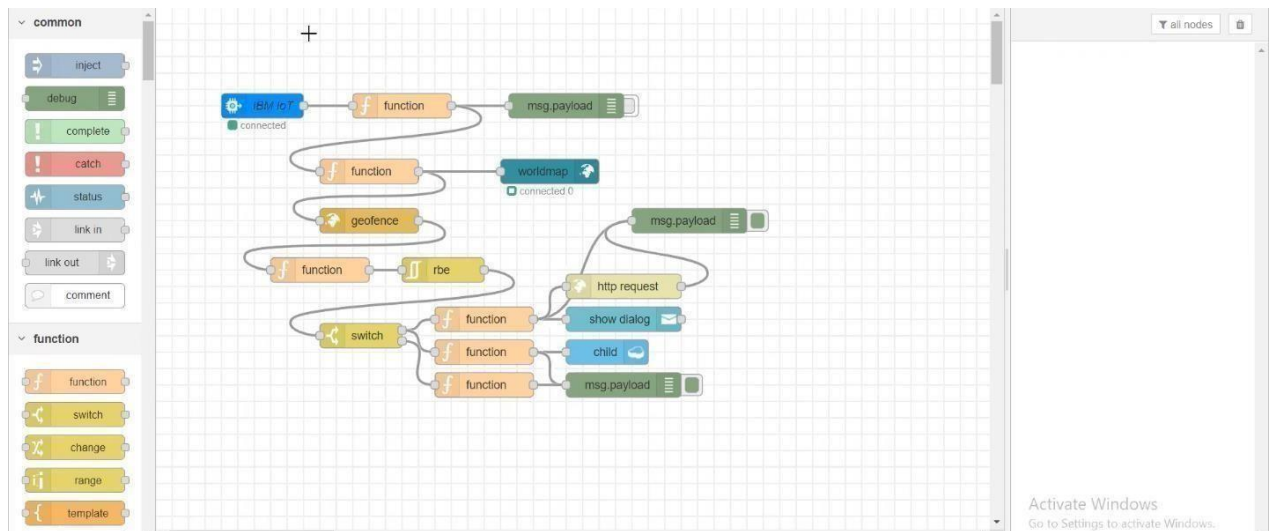
    #out area location

    #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() ] ]
```

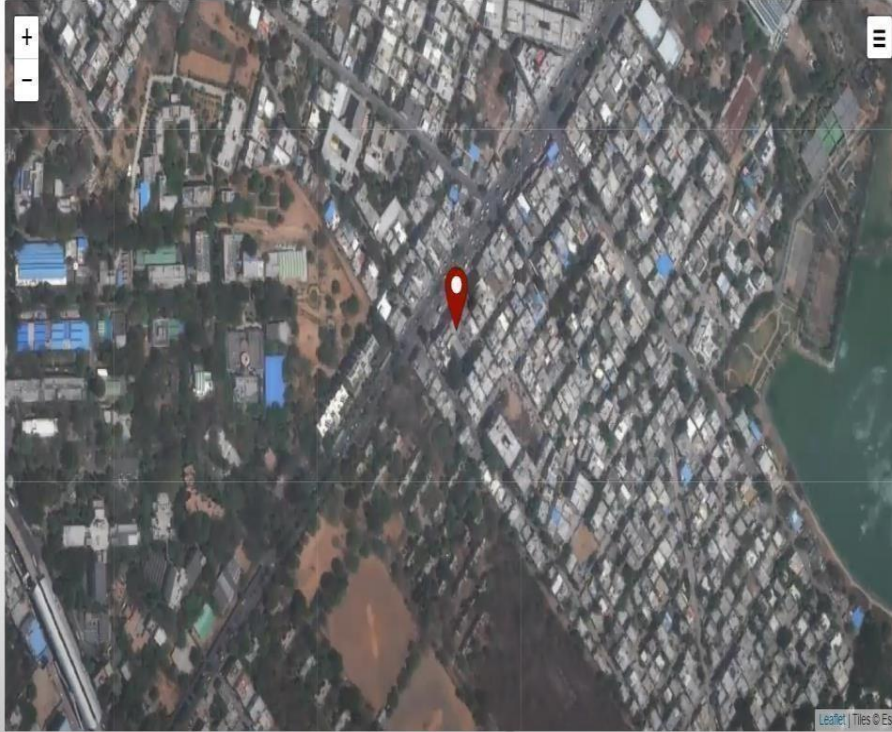
Step 2: Create python code.

Step 3: Click the geo-fence node.

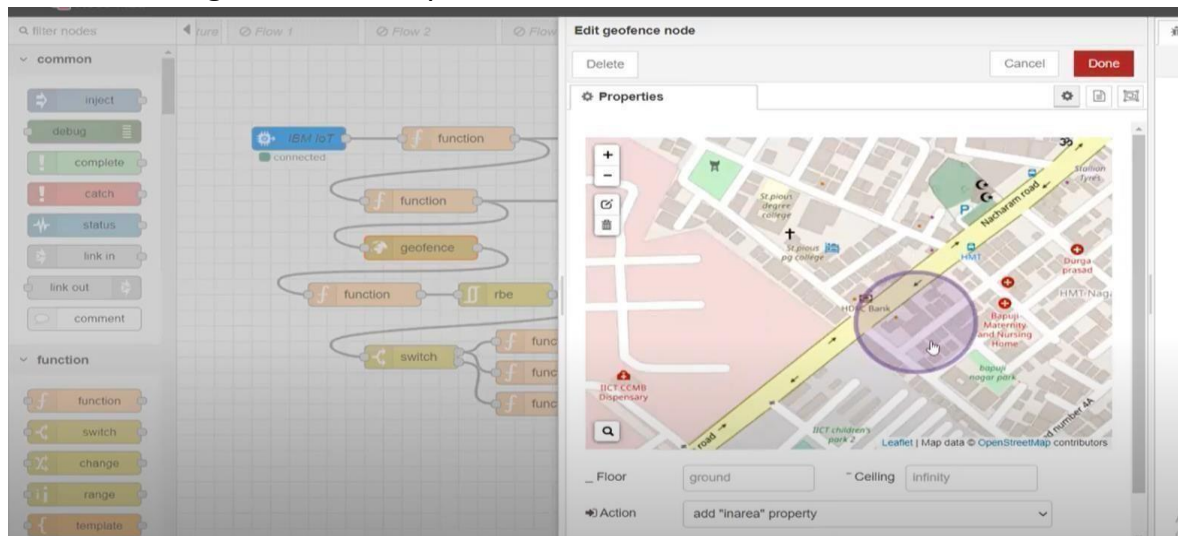


Step 4: Create the geo-fence area in the map.

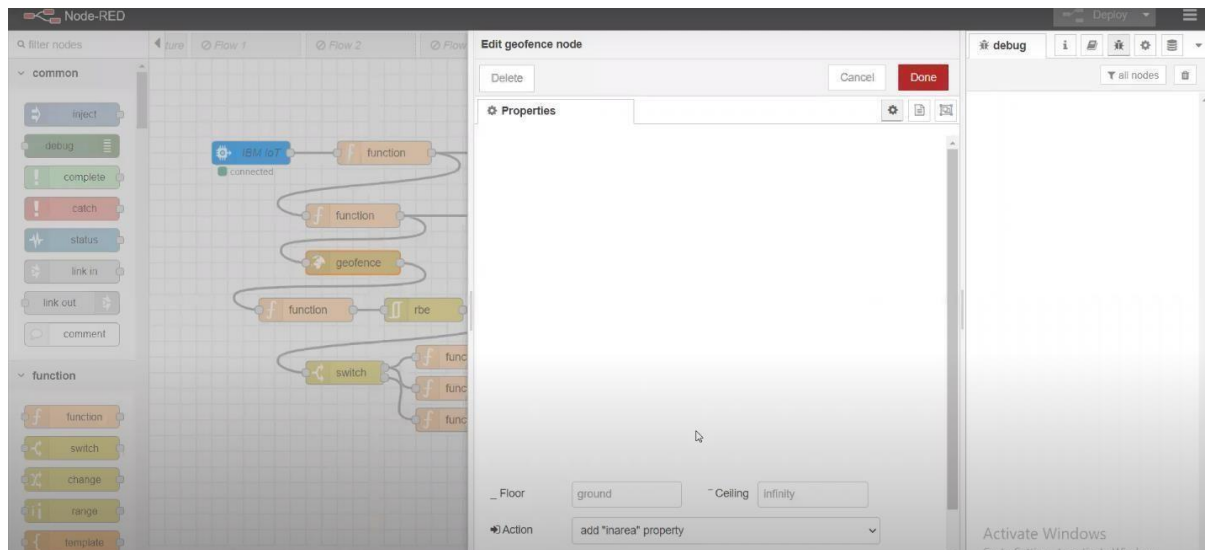
Step



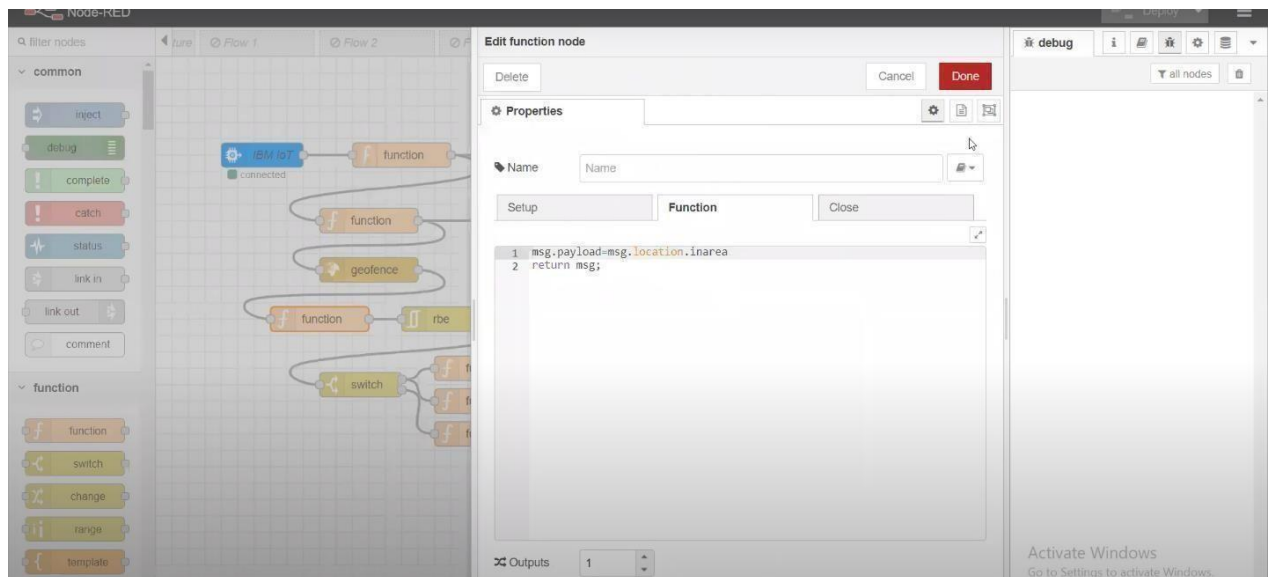
5: Create geo-fence in a particular area.



Step 6: Select the function block.

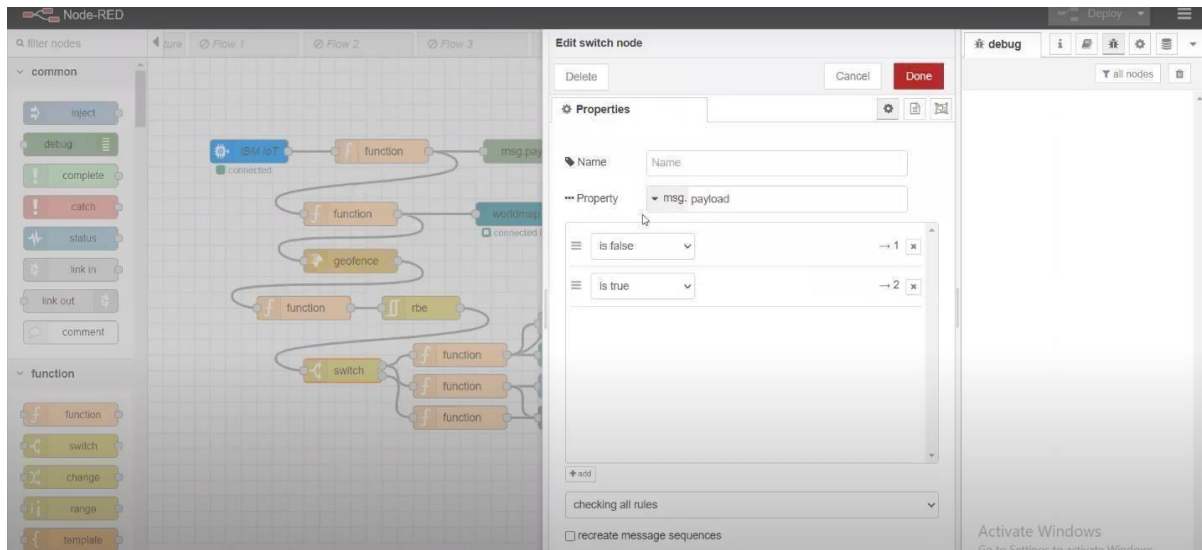


Step 7: Select the message payload.

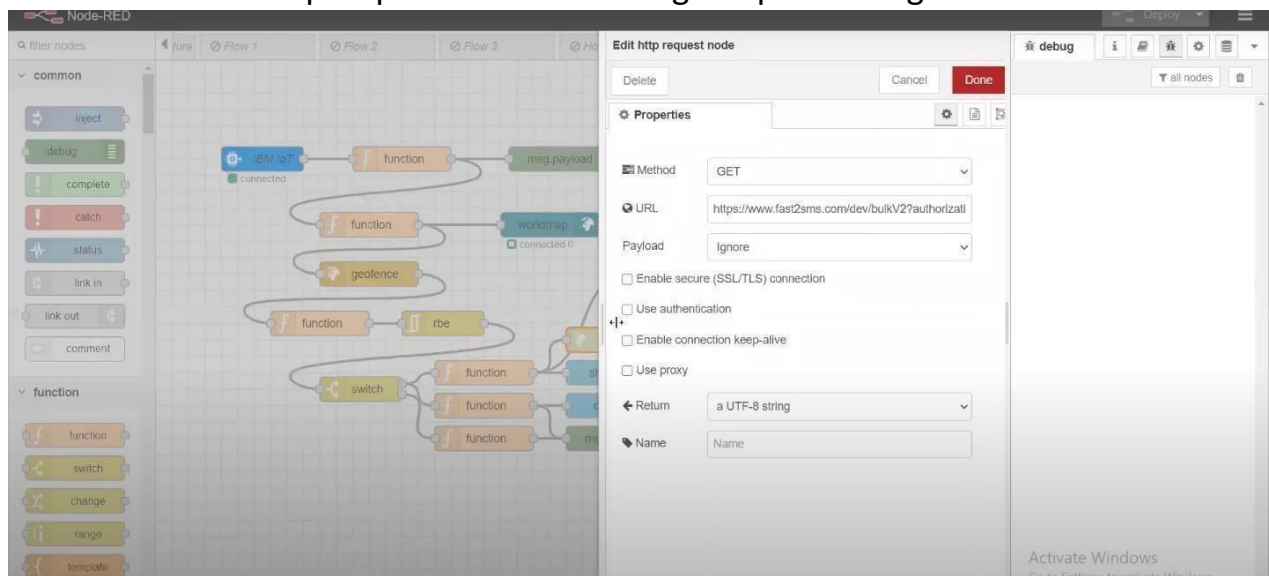


Step 8: To identify the person in area.

Step



9: Select the http request to send message to parent or guardian.



Step 10: For sending the message with time.

Node-RED

filter nodes

common

function

inject

debug

complete

catch

status

link in

link out

comment

function

switch

change

range

template

Flow 1

Flow 2

IBM IoT

connected

function

function

geofence

function

rbe

switch

function

function

function

Edit function node

Delete

Cancel

Done

Properties

Name

Setup

Function

Close

```
1 var d = new Date();
2
3 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
4
5 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1)
6
7 newDate = new Date(utc + (3600000*offset));
8
9 msg.payload = {
10   "message": "Exit",
11   "time": newDate.toLocaleString(),
12   "name": global.get('name'),
13   "lat": global.get('latitude'),
14   "lon": global.get('longitude')
15 };
16
17 return msg;
```

Outputs

1

debug

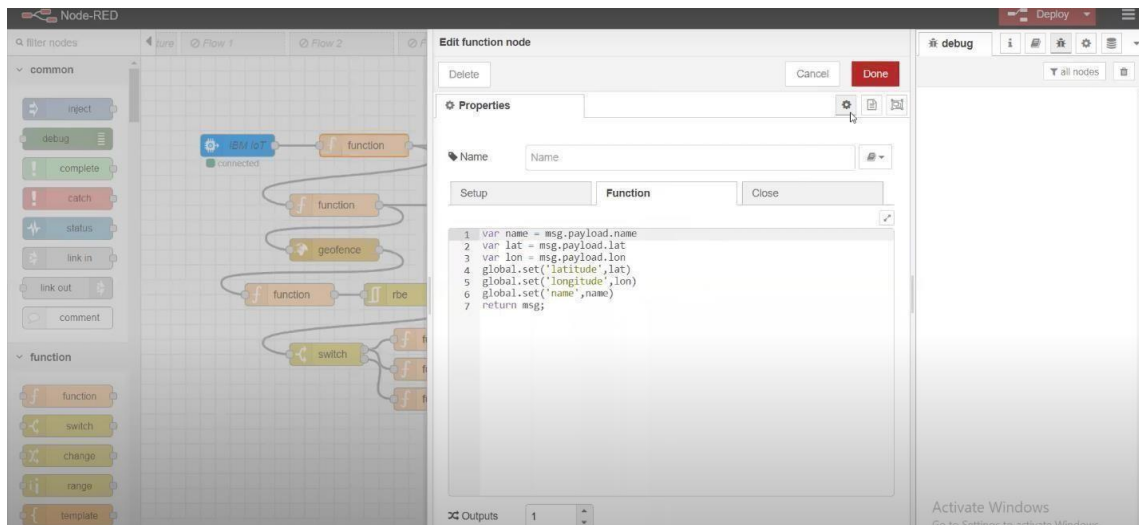
all nodes

Activate Windows

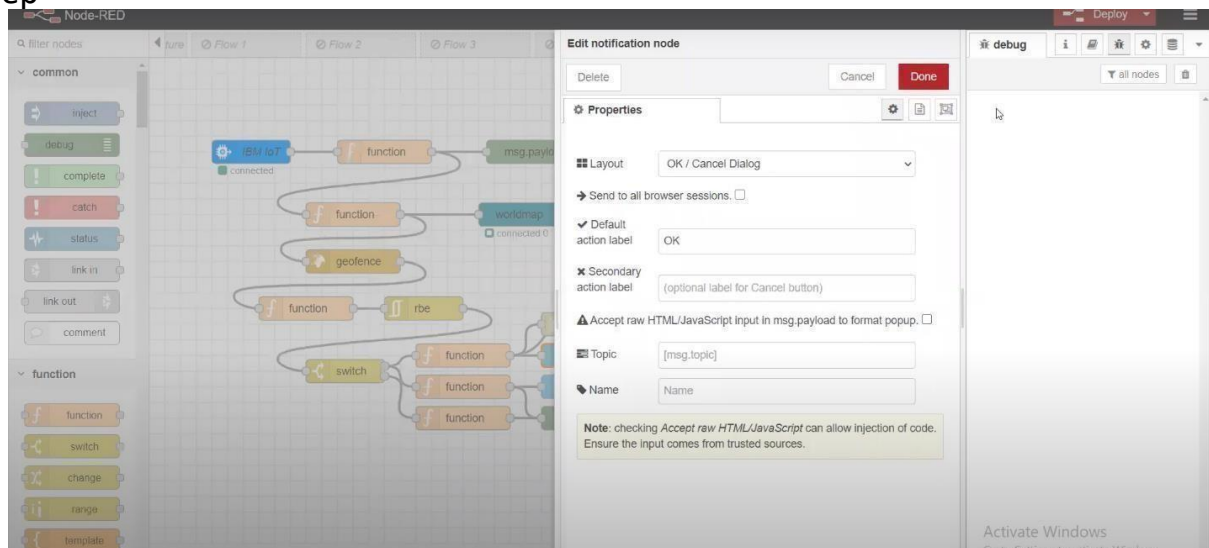
Go to Settings to activate Windows.

Step

10: Click show dialog for notifying the popup alert.



Step



Step

Step 11: Create another payload and to pass the data to geo-fence and world map.

Step

12: Click the world map to see the location.

