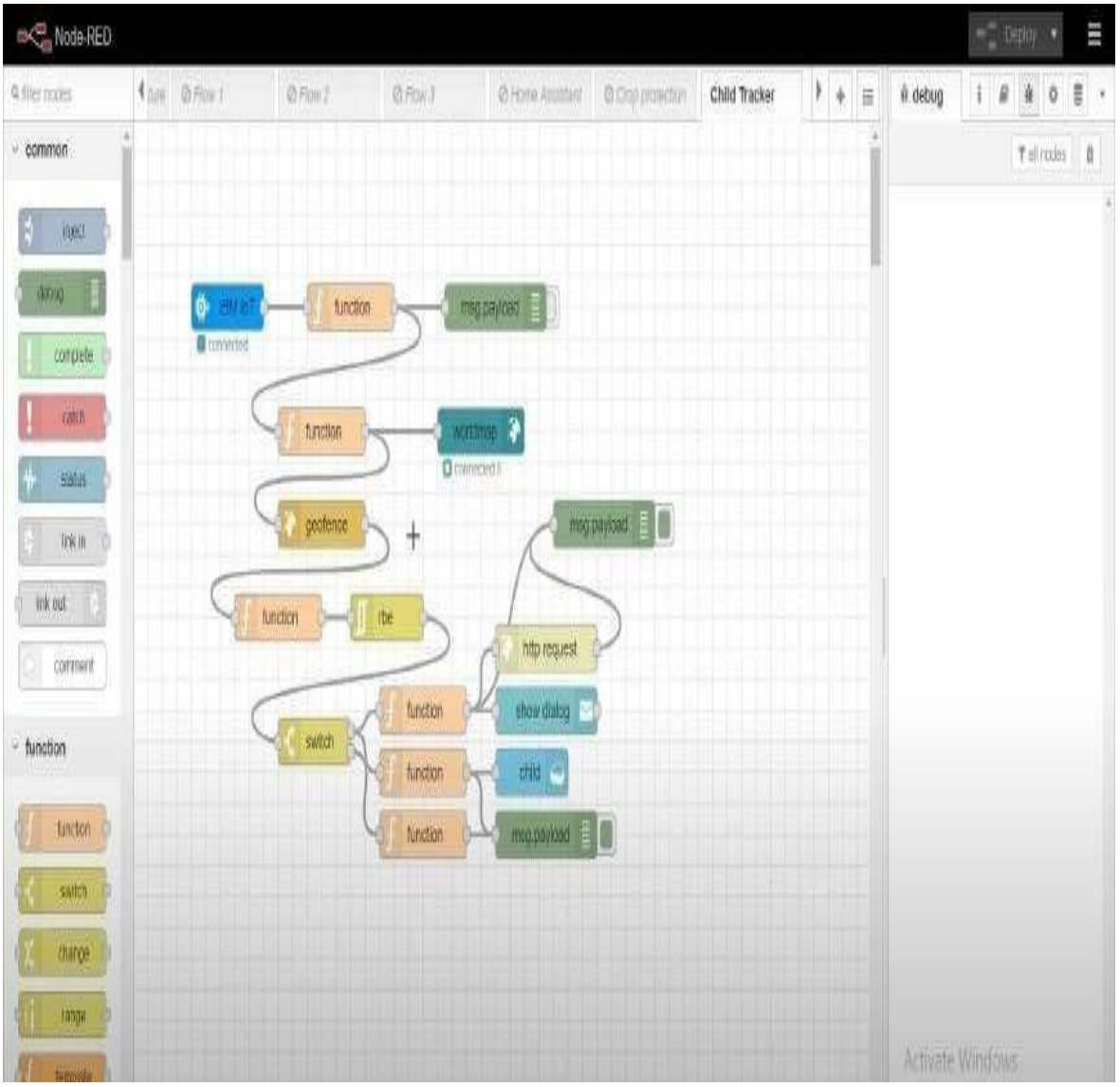
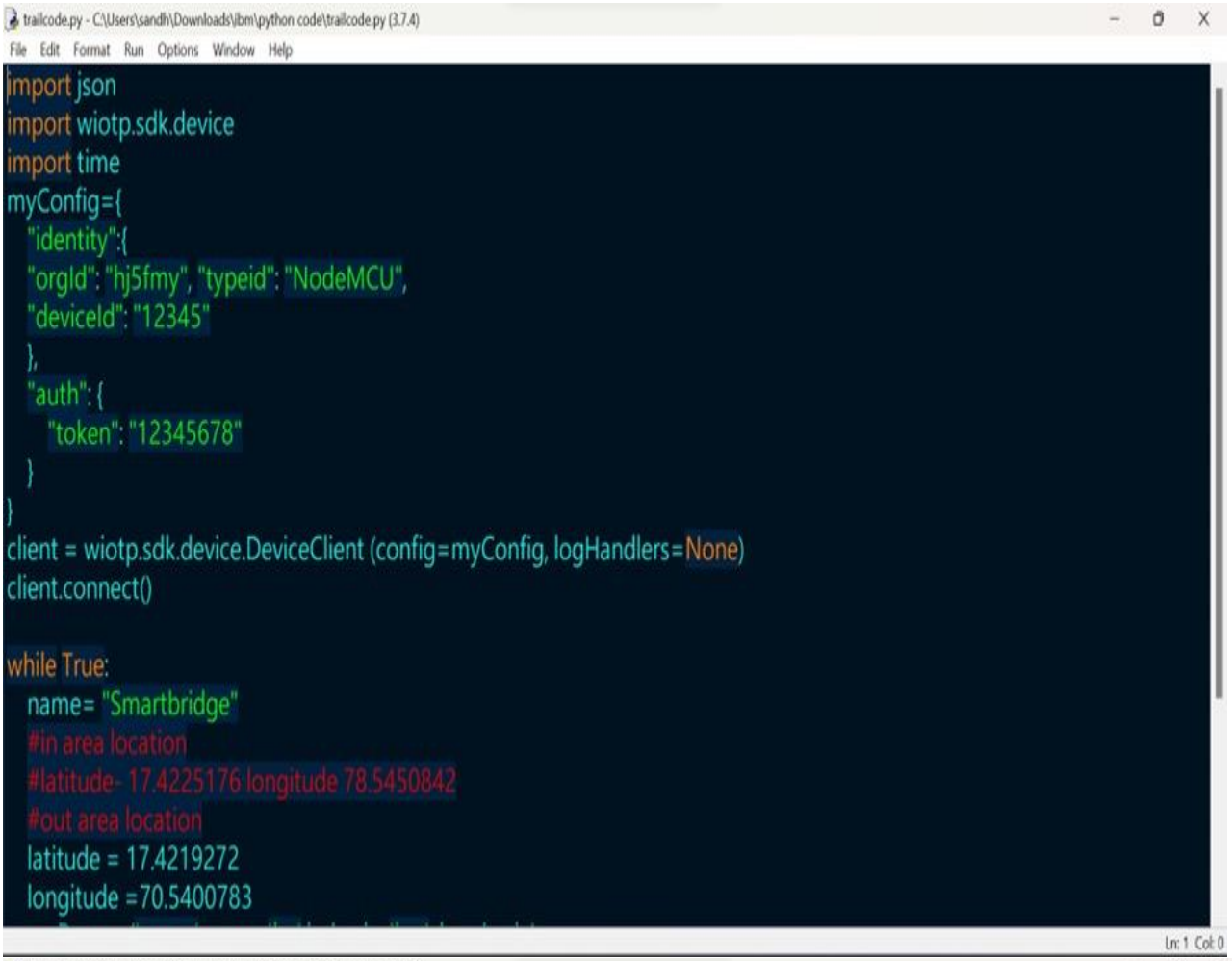
Develop a web application using Node-Red Services

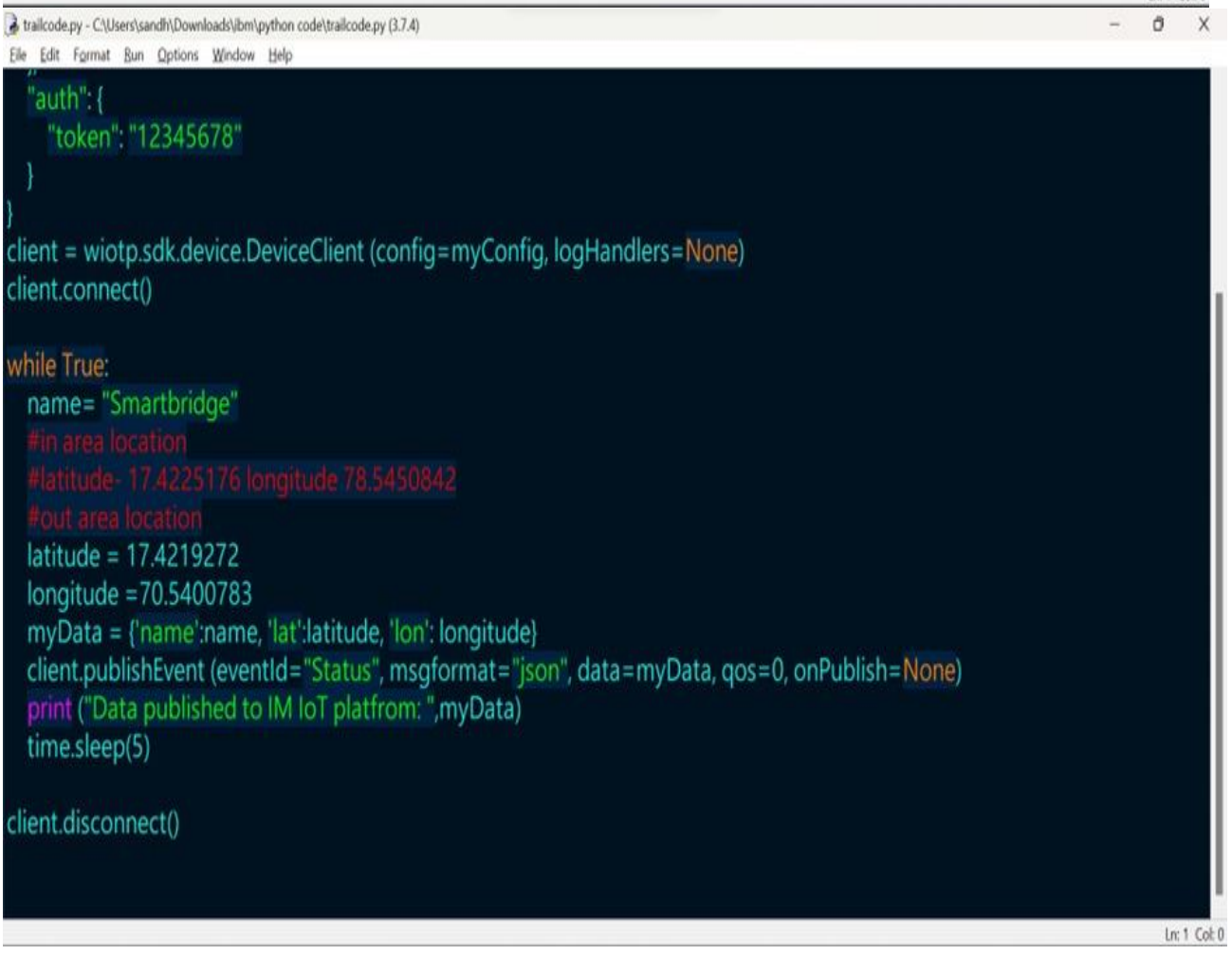
Date	14 September 2022
Team ID	PNT2022TMID00392
Project Name	Project – IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

IoT Based Safety Gadget for Child Safety Monitoring & Notification
Develop a web application using Node-Red Services Steps :
Open a Node-RED project

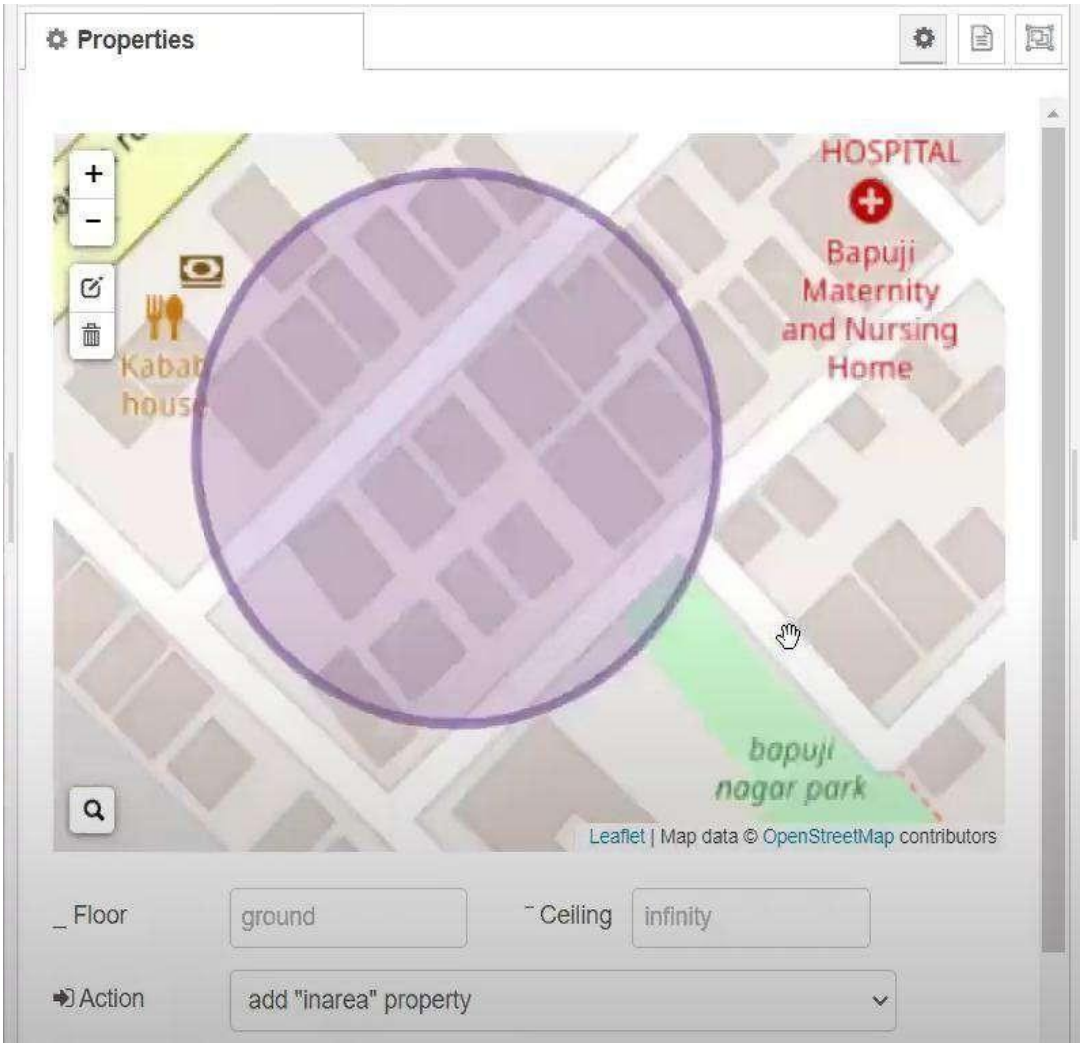


Add code to get location in python

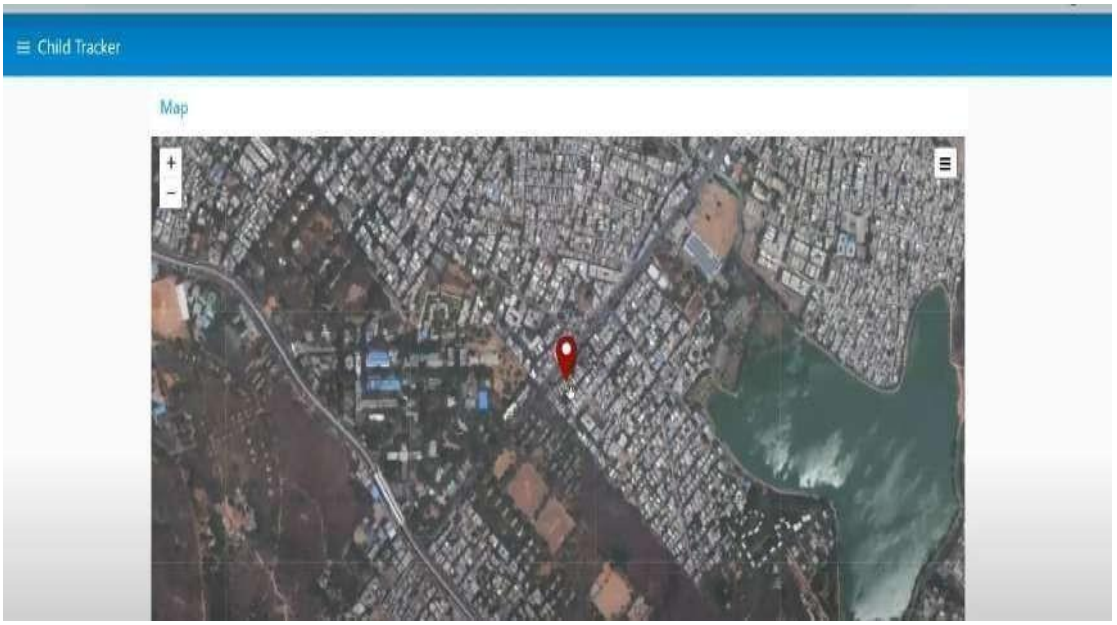

trailcode.py - C:\Users\sandh\Downloads\ibm\python code\trailcode.py (3.7.4)
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time
myConfig={
"identity":{
"orgId": "hj5fmy", "typeid": "NodeMCU",
"deviceId": "12345"
},
"auth": {
"token": "12345678"
}
}
client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None)
client.connect()
while True:
name= "Smartbridge"
#in area location
#latitude- 17.4225176 longitude 78.5450842
#out area location
latitude = 17.4219272
longitude =70.5400783
Ln: 1 Col: 0


trailcode.py - C:\Users\sandh\Downloads\ibm\python code\trailcode.py (3.7.4)
File Edit Format Run Options Window Help
"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 78.5450842
#out area location
latitude = 17.4219272
longitude =70.5400783
myData = {'name':name, 'lat':latitude, 'lon': longitude}
client.publishEvent (eventId="Status", msgformat="json", data=myData, qos=0, onPublish=None)
print ("Data published to IM IoT platfrom: ",myData)
time.sleep(5)
client.disconnect()
Ln: 1 Col: 0

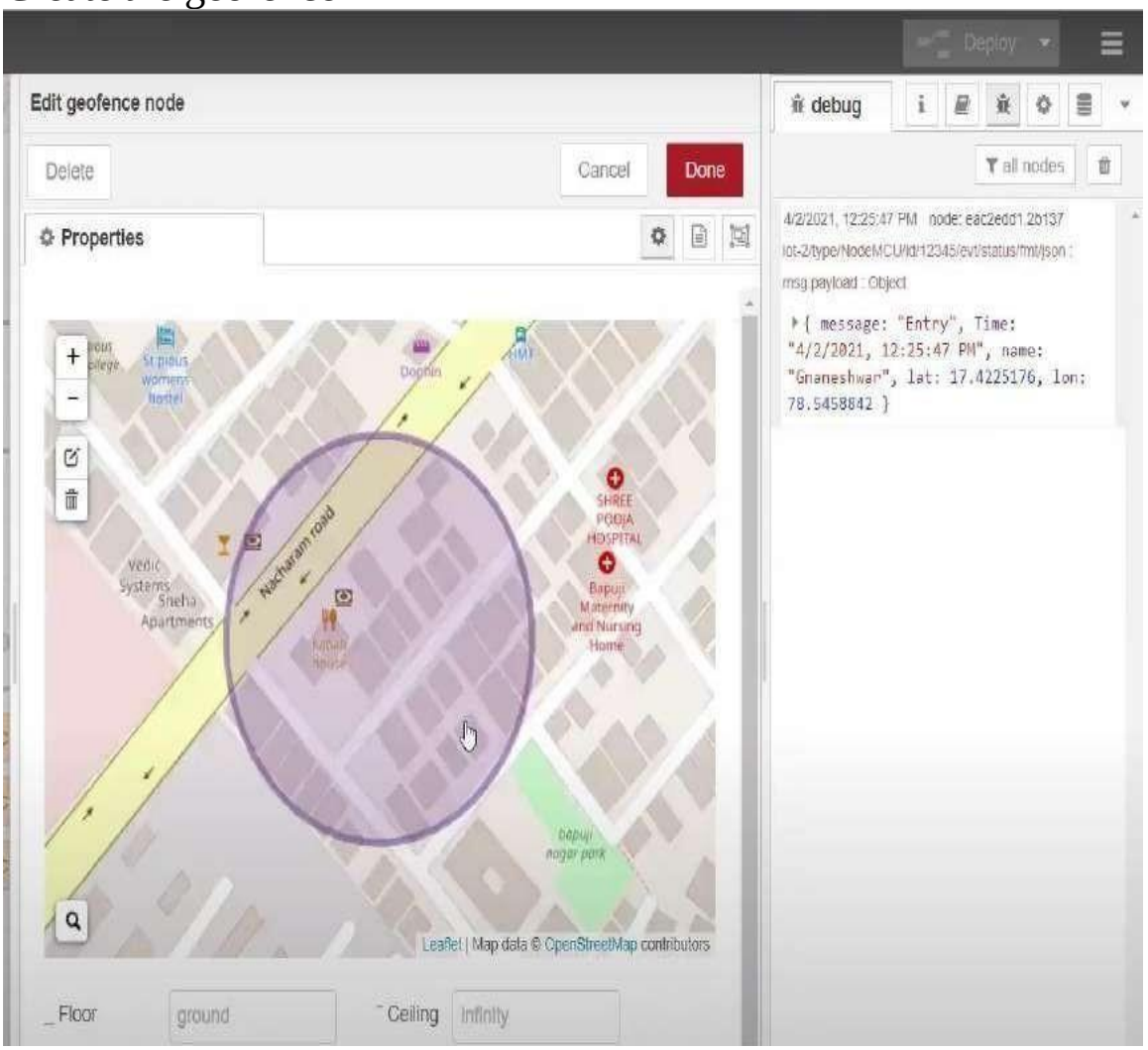
Create the Geofence



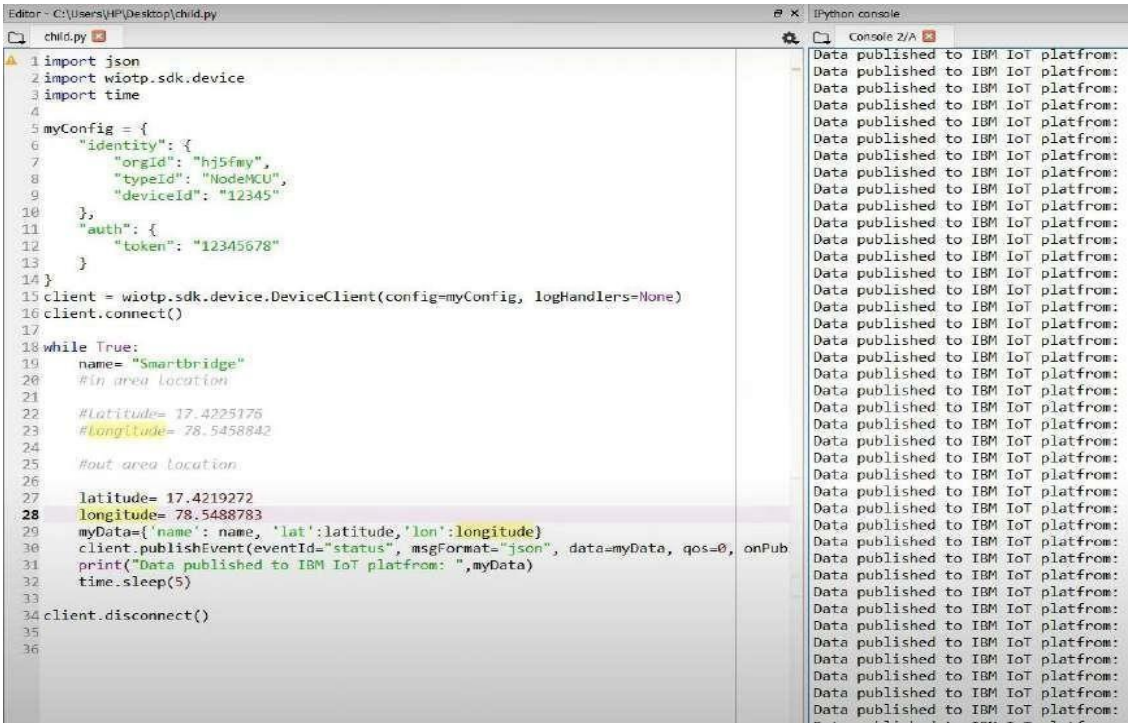
Locate the place



Create the geofence



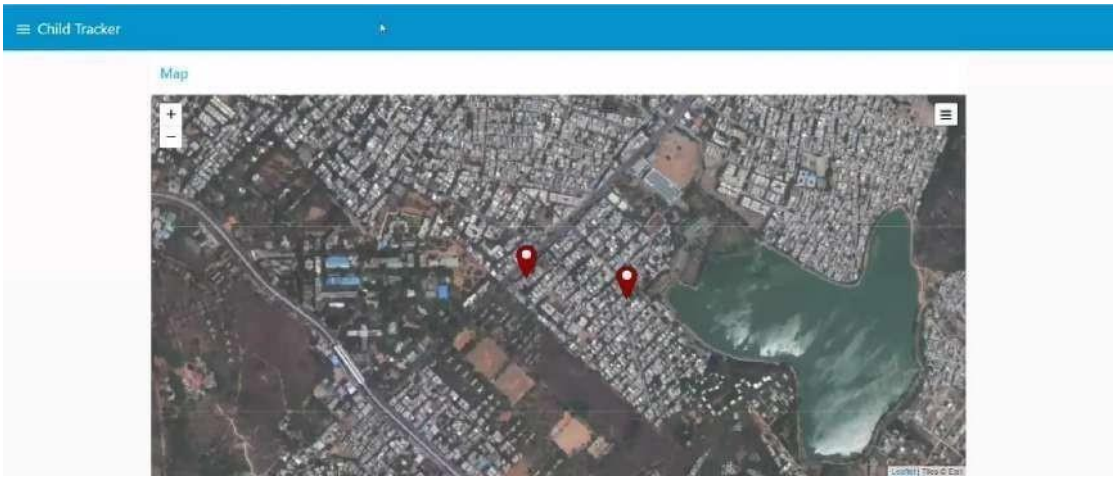
Python script send requests to IBM Cloud



```
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, onPub
    print("Data published to IBM IoT platfrom: ",myData)
    time.sleep(5)

client.disconnect()
```

```
Data published to IBM IoT platfrom:
```

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



Conclusion :
Developed the web application using Node-RED Successfully