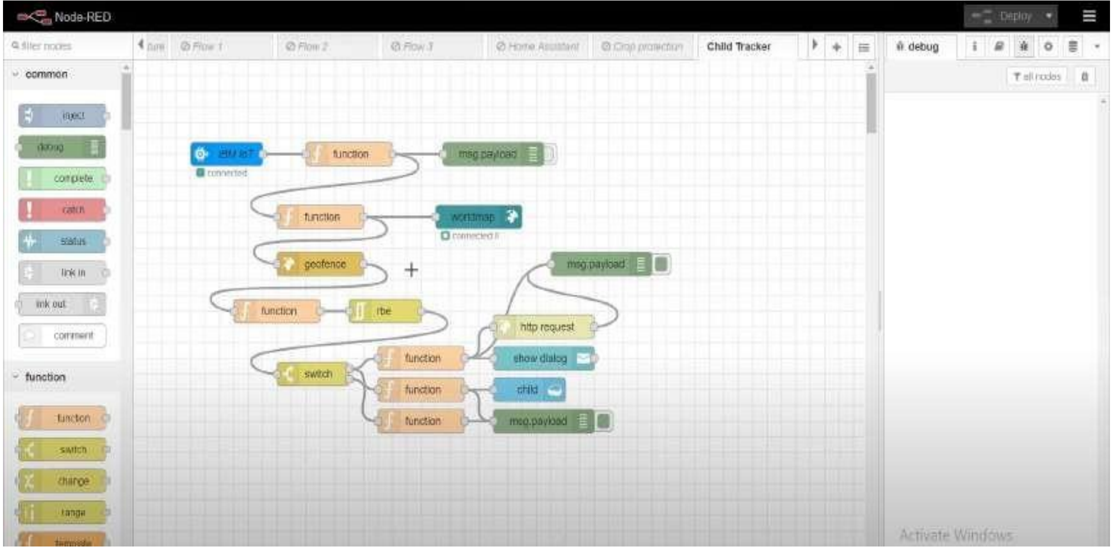
Develop The Web Application Using Node-RED

PNT2022TMID25493

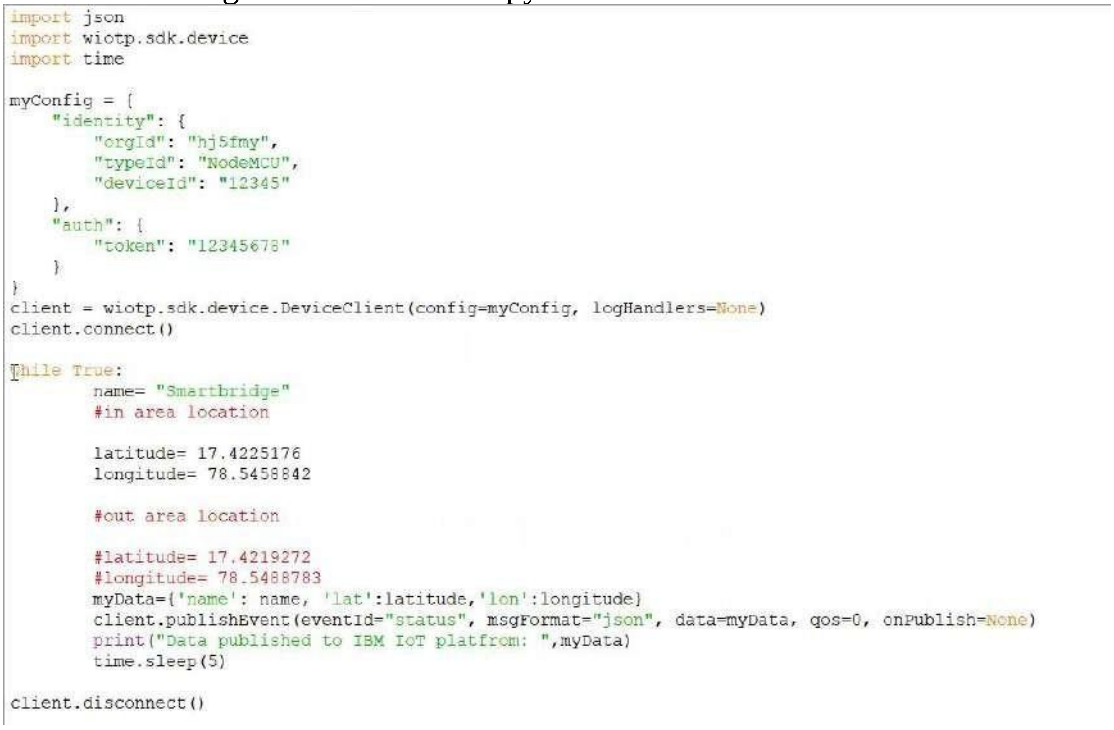
1. To Develop the web application using Node-RED

Steps :

1. Open a Node-RED project



2. Add code to get child location in python



```
import json
import wiotp.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

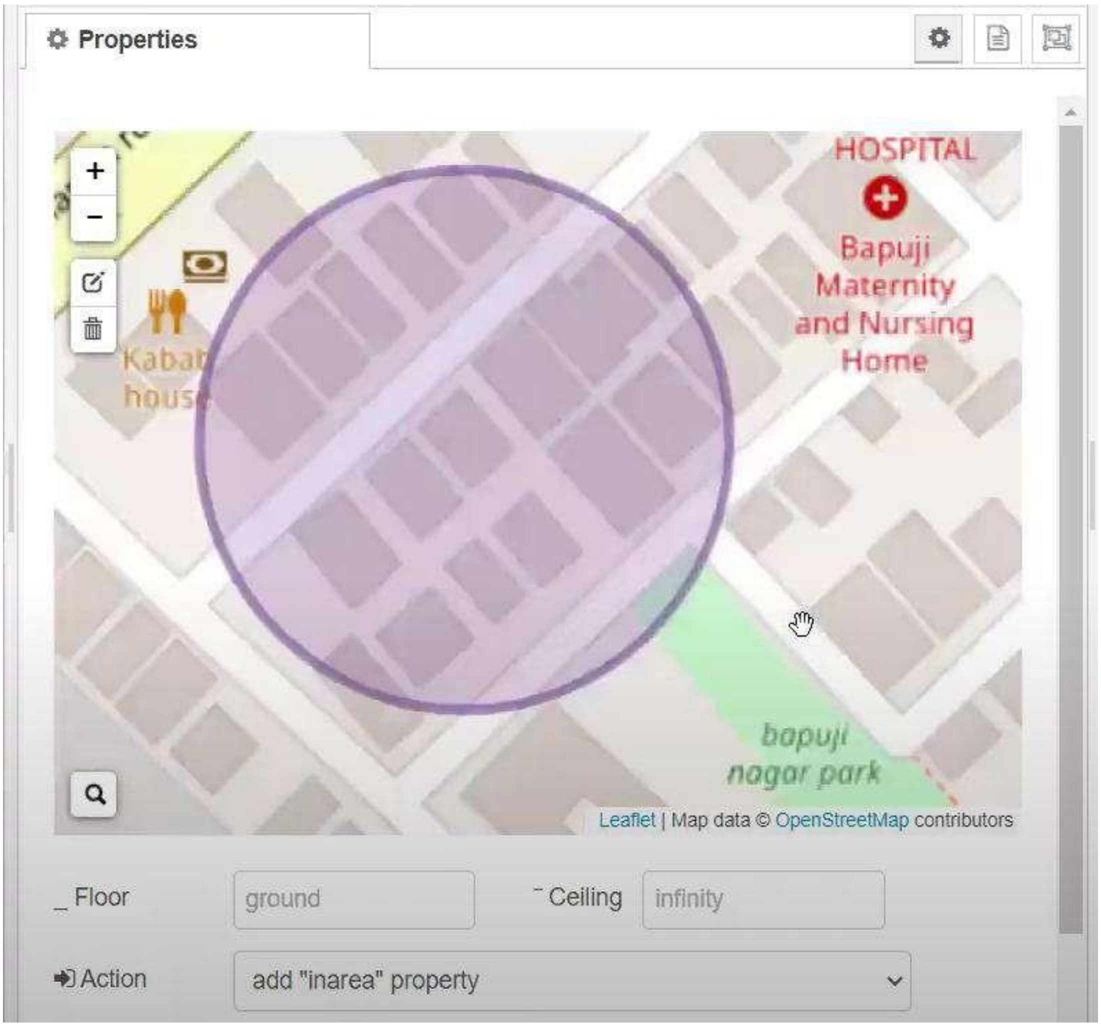
        latitude= 17.4225176
        longitude= 78.5458842

        #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()
```

3. Create the Geofence



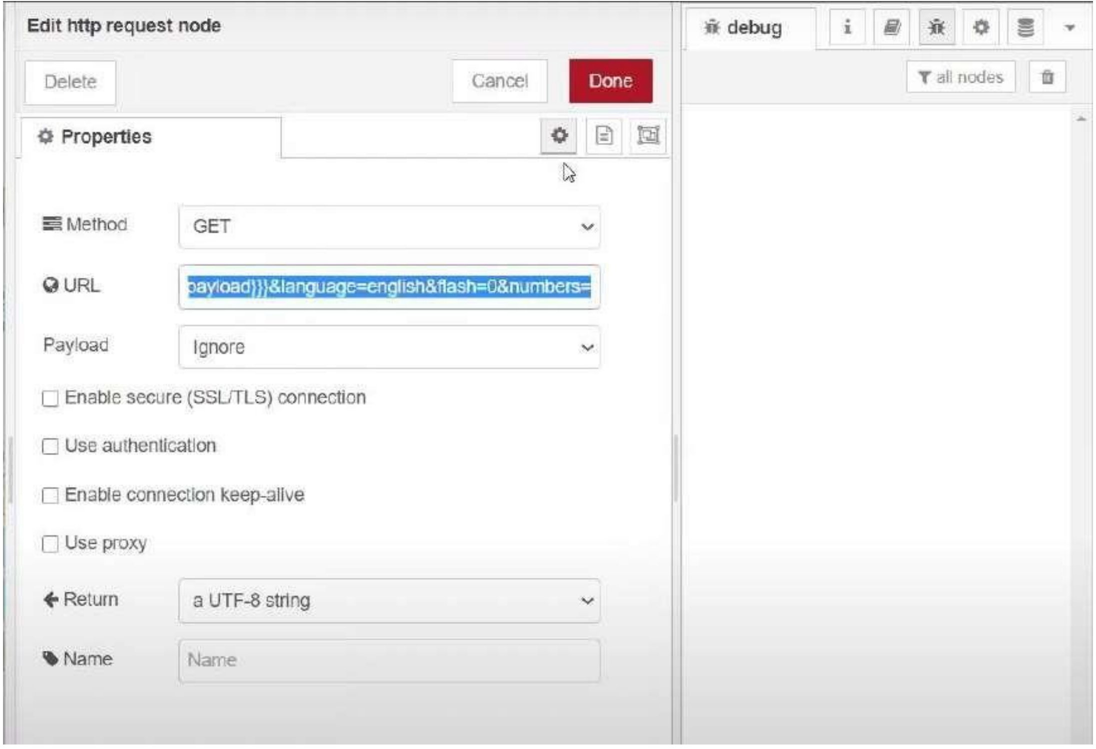
Properties
+
−
Kabab house
HOSPITAL
Bapuji Maternity and Nursing Home
bapuji nagar park
Leaflet | Map data © OpenStreetMap contributors

Floor: ground

Ceiling: infinity

Action: add "inarea" property

4. Edit the HTTP Request URL



Edit http request node

Method: GET

URL: payload}}}&language=english&flash=0&numbers=

Payload: Ignore

□ Enable secure (SSL/TLS) connection

□ Use authentication

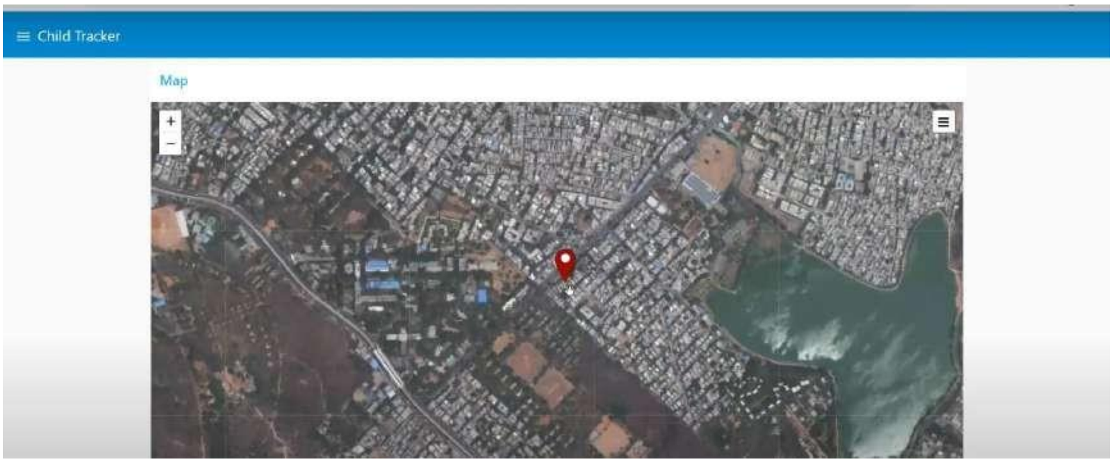
□ Enable connection keep-alive

□ Use proxy

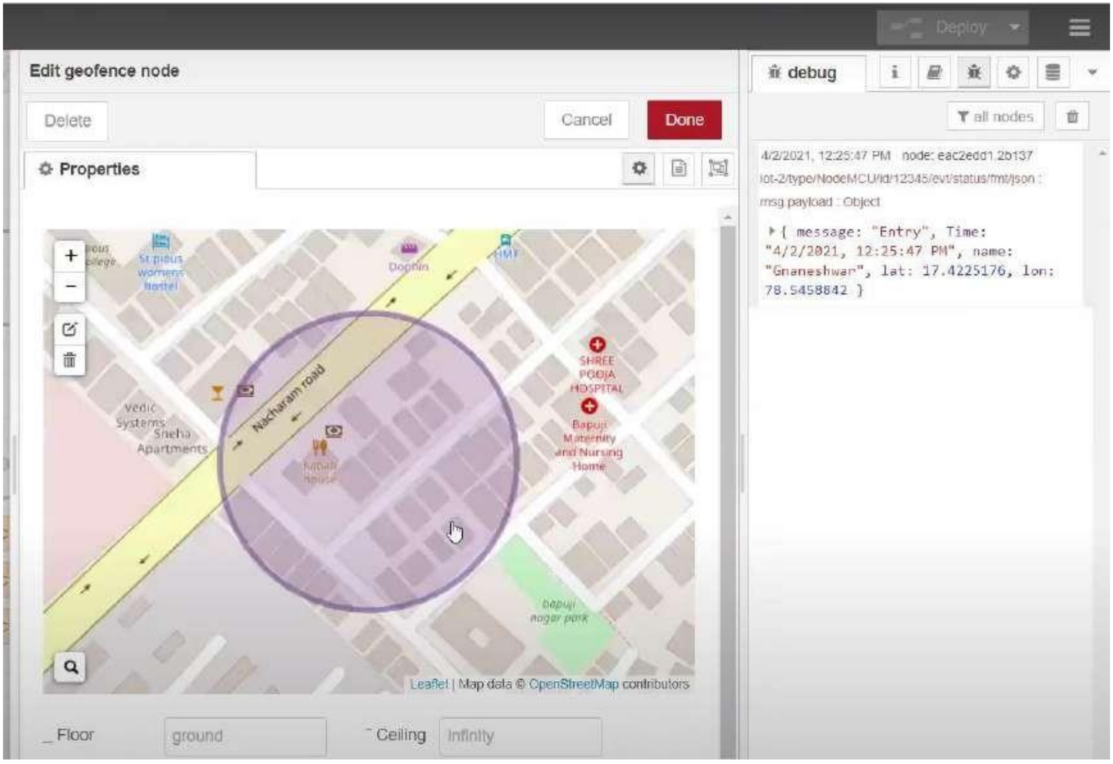
Return: a UTF-8 string

Name: Name

5. Locate the child



6. Create the geofence node

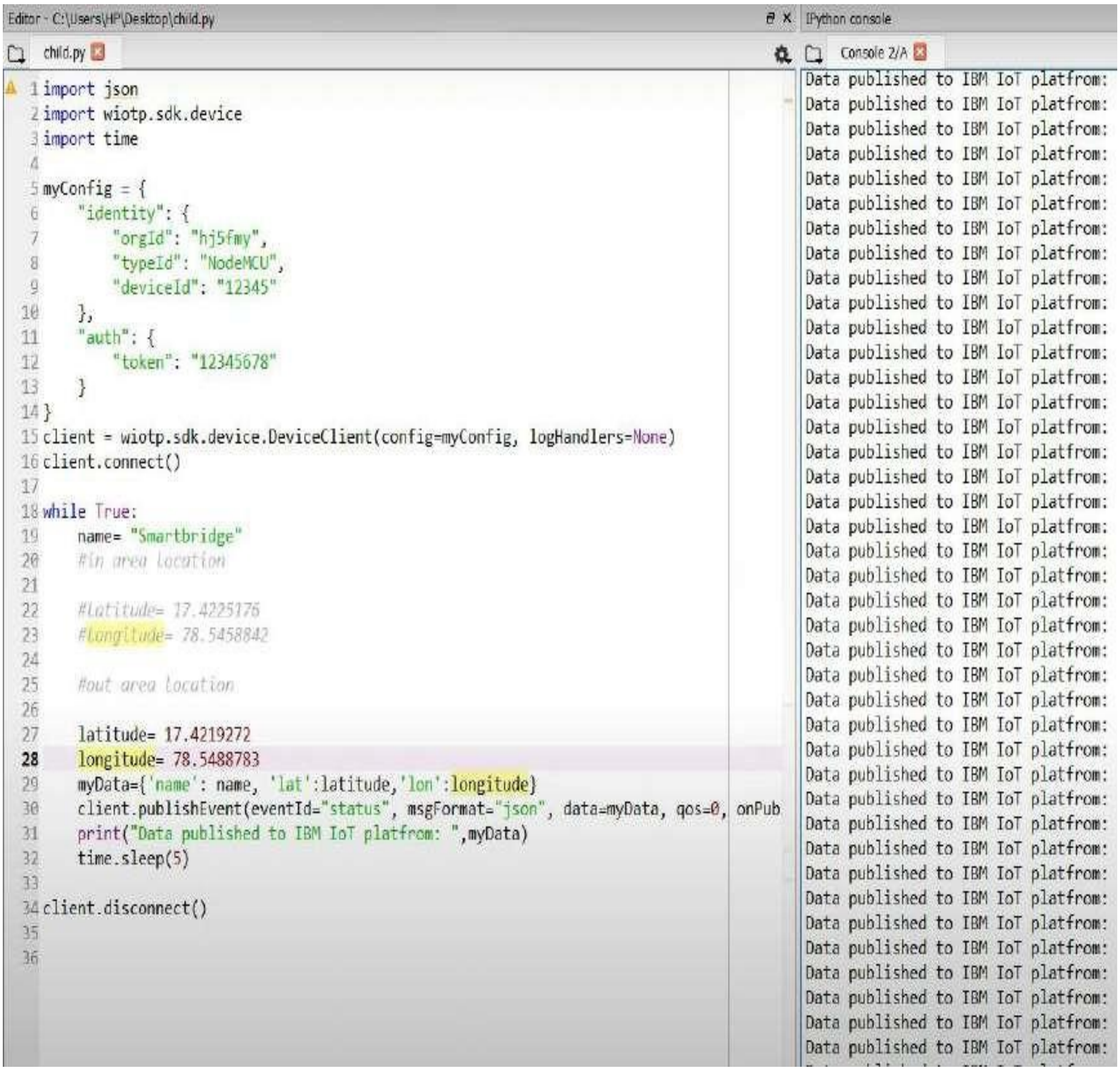


Floor ground

Ceiling Infinity

```
4/2/2021, 12:25:47 PM   node: eac2edd1.2b137
iot-2/type/NodeMCU/id/12345/evt/status/fmt/json :
msg.payload : Object
 ▸{ message: "Entry", Time:
"4/2/2021, 12:25:47 PM", name:
"Gnaneshwar", lat: 17.4225176, lon:
78.5458842 }
```

7. Python script send requests to IBM Cloud



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    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)
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client.disconnect()
```

```
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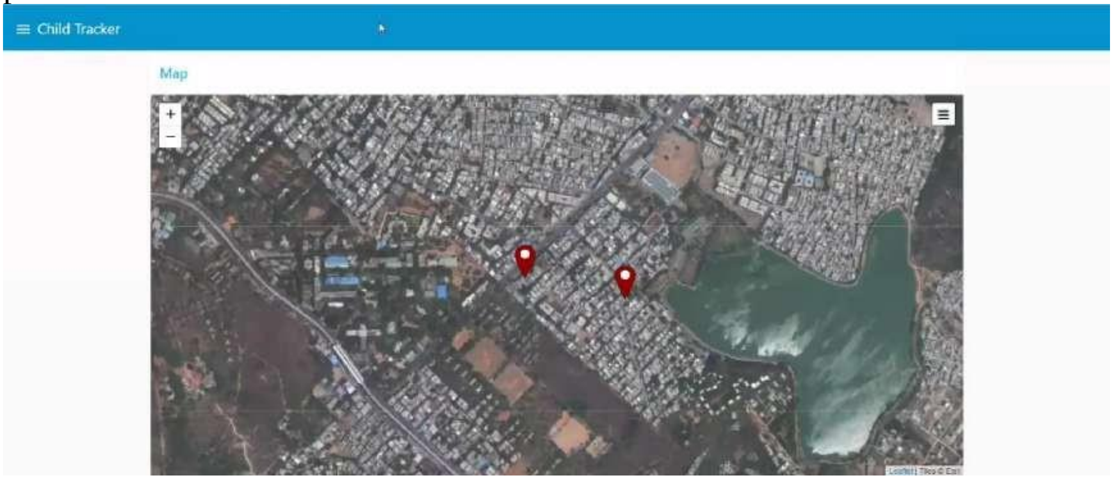
```

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



Conclusion:

Developed the web application using Node-RED Successfully