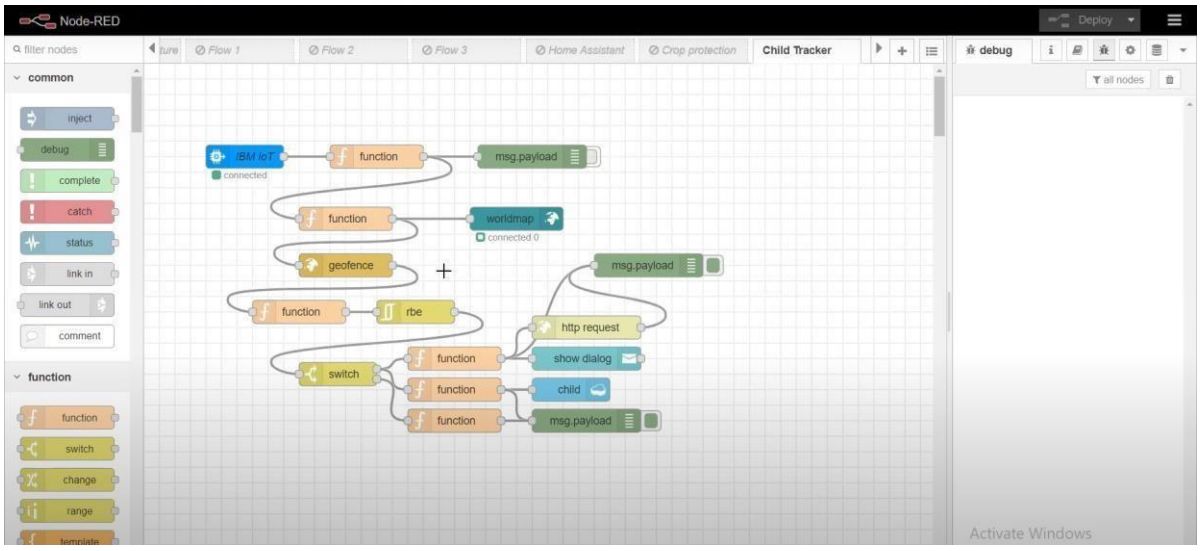
Developing Web Application Using Node-RED

Date	11-11-2022
Team ID	PNT2022TMID42919
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification

Aim: Develop the web application using Node-RED

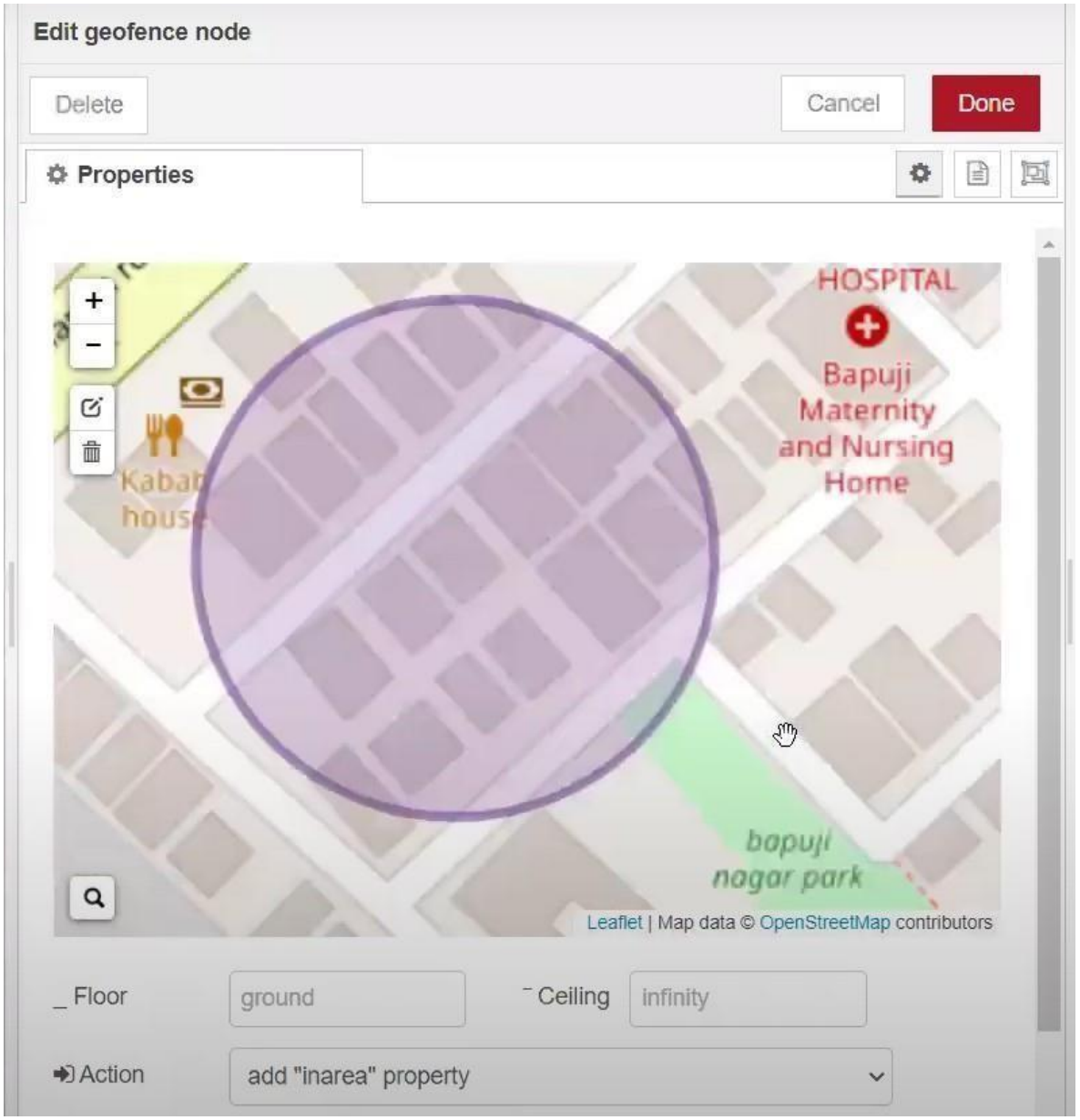
Steps Followed:

Opened a Node-RED project:



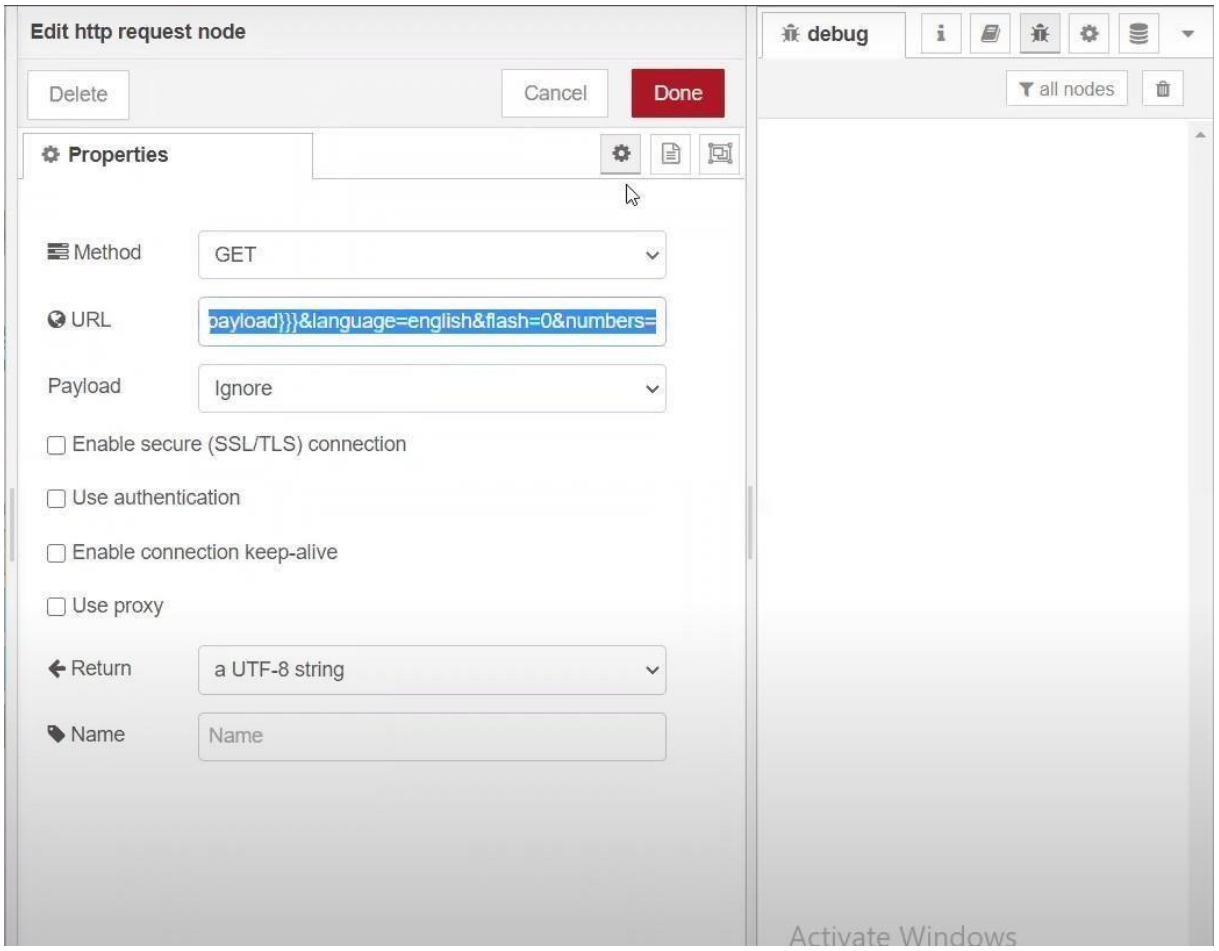
Add code in python to track child location:

```
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()
```

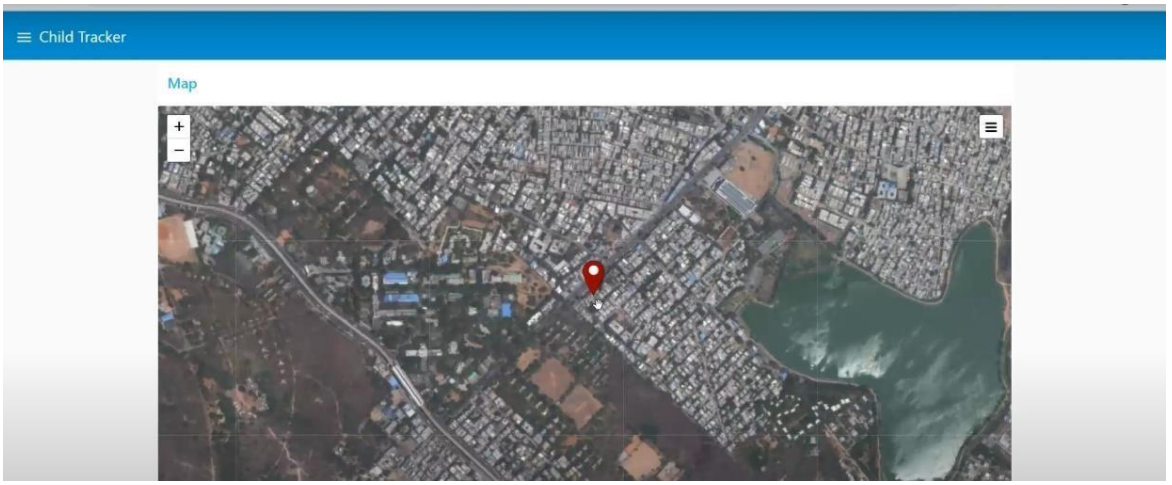


- **Create the GeoFence**

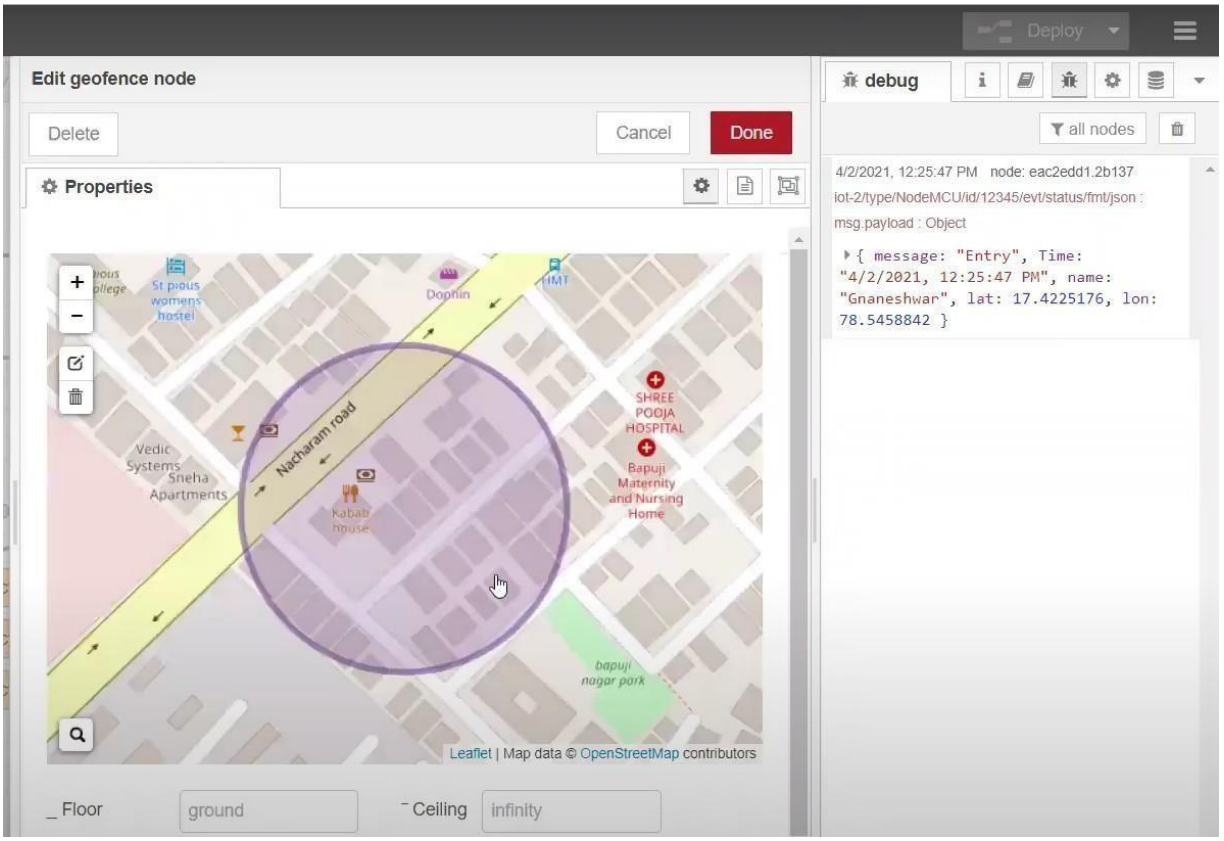
- **Editing the HTTP Request URL:**



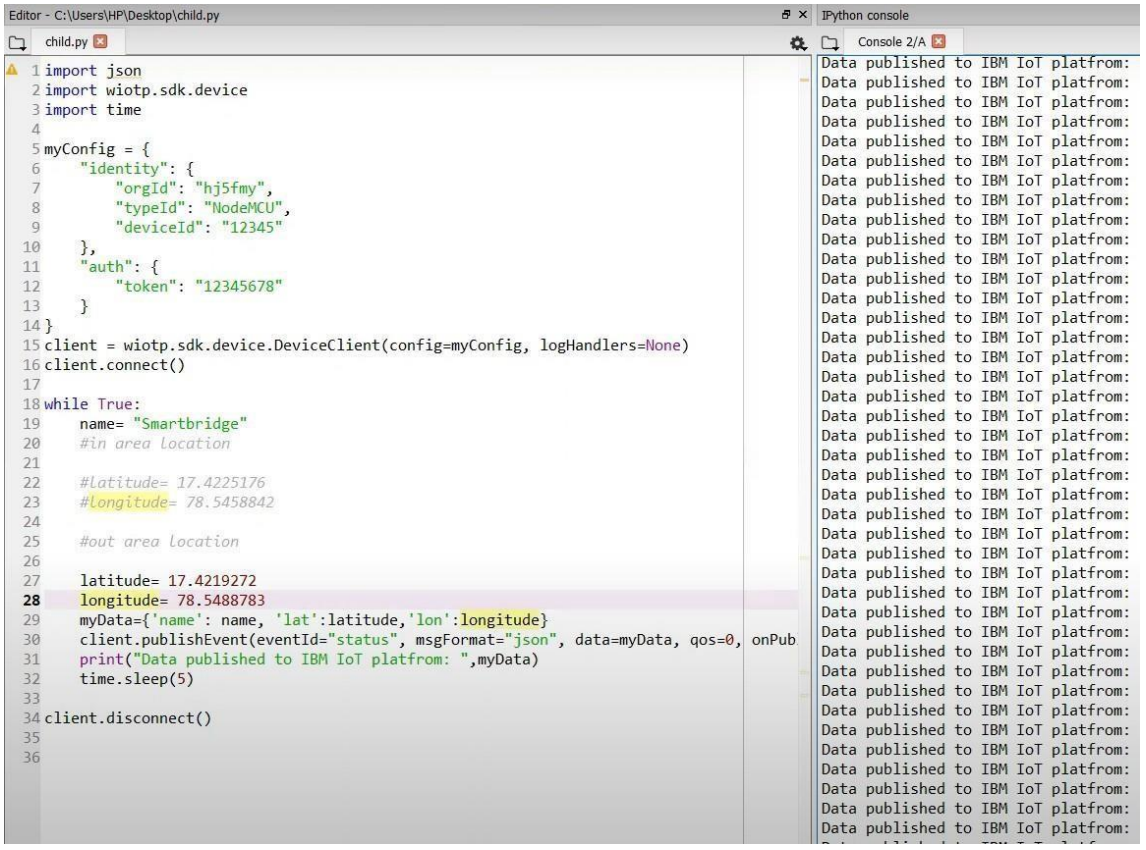
- **Locating the child:**



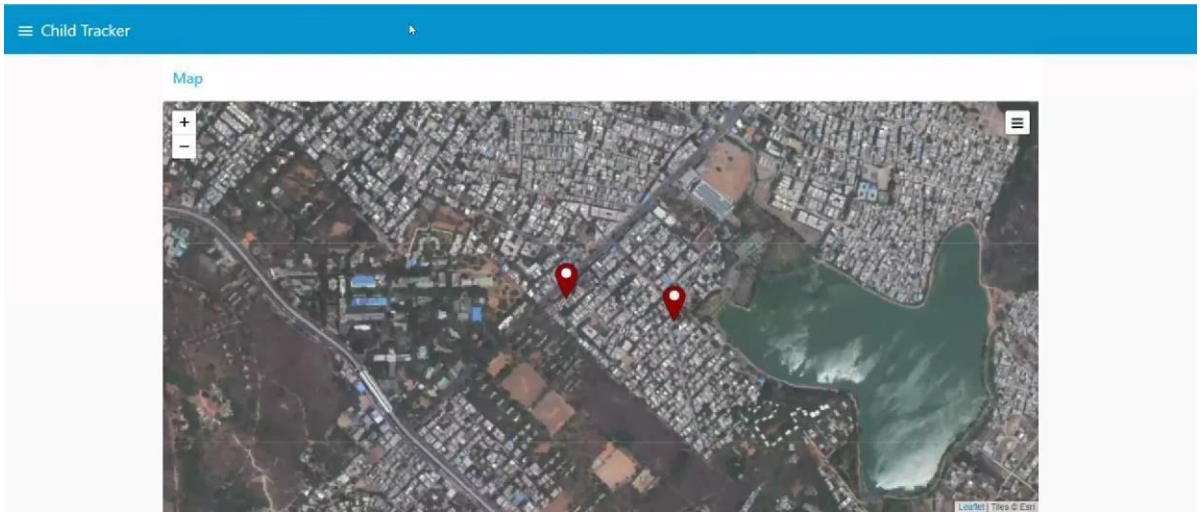
- **Created the geofence node:**



- **Python script sending requests to IBM Cloud:**



- **After running the script, the web UI shows "Person is not in the particular area":**



Result: Successfully developed the web application using Node-RED