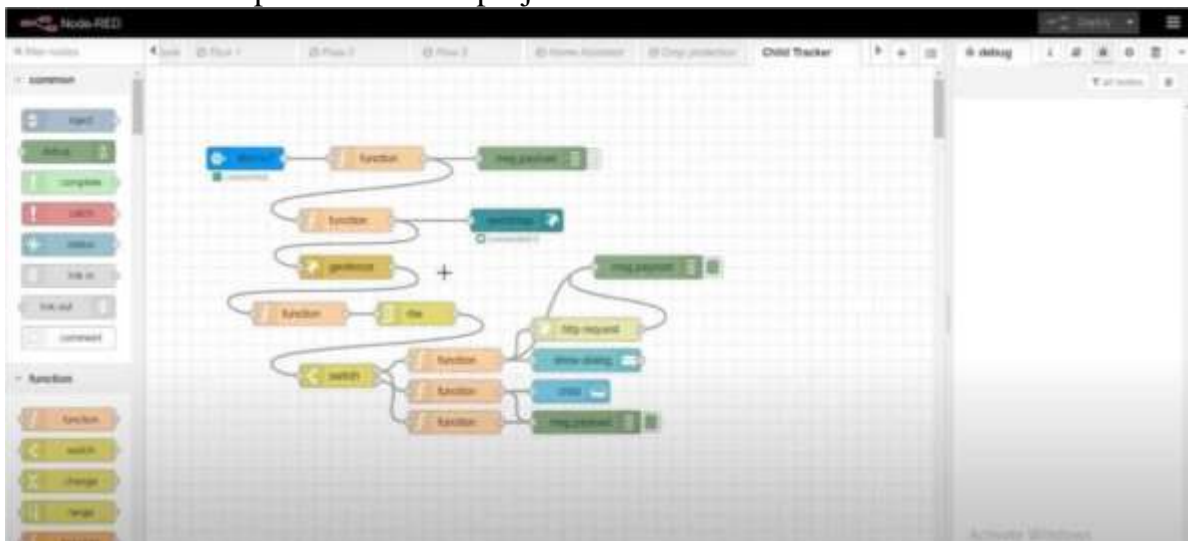


Develop A Web Application Using Node-RED

Team ID	PNT2022TMID05567
Project Name	Project- IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

Steps Followed:

- Open Node-RED project



- Added code to get child location in python

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

myConfig = {
    "identity": {
        "orgId": "h35fmy",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

#Data Type:
name= "Smartbridge"
#in area location

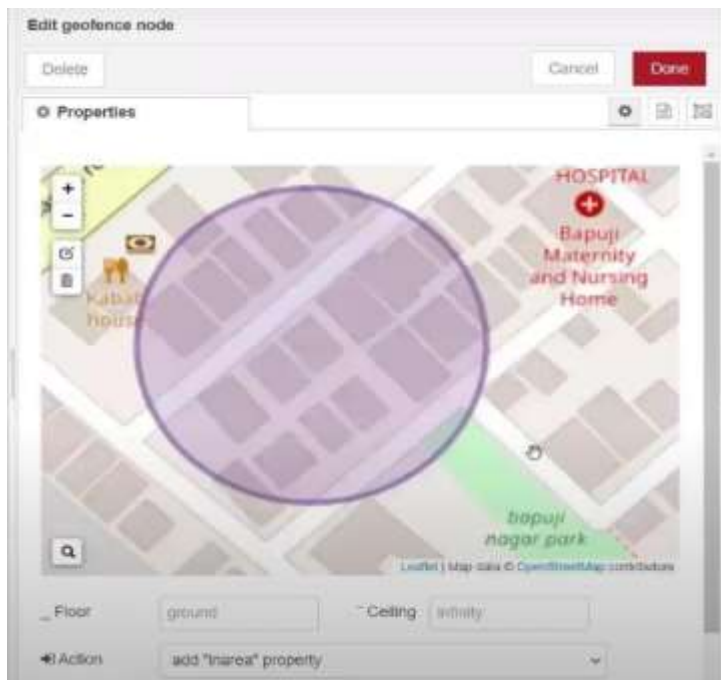
latitude= 17.4225176
longitude= 78.5458842

#out area location

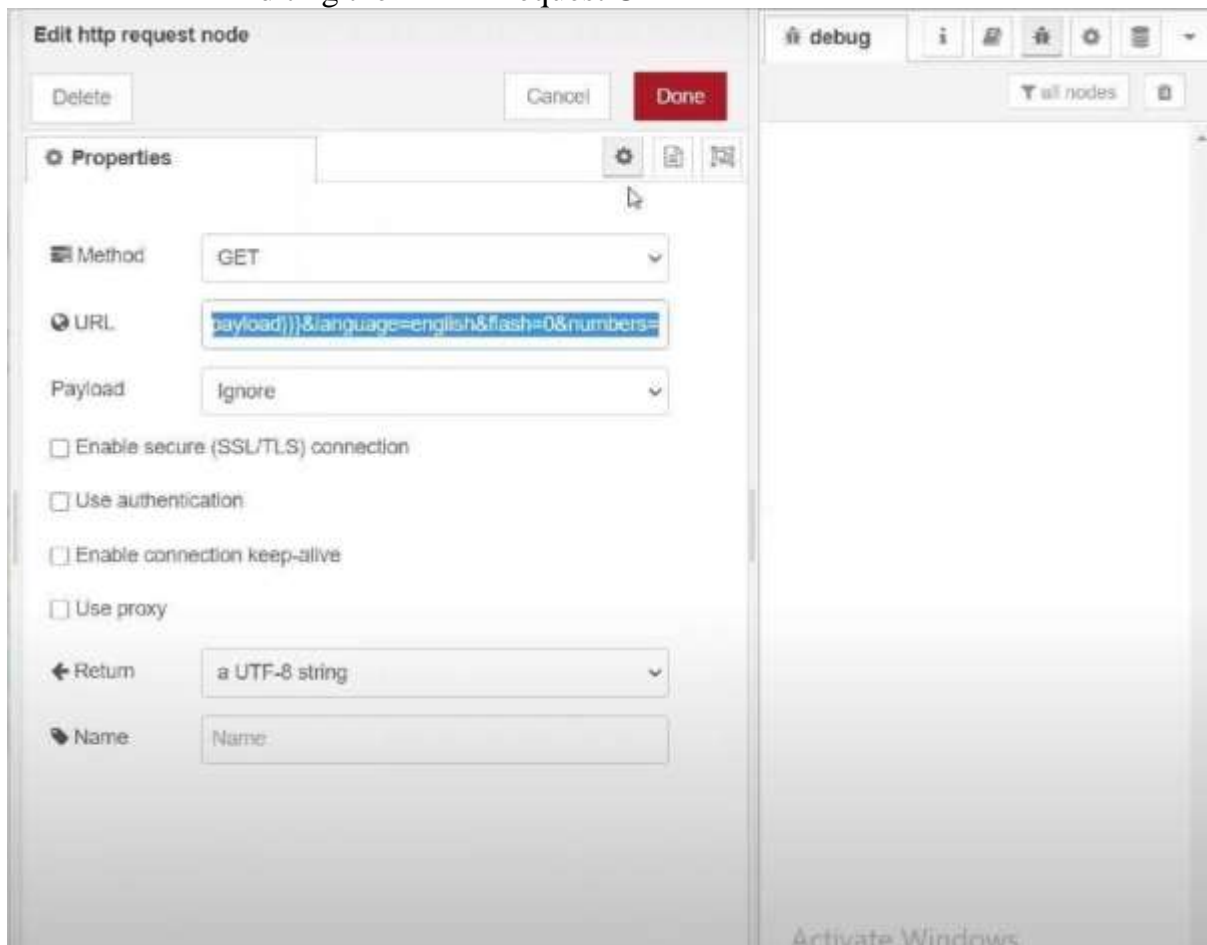
#latitude= 17.4218272
#longitude= 78.5488783
myData={'name': name, 'lat':latitude, 'lon':longitude}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
print("Data published to IBM IoT platform: ",myData)
time.sleep(5)

client.disconnect()
```

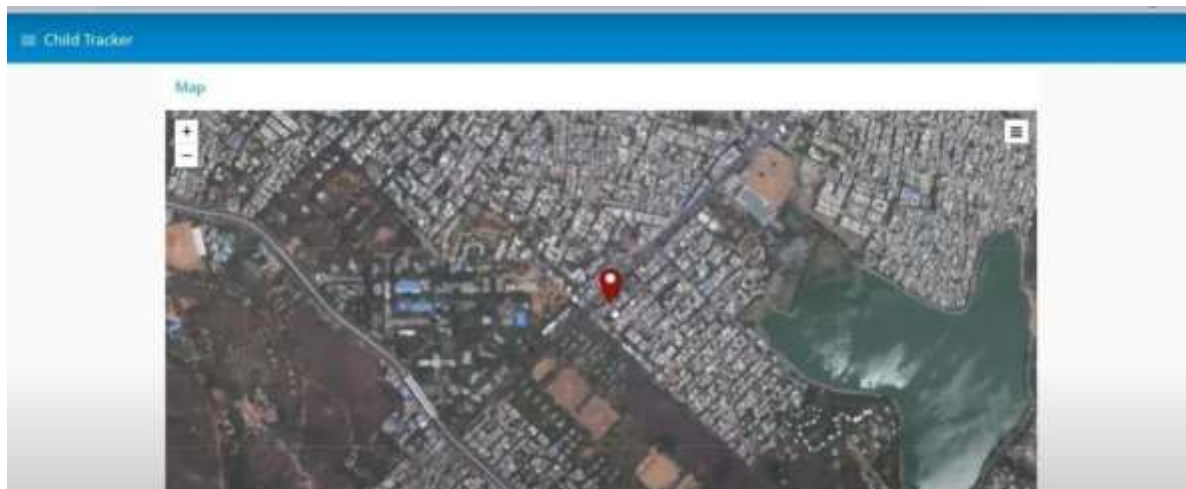
Created the GeoFence



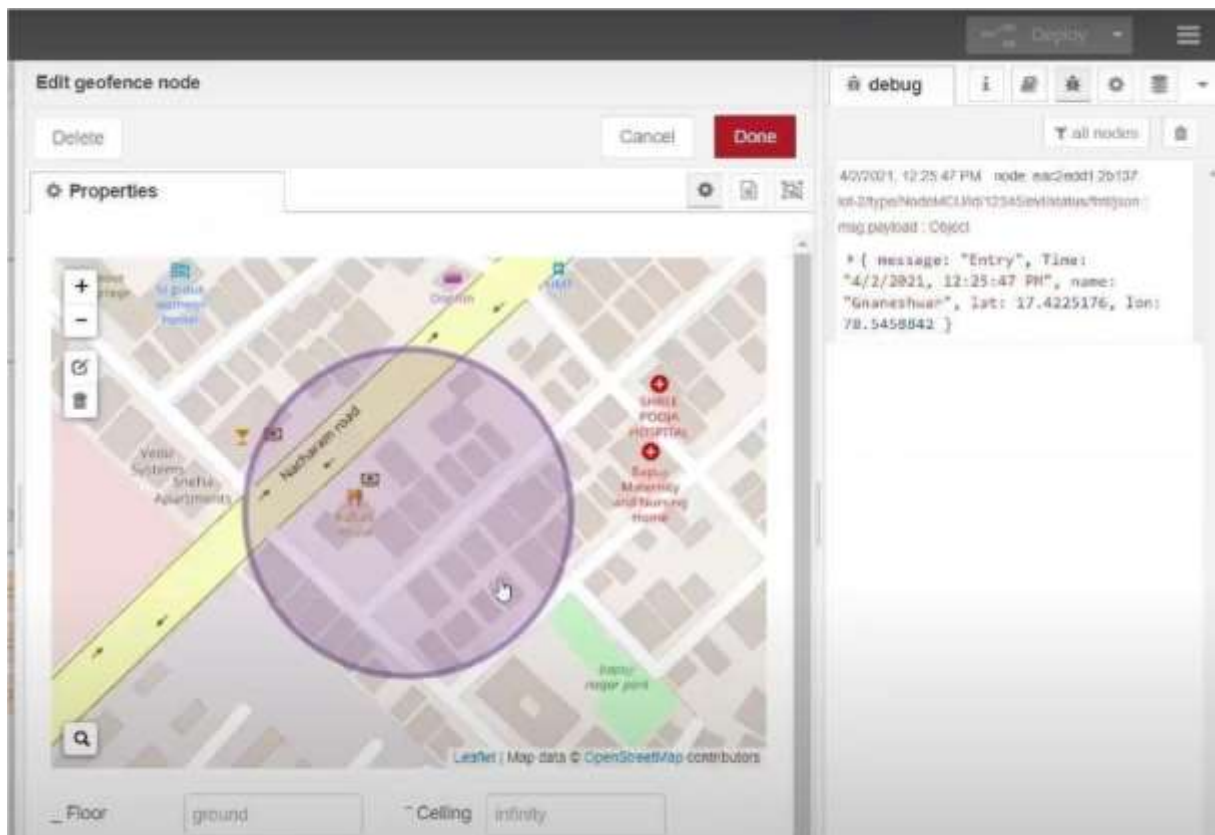
Editing the HTTP Request URL



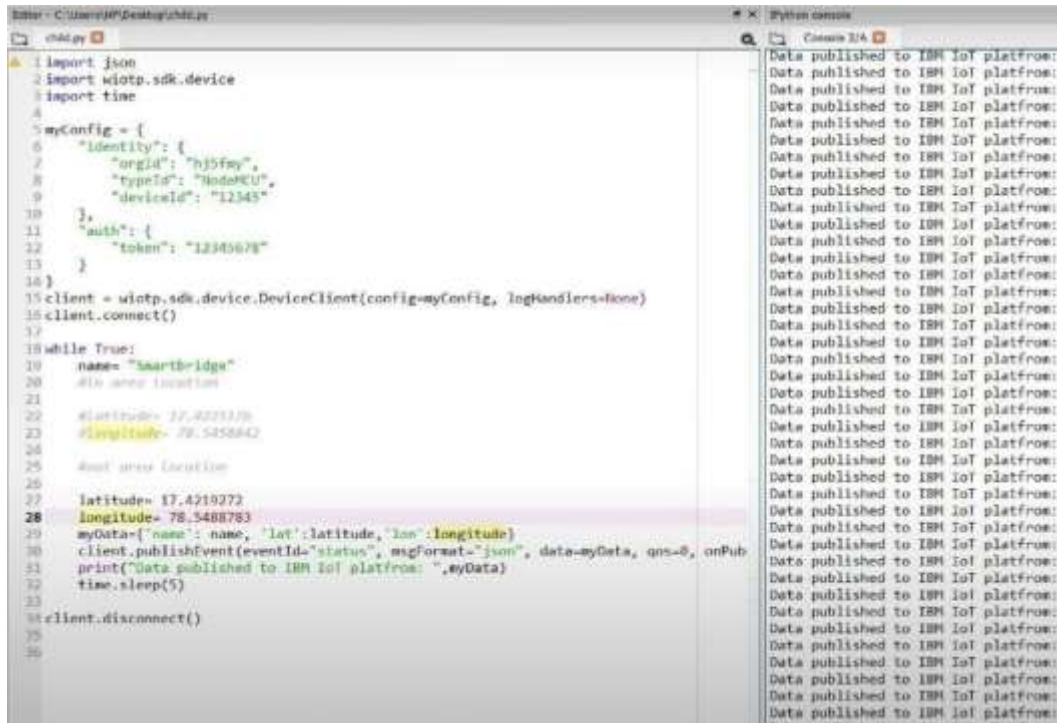
- Located the child



Created the geofence node



- PythonscriptsendingrequeststoIBMCloud



The image shows a Python script in a code editor on the left and its output in a console on the right. The script, named `child.py`, imports `json`, `wiotp.sdk.device`, and `time`. It defines a `myConfig` dictionary with identity and authentication details. A `DeviceClient` is created and connected. A `while True` loop publishes location data (name, latitude, longitude) to the IBM IoT platform every 5 seconds. The console on the right shows the output: "Data published to IBM IoT platform:" repeated 20 times.

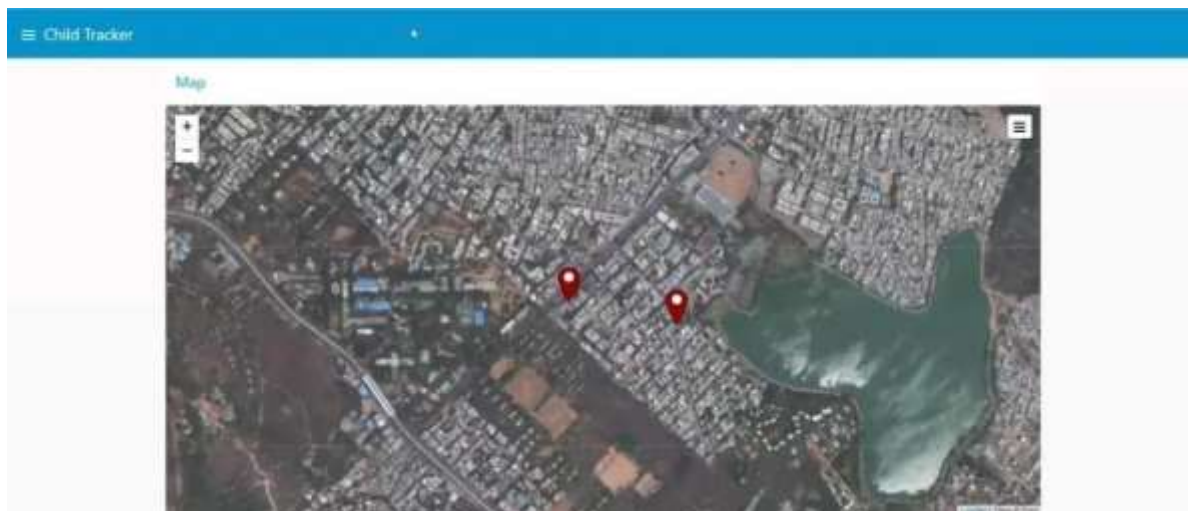
```

1 import json
2 import wiotp.sdk.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 = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
16 client.connect()
17
18 while True:
19     name = "SmartBridge"
20     #In sensor location
21
22     #latitude= 37.4271379
23     #longitude= 78.5458842
24     #out area location
25
26     latitude= 17.4219272
27     longitude= 78.5488783
28     myData={"name": name, "lat":latitude, "lon":longitude}
29     client.publish(eventId="status", msgFormat="json", data=myData, qos=0, onPub
30     print("Data published to IBM IoT platform: ",myData)
31     time.sleep(5)
32
33 client.disconnect()
34
35

```

Data published to IBM IoT platform:
Data published to IBM IoT platform:
Data published to IBM IoT platform:
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After running the script, the web UI shows “Person is not in the particular area”



Result: Successfully developed a web application using Node-RED