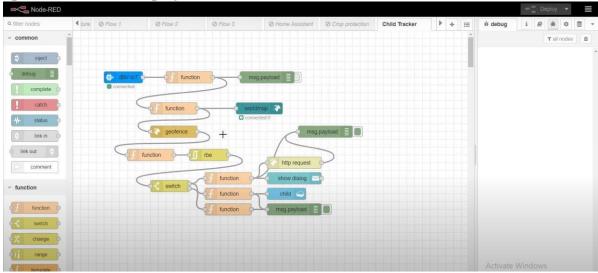
## Develop A Web Application Using Node-RED

Team ID	PNT2022TMID26397
Project Name	Project - IoT Based Safety Gadget For Child
	Safety Monitoring & Notification
Maximum Marks	2 Marks

## Steps Followed:

Opened a Node-RED project

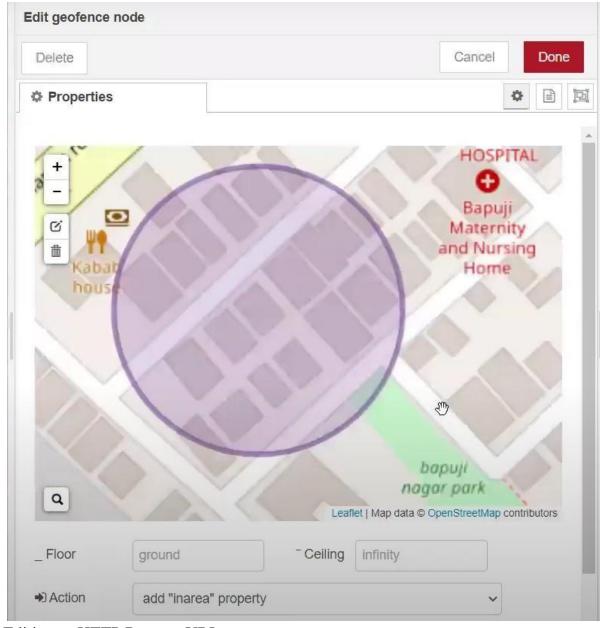


Added code to get child location in python

```
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()
```

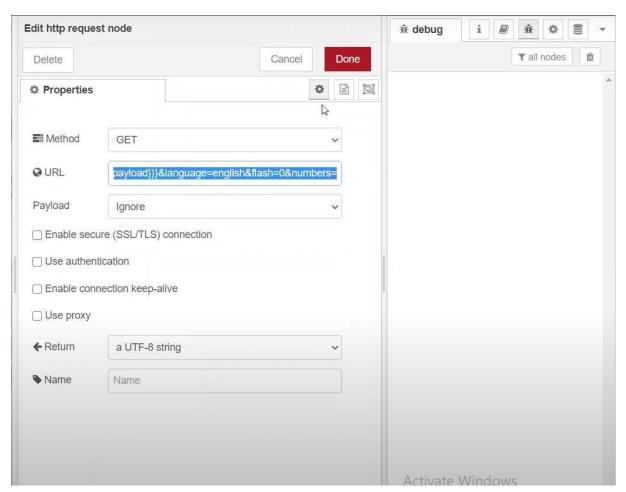
the

## Created GeoFence

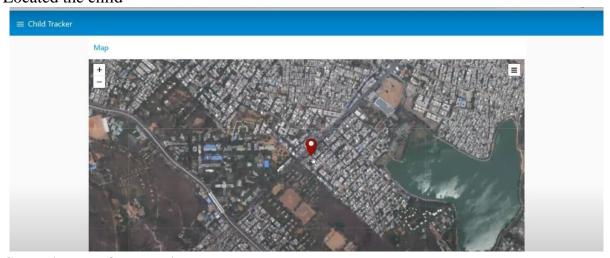


Editing HTTP Request URL

the

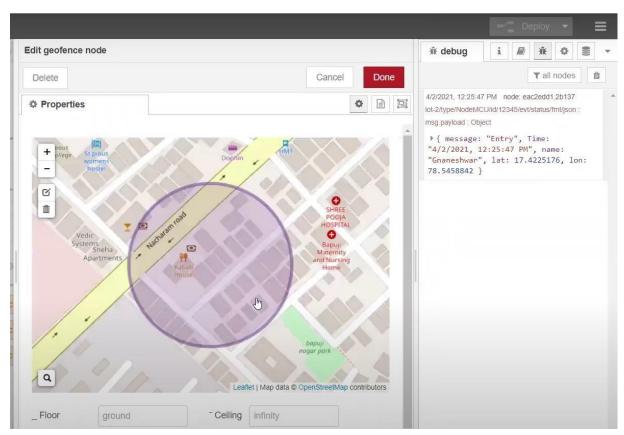


• Located the child



Created geofence node

the



Python script sending requests to IBM Cloud

```
child.py
                                                                                             Console 2/A 🔯
                                                                                                 Data published to IBM IoT platfrom:
  1 import json
                                                                                                 Data published to IBM IoT platfrom:
  2 import wiotp.sdk.device
                                                                                                 Data published to IBM IoT platfrom:
  3 import time
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
  5 myConfig = {
        nrig = {
"identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
 10
        },
"auth": {
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
             "token": "12345678"
 12
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
 14 }
                                                                                                 Data published to IBM IoT platfrom:
  15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
                                                                                                 Data published to IBM IoT platfrom:
 16 client.connect()
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
 18 while True:
19 name= "Smartbridge"
20 #in area location
                                                                                                 Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
        #Latitude= 17.4225176
                                                                                                 Data published to IBM IoT platfrom:
 23
        #longitude= 78.5458842
                                                                                                 Data published to IBM IoT platfrom:
 24
                                                                                                 Data published to IBM IoT platfrom:
        #out area location
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
        latitude= 17.4219272
                                                                                                 Data published to IBM IoT platfrom:
        longitude= 78.5488783
 28
                                                                                                 Data published to IBM IoT platfrom:
        Data published to IBM IoT platfrom:
  30
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
        time.sleep(5)
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
  34 client.disconnect()
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
  36
                                                                                                 Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                 Data published to IBM IoT platfrom:
```

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



Result: Successfully developed a web application using Node-RED