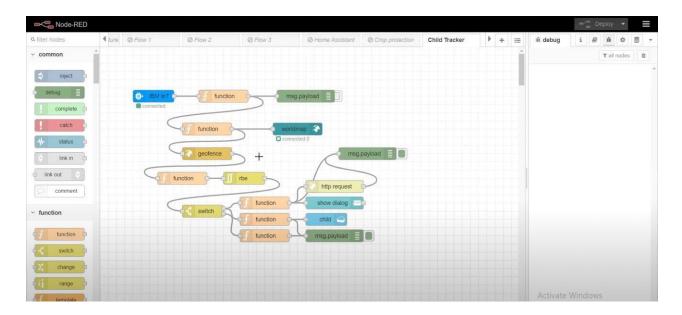
Develop A Web Application Using Node-RED

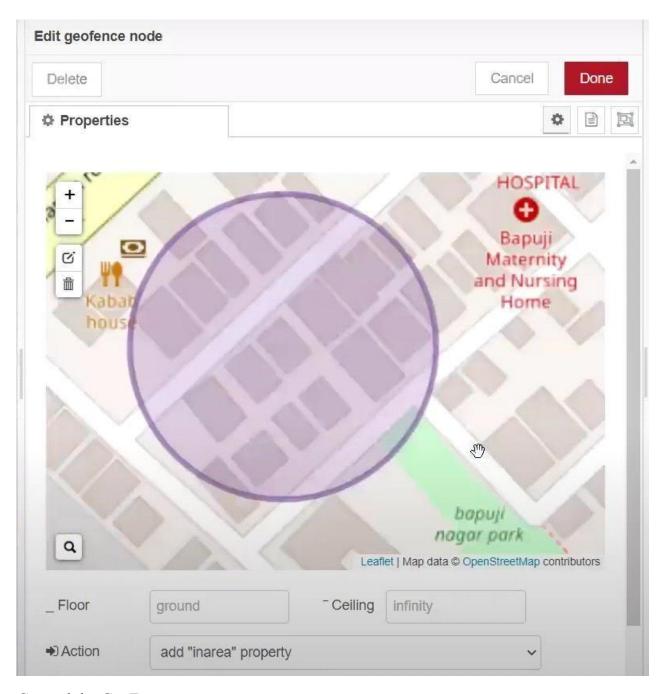
Team ID	PNT2022TMID17405
Project Name	Project - IoT Based Safety Gadget For Child
	Safety Monitoring & Notification
Maximum Marks	2 Marks

Steps Followed:

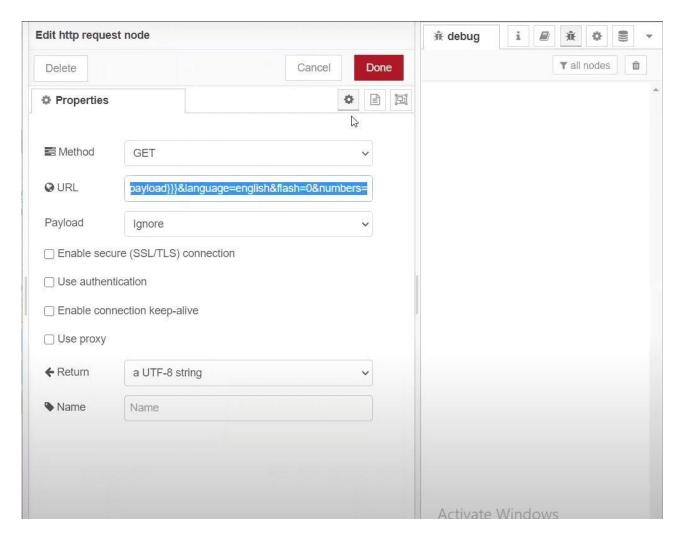


- Opened a Node-RED project
- Added code to get child location in python

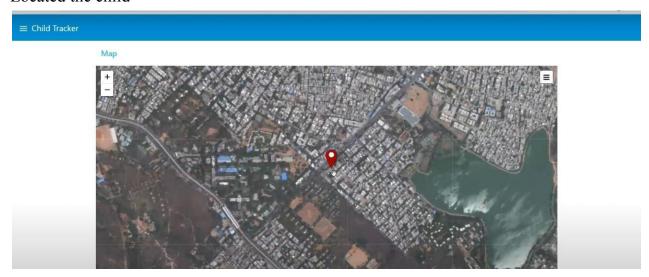
```
import json
import wiotp.sdk.device
import time
myConfig = {
    "identity": {
   "orgId": "hj5fmy",
   "typeId": "NodeMCU",
   "deviceId": "12345"
    "auth": {
        "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
While True:
        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()
```

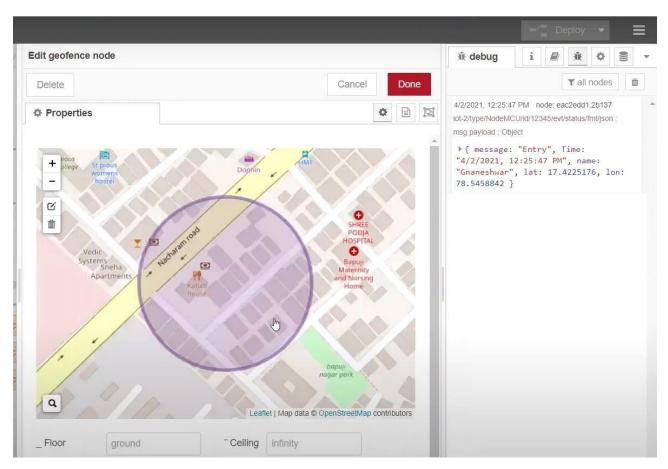


• Created the GeoFence



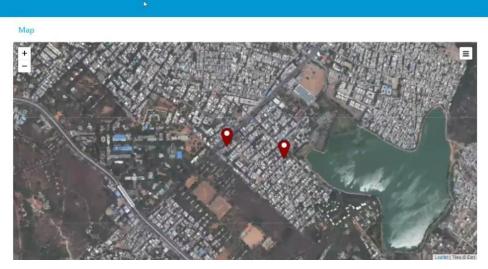
- Editing the HTTP Request URL
- Located the child





- Created the geofence node
- Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                            Console 2/A 🖾
child.py
                                                                                                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 = {
         "identity": {
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
             "orgId": "hj5fmy",
"typeId": "NodeMCU",
                                                                                                Data published to IBM IoT platfrom:
             "deviceId": "12345"
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
  10
                                                                                                Data published to IBM IoT platfrom:
         "auth": {
 11
                                                                                                Data published to IBM IoT platfrom:
             "token": "12345678"
  12
                                                                                                Data published to IBM IoT platfrom:
  13
                                                                                                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:
 17
                                                                                                Data published to IBM IoT platfrom:
 18 while True:
                                                                                                Data published to IBM IoT platfrom:
        name= "Smartbridge"
 19
                                                                                                Data published to IBM IoT platfrom:
        #in area location
  20
                                                                                                Data published to IBM IoT platfrom:
 21
                                                                                                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:
 25
        #out area location
                                                                                                Data published to IBM IoT platfrom:
 26
                                                                                                Data published to IBM IoT platfrom:
  27
        latitude= 17.4219272
                                                                                                Data published to IBM IoT platfrom:
 28
        longitude= 78.5488783
                                                                                                Data published to IBM IoT platfrom:
        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)
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
                                                                                                Data published to IBM IoT platfrom:
  32
        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 theparticular area"

■ Child Tracker

Result: Successfully developed a web application using Node-RED