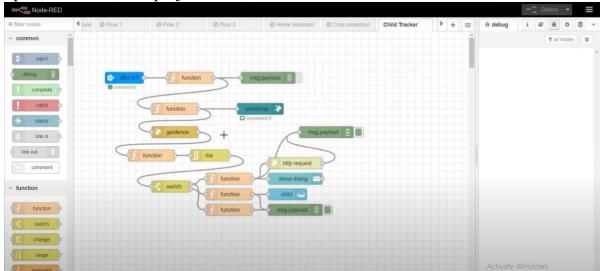
Develop A Web Application Using Node-RED

Name	Apsana A
Team I'd	PNT2022TMID45857
ProjectName	Project- IoTBasedSafetyGadgetForChild SafetyMonitoring& 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()

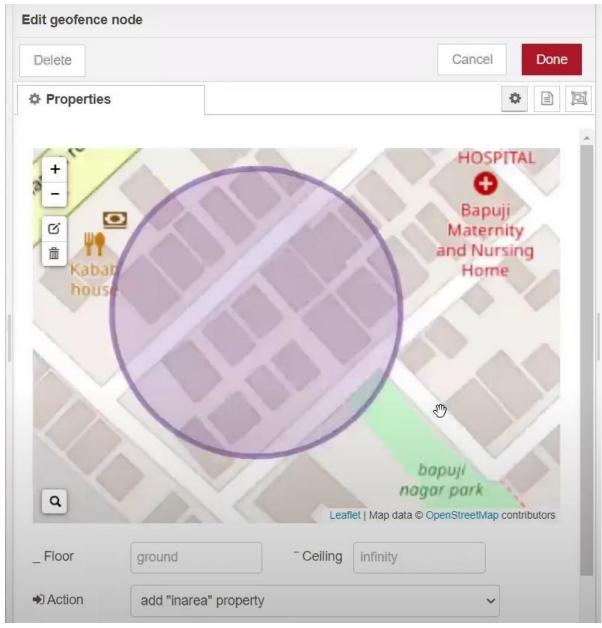
Thile True:
    name= "Smartbridge"
    #in area location
    latitude= 17.4225176
    longitude= 78.5458842
    #out area location

    #latitude= 17.4219272
    #longitude= 78.5458873
    myData=('name': name, 'lat':latitude, 'lon':longitude)
    client.publishEvent(eventId="status", msgFormat="json", data=myData, gos=0, onPublish=None)
    print("Data published to IBM IoT platfrom: ",myData)

time.sleep(5)
```

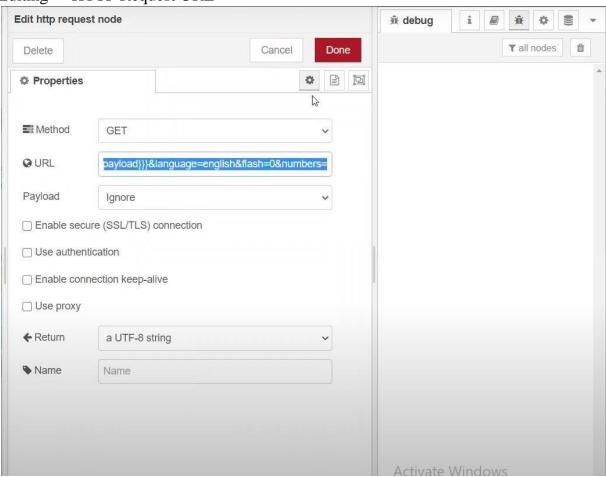
the

Created Geo Fence

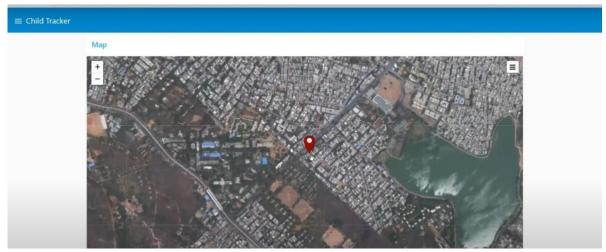


the

Editing HTTP Request URL

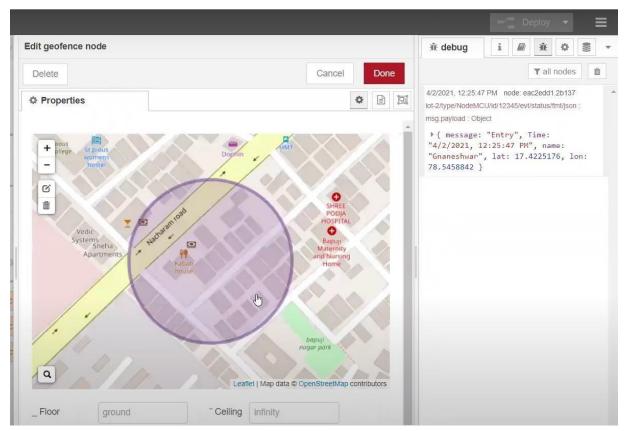


• Located the child



Created geo fence node

the



Python script sending requests to IBMCloud

```
₽ × IPython console
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 = {
         nfig = {
"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:
                                                                                                      Data published to IBM IoT platfrom:
 19
        name= "Smartbridge"
                                                                                                      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:
        #out area location
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
        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':<mark>longitude</mark>}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
print("Data published to IBM IoT platfrom: ",myData)
                                                                                                      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.