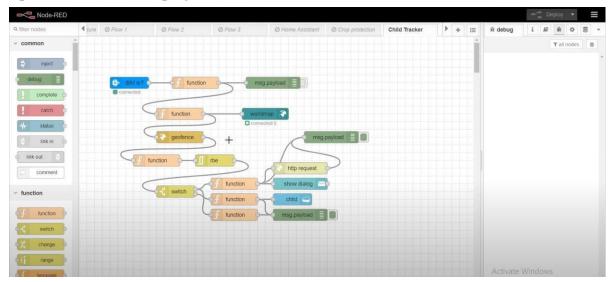
Develop A Web Application Using Node-RED

Date	26 October 2022
Team ID	PNT2022TMID14667
Project Name	Project - IoT Based Safety Gadget For Child
	Safety Monitoring & Notification
Maximum Marks	2 Marks

Steps Followed:

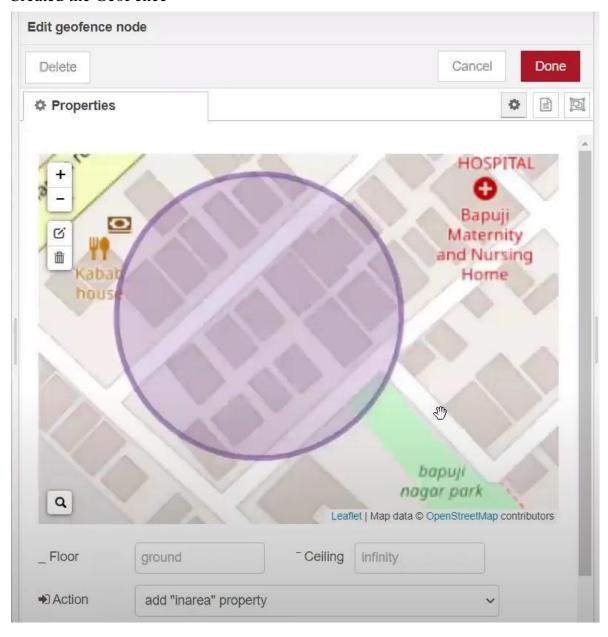
• Opened a Node-RED project



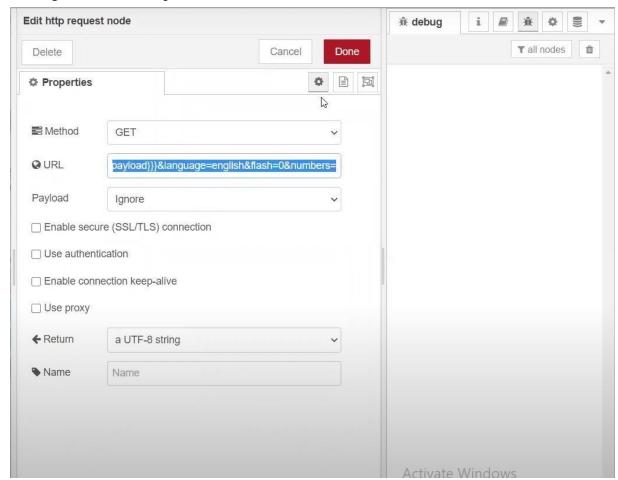
• Added code to get child location inpython

```
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



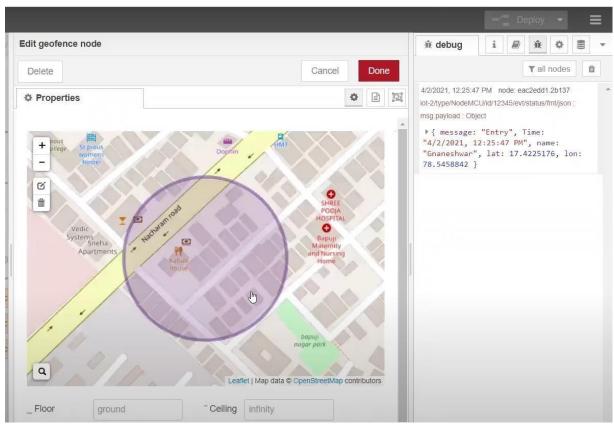
• Editing the HTTP Request URL



• Located the child



• Created the geofence node



Python script sending requests to IBM Cloud

```
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 = {
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
 10
                                                                                                      Data published to IBM IoT platfrom:
          auth": {
              "token": "12345678"
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      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"
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
         #in area location
                                                                                                      Data published to IBM IoT platfrom:
 21
                                                                                                      Data published to IBM IoT platfrom:
        #Latitude= 17.4225176
                                                                                                      Data published to IBM IoT platfrom:
        #longitude= 78.5458842
                                                                                                      Data published to IBM IoT platfrom:
 24
25
                                                                                                      Data published to IBM IoT platfrom:
        #out area location
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
         latitude= 17.4219272
        latitude 78.5488783
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:
 28
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      Data published to IBM IoT platfrom:
                                                                                                      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:
```

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



Result: Successfully developed a web application using Node-RED