# **DEVELOP A WEB APPLICATION USING NODE-RED SERVICE**

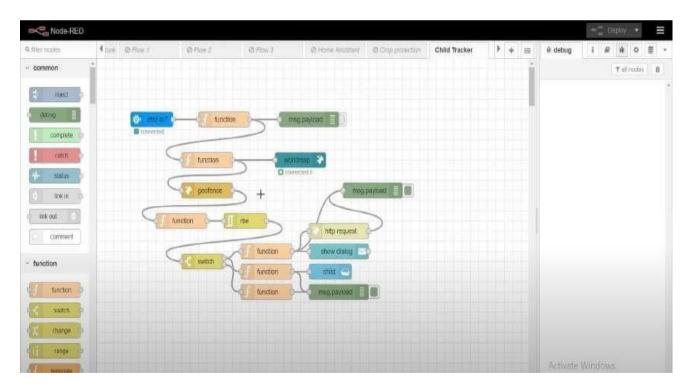
#### DEVELOP THE WEB APPLICATION USING NODE-RED SERVICE

Date	06 November 2022
Team ID	PNT2022TMID36617
Project Name	Industry-specific intelligent fire management system
Maximum Marks	8 Marks

# 1. To Develop the web application using Node-RED

### Steps:

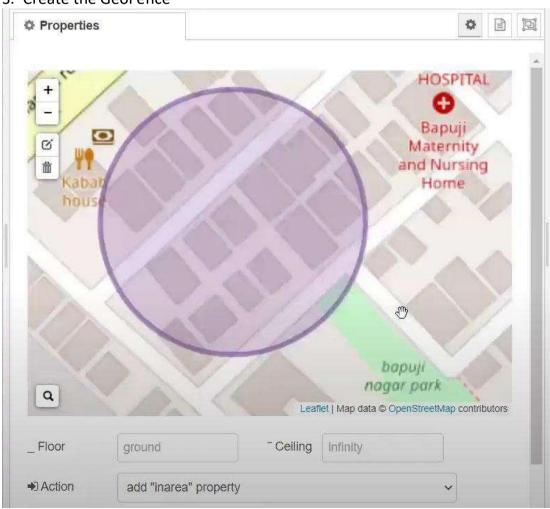
1. Open a Node-RED project



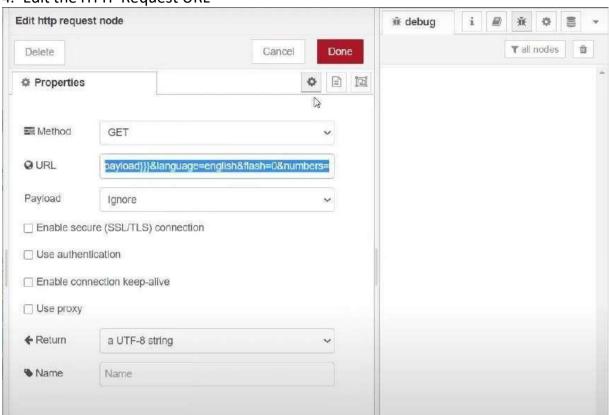
2. Add code to get child location in python

```
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= 78.5488783
        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()
```

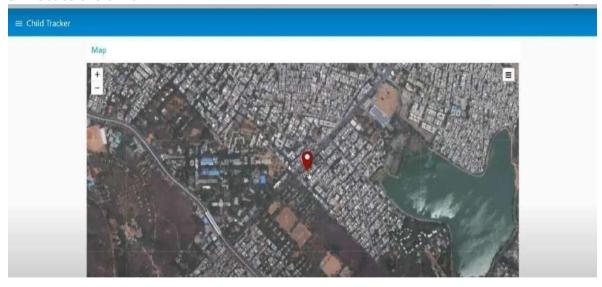
#### 3. Create the GeoFence



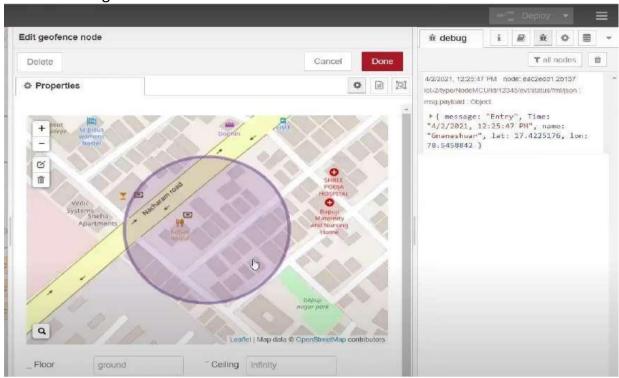
4. Edit the HTTP Request URL



# 5. Locate the child



6. Create the geofence node



7. Python script send requests to IBM Cloud

```
# X IPython console
                                                                                                                                                                                                    Ca Console 2/A 
Data published to IBM IoT platfrom:
A 1 import json
2 import wiotp.sdk.device
3 import time
                                                                                                                                                                                                            Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                                                                                                                             Data published to IBM IoT platfrom:
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Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
     5 myConfig = {
                  ntig = {
  "identity": {
      "orgId": "hj5fmy",
      "typeId": "NodeMCU",
      "deviceId": "12345"
                                                                                                                                                                                                            Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
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Data published to IBM IoT platfrom:
                   auth": {
                                                                                                                                                                                                            Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                           "token": "12345678"
                1
                                                                                                                                                                                                            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:
Data published to IBM IoT platfrom:
   16 client.connect()
                                                                                                                                                                                                            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:
                 #Latitude= 17.4225176
#Longitude= 78.5458842
   22
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Data published to IBM IoT platfrom:
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                  latitude= 17.4219272
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myData={'name': name,
   28
                 myData={ 'name': name, 'lat':latitude, 'lon':longitude
client.publishEvent(eventId="status", msgFormat="jso
print("Data published to IBM IoT platfrom: ",myData)
                                                                 'lat':latitude,'lon':longitude}
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                                                                                                                                                                                                             Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                 time.sleep(5)
                                                                                                                                                                                                            Data published to IBM IOT platfrom:
   34 client.disconnect()
```

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



### **Conclusion:**

Developed the web application using Node-RED Successfully