Develop The Web Application Using Node- RED

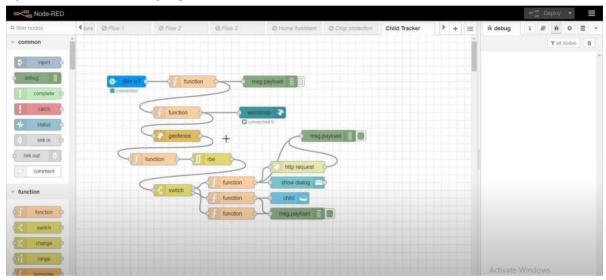
TEAM ID	PNT2022TMID18932
PROJECT NAME	IOT BASED SAFETY GADGET FOR
	CHILD SAFETYMONITORING AND
	NOTIFICATION

Aim:

Develop the web application using Node-RED Steps

Followed:

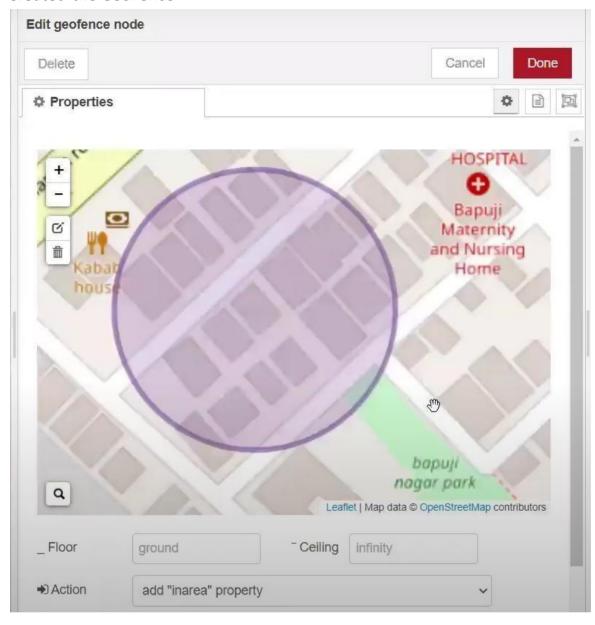
• Opened a Node-RED project



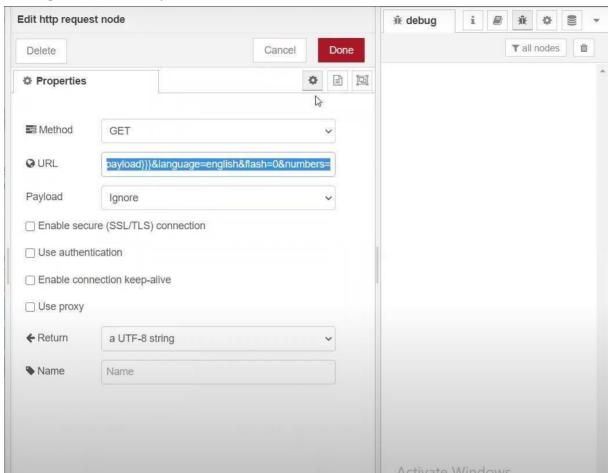
Added code to get child location in python

```
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()
```

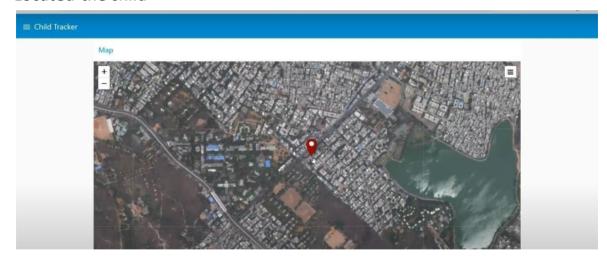
• Created the GeoFence



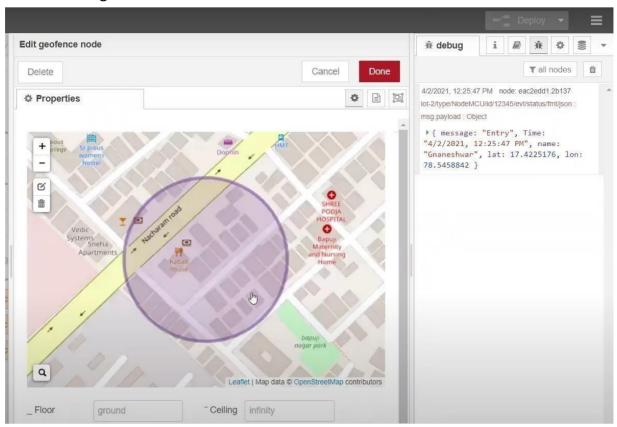
• Editing the HTTP Request URL



• Located the child



• Created the geofence node



• Python script sending requests to IBM Cloud

```
Console 2/A
child.py
                                                                                                                    Data published to IBM IoT platfrom:
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 = {
                                                                                                                    Data published to IBM IoT platfrom:
           "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
               "deviceId": "12345"
                                                                                                                    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:
  14 }
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:
                                                                                                                    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:
  21
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
          #Latitude= 17.4225176
          #Longitude= 78.5458842
                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
          #out area location
                                                                                                                    Data published to IBM IoT platfrom:
          latitude= 17.4219272
                                                                                                                    Data published to IBM IoT platfrom:
          longitude= 78.5488783
myData={'name': name, 'lat':latitude, 'lon':longitude}
client.publishEvent(eventId="status", msgFormat="json"
print("Data published to IBM IoT platfrom: ",myData)
  28
                                                                                                                    Data published to IBM IoT platfrom:
                                                                                                                    Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                               , data=myData, qos=0, onPub
                                                                                                                    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:
                                                                                                                    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 the web application using Node-RED