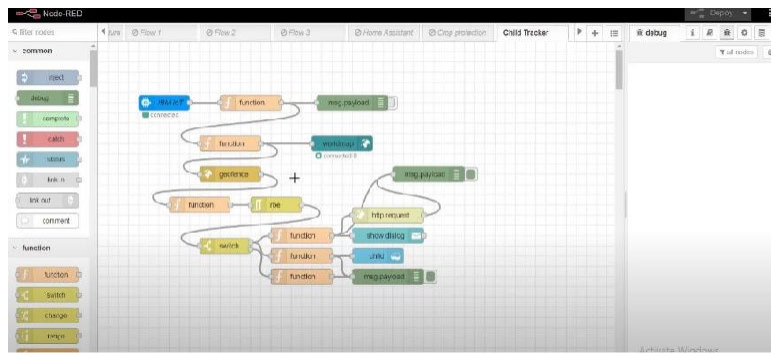


DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

Date	19 November 2022
Team ID	PNT2022TMID33996
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification

DEVELOP A WEB APPLICATION USING NODE-RED SERVICE:

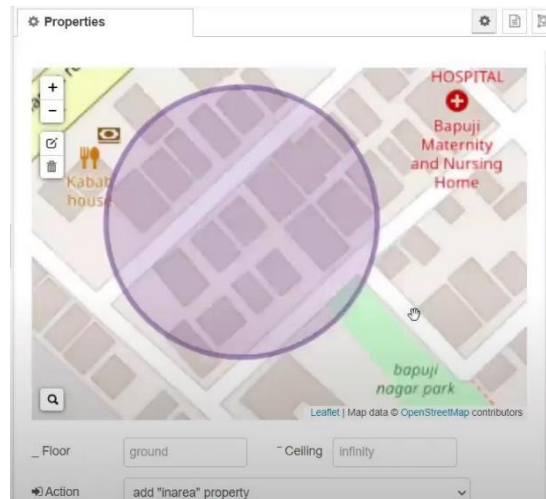
1. The node red application is developed with the required function.



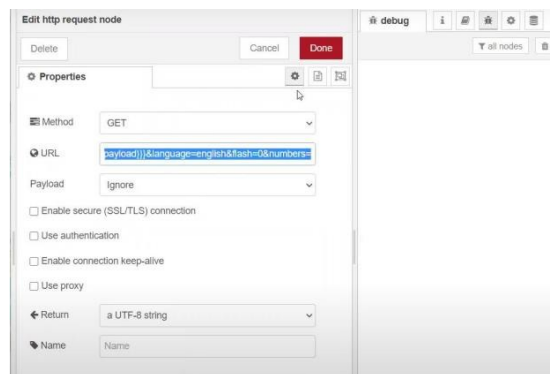
2. Python code:

```
File Edit Format Run Options Window Help
import json
import winpi.sdk.device
import time
myconfig = {
    "identity": {
        "orgId": "a7011a",
        "typeId": "TOT",
        "deviceId": "123"
    },
    "auth": {
        "token": "y-WFn74bYRkMP2ic2g"
    }
}
client = winpi.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=78.5468783
    myData={'name': name, 'lat': latitude, 'lon': longitude}
    client.publish(eventId="status", msgformat="json", data=myData, qos=0, onPublish=None)
    print("Data published to iM IoT platform :", myData)
    time.sleep(5)
client.disconnect()
```

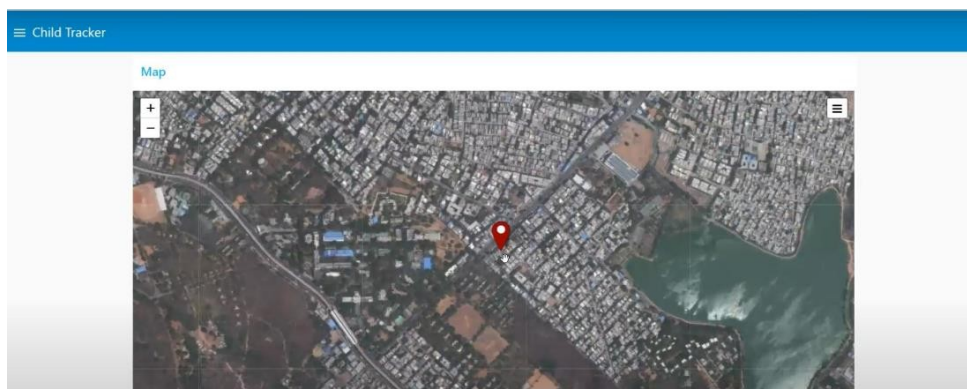
3. Create a geofence



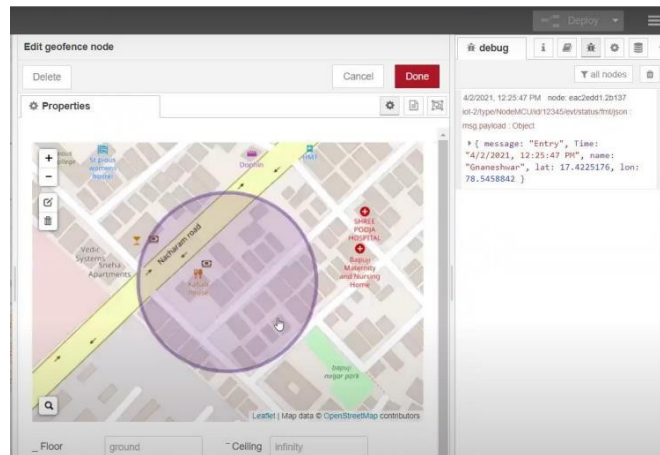
4. Edit the http request url.



5. Locate the child.



6. Create the geofence node.



7. Python script send requests to IBM cloud:

```

1 import json
2 import wiots.sdk.device
3 import time
4
5 myConfig = {
6     "identity": {
7         "orgId": "hj5fmy",
8         "typeId": "NodeMCU",
9         "deviceId": "12345"
10    },
11    "auth": {
12        "token": "12345678"
13    }
14 }
15 client = wiots.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
16 client.connect()
17
18 while True:
19     name= "Smartbridge"
20     #in area location
21
22     #latitude= 17.4225176
23     #longitude= 78.5458842
24
25     #out area location
26
27     latitude= 17.4219272
28     longitude= 78.5488783
29     myData={'name': name, 'lat':latitude, 'lon':longitude}
30     client.publishEvent(eventId='status', msgFormat='json', data=myData, qos=0, onPub
31     print("Data published to IBM IoT platform: ",myData)
32     time.sleep(5)
33
34 client.disconnect()
35
36

```

8. The web application is developed.

