Develop The Web Application Using Node RED

TEAM ID: PNT2022TMID11663

TEAM MEMBERS:

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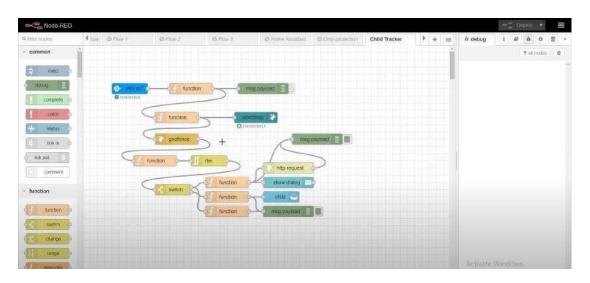
TEAM MEMBER 2 : JEEVA A
TEAM MEMBER 3 : VIGNESH V

Aim:

To Develop the web application using Node-RED

Steps:

Open a Node-RED project



Add code to get child location in python

```
import yion
import wiotp.sdk.device
import titne

myConfig = {
    "identity": {
        "orgId": "hjsfmy",
        "rypeId": "NodewCU",
        "deviceId": "12345"
},
    "auth": {
        "token": "12345678"
}}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

Thile True:
    name= "Smartbridge"
    #in area location

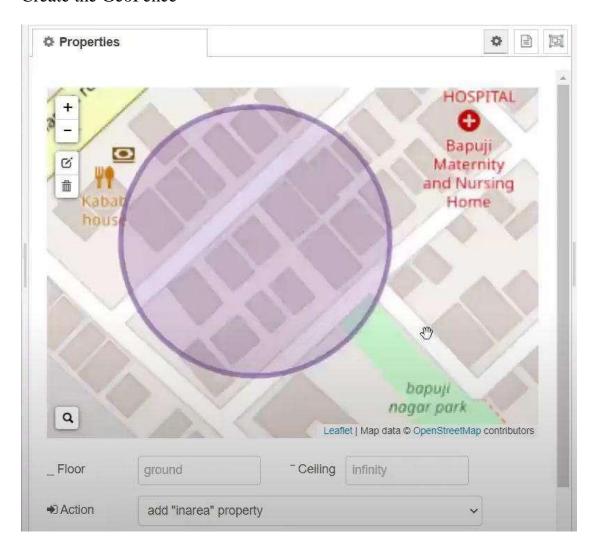
latitude= 17.4225178
longitude= 78.5458842

#out area location

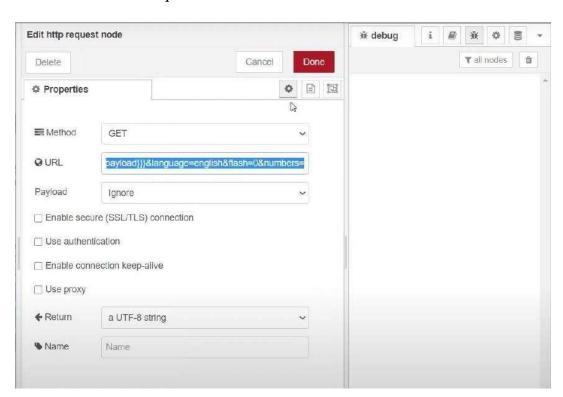
#latitude= 17.4219272
#longitude= 78.5498783
    myData= {'name': name, 'lat':latitude, 'lon':longitude)
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platfrom: ",myData)

client.disconnect()
```

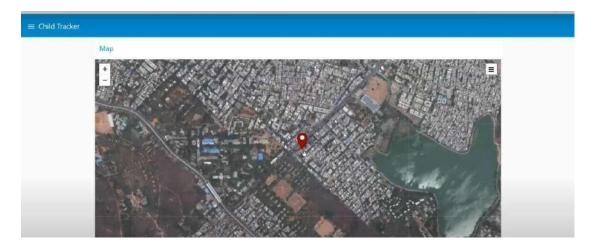
Create the GeoFence



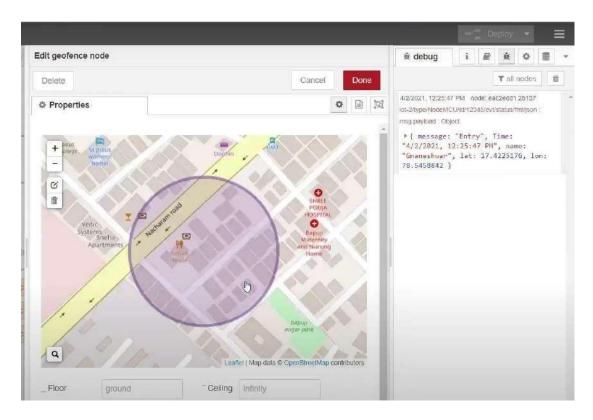
Edit the HTTP Request URL



Locate the child



Create the geofence node



Python script send requests to IBM Cloud

```
child.py 🔯
                                                                                                                                                                       Console 2/A 
Data published to IBM IoT platfrom:
   1 import json
                                                                                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
     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:
    5 myConfig = {
                ntig = {
"identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
                                                                                                                                                                        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:
Data published to IBM IoT platfrom:
                       "token": "12345678"
                                                                                                                                                                        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:
Data published to IBM IoT platfrom:
  18 while True:
19 name= "Smartbridge"
20 #In area location
  20
21
22
23
24
25
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28
                                                                                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
              #Latitude= 17.4225176
                                                                                                                                                                        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:
              Hout area Location
              latitude= 17.4219272
                                                                                                                                                                        Data published to IBM IoT platfrom:
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)
                                                                                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                                  , data=myData, qos=0, onPub
                                                                                                                                                                        Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
               time.sleep(5)
                                                                                                                                                                         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:

Developed the web application using Node-RED Successfully