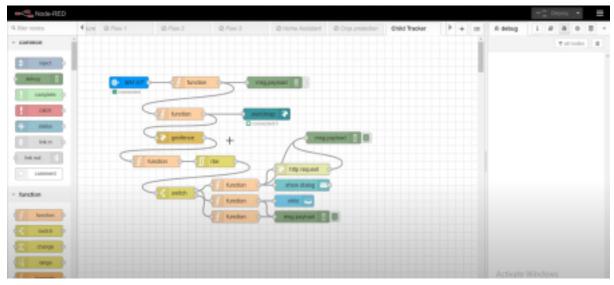
Develop The Web Application Using Node-RED

Team ID: PNT2022TMID02431

Aim: Develop the web application using Node-RED

Steps Followed:

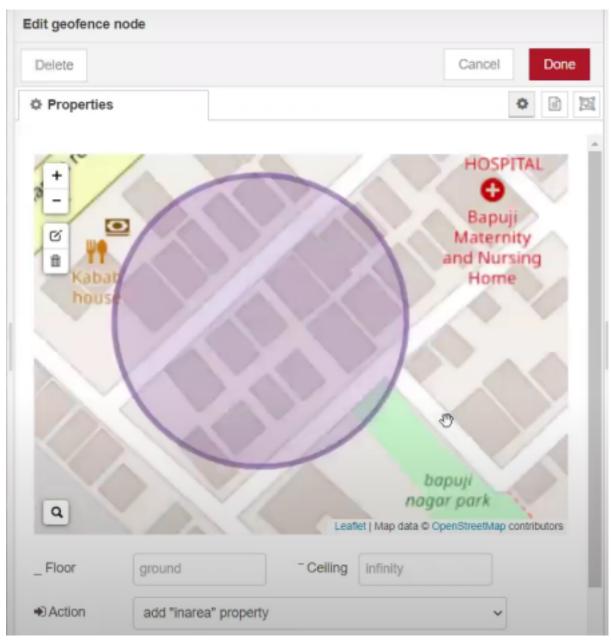
• Opened a Node-RED project



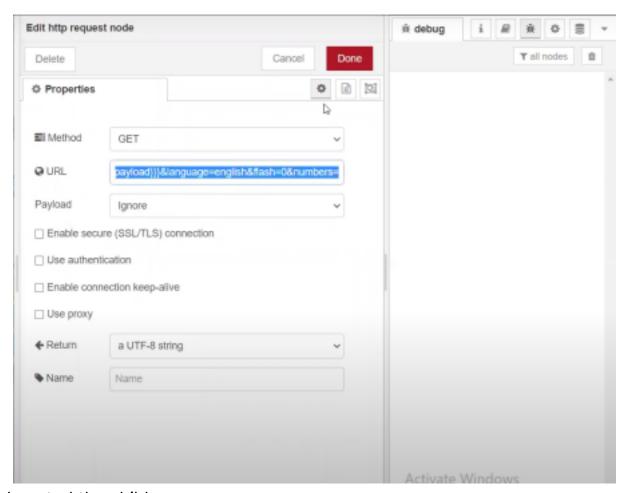
• Added code to get child location in python

```
import jsom
import wiotp.sdk.device import time
myConfig = {
    "identity": {
    "orgId": "hjSfmy",
    "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, gos=0, onPublish=None)
         print("Data published to IBM IoT platfrom: ",myData)
         time.sleep(5)
client.disconnect()
```

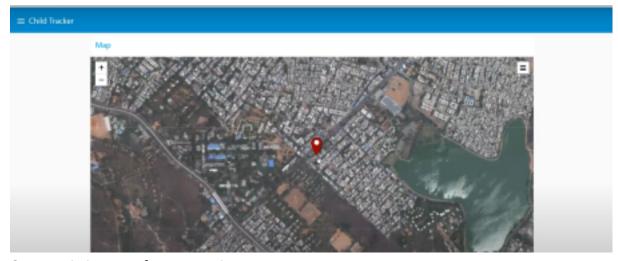
Created the GeoFence



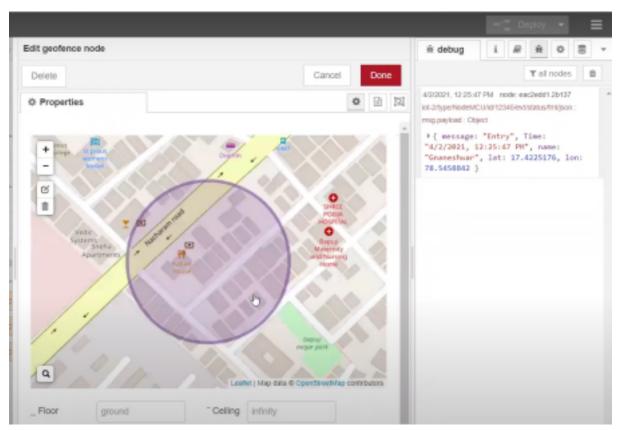
• Editing the HTTP Request URL



• Located the child



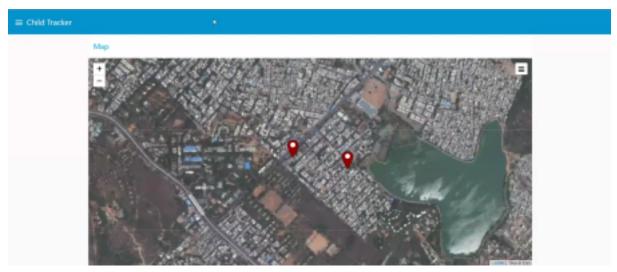
• Created the geofence node



Python script sending requests to IBM Cloud

```
# X Python cansale
🗀 child.py 🖸
                                                                                                       Console 2/A [3]
                                                                                                        Data published to IBM IoT platfrom
  limport json
                                                                                                        Data published to IBM IoT platfrom:
    import wiotp.sdk.device
                                                                                                        Data published to IBM IoT platfrom:
   limport 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:
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
 10
                                                                                                        Data published to IBM IoT platfrom:
          auth": {
                                                                                                        Data published to IBM IoT platfrom:
             "token": "12345678"
                                                                                                       Data published to IBM IoT platfrom:
                                                                                                       Data published to IBM IoT platfrom:
 143
                                                                                                        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:
 29
        #in area Location
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
 22
        #latitude= 17.4225176
                                                                                                       Data published to IBM IoT platfrom:
        WLongitude= 78.5458842
                                                                                                        Data published to IBM IoT platfrom:
 24
                                                                                                        Data published to IBM IoT platfrom:
         Wout area Location
                                                                                                        Data published to IBM IoT platfrom:
                                                                                                        Data published to IBM IoT platfrom:
        latitude= 17.4219272
                                                                                                        Data published to IBM IoT platfrom:
        longitude= 78.5488783
myOutan{'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-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:
                                                                                                        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:
```

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



Result: Successfully developed the web application using Node-RED