

TEAM ID: PNT2022TMID023

Team Leader: DEV ADHITHYA M

Team Members: ABDUR RAHMAN A

ADHITHYA NER PV

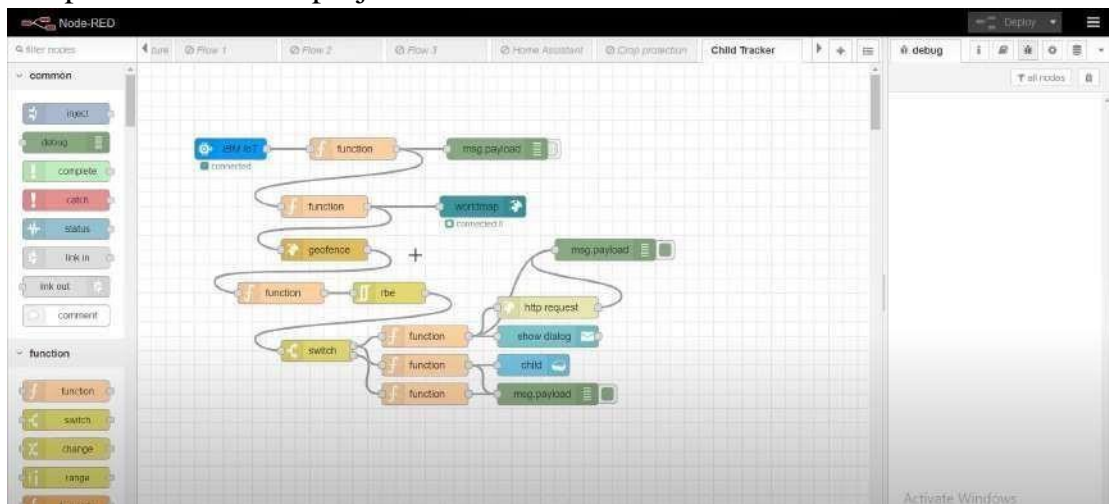
ASHWIN BALAJI B

Develop The Web Application Using Node-RED

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

```
testing.py - C:\Users\Abdur rahman\Desktop\testing.py (3.9.7)
File Edit Format Run Options Window Help
import requests
import json
# import ibmiotf.application
import ibmiotf.device
import time
import random
import sys

# watson device details
organization = "1hj5gh"
deviceType = "abdur9409"
deviceId = "distance alert"
authMethod = "use-token-auth"
authToken = "QABc-44E63H-AJH3EB"

# generate random values for random variables (temperature, humidity)

def myCommandCallback(cmd):
    global a
    print("command recieved:%s" % cmd.data['command'])
    control = cmd.data['command']
    print(control)

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device %s" % str(e))
    sys.exit()

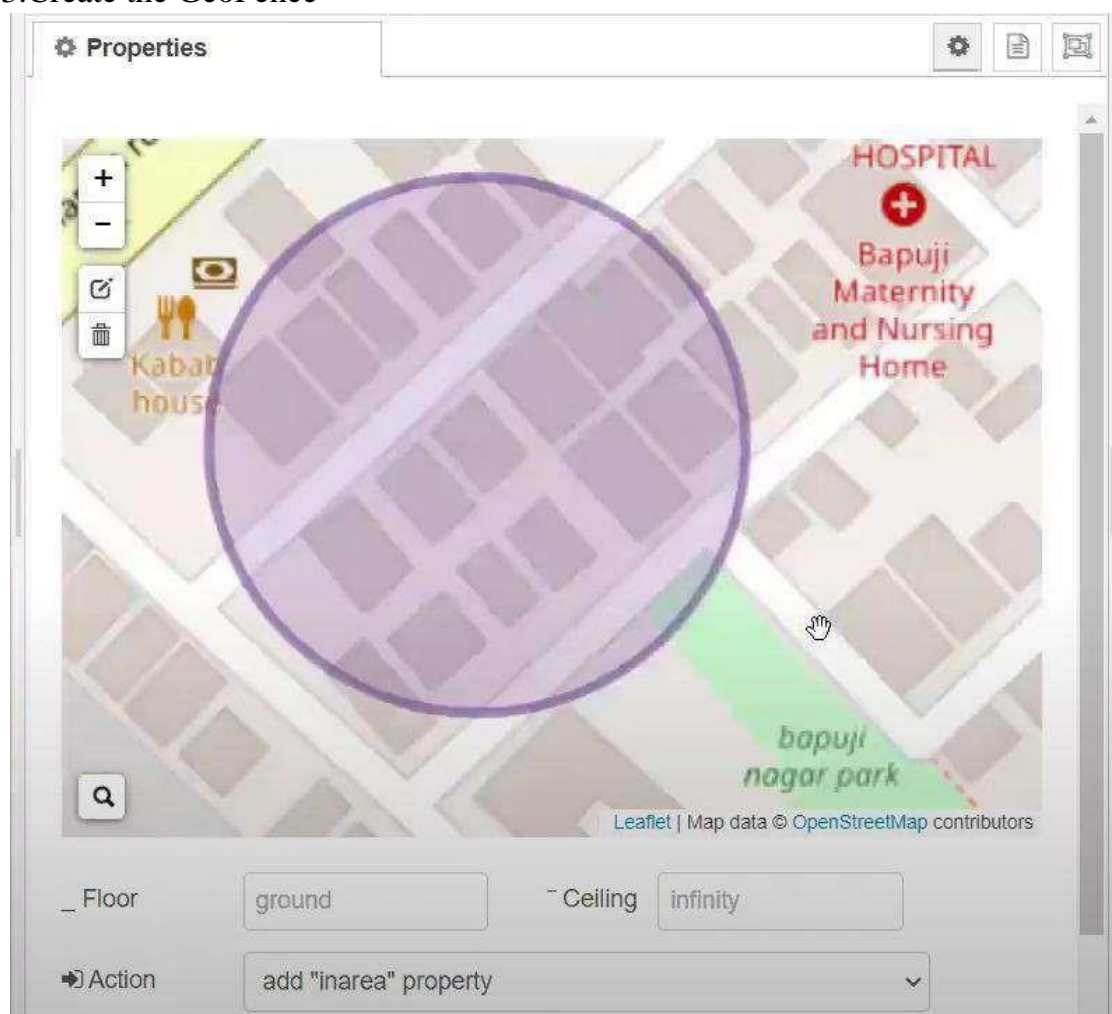
# connect and send a datapoint "temp" with value integer value into the cloud as a type of event for every 10 seconds
deviceCli.connect()
while True:
    distance1 = random.randint(10, 80)
    distance2 = random.randint(10, 80)
    data = {'dist': distance1, 'dist2': distance2}

    if distance1 < 15 and distance2 < 15:
        warn = 'Risk warning: ' 'Dumpster poundage getting high, Time to collect :) 90 %'

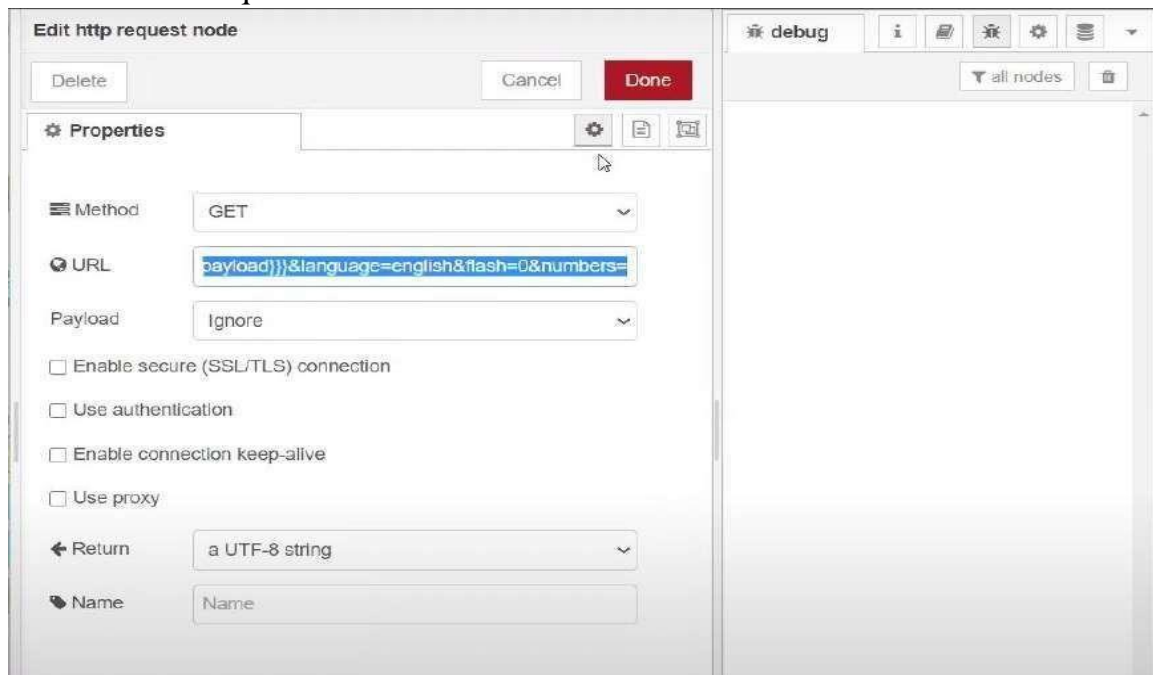
    elif distance1 > 40 and distance2 > 40:
        warn = 'Risk warning: ' 'dumpster is above 50%'

    # send data to cloud
    deviceCli.publishEvent("temp", data, warn)
```

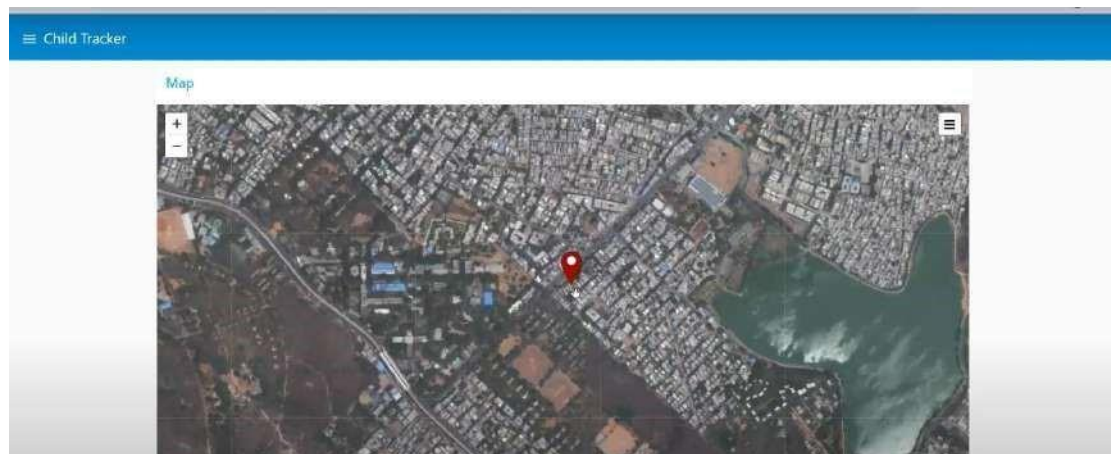
3. Create the GeoFence



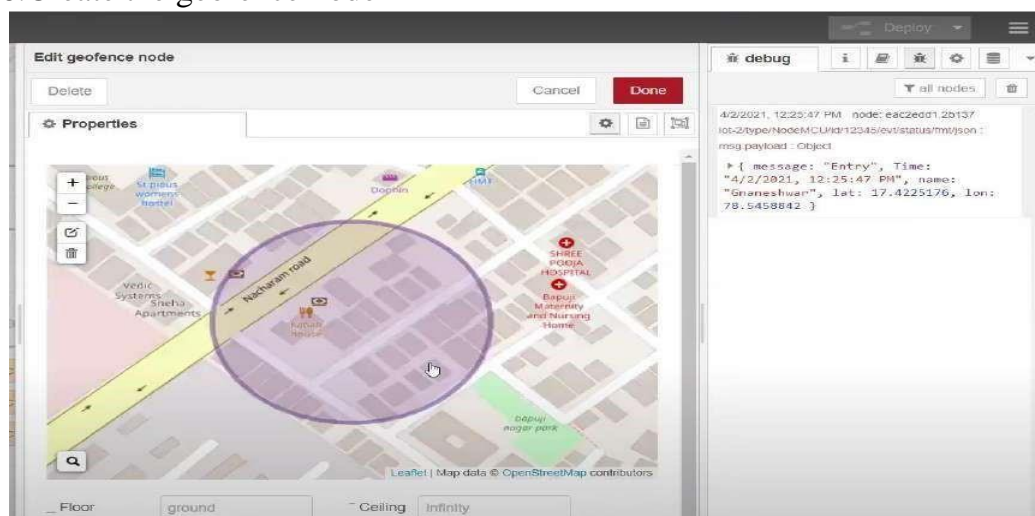
4. Edit the HTTP Request URL



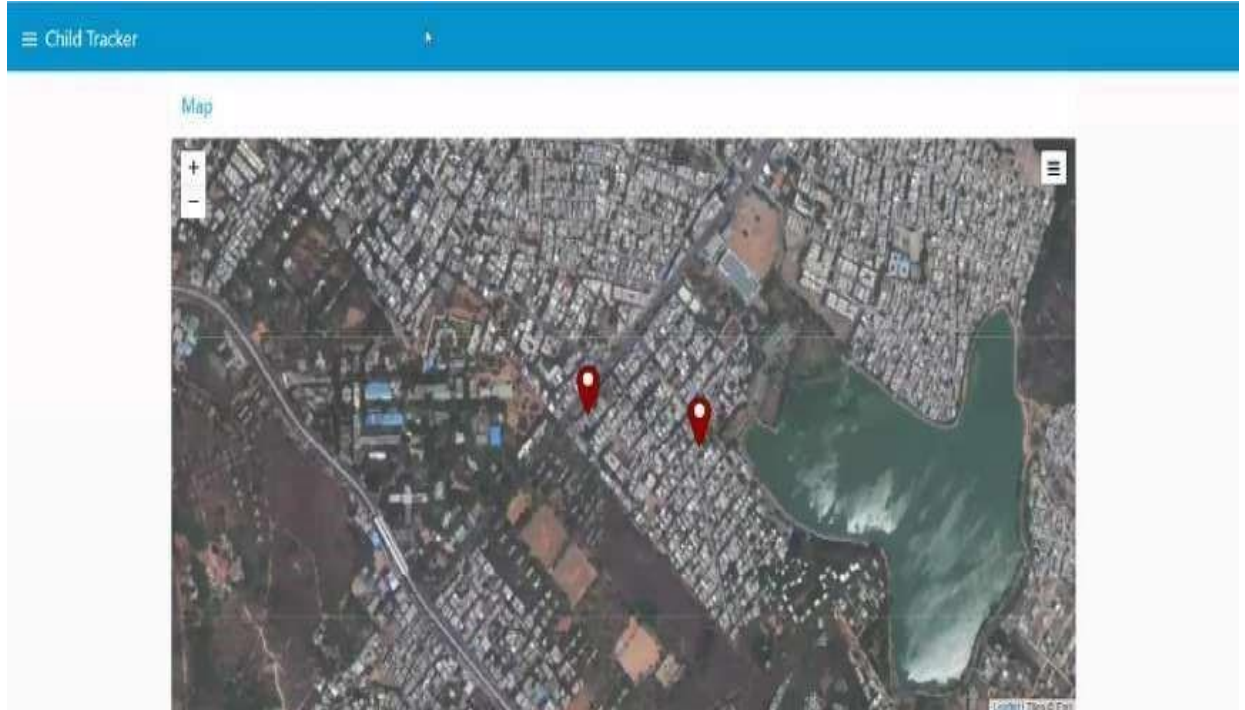
5. Locate the child



6. Create the geofence node



7. After running the script, the web UI shows “Person is not in the particular area”



Conclusion:

Developed the web application using Node-RED Successfully