

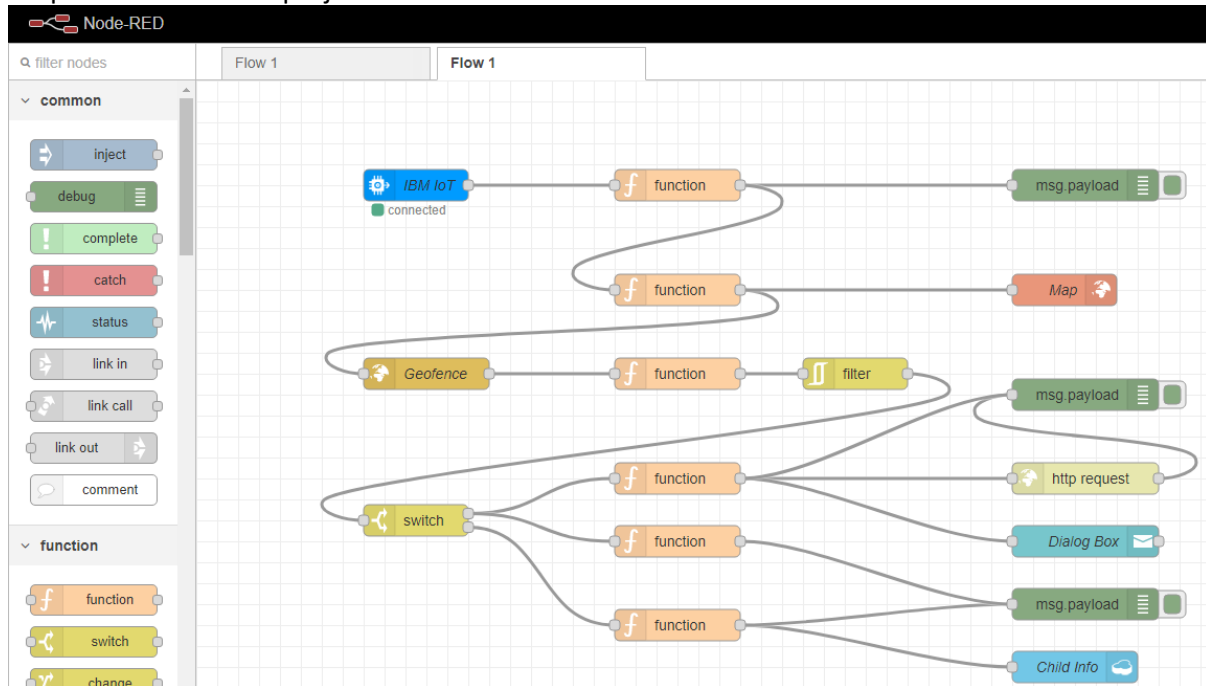
## Develop A Web Application Using Node-RED Service

### Develop The Web Application Using Node-RED

Date	27 August 2022
Team ID	PNT2022TMID18337
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification

#### Steps Followed:

##### 1. Opened a Node-RED project



##### 2. Added code to get child location in python

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

organization = "92rnyd"
deviceType = "GPS"
deviceId = "1234"
authMethod = "token"
authToken = "12345678"

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()

deviceCli.connect()

while True:
    name="Child"
    #latitude,longitude=9.525498643996373,77.85547697431774 #inarea
    #latitude,longitude=9.531834223946193,77.84996742667008 #outarea
    data = { 'name' : name, 'lat': latitude, 'lon': longitude }
    #print data
    def myOnPublishCallback():
        print ("Published Latitude = ",latitude,"Longitude = ",longitude,"to IBM Watson")

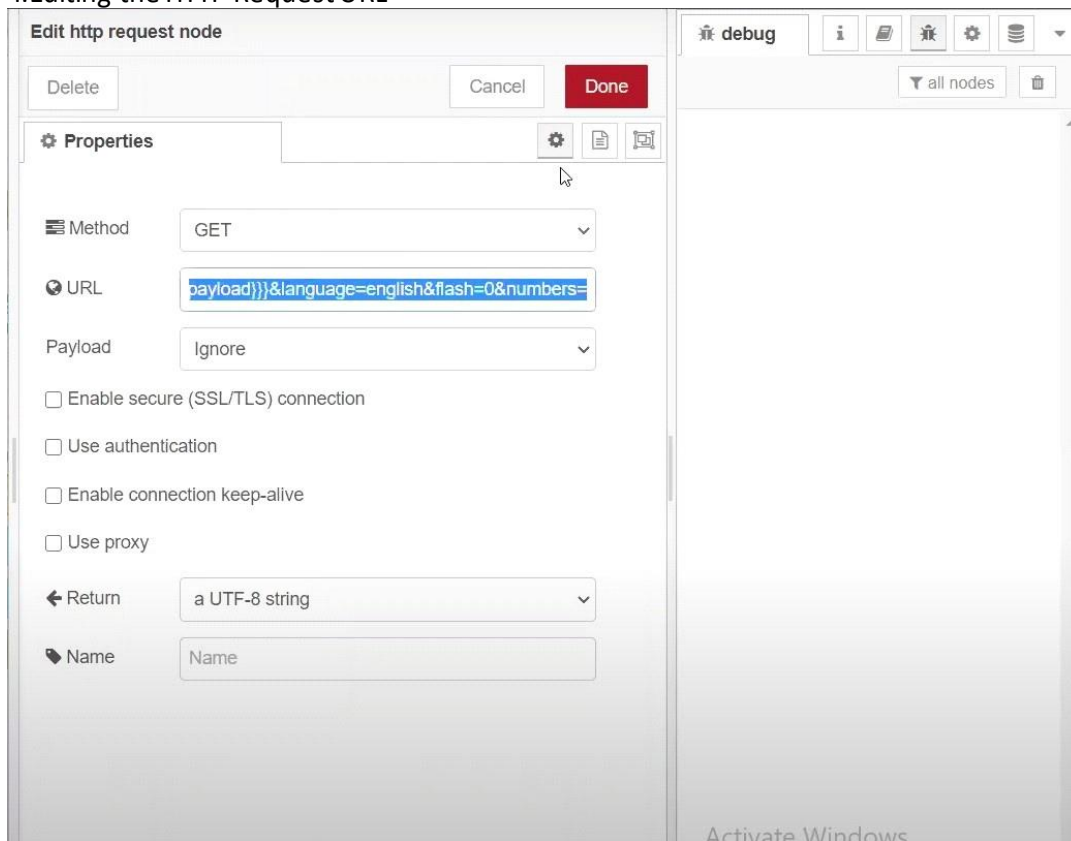
    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
        time.sleep(10)

deviceCli.disconnect()
```

### 3.Created the GeoFence

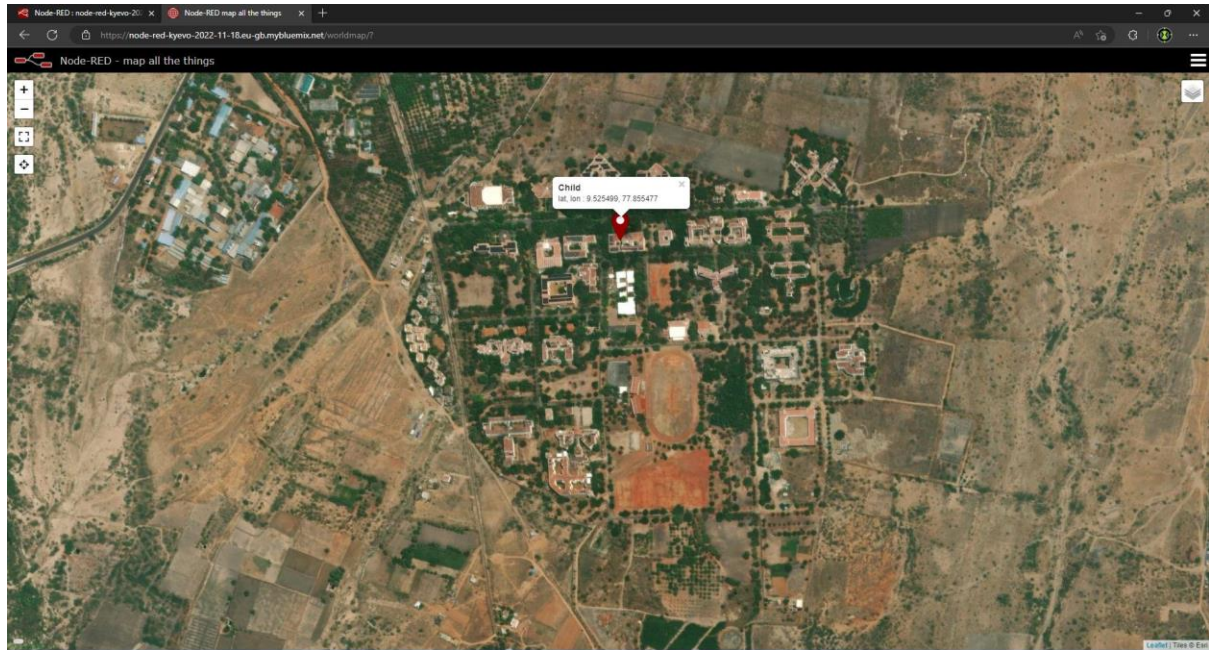


### 4.Editing the HTTP Request URL



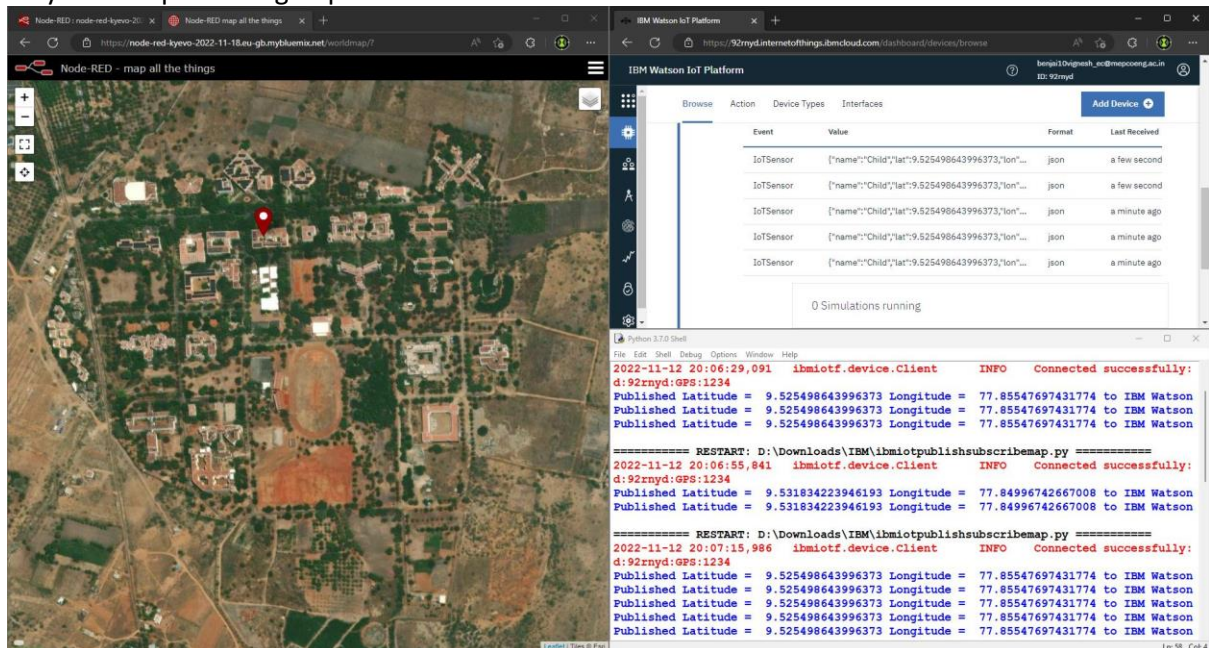


## 5. Located the child



## 6. Created the geofence node

## 7. Python script sending requests to IBM Cloud



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

Result:

Successfully developed a web application using Node-RED