

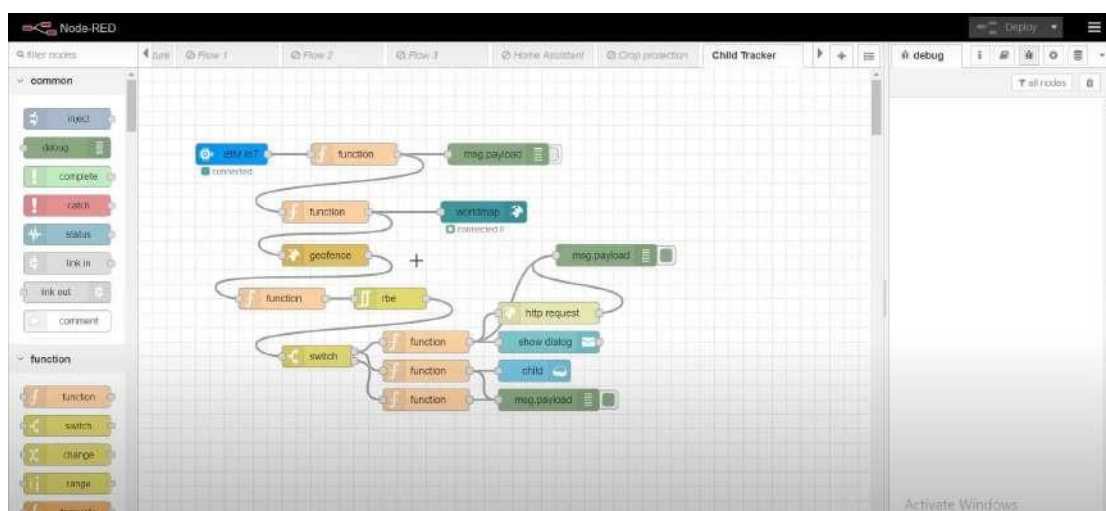
## Develop The Web Application Using Node-RED

Team ID	PNT2022TMID11128
Date	18 November 2022
Project Name	IOT Based SafetyGadget for Child Safety Monitoringand Notification

To Develop the web application using Node-RED

### Steps :

- Open a Node-RED project



- Add code to get child location in python

```
import json
import wiotp.sdk.device
import time

myConfig = {
    "identity": {
        "orgId": "hj5fmy",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

client = wiotp.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= 78.5488783
    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 platform: ",myData)
    time.sleep(5)

client.disconnect()
```

- Python scripts send request to IBM cloud

The screenshot shows a Python script in a code editor on the left and its output in a console on the right. The script, named `child.py`, imports `json`, `wiotp.sdk.device`, and `time`. It defines a configuration object `myConfig` with identity and authentication details. A `DeviceClient` is created and connected. A `while True` loop publishes status events with location data (latitude and longitude) and a message "Data published to IBM IoT platform:". The console on the right shows a continuous stream of these status messages.

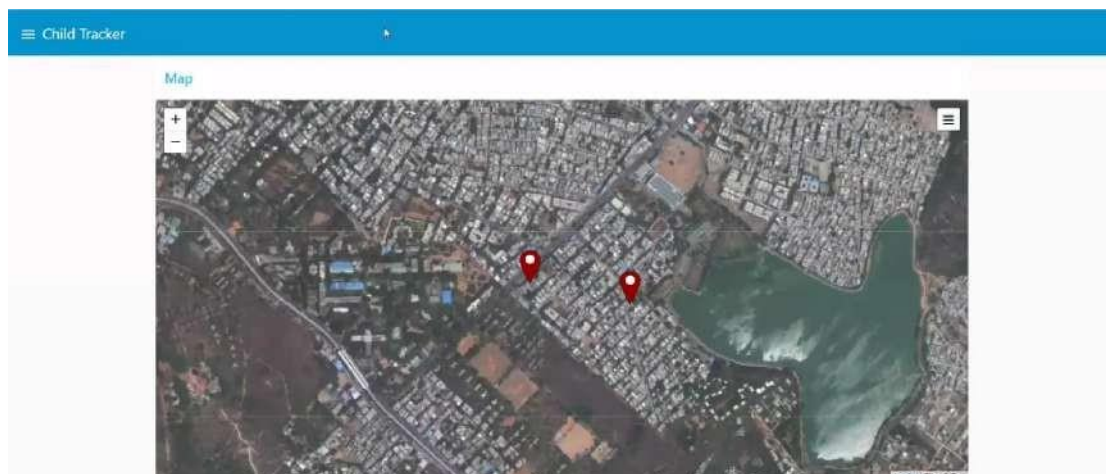
```

1 import json
2 import wiotp.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 = wiotp.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

```

Console output (repeated): Data published to IBM IoT platform: {"name": "Smartbridge", "lat": 17.4219272, "lon": 78.5488783}

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



## Conclusion:

Developed the web application using Node-RED Successfully