

# Develop The Web Application Using Node-RED

Team ID	PNT2022TMID04590
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification

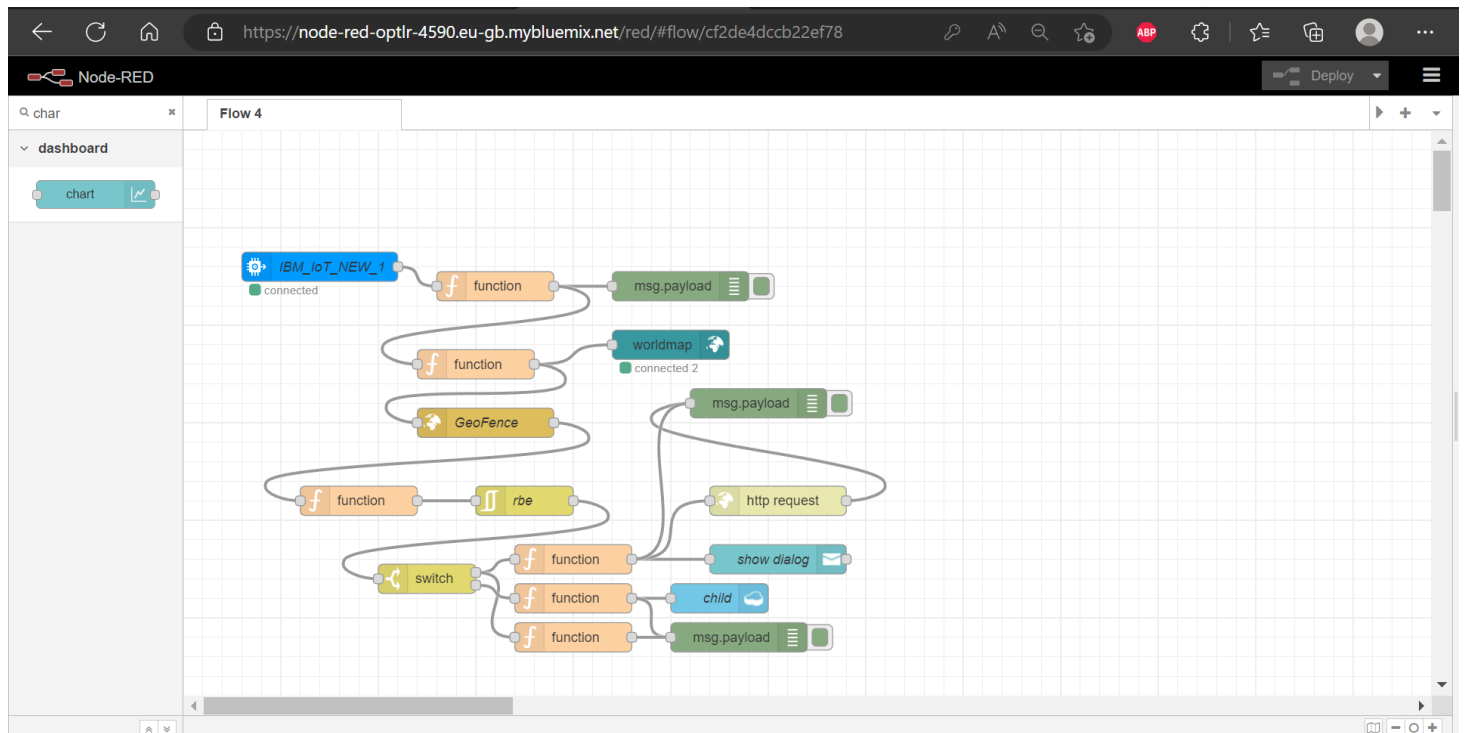
## Aim:

Develop the web application using Node-RED

## Steps:

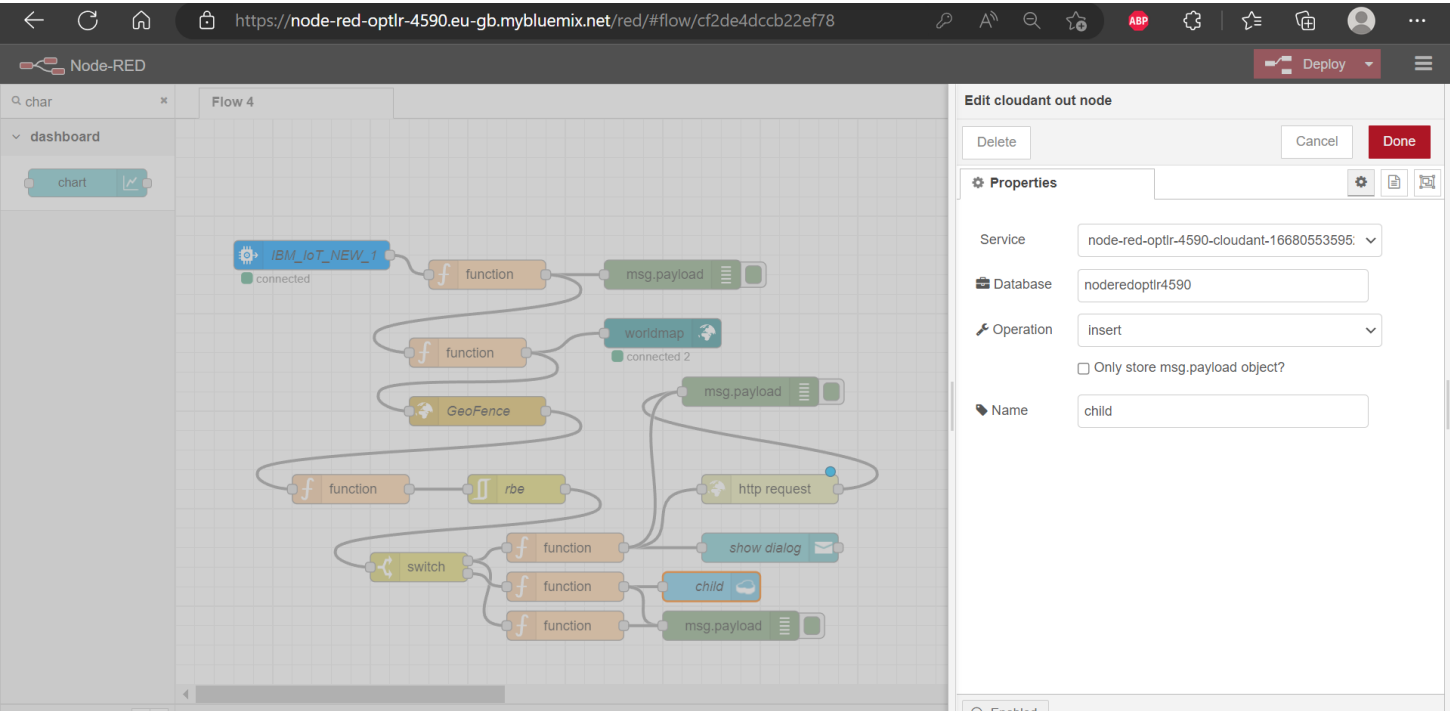
### STEP 1:

Create Node Red work flow based on the customer requirement.



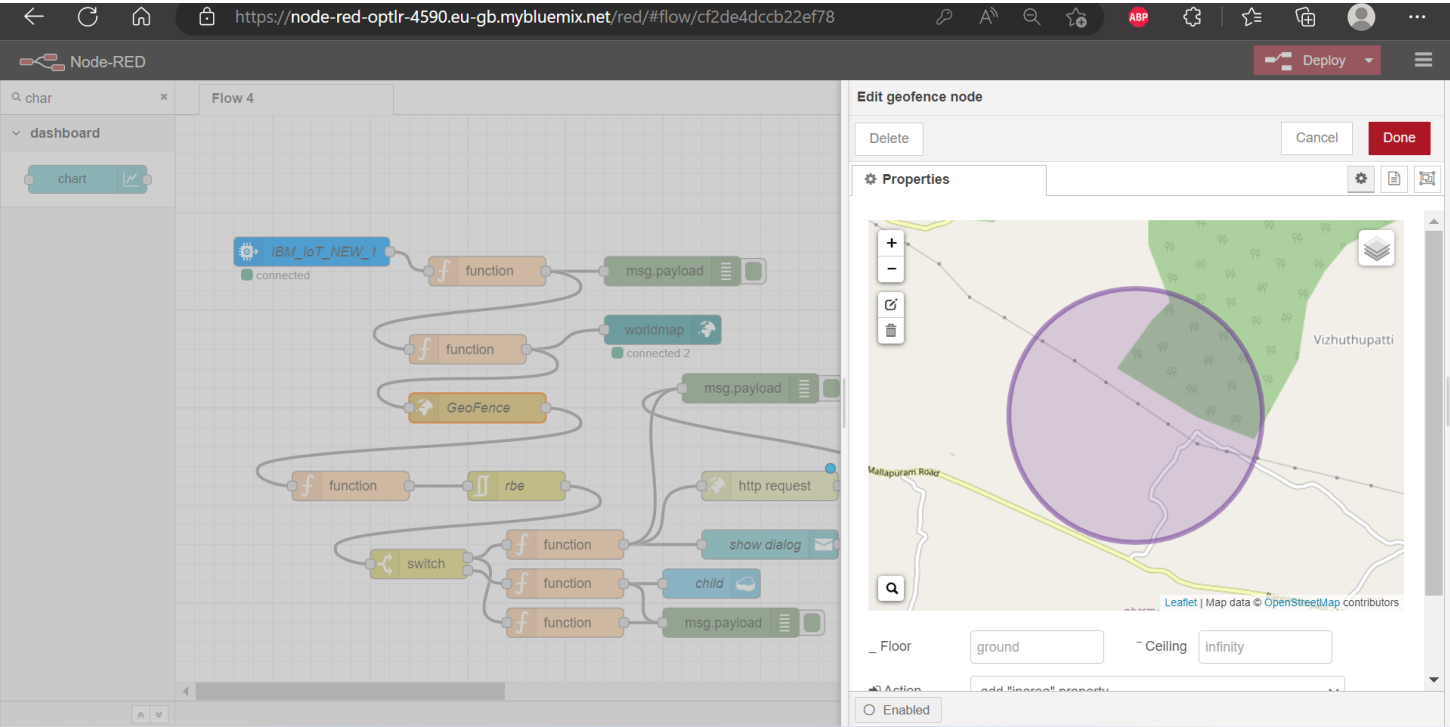
STEP 2:

Details about Cloudant DB Database ( connected with Nodered )



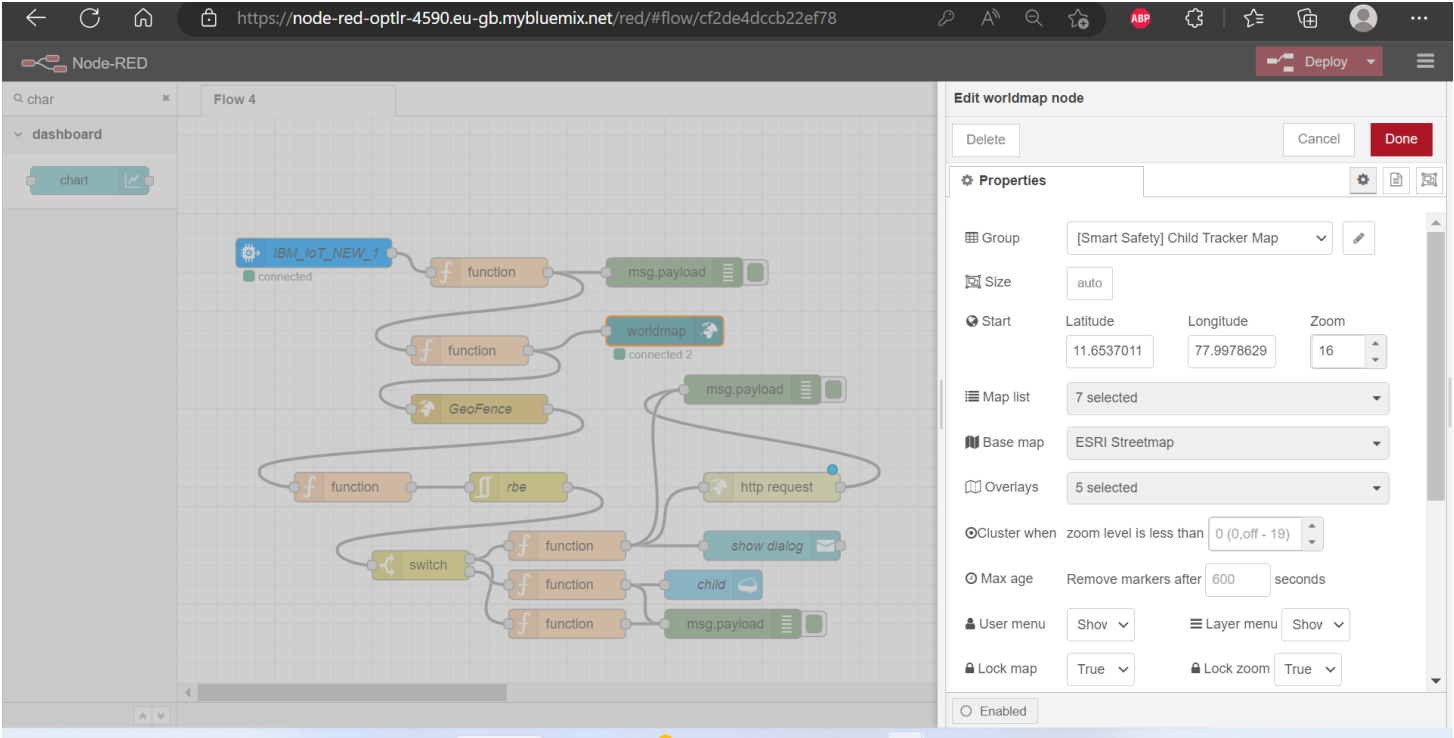
STEP 3:

Geofence area created based on the customer need..



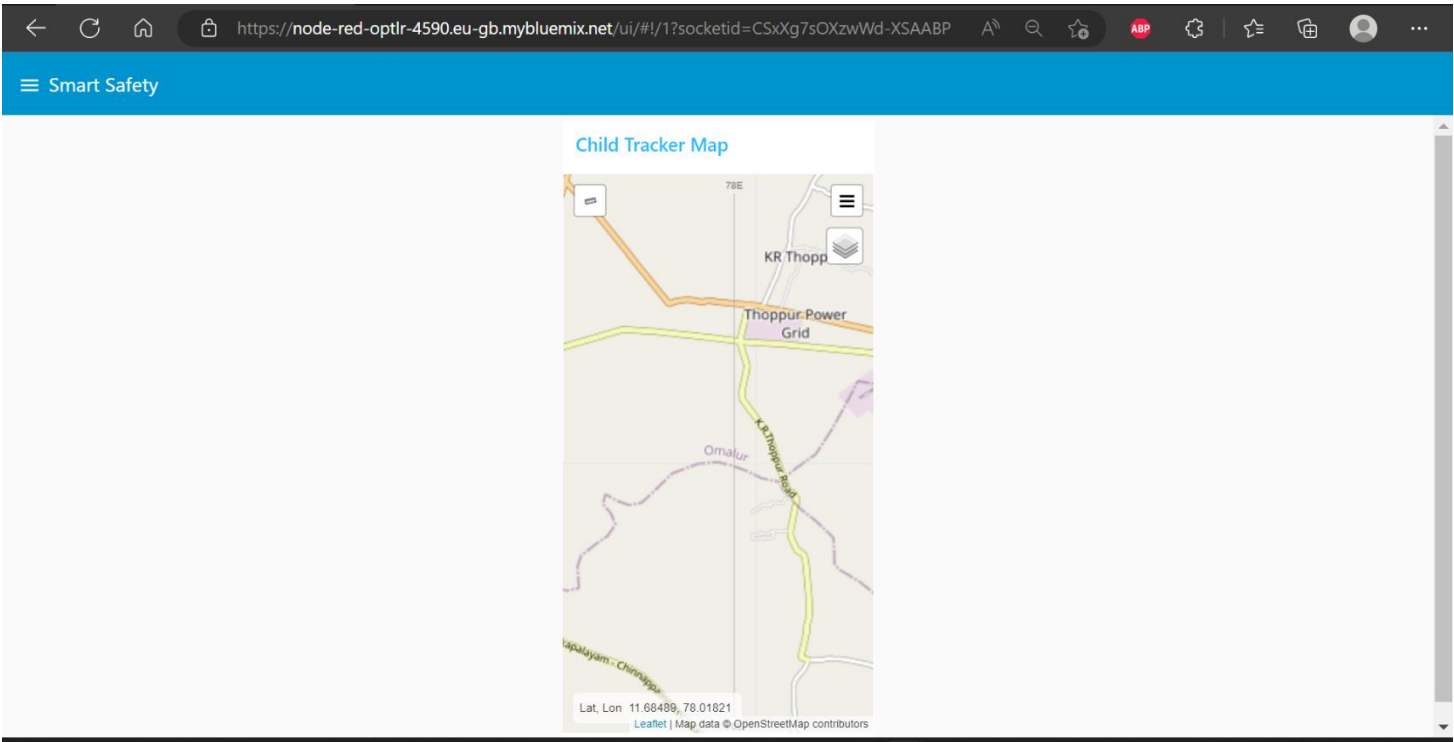
STEP 4:

Details about World map node in our designed workflow.



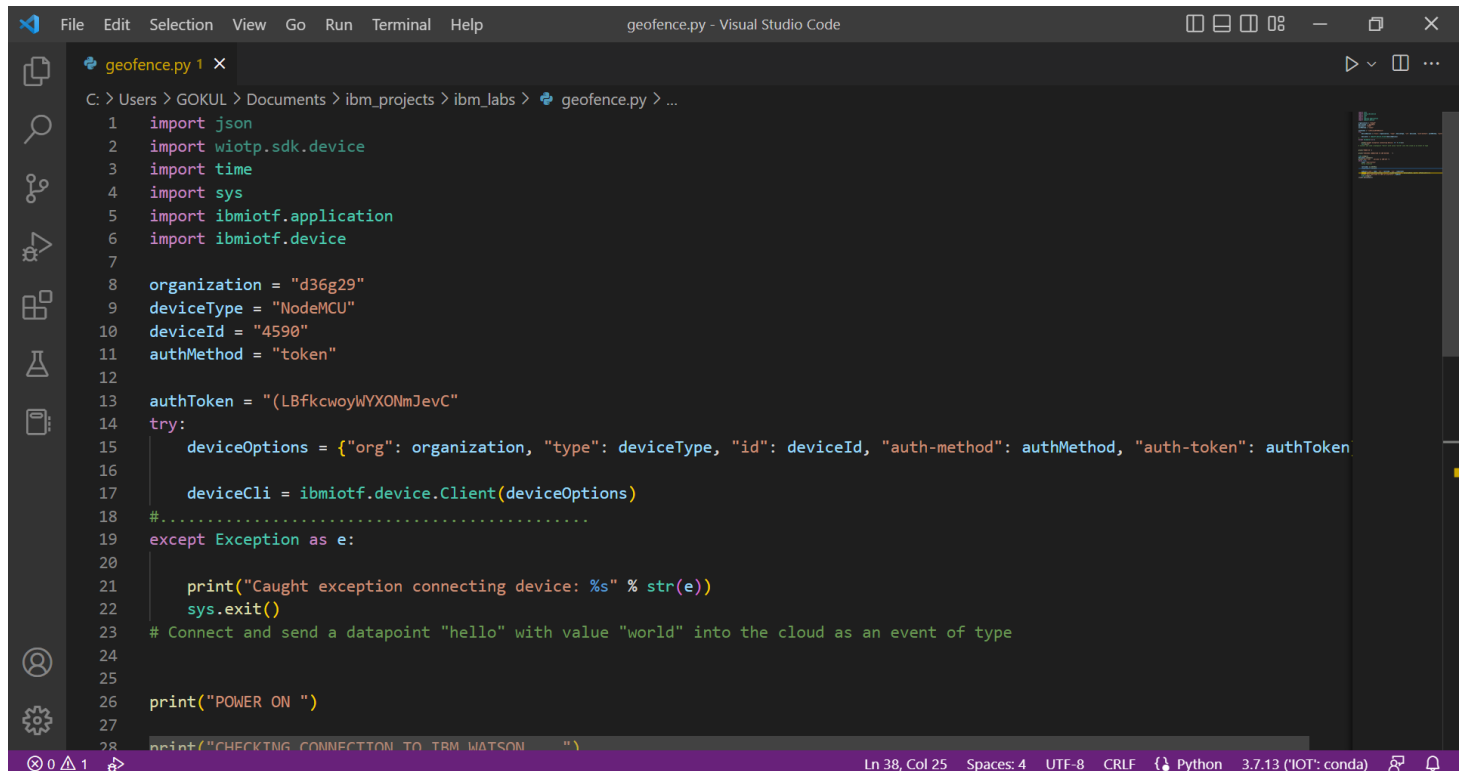
STEP 5:

Node red user interface which shows Child tracker Map.

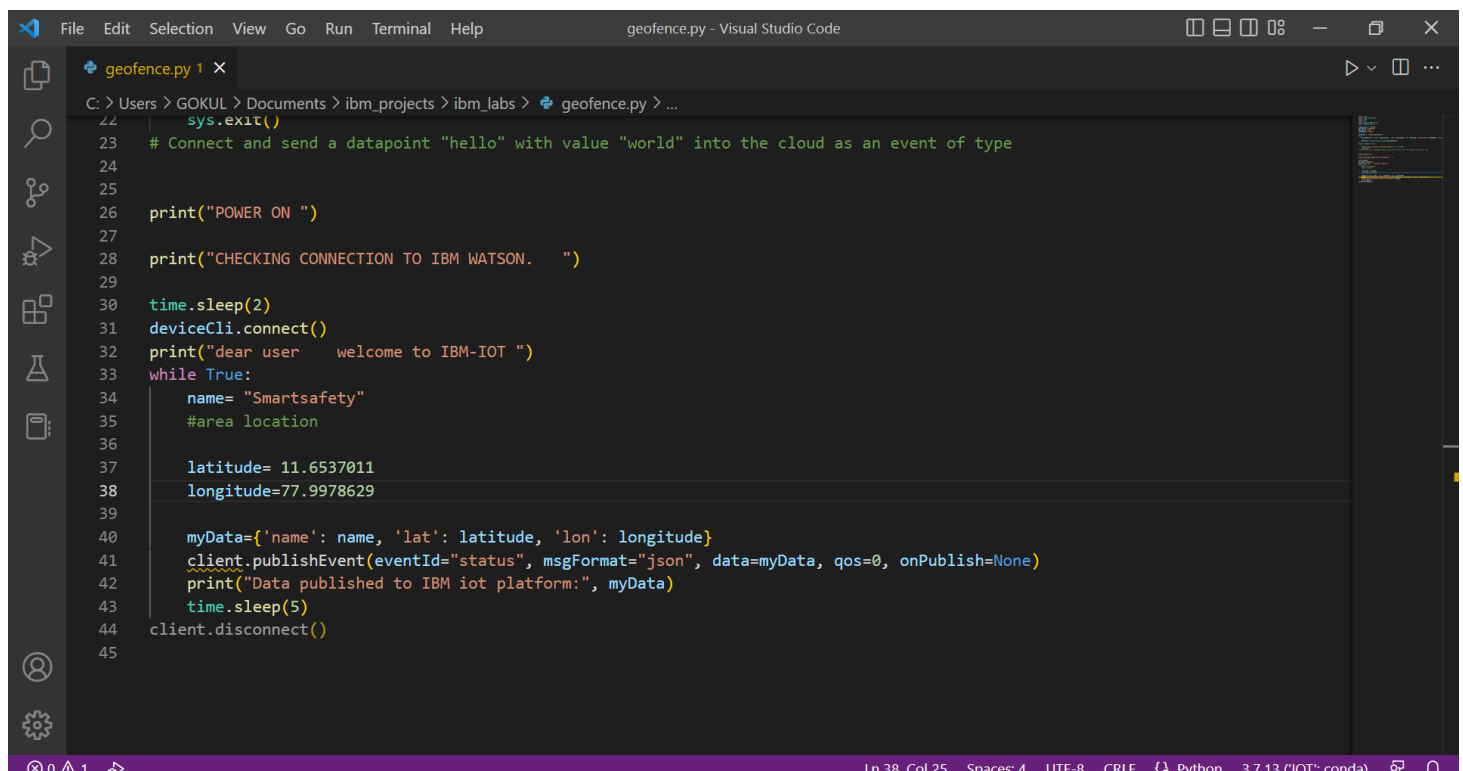


## STEP 6:

Coding which has connection, longitude and latitude details..



```
geofence.py 1 X
C: > Users > GOKUL > Documents > ibm_projects > ibm_labs > geofence.py > ...
1  import json
2  import wiotp.sdk.device
3  import time
4  import sys
5  import ibmiotf.application
6  import ibmiotf.device
7
8  organization = "d36g29"
9  deviceType = "NodeMCU"
10 deviceId = "4590"
11 authMethod = "token"
12
13 authToken = "(LBfkwoyWYXNmJevC"
14 try:
15     deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
16
17     deviceCli = ibmiotf.device.Client(deviceOptions)
18 #.....
19 except Exception as e:
20
21     print("Caught exception connecting device: %s" % str(e))
22     sys.exit()
23 # Connect and send a datapoint "hello" with value "world" into the cloud as an event of type
24
25
26 print("POWER ON ")
27
28 print("CHECKING CONNECTION TO IBM WATSON ")
```



```
geofence.py 1 X
C: > Users > GOKUL > Documents > ibm_projects > ibm_labs > geofence.py > ...
22 sys.exit()
23 # Connect and send a datapoint "hello" with value "world" into the cloud as an event of type
24
25
26 print("POWER ON ")
27
28 print("CHECKING CONNECTION TO IBM WATSON. ")
29
30 time.sleep(2)
31 deviceCli.connect()
32 print("dear user welcome to IBM-IOT ")
33 while True:
34     name= "Smartsafety"
35     #area location
36
37     latitude= 11.6537011
38     longitude=77.9978629
39
40     myData={'name': name, 'lat': latitude, 'lon': longitude}
41     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
42     print("Data published to IBM iot platform:", myData)
43     time.sleep(5)
44 client.disconnect()
45
```

## Result:

Successfully developed the web application using Node-RED

