V.S.B ENGINEERING COLLEGE

Electronics and Communication Engineering

IBM NALAIYA THIRAN

Title : IoT Based Safety Gadget for Child

Safety Monitoring and Notification

Domain Name : Internet Of Things(IoT)

Leader Name : Jeevitha M

Team Member

Name : I. S. Athena

2. R. Gowsalyaa

3.V. Ishwarya

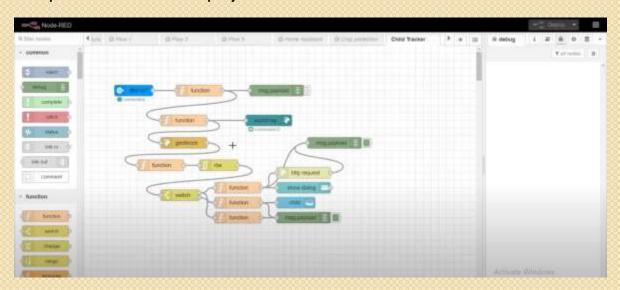
Faculty Mentor

Name: K. Sharmela

Develop The Web Application Using Node-RED

Aim: Develop the web application using Node-RED Steps Followed:

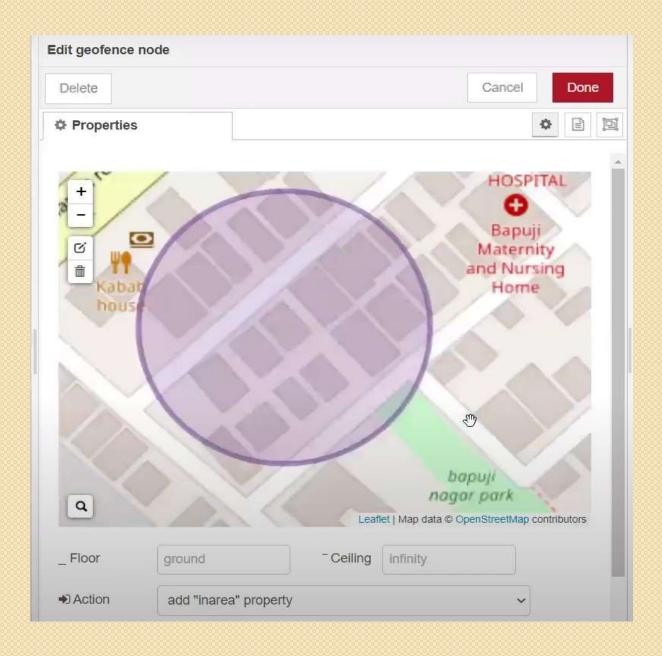
Opened a Node-RED project



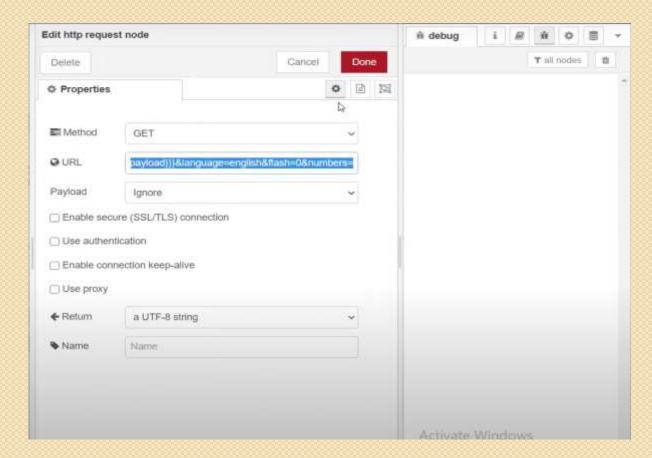
• Added code to get child location in python

```
import wiotp.sdk.device
import time
myConfig = {
     "identity": {
    "orgId": "hjSfmy",
    "typeId": "NodeMcU",
    "deviceId": "12345"
          "token": "12345678"
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
Inlie True:
          name= "Smartbridge"
          fin 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 ToT platfrom: ",myData)
          time.sleep(5)
client.disconnect()
```

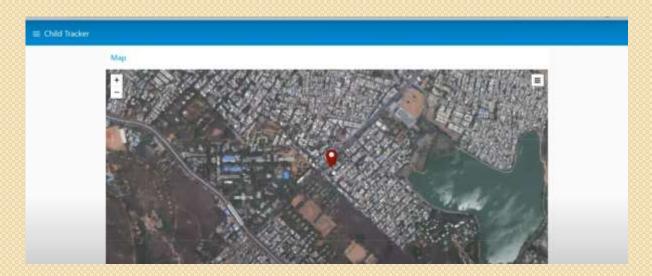
• Created the GeoFence



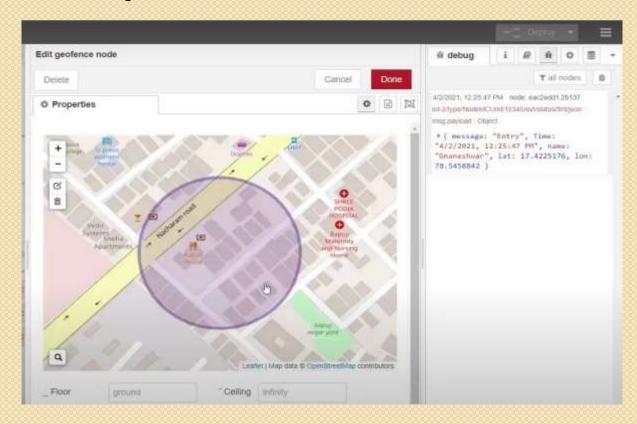
• Editing the HTTP Request URL



Located the child



Created the geofence node



Python script sending requests to BM Cloud

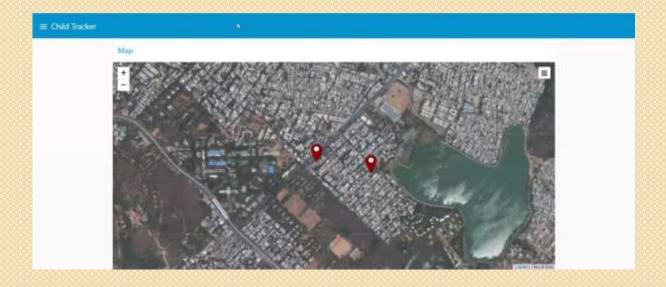
```
Editor - C:\Users\viP\pesktop\chid.py
                                                                                                                                    # × Python console
                                                                                                                                     Data published to IBM IoT platfrom:
child.py
    1 import json
2 import wiotp.sdk.device
                                                                                                                                          Data published to IBM IoT platfrom:
                                                                                                                                          Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
     import time
                                                                                                                                          Data published to IBM IoT platfrom:
      myConfig - {
            "identity": (
   "orgId": "hj5fmy",
   "typeId": "Node%CU"
   "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:
            },
"auth": {
                                                                                                                                          Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                   "token": "12345678"
                                                                                                                                          Data published to IBM IoT platfrom:
                                                                                                                                          Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  143
  15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
                                                                                                                                          Data published to IBM IoT platfrom:
  In 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:
  20
            #In more location
                                                                                                                                          Data published to IBM IoT platfrom:
                                                                                                                                          Data published to IBM IoT platfrom:
            #Lutitude= 17.4225176
#Longitude= 28.5458842
  22
23
                                                                                                                                          Data published to IBM IoT platfrom:
                                                                                                                                          Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  24
25
            Wout area tacation
                                                                                                                                          Data published to IBM IoT platfrom:
                                                                                                                                          Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
            latitude= 17.4219272
            langitude= 17.4219272

longitude= 78.5488783

myData={ name: name, 'lat':latitude, 'lon':longitude}

client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=8, onPub
print("Data published to IBM IoT platfrom: ",myData)
  28
                                                                                                                                          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:
            time.sleep(5)
                                                                                                                                          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:
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