Develop The Web Application Using Node-RED

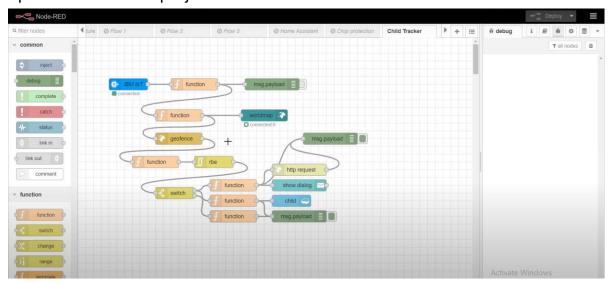
TEAM ID	PNT2022TMID33322
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY
	MONITORING AND NOTIFICATION

Aim:

Develop the web application using Node-RED Steps

Followed:

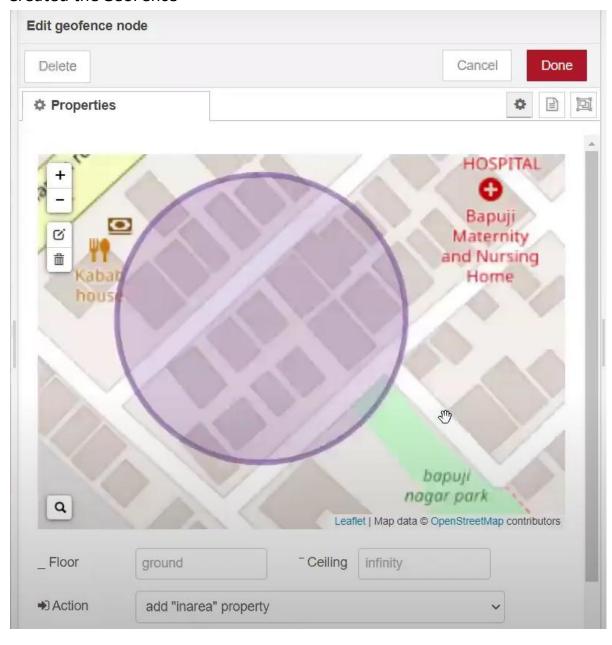
• Opened a Node-RED project



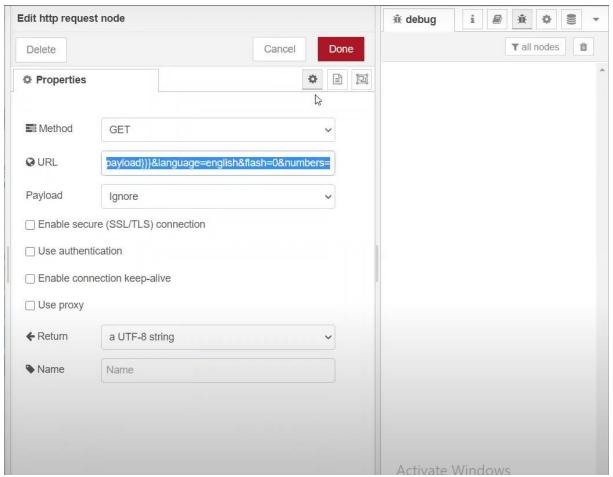
• Added code to get child location in python

```
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 platfrom: ",myData)
         time.sleep(5)
client.disconnect()
```

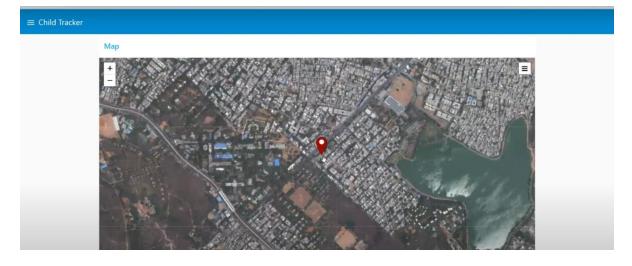
• Created the GeoFence



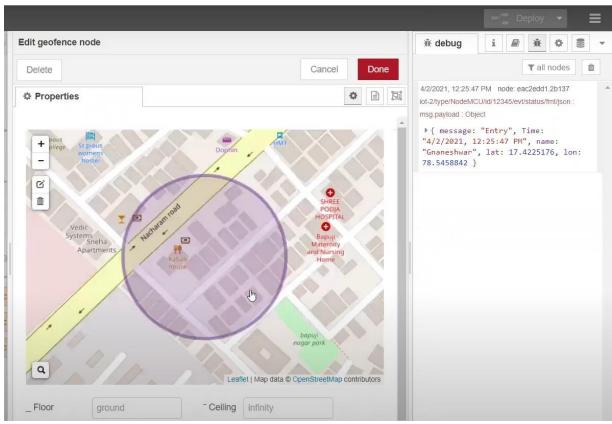
• Editing the HTTP RequestURL



• Located the child



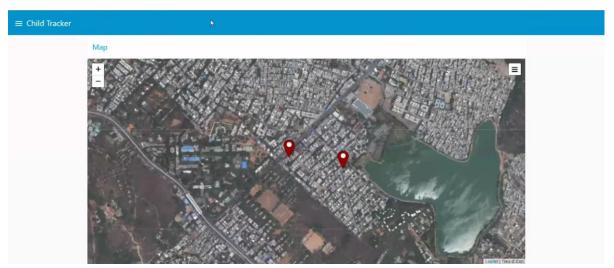
• Created the geofence node



• Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                               ₽ × IPython console
child.py
                                                                                                Console 2/A 🗵
                                                                                                    Data published to IBM IoT platfrom:
1 import json
                                                                                                    Data published to IBM IoT platfrom:
   2 import wiotp.sdk.device
                                                                                                    Data published to IBM IoT platfrom:
   3 import time
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
   5 myConfig = {
                                                                                                    Data published to IBM IoT platfrom:
         "identity": {
    "orgId": "hj5fmy",
    "typeId": "NodeMCU",
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
             "deviceId": "12345"
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
          auth": {
                                                                                                    Data published to IBM IoT platfrom:
             "token": "12345678"
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                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
  15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
                                                                                                    Data published to IBM IoT platfrom:
  16 client.connect()
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
  18 while True:
                                                                                                    Data published to IBM IoT platfrom:
  19
        name= "Smartbridge"
                                                                                                    Data published to IBM IoT platfrom:
        #in area location
  20
                                                                                                    Data published to IBM IoT platfrom:
  21
                                                                                                    Data published to IBM IoT platfrom:
         #Latitude= 17.4225176
                                                                                                    Data published to IBM IoT platfrom:
  23
24
         #Longitude= 78.5458842
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
         #out area location
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
         latitude= 17.4219272
                                                                                                    Data published to IBM IoT platfrom:
  28
         longitude= 78.5488783
                                                                                                    Data published to IBM IoT platfrom:
         myData={'name': name, 'lat':latitude,'lon':longitude}
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub print("Data published to IBM IoT platfrom: ",myData)
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
  32
         time.sleep(5)
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
  34 client.disconnect()
                                                                                                    Data published to IBM IoT platfrom:
                                                                                                    Data published to IBM IoT platfrom:
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                                                                                                    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