Develop A Web Application Using Node-RED

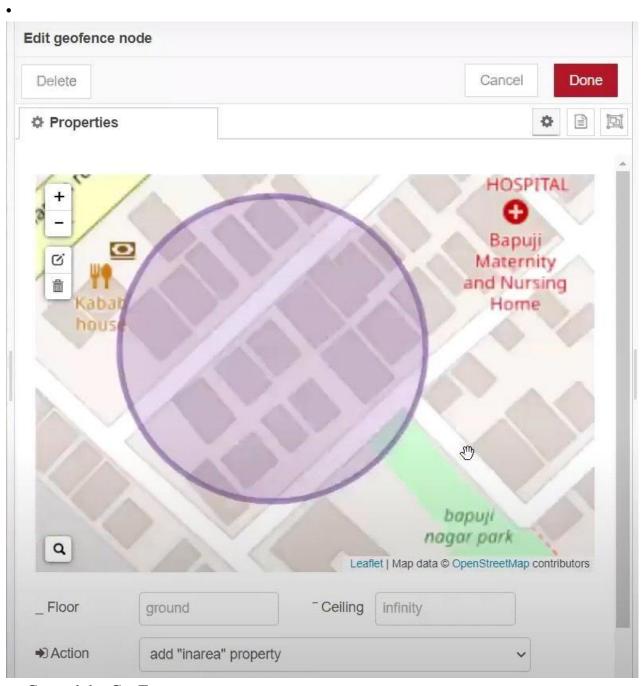
Date	28 October 2022
Team ID	PNT2022TMID49677
Project Name	Project - IoT Based Safety Gadget For Child
	Safety Monitoring & Notification
Maximum Marks	2 Marks

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()
```

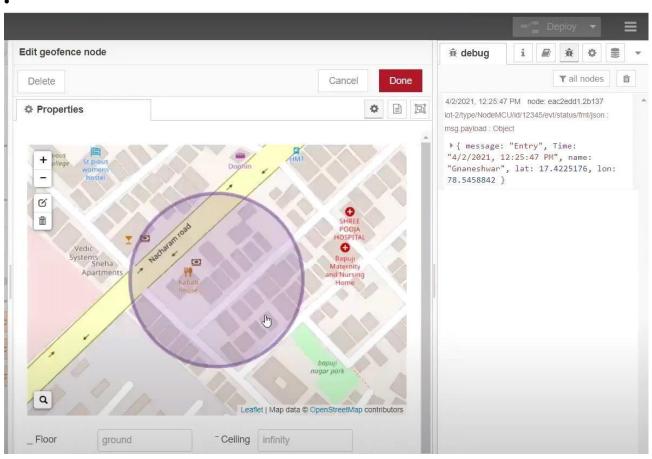


Created the GeoFence

Edit http request node ₩ debug i ŵ ▼ all nodes Cancel Done Delete Properties **■** Method GET **Q** URL payload}}}&language=english&flash=0&numbers= Payload Ignore ☐ Enable secure (SSL/TLS) connection ☐ Use authentication ☐ Enable connection keep-alive ☐ Use proxy **←** Return a UTF-8 string Name Name Activate Windows

Editing the HTTP Request URL • Located the child

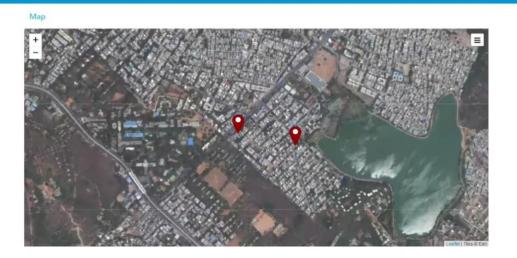




Created the geofence node

• Python script sending requests to IBM Cloud

```
Editor - C:\Users\HP\Desktop\child.py
                                                                                            Console 2/A 🔯
child.py 🔯
                                                                                                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",
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                                                                                                Data published to IBM IoT platfrom:
             "deviceId": "12345"
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 10
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         "auth": {
 11
                                                                                                Data published to IBM IoT platfrom:
             "token": "12345678"
 12
                                                                                                Data published to IBM IoT platfrom:
 13
                                                                                                Data published to IBM IoT platfrom:
 14}
                                                                                                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:
 17
                                                                                                Data published to IBM IoT platfrom:
 18 while True:
                                                                                                Data published to IBM IoT platfrom:
 19
        name= "Smartbridge"
                                                                                                Data published to IBM IoT platfrom:
  20
        #in area location
                                                                                                Data published to IBM IoT platfrom:
 21
                                                                                                Data published to IBM IoT platfrom:
 22
        #Latitude= 17.4225176
                                                                                                Data published to IBM IoT platfrom:
        #Longitude= 78.5458842
 23
                                                                                                Data published to IBM IoT platfrom:
 24
                                                                                                Data published to IBM IoT platfrom:
 25
        #out area Location
                                                                                                Data published to IBM IoT platfrom:
  26
                                                                                                Data published to IBM IoT platfrom:
  27
        latitude= 17.4219272
                                                                                                Data published to IBM IoT platfrom:
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        longitude= 78.5488783
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        myData={'name': name, 'lat':latitude,'lon':longitude}
  29
                                                                                                Data published to IBM IoT platfrom:
        client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
print("Data published to IBM IoT platfrom: ",myData)
  30
                                                                                                Data published to IBM IoT platfrom:
  31
                                                                                                Data published to IBM IoT platfrom:
  32
        time.sleep(5)
                                                                                                Data published to IBM IoT platfrom:
  33
                                                                                                Data published to IBM IoT platfrom:
  34 client.disconnect()
                                                                                                Data published to IBM IoT platfrom:
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  36
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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 a web application using Node-RED