DEVELOP THE WEB APPLICATION USING NODE-RED

Team ID: PNT2022TMID21729

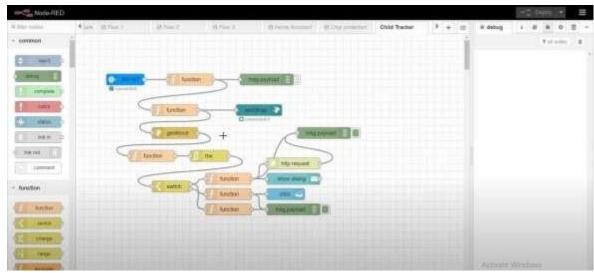
Project Name: IoT Based Safety Gadget for Child Safety Monitoring and

notification

Aim: Develop the web application using Node-RED

Steps Followed:

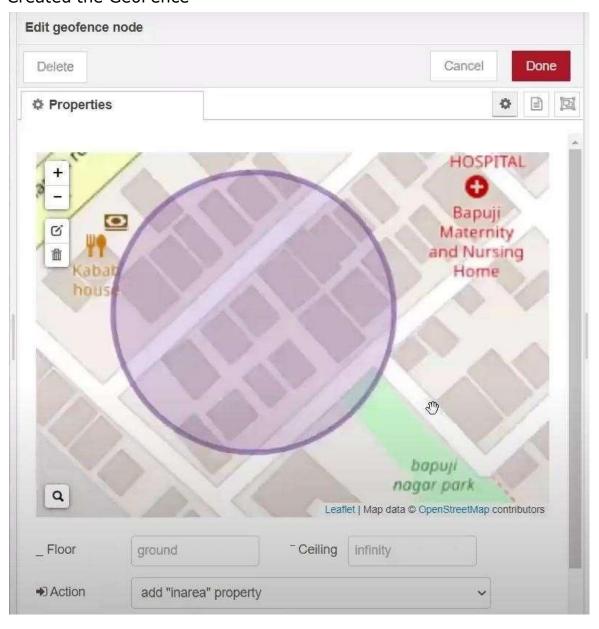
• Opened a Node-RED project



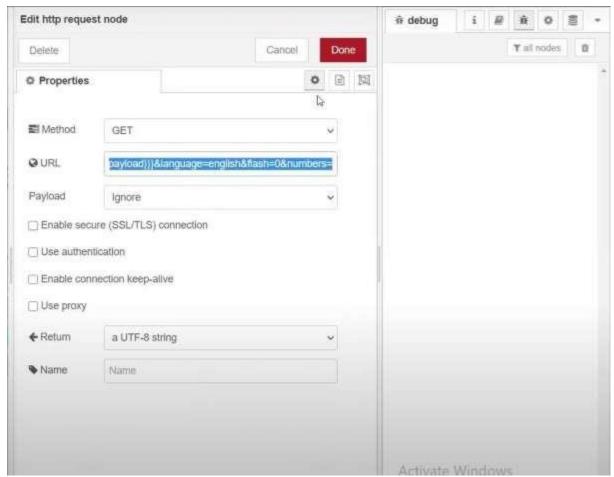
• Added code to get child location in python

```
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=Mone)
client.connect()
Thile True:
           name= "Smarthridge"
           #in area location
           latitude= 17.4225176
           longitude= 78.5458842
           #out area location
           #latitude= 17.421927Z
#longitude= 78.5498763
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



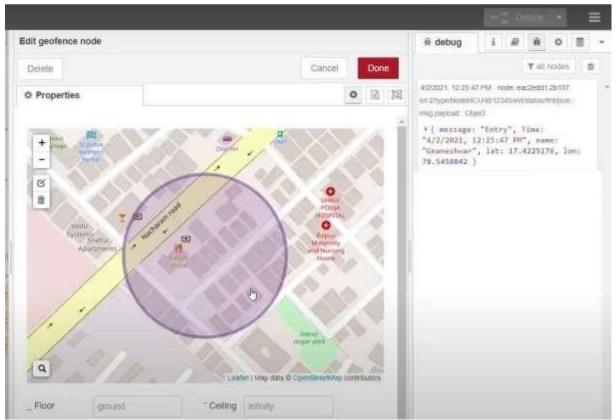
• Editing the HTTP Request URL



Located the child



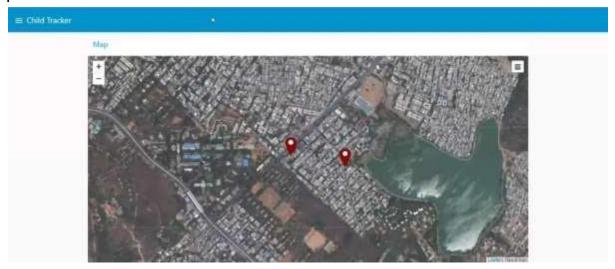
Created the geofence node



Python script sending requests to IBM Cloud

```
Canada 2/A Data published to IBM loT platfrom:
child py 🔯
limport json
limport wiotp.sdk.device
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
  5 myConfig = 4
                                                                                                               Data published to IBM IoT platfrom:
          "identity": (
    "orgid": "hj5fmy",
    "typeId": "ModeMCU"
                                                                                                               Data published to IBM IoT platfrom:
Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM loT platfrom:
              "deviceId": "12345"
                                                                                                               Data published to IBM IoT platfrom:
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          'auth": (
"token": "12345678"
                                                                                                               Data published to IBM loT platfrom:
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 14)
                                                                                                               Data published to IBM IoY 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:
 IS while True:
19 name- "Smortbridge"
                                                                                                               Data published to IBM IoT platfrom:
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         Him press Constitu
 20
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                                                                                                               Data published to IBM IoT platfrom:
        #Latitude= 17:4225176
#Lamgitude= 7#.5458842
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                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
 25
         dust seem location
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Date published to IBM IoT platfrom:
         latitude= 17.4219272
                                                                                                               Data published to IBM IoT platfrom:
         Inngitude= 78,5488783
myData={ name; "lat':latitude, 'loo':longitude}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=8, onPub
print("Data published to IBM IoT platfrom: ",myData)
time.sleep(5)
 28
                                                                                                               Data published to IBM IoT platfrom:
                                                                                                               Data published to IBM IoT platfrom:
  14 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