

DEVELOP A WEB APPLICATION USING NODE-RED SERVICE

Date	03 October 2022
Team ID	PNT2022TMID22101
Project Name	Project – SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

```
import wiotp.sdk.device
import time
import random
import ibmiotf.application
import ibmiotf.device
import requests, json

myConfig = {
    "identity": {
        "orgId": "4gh14s",
        "typeId": "ESP32",
        "deviceId": "1234"
    },
    "auth": {
        "token": "5xp6Zc74hThvC!qyOY"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if(m=="alarm ON"):
        print("Alarm is turned ON")
    elif(m=="alarm OFF"):
        print("Alarm is turned OFF")
    print("")

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
BASE_URL = "https://api.openweathermap.org/data/2.5/weather?"
CITY = "Jaipur, IN"
URL = BASE_URL + "q=" + CITY + "&units=metric"+"&appid=" + "be42a38741dd6a72d994a4bc7d9a5025"

while True:
```

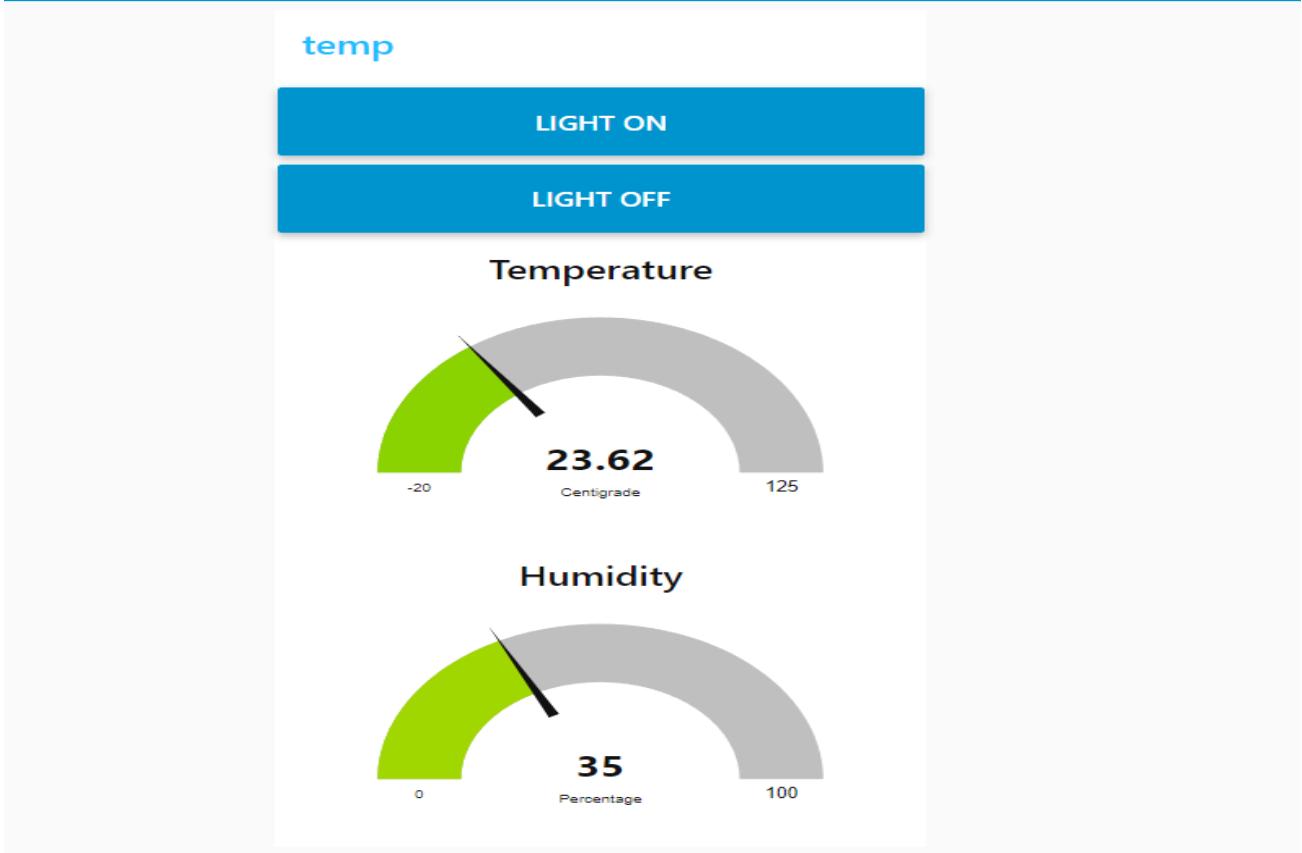
```

while True:
    response = requests.get(URL)
    if response.status_code == 200:
        data = response.json()
        main = data['main']
        temperature = main['temp']
        humidity = main['humidity']
        pressure = main['pressure']
        report = data['visibility']

    if temperature < 24:
        visibility="Fog Ahead, Drive Slow"
    elif temperature < 20:
        visibility="Bad Weather"
    else:
        visibility="Clear Weather"

myData={'Temperature':temperature, 'Humidity':humidity,'Visibility':visibility}
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
print("Published data Successfully: ", myData)
print("-----")
client.commandCallback = myCommandCallback
time.sleep(2)
client.disconnect()

```



```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
```

```
>>>
```

```
===== RESTART: C:/Python/Python37/p3.py =====
```

```
2022-11-19 11:33:28,200 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:4gh14s:ESP32:1234
```

```
Published data Successfully: {"Temperature": 23.62, "Humidity": 35, "Visibility": "Fog Ahead, Drive Slow"}
```

```
Published data Successfully: {"Temperature": 23.62, "Humidity": 35, "Visibility": "Fog Ahead, Drive Slow"}
```

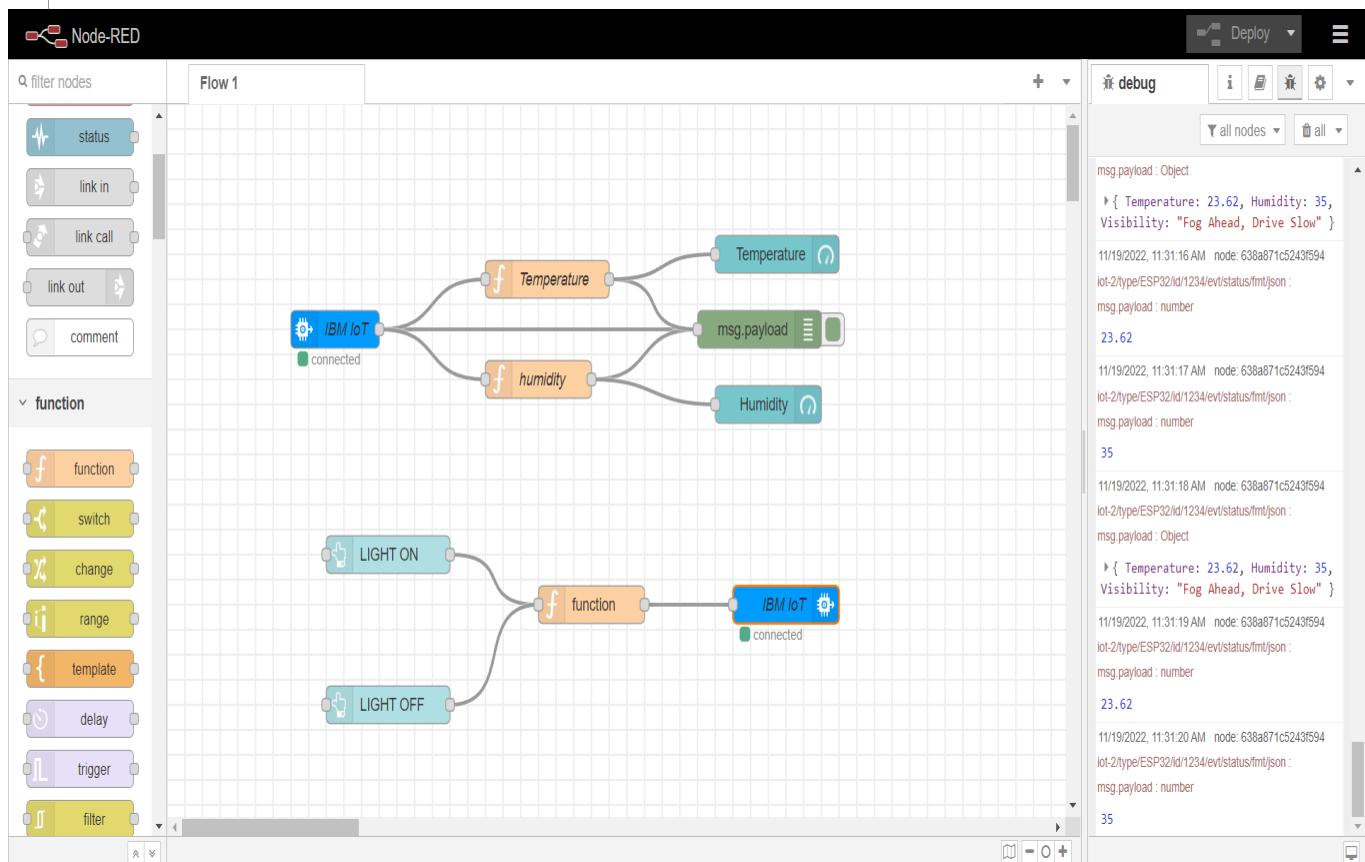
```
Published data Successfully: {"Temperature": 23.62, "Humidity": 35, "Visibility": "Fog Ahead, Drive Slow"}
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```



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Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	ESP32	Device	Nov 8, 2022 3:25 PM	...

[Identity](#) [Device Information](#) [Recent Events](#) [State](#) [Logs](#) [X](#)

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"Temperature":25.99,"Humidity":78,"Visibility":...}	json	a few seconds ago
status	{"Temperature":25.99,"Humidity":78,"Visibility":...}	json	a few seconds ago
status	{"Temperature":25.99,"Humidity":78,"Visibility":...}	json	a few seconds ago
status	{"Temperature":25.99,"Humidity":78,"Visibility":...}	json	a few seconds ago
status	{"Temperature":25.99,"Humidity":78,"Visibility":...}	json	a few seconds ago

0 Simulations running