

TEAM ID: PNT2022TMID14819

TSK 187242 Final Python Script

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ibmiotpy - C:/Users/Johny7/Desktop/ibmiotpy (3.7.0)
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import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#IBM WATSON Credentials
organization = "gmlbus"
deviceType = "ECU"
deviceId = "12345"
authMethod = "token"
authToken = "12345678"

account_sid = "ACc52f0d0b6965872c1c06e77dda760d2"
auth_token = "1ff874b334a0949b327b4d1ec14d7a37"
twilio_number = "+15133275826"
target_number = "+919600680245"

def myCommandCallback(cmd):
    print("Command Received: %s" % cmd.data['command'])
    status = cmd.data['command']
    if status == "lighton":
        print("Led is on")
    elif status == "lightoff":
        print("Led is off")
    else:
        print("Proper command required")

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)

except Exception as e:
    print("caught exception connecting device: %s" % str(e))
    sys.exit()

deviceCli.connect()

def SMS():
    message = Client.messages.create(body="ALERT!! THE WATER QUALITY IS DEGRADED", from_=keys.twilio_number, to = keys.target_number)
    print(message.body)

while True:
    turbidity = random.randint(1, 1000)
    temp=random.randint(-20,125)
    pH=random.randint(0,100)
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    while True:
        turbidity = random.randint(1, 1000)
        temp=random.randint(-20,125)
        pH=random.randint(0,100)
        myData={'tur':turbidity,'temperature':temp, 'humidity':pH}

        if temperature>70 or pH<6 or turbidity>500:
            SMS()

        def myOnPublishCallback():
            print("Published pH= %s" % pH, "Turbidity:%s" % turbidity, "temperature:%s" %temp)

        success = deviceCli.publishEvent("demo", "json", myData, qos=0,on_publish=myOnPublishCallback)

        if not success:
            print("Not Connected to ibmiot")
            time.sleep(5)

        deviceCli.commandCallback = myCommandCallback

        deviceCli.disconnect()
```