## **IBM PROJECT**

**TEAM ID:**PNT2022TMID01408

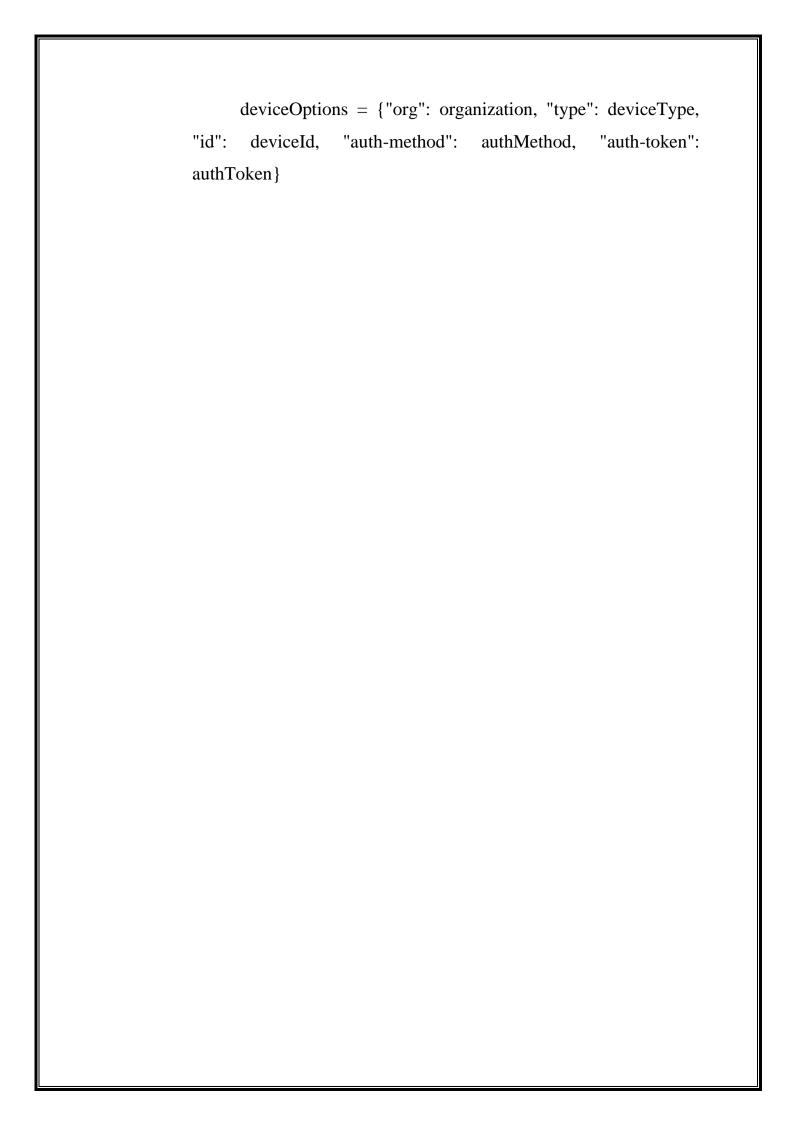
**DATE: 19.11.22** 

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## **Source Code:**

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "nckdv7"
deviceType = "NodeMCU"
deviceId = "12345"
authMethod = "token"
authToken = "12345678"
# Initialize GPIO
def myCommandCallback(cmd):
  print("Command received: %s" %cmd.data['command'])
  status=cmd.data['command']
  if status=="motoron":
    print("Motor is ON")
  else:
    print("Motor is OFF")
  #print(cmd)
try:
```



```
deviceCli = ibmiotf.device.Client(deviceOptions)
      #.....
except Exception as e:
      print("Caught exception connecting device: %s" % str(e))
      sys.exit()
# Connect and send a datapoint "hello" with value "world" into the
cloud as an event of type "greeting" 10 times
deviceCli.connect()
while True:
    #Get Sensor Data from DHT11
    temp=random.randint(0,100)
    pulse=random.randint(0,100)
    moisture= random.randint(0,100)
    humidity=random.randint(0,100);
    lat = 17
    lon = 18
    data = { 'temp' : temp, 'humidity' : humidity, 'Soil Moisture' :
moisture }
    #print data
    def myOnPublishCallback():
       print ("Published Temperature = %s C" % temp, "Humidity
= %s %%" % humidity, "Soil Moisture = %s %%" % moisture, "to
IBM Watson")
```

```
success = deviceCli.publishEvent("IoTSensor",
"json", data,qos=0,
on\_publish=myOnPublishCallback)
    if not success:
       print("Not
    connected to
    IoTF")
    time.sleep(1)
    deviceCli.commandCallback = myCommandCallback \\
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```