

PYTHON SCRIPT

TEAM ID	PNT2022TMID17383
PROJECT NAME	Smart Farmer – IoT Smart farming Application

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import
time

import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "u9qhfi"
deviceType = "Devicetype1"
deviceId = "DeviceID1"
authMethod = "token"
authToken = ")hSb7_ZD+ev12fRhXi"

# Initialize GPIO

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    else :
        print ("led is off")
    #print(cmd)

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))
```

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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)
    Humid=random.randint(0,100)
    data = { 'temp' : temp, 'Humid': Humid }
    #print data
    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "to IBM Watson")
    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
    on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
        time.sleep(1)
    deviceCli.commandCallback = myCommandCallback
    # Disconnect the device and application from the cloud
    deviceCli.disconnect()

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