Sprint – 1

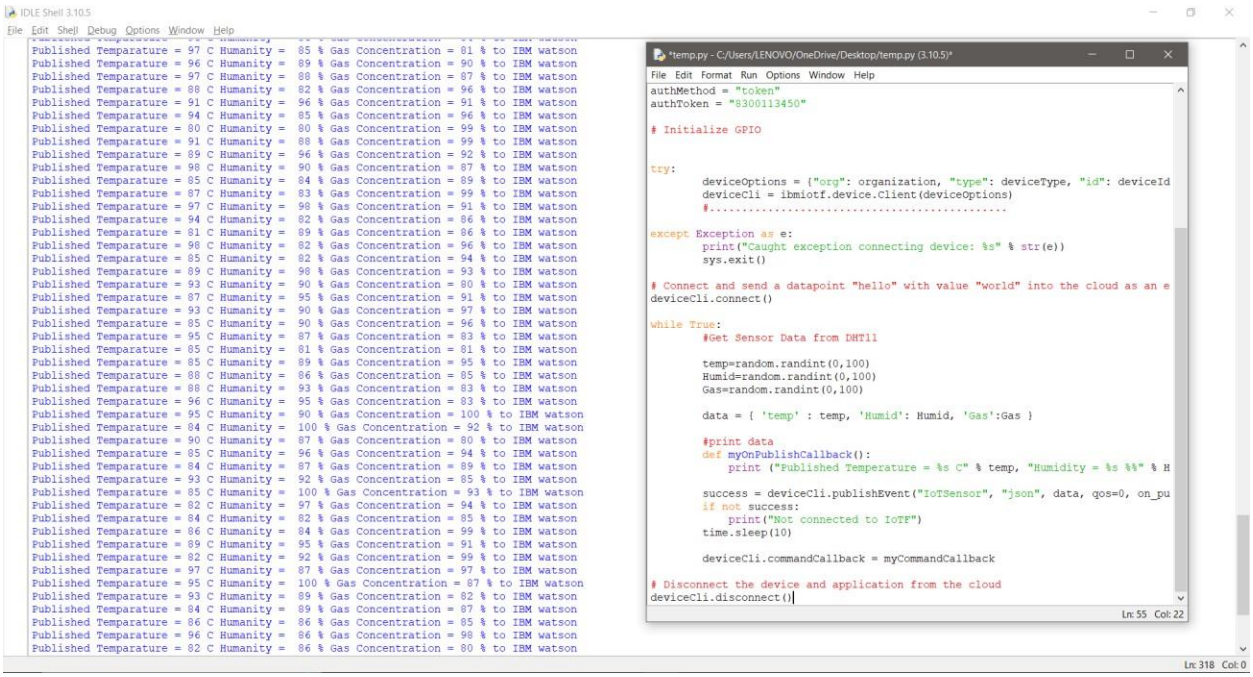
Team ID: PNT2022TMID12081

Python Code:

```
# Sprint - 1
# Team ID: PNT2022TMID12081

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

#Provide your IBM Watson Device Credentials
organization = "lcft5g"
deviceType = "Final"
deviceId = "Hello"
authMethod = "token"
authToken = "8300113450"

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()
# 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)
    Gas=random.randint(0,100)


    data = { 'temp' : temp, 'Humid': Humid,'Gas':gas }
    #print data
    def myOnPublishCallback():
       print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % Humid, "Gas Concentration = %s"%Gas"to IBM Watson")


    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
       print("Not connected to IoTF")
    time.sleep(10)


    deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

Output:


IDLE Shell 3.10.5
File Edit Shell Debug Options Window Help
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Published Temparature = 96 C Humanity = 86 % Gas Concentration = 98 % to IBM watson
Published Temparature = 82 C Humanity = 86 % Gas Concentration = 80 % to IBM watson
Ln: 318 Col: 0
temp.py - C:/Users/LENOVO/OneDrive/Desktop/temp.py (3.10.5)
File Edit Format Run Options Window Help
authMethod = "token"
authToken = "8300113450"
# Initialize GPIO
try:
deviceOptions = {"org": organization, "type": deviceType, "id": deviceId
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 e
deviceCli.connect()
while True:
#Get Sensor Data from DHT11
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data = { 'temp' : temp, 'Humid': Humid, 'Gas':Gas }
#print data
def myOnPublishCallback():
print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % H
success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_pu
if not success:
print("Not connected to IoTF")
time.sleep(10)
deviceCli.commandCallback = myCommandCallback
# Disconnect the device and application from the cloud
deviceCli.disconnect()
Ln: 55 Col: 22