HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANTS POWERED BY IOT

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SPRINT-2

```python
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:
```

```python
        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: