Team ID: PNT2022TMID11664

Project Name: Gas leakage monitoring and alerting system for industries

SPRINT 1

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random



#Provide your IBM Watson Device

Credentials organization = "s3qdw6"

deviceType = "CloudProject"

deviceId = "164163"

authMethod = "token"

authToken =

"0903202008052002"


# Initialize GPIO

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()
```