

Sprint - 1

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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"

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 IoT")
```

```
        time.sleep(10)
```

```
        deviceCli.commandCallback = myCommandCallback
```

```
# Disconnect the device and application from the cloud
```

```
deviceCli.disconnect()
```