

PROJECT DEVELOPMENT PHASE

SPRINT-3

Python code

Program:

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

organization="pyfl"
deviceType="hazard"
deviceId="231099"
authMethod="token"
authToken="zHP+8f IUb*Hmx ADd8"

def myCommandCallback(cmd):
    print("Command received:%s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="motoron":
        print("Motor is ON")
    else:
        print("Motor is OFF")

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()
```

```
deviceCli.connect()
```

```
while True:
```

```
    temp=random.randint(0,100)
```

```
    noise=random.randint(0,100)
```

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

```
    radn=random.randint(0,100)
```

```
    data={'Temperature':temp,'Noise':noise,'Gas_leakage':Gas,'Radiation':radn}
```

```
def myOnPublishCallback():
```

```
    print("Published Temperature=%s C" %temp,"Noise:%s db"
```

```
    %noise,"Gas_leakage:%s J/Kg" %Gas,"Radiation:%s rad "%radn,"to IBM  
    Watson")
```

```
success=deviceCli.publishEvent("IoTSensor","json",data,qos=0,on_publish=myO  
nPublishCallback)
```

```
if not success:
```

```
    print("Not connected to IoT")
```

```
    time.sleep(1)
```

```
deviceCli.commandCallback=myCommandCallback
```

```
deviceCli.disconnect()
```