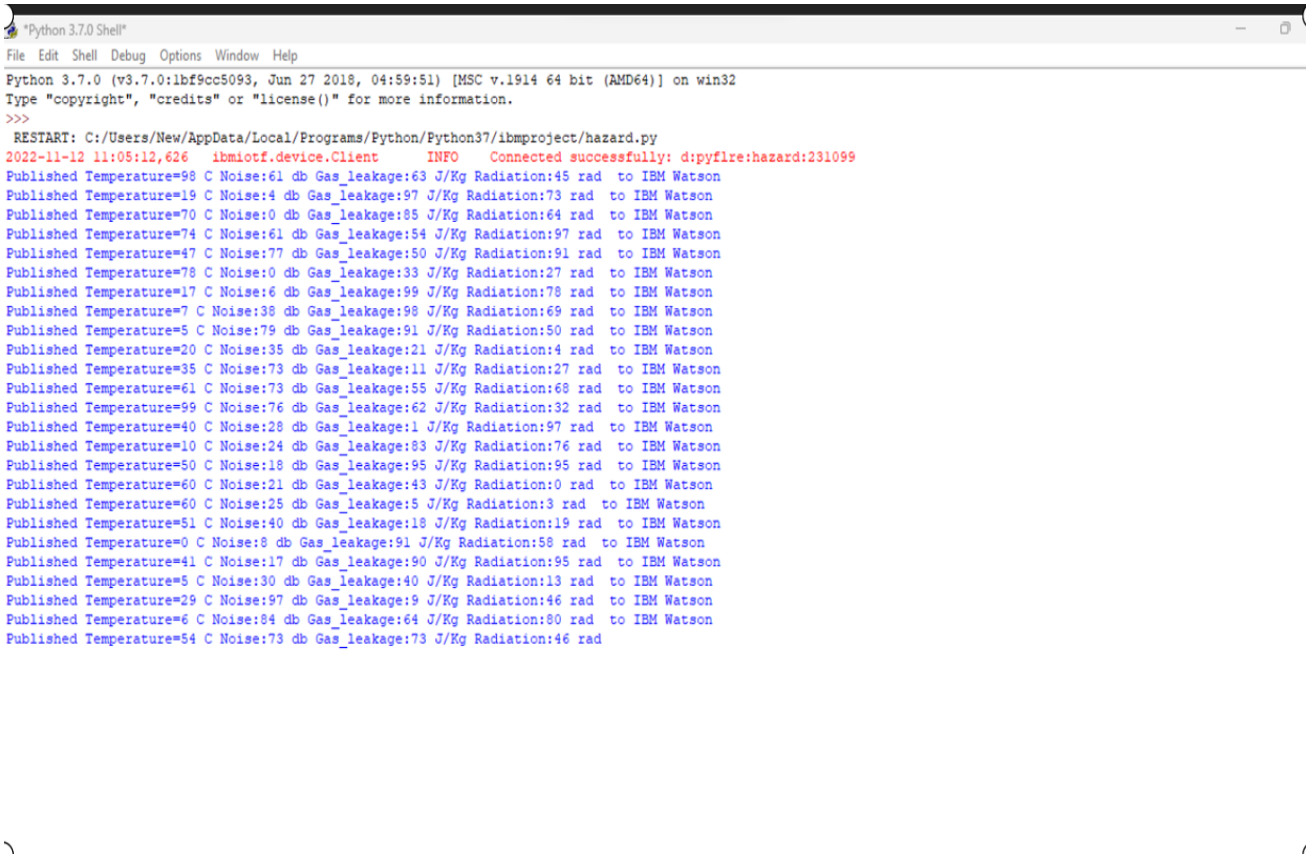
PROJECT DEVELOPMENT PHASE
SPRINT-3

Program:

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

organization="pyfl"
deviceType="hazard"
deviceId="231099"
authMethod="token"
authToken="zHP+8f lUb*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 IoTF")
time.sleep(1)


deviceCli.commandCallback=myCommandCallback

deviceCli.disconnect()
```


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/New/AppData/Local/Programs/Python/Python37/ibmproject/hazard.py
2022-11-12 11:05:12,626 ibmiotf.device.Client INFO Connected successfully: d:pyflre:hazard:231099
Published Temperature=98 C Noise:61 db Gas_leakage:63 J/Kg Radiation:45 rad to IBM Watson
Published Temperature=19 C Noise:4 db Gas_leakage:97 J/Kg Radiation:73 rad to IBM Watson
Published Temperature=70 C Noise:0 db Gas_leakage:85 J/Kg Radiation:64 rad to IBM Watson
Published Temperature=74 C Noise:61 db Gas_leakage:54 J/Kg Radiation:97 rad to IBM Watson
Published Temperature=47 C Noise:77 db Gas_leakage:50 J/Kg Radiation:91 rad to IBM Watson
Published Temperature=78 C Noise:0 db Gas_leakage:33 J/Kg Radiation:27 rad to IBM Watson
Published Temperature=17 C Noise:6 db Gas_leakage:99 J/Kg Radiation:78 rad to IBM Watson
Published Temperature=7 C Noise:38 db Gas_leakage:98 J/Kg Radiation:69 rad to IBM Watson
Published Temperature=5 C Noise:79 db Gas_leakage:91 J/Kg Radiation:50 rad to IBM Watson
Published Temperature=20 C Noise:35 db Gas_leakage:21 J/Kg Radiation:4 rad to IBM Watson
Published Temperature=35 C Noise:73 db Gas_leakage:11 J/Kg Radiation:27 rad to IBM Watson
Published Temperature=61 C Noise:73 db Gas_leakage:55 J/Kg Radiation:68 rad to IBM Watson
Published Temperature=99 C Noise:76 db Gas_leakage:62 J/Kg Radiation:32 rad to IBM Watson
Published Temperature=40 C Noise:28 db Gas_leakage:1 J/Kg Radiation:97 rad to IBM Watson
Published Temperature=10 C Noise:24 db Gas_leakage:83 J/Kg Radiation:76 rad to IBM Watson
Published Temperature=50 C Noise:18 db Gas_leakage:95 J/Kg Radiation:95 rad to IBM Watson
Published Temperature=60 C Noise:21 db Gas_leakage:43 J/Kg Radiation:0 rad to IBM Watson
Published Temperature=60 C Noise:25 db Gas_leakage:5 J/Kg Radiation:3 rad to IBM Watson
Published Temperature=51 C Noise:40 db Gas_leakage:18 J/Kg Radiation:19 rad to IBM Watson
Published Temperature=0 C Noise:8 db Gas_leakage:91 J/Kg Radiation:58 rad to IBM Watson
Published Temperature=41 C Noise:17 db Gas_leakage:90 J/Kg Radiation:95 rad to IBM Watson
Published Temperature=5 C Noise:30 db Gas_leakage:40 J/Kg Radiation:13 rad to IBM Watson
Published Temperature=29 C Noise:97 db Gas_leakage:9 J/Kg Radiation:46 rad to IBM Watson
Published Temperature=6 C Noise:84 db Gas_leakage:64 J/Kg Radiation:80 rad to IBM Watson
Published Temperature=54 C Noise:73 db Gas_leakage:73 J/Kg Radiation:46 rad