SPRINT - 2

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Team ID	PNT2022TMID38157
Project Name	Smart Farmer - IoT Enabled Smart Farming Application

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PYTHON SCRIPT :

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
organization = "zxnybt"
deviceType = "dominators"
deviceId = "12345"
authMethod = "token"
authToken = "123456789"
def myCommandCallback(cmd):
 print("Command received: %s" % cmd.data)
 for key in cmd.data.keys():
 if key == 'motor':
 if cmd.data['motor'] == 'ON':
 print("MOTOR is turned ON")
 elif cmd.data['motor'] == 'OFF':
 print("MOTOR is turned OFF")
try:
 deviceOptions = {"org": organization, "type": deviceType, "id":
```

```python
          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(0,40)
 Humid=random.randint(0,100)
 moist=random.randint(0,40)
 data = { 'temperature' : temp, 'humidity': Humid, 'soil_moisture':moist
}

 def myOnPublishCallback():
 print ("Published Temperature = %s C" % temp, "Humidity = %s
%%" % Humid, "soil moisture =%s" % moist,"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
deviceCli.

disconnect()
```
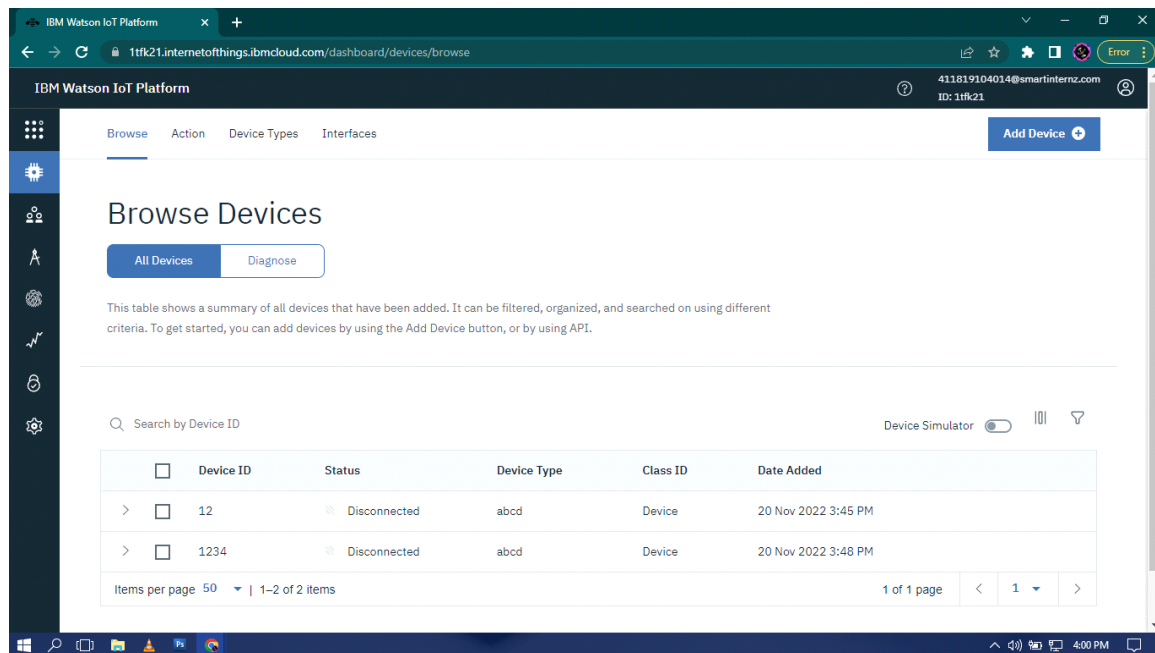
PYTHON SCRIPT CONFIGURED TO IBM WATSON IoT PLATFORM :

THE SENSOR DATAS IN THE PYTHON SCRIPT WILL BE RECEIVED BY IBM WATSON IOT PLATFORM :