

Sprint-3

Date	14thNovember2022
Team ID	PNT2022TMID35067
Project Name	Signs with Smart Connectivity for Better Road Safety.
Marks	20Marks

Sprint	Functional Requirement	User Story Number	User Story /Task	Story Points	Priority	Team Members
Sprint-3		US-1	Develop a python script to publish random sensordata such as temperature, humidity, visibility to the IBM IoT platform.	7	High	R. Abisha A. Anugraha R. Angel L. Brijitha
Sprint-3		US-2	After developing python code, commands are received print the statements which represent the control of the devices.	5	Medium	R. Abisha A. Anugraha R. Angel L. Brijitha
Sprint-3		US-3	Publish Data to the IBM Cloud.	8	High	R. Abisha A. Anugraha R. Angel L. Brijitha

```
import sys
import ibmiotf.application
import ibmiotf.device
import random
#ProvideyourIBMWatsonDeviceCredentials
organization="ozyf7e"
deviceType="iotdevice"
deviceId="iotdeviceid"
authMethod="use-token-auth"
authToken="9876543210"
```

```

#IntializeGPIO
def myCommandCallback(cmd):
    print("Commandreceived:%s"%cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print("ledison")
    elif status=="light off":
        print("ledisoff")
    else:
        print("send proper command")
#print(cmd)
try:
    deviceOptions={"org":organization,"type":deviceType,"id":deviceId,"auth-
method":authMethod,"auth-token":authToken}
    deviceCli=ibmiotf.device.Client(deviceOptions)
    #.....
except Exception as e:
    print("Caughtexceptionconnectingdevice:%s"%str(e))
    sys.exit()
#Connectandsendadatapoint"hello"withvalue"world"intothecloudasaneventof type "greeting"
10 times
deviceCli.connect()
while True:
    temp=random.randint(90,100)
    humid=random.randint(60,100)
    data={"temperature":temp,"humidity":humid}
#printdata
def myOnPublishCallback():
    print("Publishedtemperature=%sC"%temp,"humidity=%s%% "%humid,"toIBMWatson")
    success=deviceCli.publishEvent("IoTSensor","json",data,qos=0,on_publish=myOnPublish
Callback)
if not success:
    print("NotconnectedtoIoTF")
    time.sleep(1)
deviceCli.commandCallback=myCommandCallback
#Disconnect thedeviceandapplicationfrom thecloud
deviceCli.disconnect()

```

Output:

IBM Watson IoT Platform

?

960219104018@smartinfernz.com

ID: ozyf7e

Browse

Action

Device Types

Interfaces

Add Device +

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"temperature":17,"humidity":94}	json	a few seconds ago
event_1	{"temperature":95,"humidity":65}	json	a few seconds ago
event_1	{"temperature":0,"humidity":19}	json	a few seconds ago
event_1	{"temperature":73,"humidity":65}	json	a few seconds ago

>

☐

iotdeviceid

☐ Disconnected

iotdevice

Device

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1 Simulation running