PROJECT DEVELOPMENT PHASE

SPRINT-3 CODING

Date	08 November 2022
Team ID	PNT2022TMID12298
Project Name	Real Time River Water Quality Monitoring and Control System
Maximum Marks	8 Marks

CODING:

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


#Provide your IBM Watson Device Credentials
organization = "mw0wqj" deviceType = "real"
deviceId = "realtime" authMethod = "token"
authToken = "vasuki123"

# Initialize GPIO


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")

   #print(cmd)



try:
```

```
 deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "authmethod": 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

        ph=random.randint(0,14)
        turb=random.randint(0,100)



        data = { 'ph' : ph, 'turb': turb }
        #print data        def myOnPublishCallback():            print ("Published PH Level = %s C" % ph, "Turbidity = %s C" % turb, "to IBM Watson")

        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)        if not success:
print("Not connected to IoTF")
        time.sleep(5)

        deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the cloud
deviceCli.disconnect()
```