SPRINT 1

PROJECT DEVELOPMENT PHASE

Date	15 November 2022
Team ID	PNT2022TMID11410
Project Name	Real -Time River Water Quality Monitoring and Control System

CODE:

```
import wiotp.sdk.device
import os
import time
import random
myConfig = {
   "identity": {
      "orgId": "12mn2r",
      "typeId": "QweRt",
      "deviceId":"938411"
   },
   "auth": {
      "token": "987654321"
```

```
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    tur=random.randint(20,300)
    tem=random.randint(0,100)
    ph=random.randint(1,14)
    myData={'temperature':tem, 'turbidity':tur, 'phvalue':ph}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(300)
    client.disconnect()
```

OUTPUT:

Output:

```
Published data {'T': 23, 'pH': 85, 'conductivity': 37, 'oxygen': 41, 'turbidity'
: 2} to IBM Watson
Published data {'T': 39, 'pH': 87, 'conductivity': 1, 'oxygen': 32, 'turbidity':
 84} to IBM Watson
Published data {'T': 90, 'pH': 89, 'conductivity': 29, 'oxygen': 65, 'turbidity'
: 93} to IBM Watson
Published data {'T': 91, 'pH': 15, 'conductivity': 0, 'oxygen': 27, 'turbidity':
 60} to IBM Watson
Published data {'T': 52, 'pH': 65, 'conductivity': 59, 'oxygen': 78, 'turbidity'
: 23} to IBM Watson
Published data {'T': 96, 'pH': 96, 'conductivity': 20, 'oxygen': 47, 'turbidity'
: 90} to IBM Watson
Published data {'T': 87, 'pH': 73, 'conductivity': 92, 'oxygen': 41, 'turbidity'
: 85} to IBM Watson
Published data {'T': 90, 'pH': 21, 'conductivity': 81, 'oxygen': 83, 'turbidity'
: 61} to IBM Watson
```