

PROJECT DEVELOPMENT - DELIVERY OF SPRINT 2

Date	12 November 2022
Team ID	PNT2022TMID22571
Project	Real Time River Water Quality Monitoring and Control System

Develop a python script:

Coding:

```
import time
```

```
import sys
```

```
import ibmiotf.application
```

```
import ibmiotf.device
```

```
organization = "brljua"
```

```
deviceType = "nandhini 123"
```

```
deviceId = "123"
```

```
authMethod = "token"
```

```
authToken = "nandhini123"
```

```
temp=60
```

```
pulse=70
```

```
oxygen= 30
```

```
lat = 17
```

```
lon = 18
```

```
def myCommandCallback(cmd):
```

```
    print("Command received: %s" % cmd.data['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("Caught exception connecting device: %s" % str(e))
```

```
    sys.exit()
```

```
deviceCli.connect()
```

```
while True:
```

```
    #Get Sensor Data from DHT11
```

```
    data = {"d":{ 'temp': temp, 'pulse': pulse , 'oxygen': oxygen, "lat":lat, "lon":lon }}
```

```
    #print data
```

```
    def myOnPublishCallback():
```

```
        print ("Published Temperature = %s C" % temp, "Humidity = %s %" % pulse, "to IBM Watson")
```

```
        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
```

```
    if not success:
```

```
        print("Not connected to IoTTF")
```

```
    time.sleep(1)
```

```
    deviceCli.commandCallback = myCommandCallback
```

```
deviceCli.disconnect()
```