


SPRINT 1

Date	28 October 2022
TEAMID	PNT2022TMID36188
ProjectName	IoT Based smart crop Protection system for agriculture
Maximummark	20marks

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Internet of Things Platform

This service is the hub of all things IBM IoT, it is where you can set up and manage your connected devices so that your apps can access their live and historical data.

Create

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Configure your resource

Summary

Internet of Things Platform

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Create

Add to estimate

Device credentials information

IBM Watson IoT Platform

110519106007@smartinternz.com
ID: h4yt8u

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Device Drilldown - PNT2022TMID36188

Device Credentials

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

Device Credentials

You registered your device to the organization. Add these credentials to the device to connect it to the platform. After the device is connected, you can navigate to view connection and event details.

Organization ID	h4yt8u
Device Type	PNT2022TMID36188
Device ID	PNT2022TMID36188
Authentication Method	use-token-auth
Authentication Token	8H66**cxW0&Nm-ii1f

⚠

Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.

Find out how to add these credentials to your device

0 Simulations running

Python Program:

```
import wiotp.sdk.device

import time

import os

import datetime

import random

myConfig = {

    "orgId": "h4y8u",

    "typeId": "PNT2022TMID36188",

    "deviceId": "PNT2022TMID36188",

    "auth": {

        "token": "8H66**cxW0&Nm-il1f"

    }

}

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

client.connect ()
```

```
def myCommandCallback (cmd) :

    print("command received: %s" % cmd.data

    if cmd.data ['command']== 'MOTOR ON':

        print("MOTOR ON IS RECEIVED")

    elif cmd.data['command']== 'MOTOR OFF':

        print(" MOTOR OFF IS RECEIVED")

    if cmd.command == " set interval":

        if 'interval' not in cmd.data:

            print(" Error – command is missing required information: 'interval'")

        else:

            interval = cmd.data['interval']

            elif cmd.command == "print":

                if ' message' not in cmd.data:

                    print("Error – command is missing required information: 'message'")

                else:

                    output=cmd.data['message']
```

```
print (output)

while True:

    soil=random.randint (0,100)

    temp=random.randint (-20, 125)

    hum=random.randint (0, 100)

    myData={'soil moisture': soil, 'temperature':temp, 'humidity':hum}

    client.publishEvent (eventId="status", msgFormat="json", data=myData,

    qos=0 ,onPublish=None)

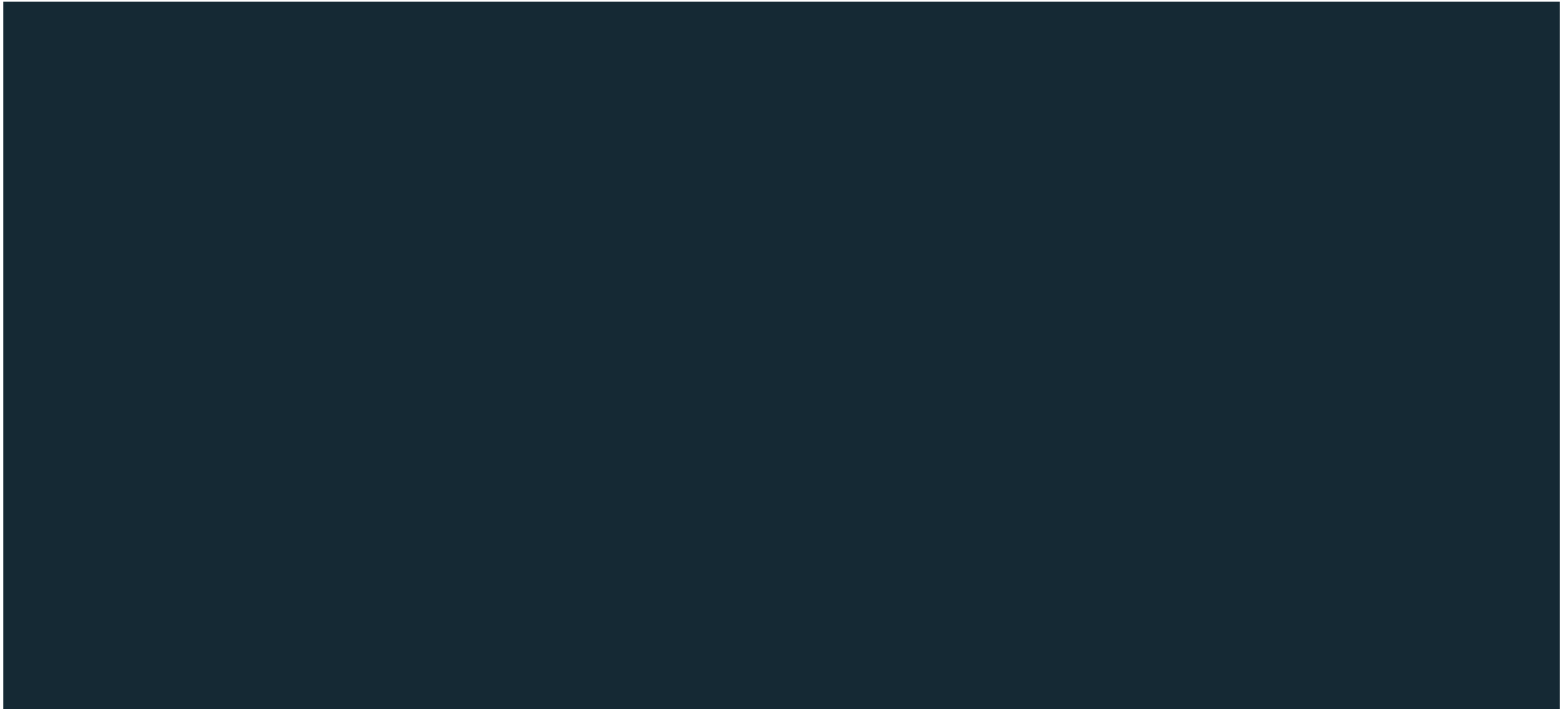
    print ("Published data Successfully: %s", myData)

    time.sleep (2)

    client.commandCallback = myCommandCallback

    client.disconnect
```

OUTPUT:



Program Output:

```
2022-11-19 11:00:51,934 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 14, 'humidity': 47}
Published data Successfully: %s {'temperature': 109, 'humidity': 95}
2022-11-19 11:00:54,077 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:00:56,629 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': -19, 'humidity': 8}
Published data Successfully: %s {'temperature': 88, 'humidity': 7}
2022-11-19 11:00:59,397 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:01,518 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 103, 'humidity': 86}
Published data Successfully: %s {'temperature': 73, 'humidity': 87}
2022-11-19 11:01:04,939 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:08,827 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 75, 'humidity': 33}
Published data Successfully: %s {'temperature': 113, 'humidity': 84}
2022-11-19 11:01:11,150 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:13,587 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 10, 'humidity': 85}
Published data Successfully: %s {'temperature': 107, 'humidity': 58}
2022-11-19 11:01:17,117 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:19,146 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 65, 'humidity': 45}
Published data Successfully: %s {'temperature': 28, 'humidity': 89}
2022-11-19 11:01:22,551 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:25,863 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 17, 'humidity': 58}
Published data Successfully: %s {'temperature': -12, 'humidity': 54}
2022-11-19 11:01:28,157 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:30,387 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 13, 'humidity': 58}
2022-11-19 11:01:32,539 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:36,830 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 12, 'humidity': 36}
2022-11-19 11:01:38,896 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:40,986 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 65, 'humidity': 71}
Published data Successfully: %s {'temperature': 111, 'humidity': 75}
Published data Successfully: %s {'temperature': 60, 'humidity': 93}
2022-11-19 11:01:45,426 wiotp.sdk.device.client.DeviceClient ERROR
2022-11-19 11:01:48,767 wiotp.sdk.device.client.DeviceClient INFO
Published data Successfully: %s {'temperature': 58, 'humidity': 87}
```

```
Published data Successfully: %s ('temperature': 68, 'humidity': 16)
2022-11-19 11:09:28,333 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:35,913 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rln113:SathyaPriya:2609
Published data Successfully: %s ('temperature': 59, 'humidity': 46)
Published data Successfully: %s ('temperature': 48, 'humidity': 86)
Published data Successfully: %s ('temperature': 116, 'humidity': 35)
2022-11-19 11:09:40,653 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:48,401 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rln113:SathyaPriya:2609
Published data Successfully: %s ('temperature': 63, 'humidity': 94)
Published data Successfully: %s ('temperature': 72, 'humidity': 56)
Published data Successfully: %s ('temperature': 91, 'humidity': 47)
2022-11-19 11:09:53,728 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:10:00,012 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rln113:SathyaPriya:2609
Published data Successfully: %s ('temperature': 90, 'humidity': 80)
Published data Successfully: %s ('temperature': -6, 'humidity': 93)
Published data Successfully: %s ('temperature': 117, 'humidity': 78)
Published data Successfully: %s ('temperature': 83, 'humidity': 88)
Published data Successfully: %s ('temperature': 34, 'humidity': 20)
Published data Successfully: %s ('temperature': 25, 'humidity': 48)
Published data Successfully: %s ('temperature': 95, 'humidity': 53)
Published data Successfully: %s ('temperature': 56, 'humidity': 74)
Published data Successfully: %s ('temperature': 27, 'humidity': 11)
Published data Successfully: %s ('temperature': 12, 'humidity': 94)
Published data Successfully: %s ('temperature': 75, 'humidity': 84)
Published data Successfully: %s ('temperature': 123, 'humidity': 75)
Published data Successfully: %s ('temperature': 107, 'humidity': 77)
Published data Successfully: %s ('temperature': 64, 'humidity': 93)
Published data Successfully: %s ('temperature': 9, 'humidity': 97)
Published data Successfully: %s ('temperature': 119, 'humidity': 20)
Published data Successfully: %s ('temperature': -6, 'humidity': 19)
Published data Successfully: %s ('temperature': 55, 'humidity': 94)
Published data Successfully: %s ('temperature': 66, 'humidity': 28)
Published data Successfully: %s ('temperature': 58, 'humidity': 97)
Published data Successfully: %s ('temperature': 93, 'humidity': 61)
Published data Successfully: %s ('temperature': 92, 'humidity': 100)
Published data Successfully: %s ('temperature': 116, 'humidity': 55)
Published data Successfully: %s ('temperature': 13, 'humidity': 63)
Published data Successfully: %s ('temperature': -17, 'humidity': 27)
Published data Successfully: %s ('temperature': -2, 'humidity': 63)
Published data Successfully: %s ('temperature': 52, 'humidity': 6)
Published data Successfully: %s ('temperature': -8, 'humidity': 25)
Published data Successfully: %s ('temperature': 68, 'humidity': 86)
```