

REAL TIME RIVER WATER QUALITY MONITORING AND
CONTROL SYSTEM

DEVICE

DATE	15 OCTOBER 2022
TEAM ID	PNT2022TMID11003
PROJECT TITLE	Real time river water quality monitoring and control system
MAXIMUM MARKS	4 marks

IBM Cloud Dashboard

For you

- Build**
Explore IBM Cloud with this selection of easy starter tutorials and services.
- Build a web app with Watson Speech to Text**
Deploy a conversational interface compatible with any application, device, or channel.
Getting started 15 min
- Get Started with Watson Studio**
Get started with using AI and Cloud Object Storage in 15 minutes.
Popular 2 hr
- Get started with Watson Discovery**
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Recommended 2 hr
- IBM Watson Knowledge Catalog**
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Recommended 2 min
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User access [Manage users](#)

Enter email addresses below to jump directly into the invite user setup:

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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 About

Type Service

Provider IBM

Last updated 08/15/2022

Category Internet of Things

Compliance IAM-enabled

Location Frankfurt London Dallas Washington DC

Select a location

Frankfurt (eu-de)

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or location: [United States](#)

Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric. Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data enshred and edge data analyzed.	Free

Summary

Internet of Things Platform Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-ad

Resource group: Default

Existing Lite plan instance

You can have only 1 Lite plan instance of this service per resource group. [Delete](#) your current Lite plan instance in Default resource group to create a new one, or [view the existing instance](#).


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Create

Internet of Things Platform-41 Active [Add tags](#) [Details](#) [Actions...](#)

Manage

- Plan
- Connections




Let's get started with IBM Watson IoT Platform

Securely connect, control, and manage devices. Quickly build IoT applications that analyze data from the physical world.

[Launch](#) [Docs](#)


Ready for the next level?

IBM Watson IoT Platform Journey




Lite

The Lite service plan provides a lightweight development environment to get you started



Non-Production

The Non-Production service plan is a full-featured, fully-integrated offering that enables




Production

The Production service is a fully managed SaaS offering that enables you to manage and analyze

29°C Partly sunny 14:28 18-11-2022

IBM Watson IoT Platform [Sign in](#)



Collect data from **Equipment** and make value from it

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Cookie Preferences

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SIMULATION

WOKWI

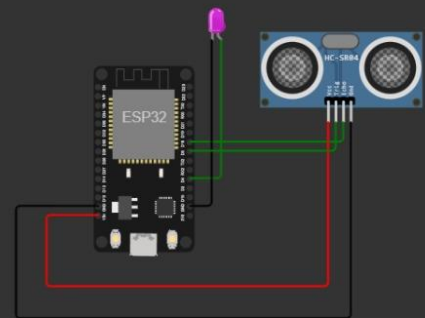
sketch.ino diagram.json libraries.txt Library Manager

```
#include <WiFi.h>
#include <PubSubClient.h>

void callback(char* subscribetopic, byte* payload, unsigned int payloadLength) {
  #define ORG "ne7h28"
  #define DEVICE_TYPE "ESP32_Controller"
  #define DEVICE_ID "BME32_Sensor"
  #define TOKEN "JgspEow8hr!gOQT(k2"
  String data3;
  float dist;
  char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
  char publishTopic[] = "iot-2/evt/Data/fmt/json";
  char subscribetopic[] = "iot-2/cmd/test/fmt/String";
  char authMethod[] = "use-token-auth";
  char token[] = TOKEN;
  char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
  WiFiClient wificlient;
  PubSubClient client(server, 1883, callback, wificlient);
  int LED = 4;
  int trig = 5;
  int echo = 18;
  void setup(){
    Serial.begin(115200);
```

Simulation

Start the simulation



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