

ASSIGNMENT- 4

TEAM ID – PNT2022TMID42891

Device ID
201999

Device Type
BARATH

Date Added
Nov 15, 2022 1:53 PM

Added By
barathsachin.bs@gmail.com

Connection Status
Connected

The screenshot displays the IBM Watson IoT Platform dashboard. The browser address bar shows the URL: `xewzi1.internetofthings.ibmcloud.com/dashboard/devices/browse`. The dashboard header includes the user profile for `barathsachin.bs@gmail.com` with ID `xewzi1`. The main navigation bar has tabs for `Browse`, `Action`, `Device Types`, and `Interfaces`, with `Browse` selected. A search bar labeled "Search by Device ID" is present. A table lists devices, with one device selected: `201999`, status `Connected`, type `BARATH`, class `Device`, and added on `Nov 15, 2022 1:53 PM`. A detailed view for this device is shown below the table, including fields for `Device ID`, `Device Type`, `Date Added`, `Added By`, and `Connection Status`. The connection status is `Connected` with a connection time of `Nov 15, 2022 2:33 PM` and client address `185.178.200.130 Insecure`. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating `2:33 PM 11/15/2022`.

Device ID	Status	Device Type	Class ID	Date Added
201999	Connected	BARATH	Device	Nov 15, 2022 1:53 PM

Identity	Device Information	Recent Events	State	Logs
Device ID	201999			
Device Type	BARATH			
Date Added	Nov 15, 2022 1:53 PM			
Added By	barathsachin.bs@gmail.com			
Connection Status	Connected			
	Connection Time: Nov 15, 2022 2:33 PM			
	Client Address: 185.178.200.130 Insecure			

DEVICE EVENT

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A user profile for 'barathsachin.bs@gmail.com' with ID 'xewzi1' is visible in the top right. The main content area shows details for a device named 'BARATH' (ID: 201999, Status: Disconnected). The 'Recent Events' tab is selected, showing a table of live data events.

Event	Value	Format	Last Received
Data	{"normal distance":110.98}	json	a few seconds ago
Data	{"normal distance":110.96}	json	a few seconds ago
Data	{"normal distance":110.98}	json	a few seconds ago
Data	{"normal distance":146.98}	json	a few seconds ago
Data	{"normal distance":146.98}	json	a few seconds ago

WOKWI PROJECT INFO

WOKWI

sketch.ino

```
1 #include <WiFi.h>
2 #include <PubSubClient.h>
3 WiFiClient wificlient;
4 String data3;
5 #define ORG "xewz11"
6 #define DEVICE_TYPE "BARATH"
7 #define DEVICE_ID "201999"
8 #define TOKEN "M58ebCRm)5_Qp8tbQ4"
9 #define speed 0.034
10 #define led 12
11 char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
12 char publishTopic[] = "iot-2/evt/Data/fmt/json";
13 char topic[] = "iot-2/cmd/home/fmt/String";
14 char authMethod[] = "use-token-auth";
15 char token[] = TOKEN;
16 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
17 PubSubClient client(server, 1883, wificlient);
18 void publishData();
19
20
21 const int trigpin=4;
22 const int echopin=2;
23 String command;
24 String data="";
25
26 long duration;
27 float dist;
```

Simulation

02:30.628 90%

Warning crosses 110cm -- it automaticaly of the loop

Sending payload: {"normal distance":329.97}

Warning crosses 110cm -- it automaticaly of the loop

Sending payload: {"normal distance":329.95}

Warning crosses 110cm -- it automaticaly of the loop

2:30 PM 11/15/2022

NODE RED CONNECTION INFO

The screenshot shows the Node-RED web interface in a browser. The address bar indicates the URL: `node-red-qsqtz-2022-11-15-au-syd.mybluemix.net/red/#flow/3bc8fa7c6d6f5c34`. The interface includes a left sidebar with node categories (common, function), a central workspace with a flow diagram, and a right sidebar with a debug console.

The flow diagram in the center shows two nodes connected by a wire:

- IBM IoT** (blue node with a green 'connected' status indicator)
- msg.payload** (green node)

The debug console on the right, titled 'debug', shows a list of messages. Each message is an object with a 'normal distance' property. The messages are as follows:

```
msg.payload : Object
  > { normal distance: 167.94 }

11/15/2022, 2:24:02 PM node: eda36e4d1f5d2ded
iot-2/type/BARATH/id/201999/evl/Data/fmt/json :
msg.payload : Object
  > { normal distance: 167.96 }

11/15/2022, 2:24:02 PM node: eda36e4d1f5d2ded
iot-2/type/BARATH/id/201999/evl/Data/fmt/json :
msg.payload : Object
  > { normal distance: 167.96 }

11/15/2022, 2:24:02 PM node: eda36e4d1f5d2ded
iot-2/type/BARATH/id/201999/evl/Data/fmt/json :
msg.payload : Object
  > { normal distance: 167.96 }

11/15/2022, 2:24:02 PM node: eda36e4d1f5d2ded
iot-2/type/BARATH/id/201999/evl/Data/fmt/json :
msg.payload : Object
  > { normal distance: 167.96 }

11/15/2022, 2:24:02 PM node: eda36e4d1f5d2ded
iot-2/type/BARATH/id/201999/evl/Data/fmt/json :
msg.payload : Object
  > { normal distance: 167.96 }
```

The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 2:24 PM on 11/15/2022.