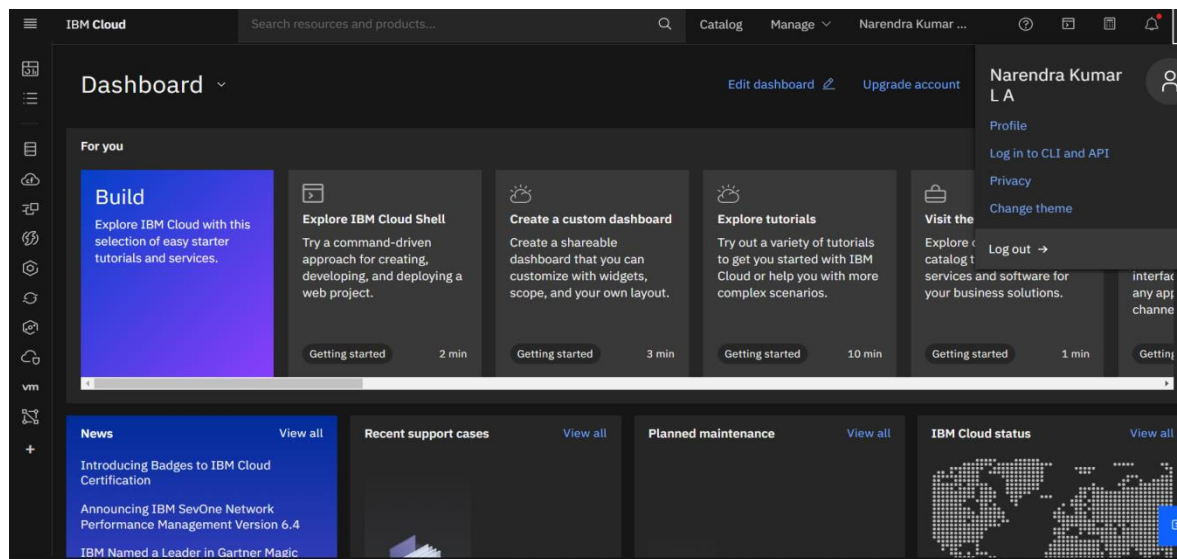


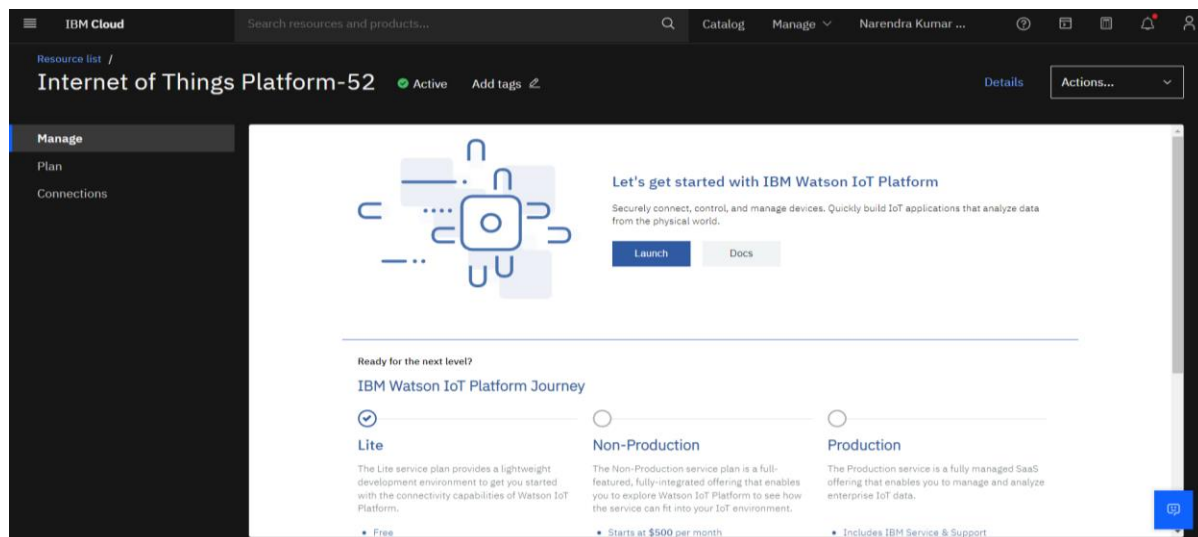
# Sprint-2-Creating new device in IBM Watson and workflows in Nodered

Team ID	PNT2022TMID33708
Project Name	Smart solutions for railways
Maximum Marks	20 marks

## Step1:Opening IBM Cloud



## Step-2:Opening Internet of Things Platform in IBM Cloud



### Step-3: Launching IBM Watson

IBM Watson IoT Platform

922519205070@smartinternz.com  
ID: d941ew

Browse Action Device Types Interfaces

Add Device +

## Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator ☒

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
> <input type="checkbox"/>	123456	Disconnected	abcd	Device	Nov 18, 2022 1:21 PM	
> <input type="checkbox"/>	558585	Disconnected	svrtbr	Device	Nov 18, 2022 11:26 AM	

Items per page 50 | 1-2 of 2 items

1 of 1 page < 1 >

1 Simulation running

### Step-4: Creating a new Device

IBM Watson IoT Platform

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ID: d941ew

Browse Action Device Types Interfaces

## Add Device

Identity Device Information Security Summary

Select a device type for the device that you are adding and give the device a unique ID.

Device Type Select or create a device type...

Device ID Enter Device ID

Cancel Next

## Browse Devices

All Devices Diagnose

1 Simulation running

## Step-5: Adding Device Type and Device Id

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The wizard is at the 'Identity' step, which is the first of four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is highlighted with a blue circle and the word 'Identity' below it. The instructions state: 'Select a device type for the device that you are adding and give the device a unique ID.' There are two input fields: 'Device Type' with the value 'arduino' and 'Device ID' with the value '112233'. At the bottom right of the wizard, there are 'Cancel' and 'Next' buttons. Below the wizard, the 'Browse Devices' section is visible, showing 'All Devices' and 'Diagnose' tabs, and a status indicator '1 Simulation running'.

IBM Watson IoT Platform

922519205070@smartinternz.com  
ID: d941ew

Browse Action Device Types Interfaces

### Add Device

Identity Device Information Security Summary

Select a device type for the device that you are adding and give the device a unique ID.

Device Type arduino

Device ID 112233

Cancel Next

### Browse Devices

All Devices Diagnose

1 Simulation running

## Step-6: Finish Creating a new Node

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Summary' step. The 'Summary' step is highlighted with a blue circle and the word 'Summary' below it. The instructions state: 'Verify that the following information is correct then select Finish'. The information displayed is: 'Device Type: arduino', 'Device ID: 112233', and 'Security Token: To be generated'. There is a 'View Metadata' button next to the Device ID. At the bottom right of the wizard, there are 'Back' and 'Finish' buttons. Below the wizard, the 'Browse Devices' section is visible, showing 'All Devices' and 'Diagnose' tabs, and a status indicator '1 Simulation running'.

IBM Watson IoT Platform

922519205070@smartinternz.com  
ID: d941ew

Browse Action Device Types Interfaces

### Add Device

Identity Device Information Security Summary

Verify that the following information is correct then select Finish

Device Type arduino

Device ID 112233

View Metadata

Security Token To be generated

Back Finish

### Browse Devices

All Devices Diagnose

1 Simulation running

## Step-7: Device created Successfully

The screenshot shows the IBM Watson IoT Platform interface. The top header displays the platform name and user information. The left sidebar contains navigation icons. The main content area is titled "Device Drilldown - 112233" and features a "Device Credentials" section. This section includes a list of credentials on the left and a detailed view on the right. The detailed view shows the Organization ID, Device Type, Device ID, Authentication Method, and Authentication Token. A warning message states that authentication tokens are non-recoverable. A link provides instructions on how to add credentials to the device. A status bar at the bottom indicates "1 Simulation running".

### Device Drilldown - 112233

#### 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	d941ew
Device Type	ardino
Device ID	112233
Authentication Method	use-token-auth
Authentication Token	T*2EFNm8Bp0psv0K-f

**Warning:** 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](#)

1 Simulation running

## Step-8: Stimulated the device

The screenshot shows the IBM Watson IoT Platform interface with the "Recent Events" tab selected. The main content area displays a table of recent events, including the event name, value, format, and last received time. The table shows five events, all with a value of {"randomNumber":X} and a format of json. The last received time for all events is "a few seconds ago". A status bar at the bottom indicates "1 Simulation running".

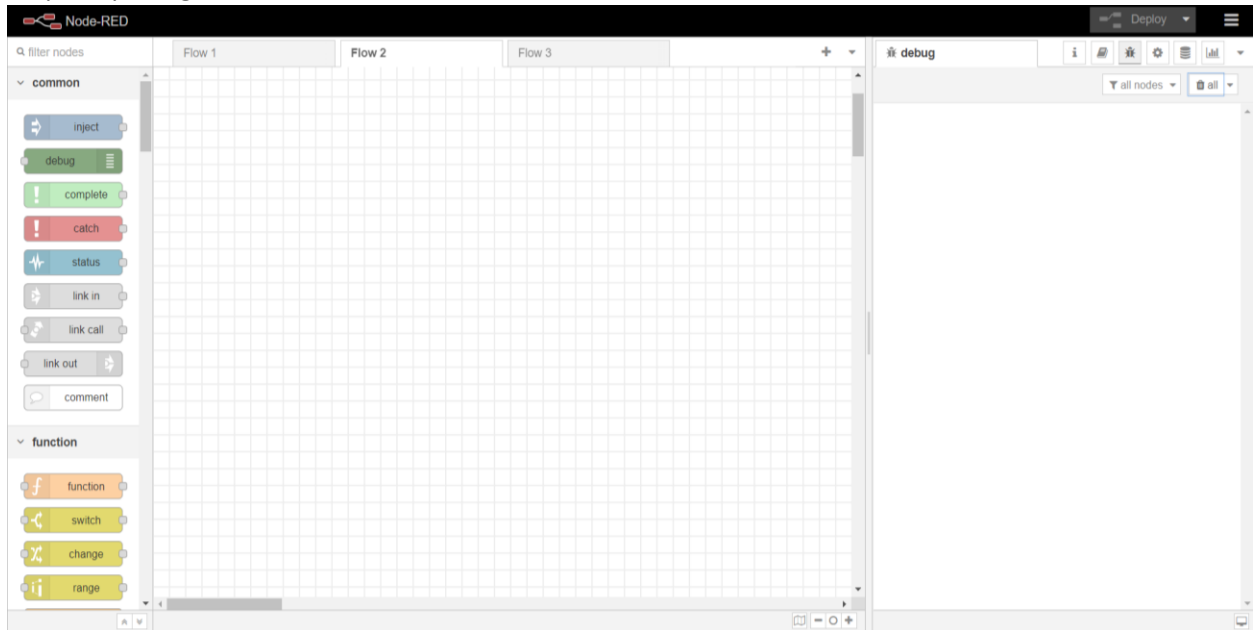
### Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

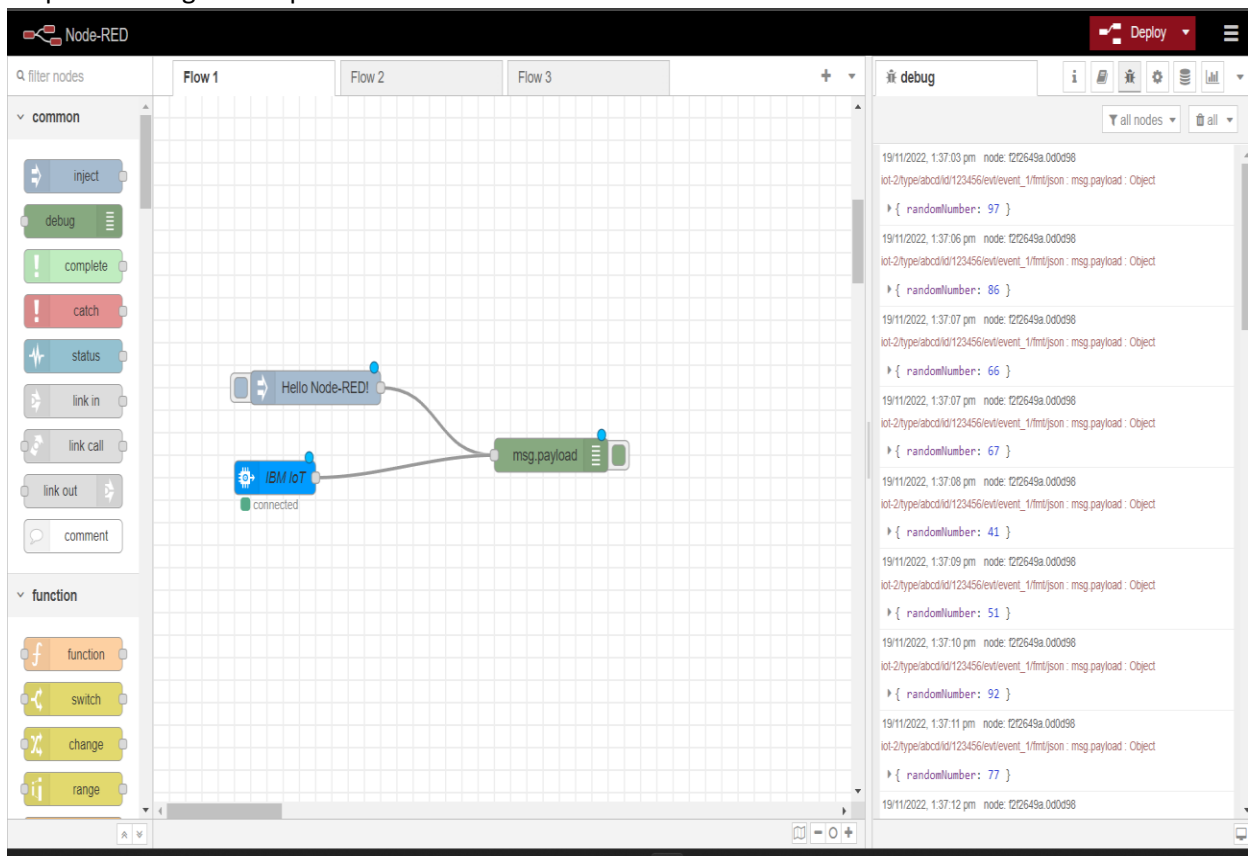
Event	Value	Format	Last Received
event_1	{"randomNumber":9}	json	a few seconds ago
event_1	{"randomNumber":70}	json	a few seconds ago
event_1	{"randomNumber":97}	json	a few seconds ago
event_1	{"randomNumber":8}	json	a few seconds ago
event_1	{"randomNumber":84}	json	a few seconds ago

1 Simulation running

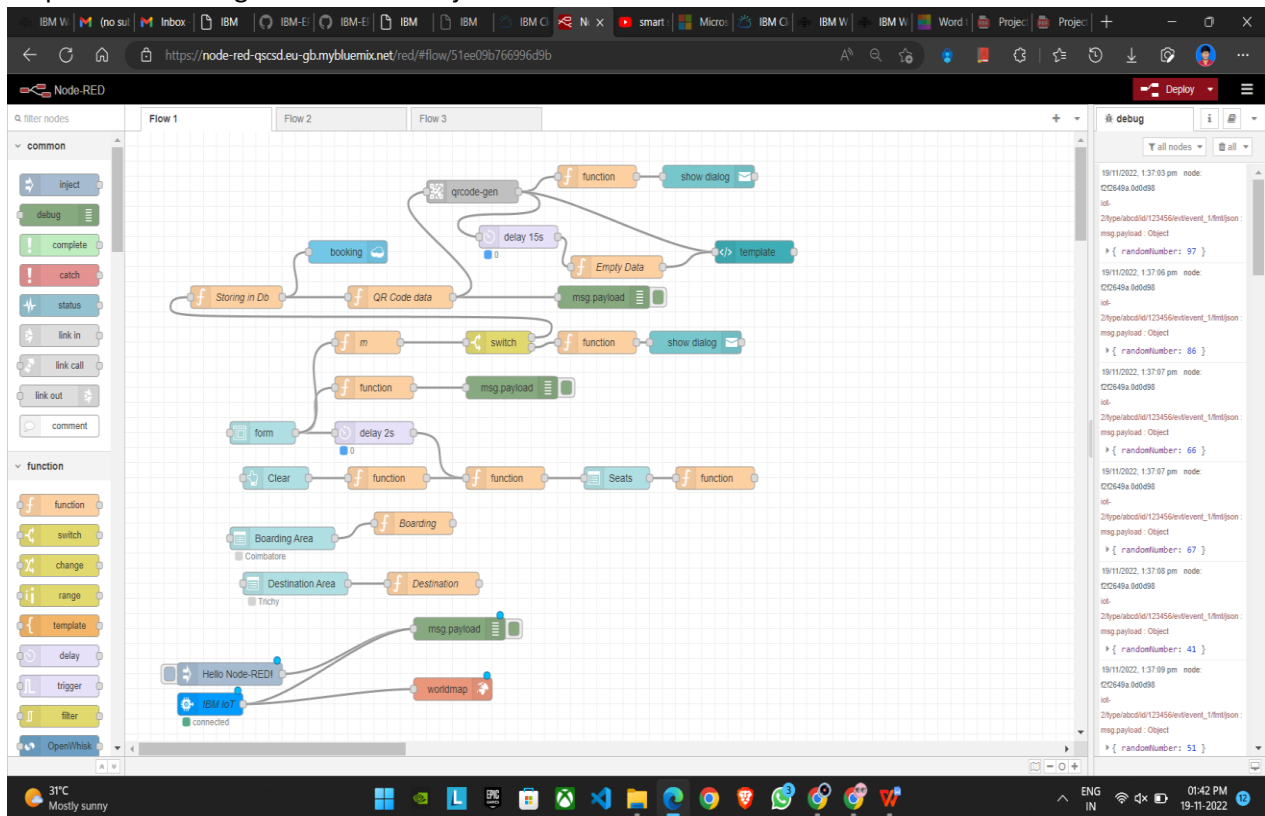
## Step-9:Opening Node Red



## Step-10:Getting the output from IBM Watson to NodeRed



### Step-11: Connecting flows for the Project



## Step-12: Displaying the Web UI using NodeRed

Home

IBM

Seats

Select option

Boarding Area

Coimbatore

Destination

Trichy

Name \*

Age \*

Mobile Number \*

SUBMIT

CANCEL

CLEAR