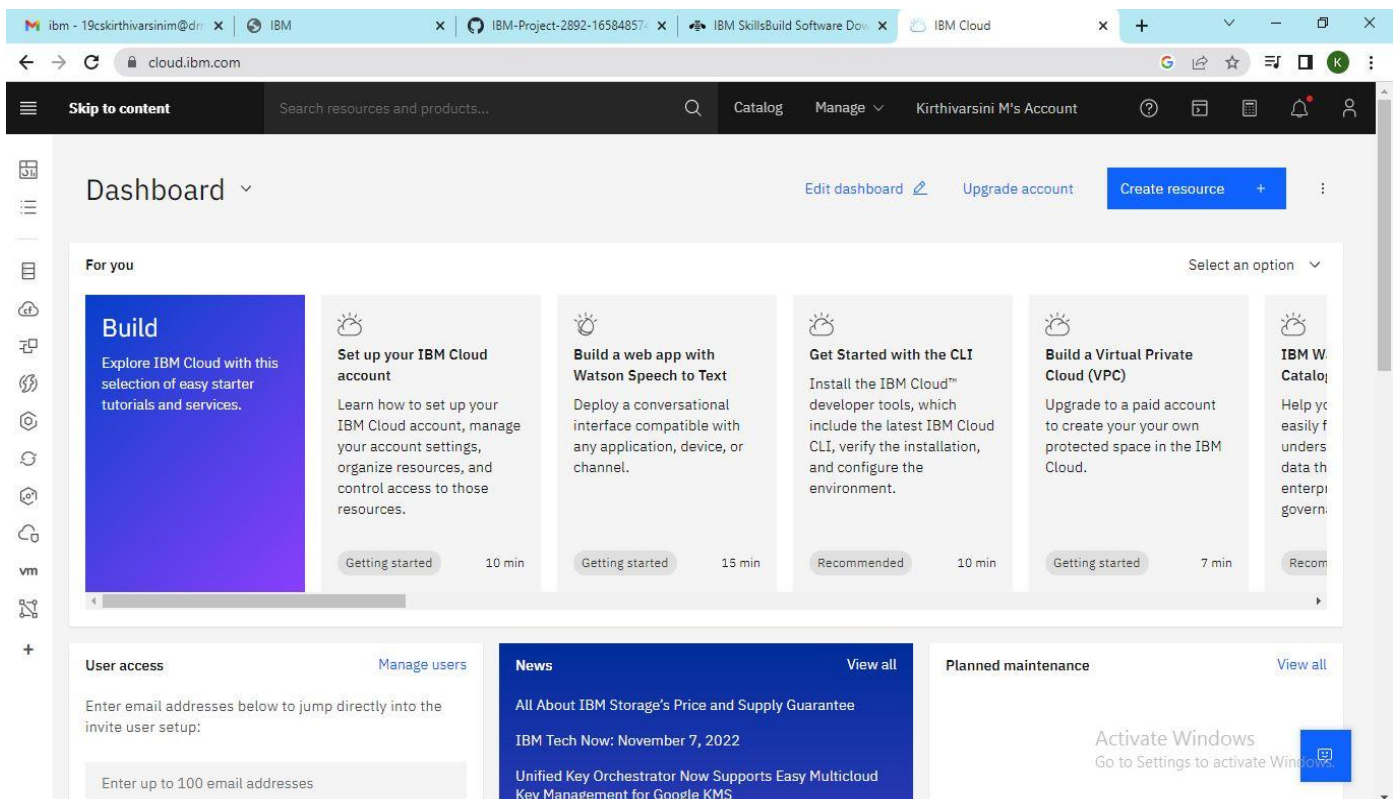


# SPRINT-1

Date	2 November 2022
Team ID	PNT2022TMID31318
Project Name	Smart solutions for railways
Maximum Marks	20 marks

## Step-1: Creating IBM Cloud:




The screenshot displays the IBM Cloud Dashboard in a web browser. The browser's address bar shows the URL 'cloud.ibm.com'. The dashboard's navigation bar includes a 'Skip to content' link, a search bar, and links for 'Catalog', 'Manage', and 'Kirthivarsini M's Account'. The main content area is titled 'Dashboard' and features a 'Create resource' button. Below the dashboard title, there is a 'For you' section with a 'Select an option' dropdown. This section contains several cards: 'Build' (a large blue card), 'Set up your IBM Cloud account' (10 min), 'Build a web app with Watson Speech to Text' (15 min), 'Get Started with the CLI' (10 min), 'Build a Virtual Private Cloud (VPC)' (7 min), and 'IBM Watson Catalog'. At the bottom of the dashboard, there are three sections: 'User access' with a 'Manage users' link, 'News' with a 'View all' link, and 'Planned maintenance' with a 'View all' link. The 'News' section includes a headline about IBM Storage's Price and Supply Guarantee and a date of November 7, 2022. The 'Planned maintenance' section includes a link to 'Activate Windows'.

## Step-2: Using IBM CLOUD services

services

Sell on IBM CloudCatalog settings




### IBM Cloud Monitoring

By IBM

Offers visibility into the performance and health of your infrastructure and apps, with in-depth troubleshooting and alerting.

Lite • Free • EU Supported • IAM-enabled • IBM supported




### IBM Cognos Dashboard Embedded

By IBM

Build and deliver visually stunning dashboards that accelerate your journey to a data driven business.

Lite • Free • IAM-enabled • IBM supported




### IBM Log Analysis

By IBM

IBM Log Analysis provides log collection and log search for IBM Cloud. Define alerts and design custom views to monitor application and system logs.

Lite • Free • EU Supported • IAM-enabled • IBM supported




### IBM Match 360 with Watson

By IBM

IBM Match 360 with Watson (Match 360) improves trust in AI pipelines by identifying duplicate records and providing reliable data about your customers, supplier...

Lite • Free • IAM-enabled • IBM supported




### Informix

By IBM

IBM Informix on Cloud helps businesses gain a trusted view of data in a hybrid computing environment.

IBM supported




### Internet of Things Platform

By IBM


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.

Lite • Free • IAM-enabled • IBM supported




### Internet Services

By IBM



### IPSec VPN

By IBM




### Key Protect

By IBM

<https://cloud.ibm.com>

### Step-3: Configure the IBM CLOUD service and creating IOT platform



Catalog /

## 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

Related links  
[Docs](#)  
[Terms](#)

Select a location

London (eu-gb) ▼

Select a pricing plan

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

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

The Lite service plan for Internet of Things Platform includes up to 500 registered devices, and a maximum of 200 MB each of data exchanged, data analyzed, and edge data analyzed per month.

#### Summary

**Internet of Things Platform** **Free**

Location: London

Plan: Lite

Service name: Internet of Things Platform-hy

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](#).

☐ I have read and agree to the following license agreements: [Terms](#)

Create

Add to estimate

**Step4: IBM Watson IOT platform acts as the mediator to connect the web application to IOT devices, hence launching IBM Watson IOT platform.**

Resource list /


## Internet of Things Platform-ma 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](#)

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**Ready for the next level?**

### IBM Watson IoT Platform Journey




#### Lite

The Lite service plan provides a lightweight development environment to get you started with the connectivity capabilities of Watson IoT Platform.



#### Non-Production

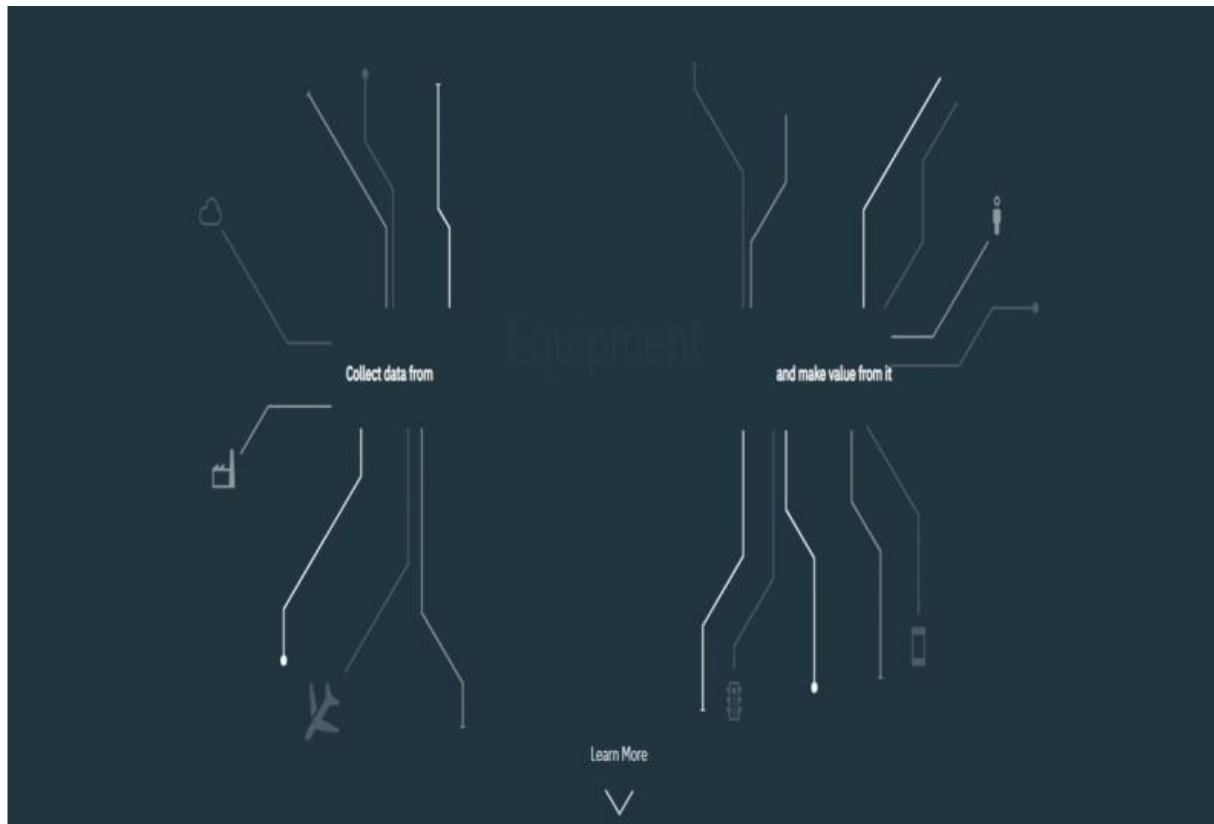
The Non-Production service plan is a full-featured, fully-integrated offering that enables you to explore Watson IoT Platform to see how the service can fit into your IoT environment.



#### Production

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

## Step 5: IBM Watson IOT platform is created



**Step 6: In order to connect the IOT device to the IBM cloud , create device in the IBM Watson IOT Platform and get the device credentials.**

The screenshot displays the 'Device Drilldown' interface for a device named 'MKSJ16'. On the left is a dark sidebar with navigation icons. The main content area has a top bar with a 'Back' button and the title 'Device Drilldown - MKSJ16'. Below this is a sidebar menu with options: 'Connection Information' (selected), 'Recent Events', 'State', 'Device Information', 'Metadata', 'Diagnostics', 'Connection Logs', and 'Device Actions'. The 'Connection Information' section shows details about the device's connection, including its ID, type, date added, creator, and status. Below this, the 'Recent Events' section shows a table of events, with one event listed. A status message '1 Simulation running' is visible at the bottom right of the events section.

← Back

### Device Drilldown - MKSJ16

**Connection Information**  
Basic connection information about this device.

Device ID	MKSJ16
Device Type	b11m3edevicetype
Date Added	Nov 3, 2022 12:42 PM
Added By	monishkumarts@student.autmd.edu.in
Connection Status	Disconnected

**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	{\"available seats\":76,\"longitude\":-95,\"latitude\":...	json	

1 Simulation running

‘Step-7: Connect the device and start simulation

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← Back

Device Drilldown - MKSJ16

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

Recent Events

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

Event	Value	Format
event_1	{"available seats":60,"longitude":-14,"latitude":...	jsc
event_1	{"available seats":8,"longitude":-178,"latitude":...	jsc
event_1	{"available seats":45,"longitude":-34,"latitude":...	jsc
event_1	{"available seats":47,"longitude":-111,"latitude":...	jsc
event_1	{"available seats":17,"longitude":21,"latitude":-...	jsc

State

This table shows a list of data points that are reported by this device.

Device Type: b11m3edevicetype

Events 1 

New event type +

Event type name event\_1 

Send

Schedule

20 Every Minute

Payload

Specify the event payload in the editor window or by uploading a [CSV file](#).

0 {

1 "available seats": random(0, 100)

2 "longitude": random(-180, 180)

3 "latitude": random(-90, 90)

4 }

5

Upload a CSV file

Cancel

Save

ng.

**SIMULATION:**

The simulation shows the available seats, longitude and latitude.

