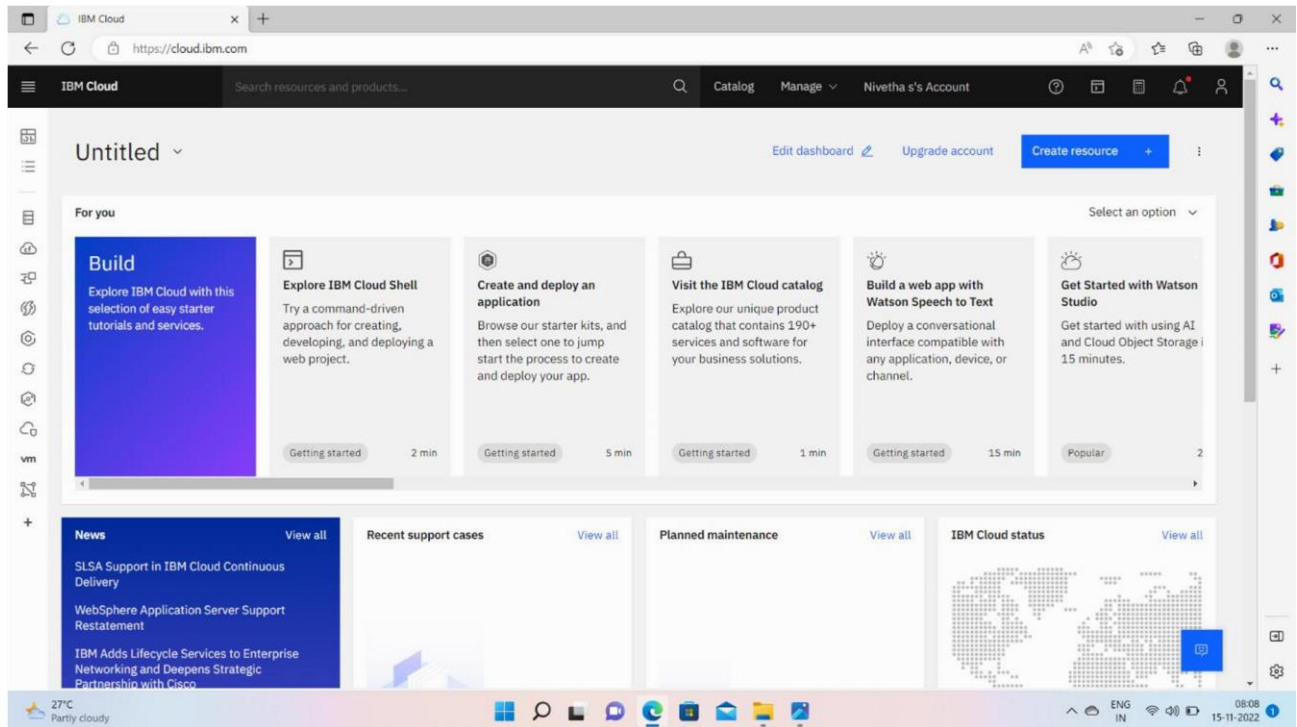


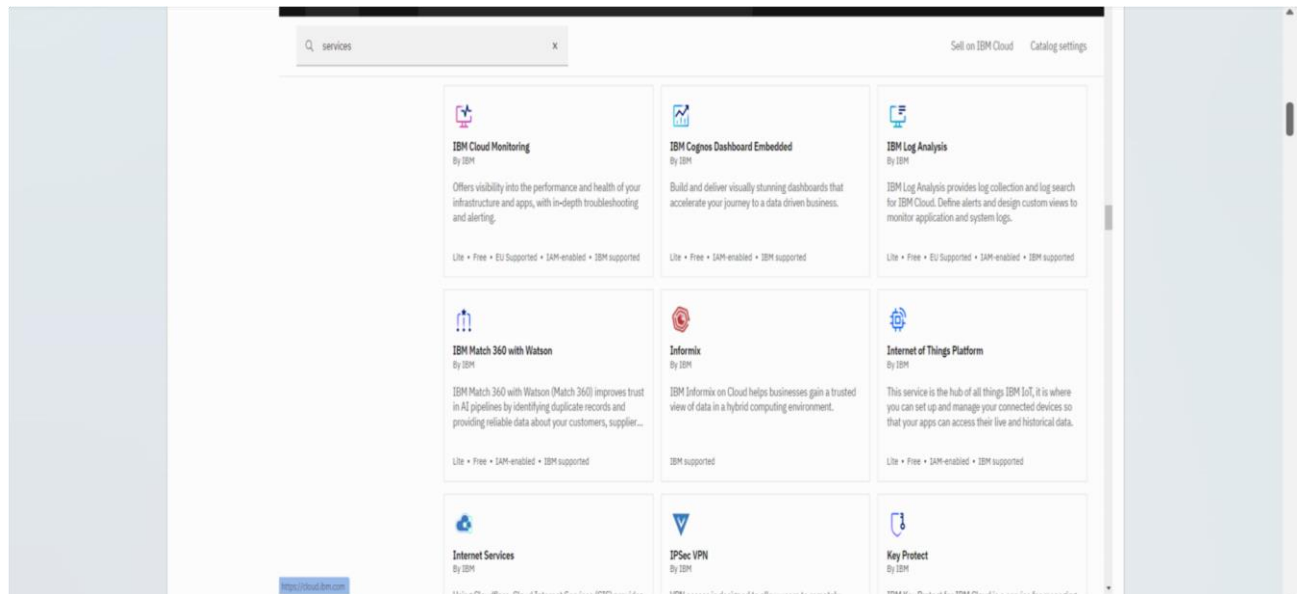
IOT WATSON CREATION

Date	29 October 2022
Team ID	PNT2022YMID38248
Project Name	Smart solutions for railways

Step-1:Creating IBM Cloud



Step-2:Using IBM CLOUD services



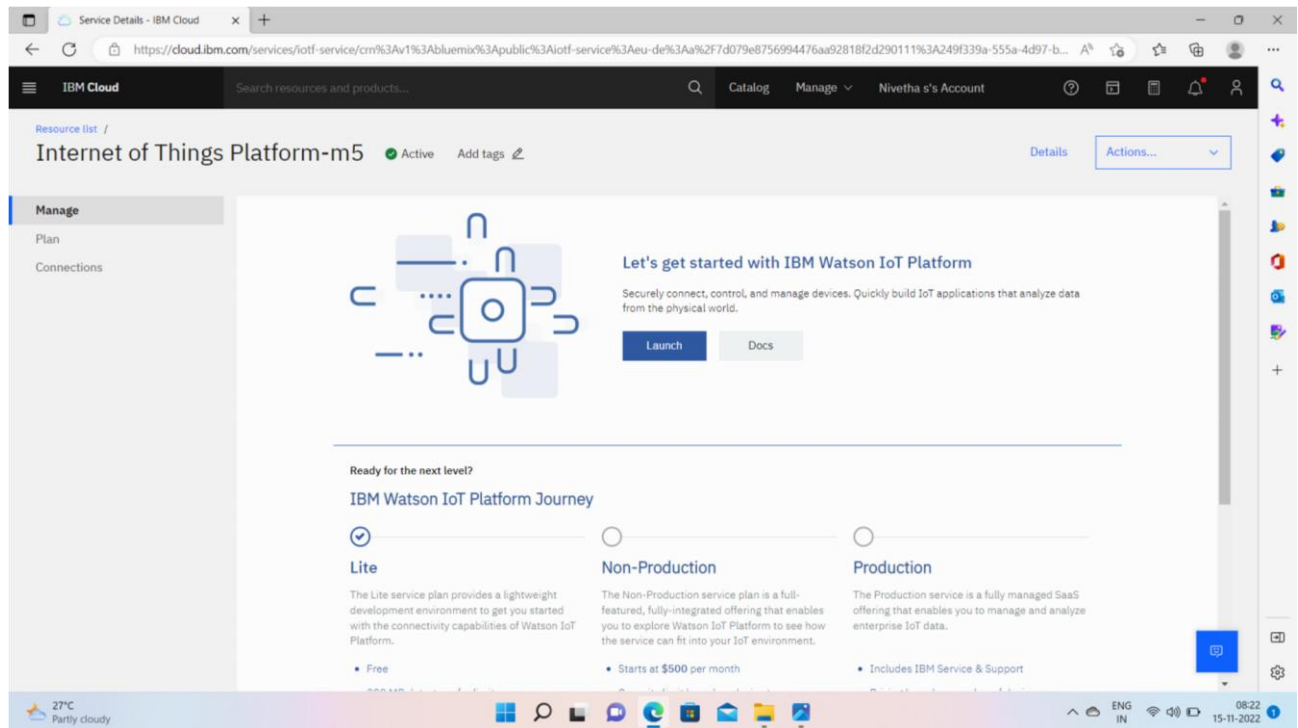
Step-3: Configure the IBM CLOUD service and creating IOT platform

The screenshot displays the IBM Cloud catalog page for the Internet of Things Platform. The page is titled "Internet of Things Platform" and includes a description: "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." The "Create" tab is active, showing a "Select a location" dropdown menu with "London (eu-gb)" selected. Below this, there is a "Select a pricing plan" section with a table of available plans.

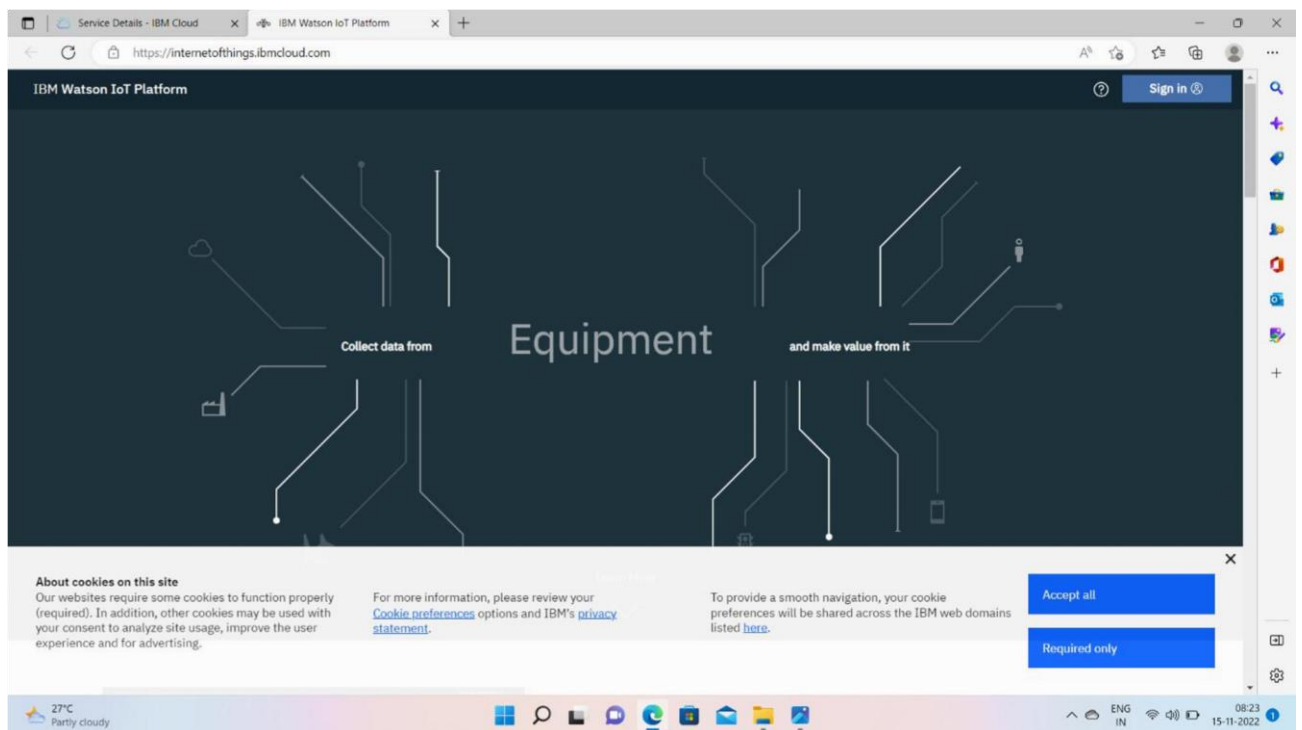
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free

A summary panel on the right side of the page shows the service details: "Internet of Things Platform" (Free), Location: London, Plan: Lite, Service name: Internet of Things Platform-41, and Resource group: Default. A warning message states: "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." Below the warning, there is a checkbox for "I have read and agree to the following license agreements:" with a "Terms" link, and buttons for "Create" and "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.



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 IBM Watson IoT Platform interface. The browser address bar shows the URL: <https://swbkb4.internetofthings.ibmcloud.com/dashboard/devices/drilldown/iot:2002?returnTo=/devices/browse>. The page title is "Device Drilldown - 2002". On the left, a sidebar menu lists options: Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The main content area is divided into two sections. The top section, "Connection Information", provides details about the device: Device ID (2002), Device Type (iot), Date Added (Nov 4, 2022 12:41 PM), Added By (nivethaselvaraj111@gmail.com), and Connection Status (Disconnected). It also shows the last connected time (Nov 4, 2022 1:20 PM), client address (145.40.94.93 Insecure), duration (2 minutes), and data transferred (2.7 KB). The bottom section, "Recent Events", includes a table with columns for Event, Value, Format, and Last Received. The Windows taskbar at the bottom shows the system clock as 08:35 on 15-11-2022.

Event	Value	Format	Last Received
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Step-7: Connect the device and start simulating.

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← Back

Device Drilldown - MKS316

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 this device.

Event	Value	Time
event_1	("available seats">66,"longitude">-14,"latitude">...	js...
event_1	("available seats">6,"longitude">-176,"latitude">...	js...
event_1	("available seats">45,"longitude">-34,"latitude">...	js...
event_1	("available seats">47,"longitude">-111,"latitude">...	js...
event_1	("available seats">17,"longitude">21,"latitude">...	js...

State

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

Device Type: b11m3edevicetype

Events

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(0, 90)

4 }

5

Upload a CSV file

Cancel

Save

SIMULATION:

The simulation shows the available seats , longitude and latitude

The screenshot shows a web application interface for a device named 'MKSJ16'. The sidebar on the left contains navigation links: 'Back', 'Device Information', 'Recent Events', 'State', 'Connection Information', 'Metadata', 'Diagnostics', 'Connection Logs', and 'Device Actions'. The main content area is titled 'Device Drilldown - MKSJ16' and is divided into two sections: 'Recent Events' and 'State'.

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": 5, "longitude": 37, "latitude": ...}	json	a few seconds ago
event_1	{"available seats": 72, "longitude": 223, "latitude": ...}	json	a few seconds ago
event_1	{"available seats": 66, "longitude": 40, "latitude": ...}	json	a few seconds ago
event_1	{"available seats": 15, "longitude": 130, "latitude": ...}	json	a few seconds ago
event_1	{"available seats": 105, "longitude": 24, "latitude": ...}	json	a few seconds ago

State

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

1 Simulation running