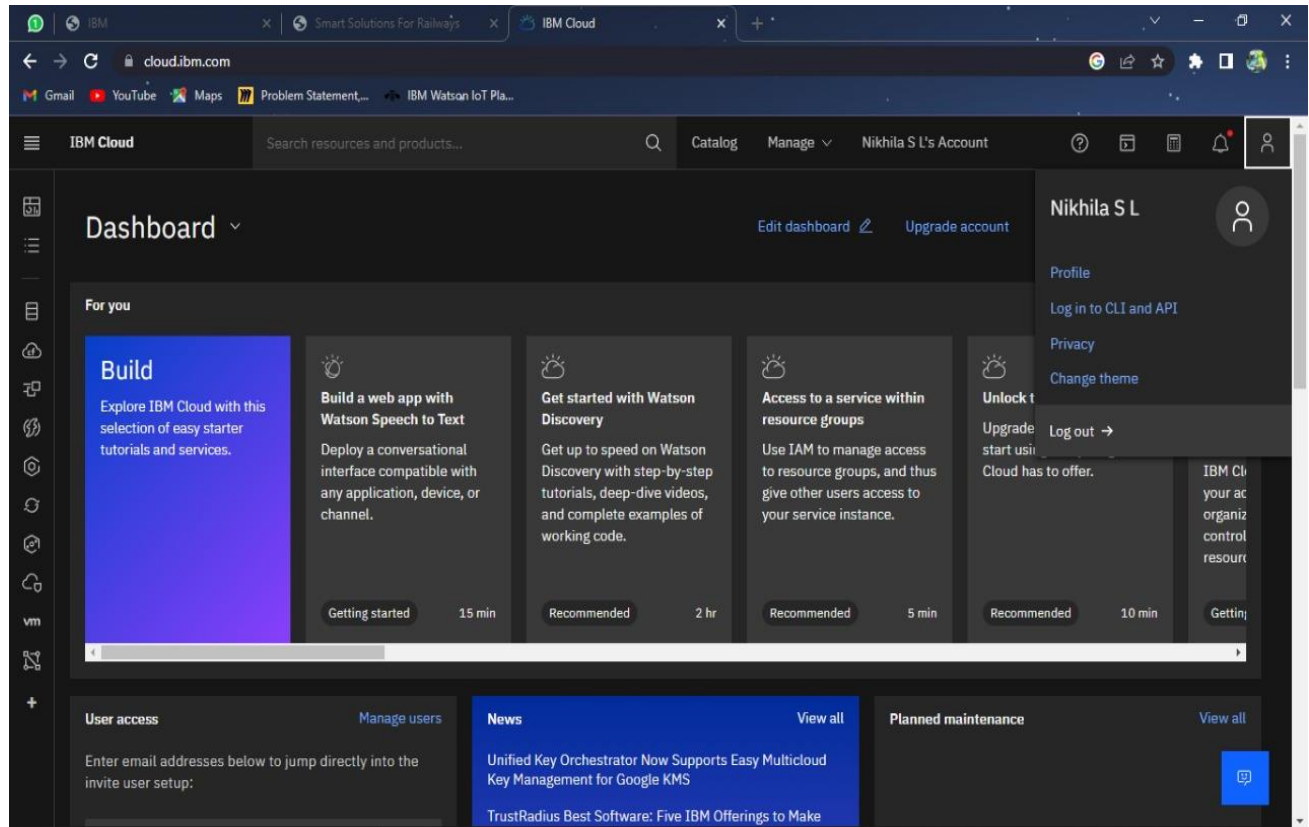


## IBM WATSON PLATFORM IOT AND DEVICE

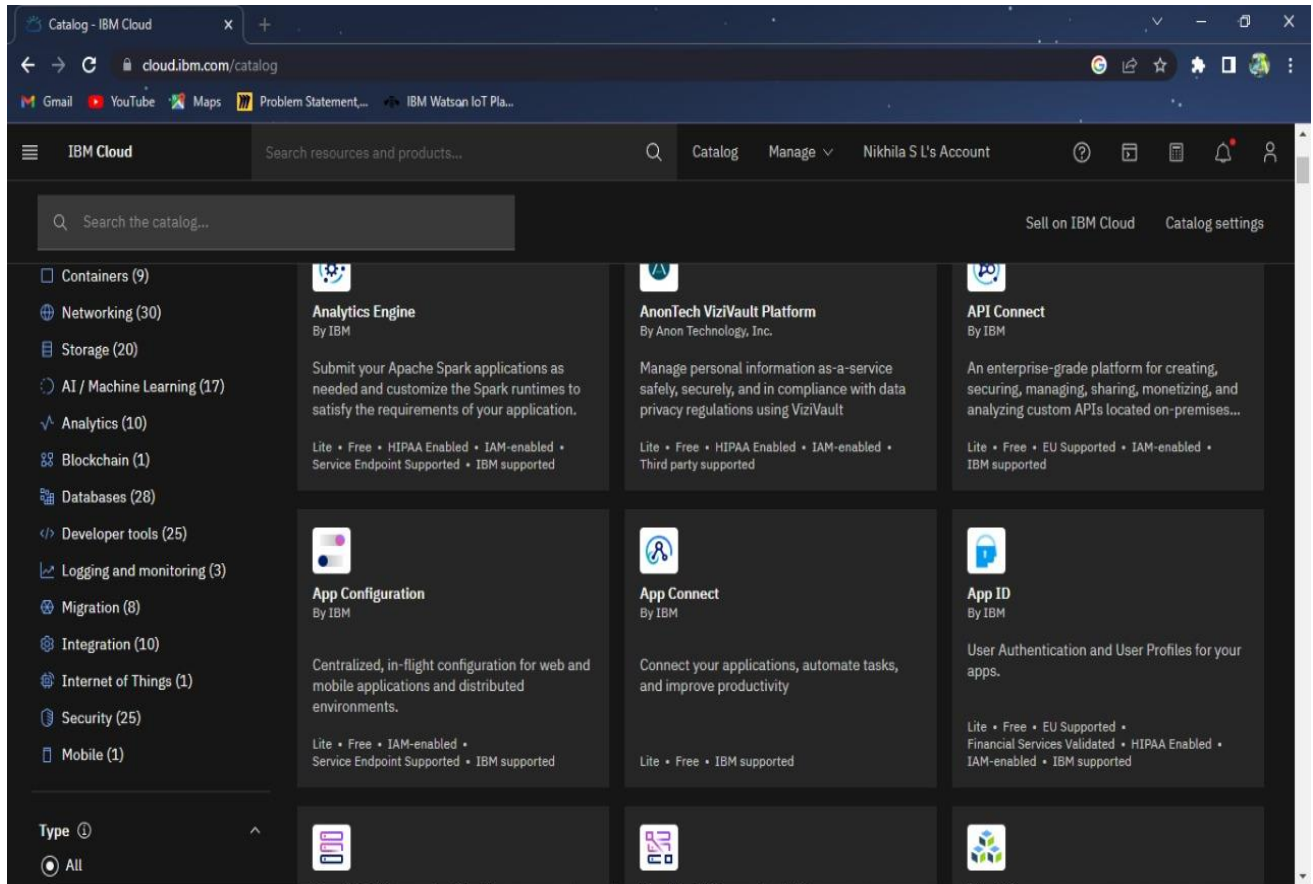
TEAM ID	PNT2022TMID42348
TEAM MEMBERS	Nikhila. S.L(Team lead) Preethiha.D(Team member 1) Kishok kumar. S(Team member 2) Raguram.S(Team member 3)
PROJECT NAME	Smart Solution For Railways

Nikhila. S. L (Team lead)

# STEP 1: CREATING IBM Cloud



## STEP 2: USING IBM CLOUD SERVICES



## STEP 3 : CONFIGURE THE IBM CLOUD SERVICE AND CREATING IOT PLATFORM

Internet of Things Platform - IBM x

cloud.ibm.com/catalog/services/internet-of-things-platform

IBM Cloud Search resources and products... Catalog Manage Nikhila S L's Account

### 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 analyzed and edge data analyzed	Free

Summary

Internet of Things Platform Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform

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

## STEP 4 : IBM WATSON IOT PLATFORM ACTS AS THE MEDIATOR TO CONNECT THE WEB APPLICATION TO IOT DEVICES L, HENCE LAUNCHING IBM WATSON IOT PLATFORM.

The screenshot displays the IBM Cloud console interface for the IBM Watson IoT Platform. The browser address bar shows the URL: `cloud.ibm.com/services/iotf-service/crm%3Av1%3Abluemix%3Apublic%3Aiotf-service%3Aeu-de%3Aa%2F14553a92d96d4499923d4be693320c90%3A4cf0087...`. The console header includes the IBM Cloud logo, a search bar, and navigation links for Catalog, Manage, and the user account (Nikhila S L's Account). The main content area shows the 'Internet of Things Platform-xz' resource, which is 'Active'. A sidebar on the left contains links for Manage, Plan, and Connections. The main content area features a 'Let's get started with IBM Watson IoT Platform' section with a 'Launch' button and a 'Docs' button. Below this, a 'Ready for the next level?' section titled 'IBM Watson IoT Platform Journey' shows a progress bar with three stages: Lite (checked), Non-Production, and Production. The Lite stage is described as a lightweight development environment, Non-Production as a full-featured, fully-integrated offering, and Production as a fully managed SaaS offering.

Resource list /

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

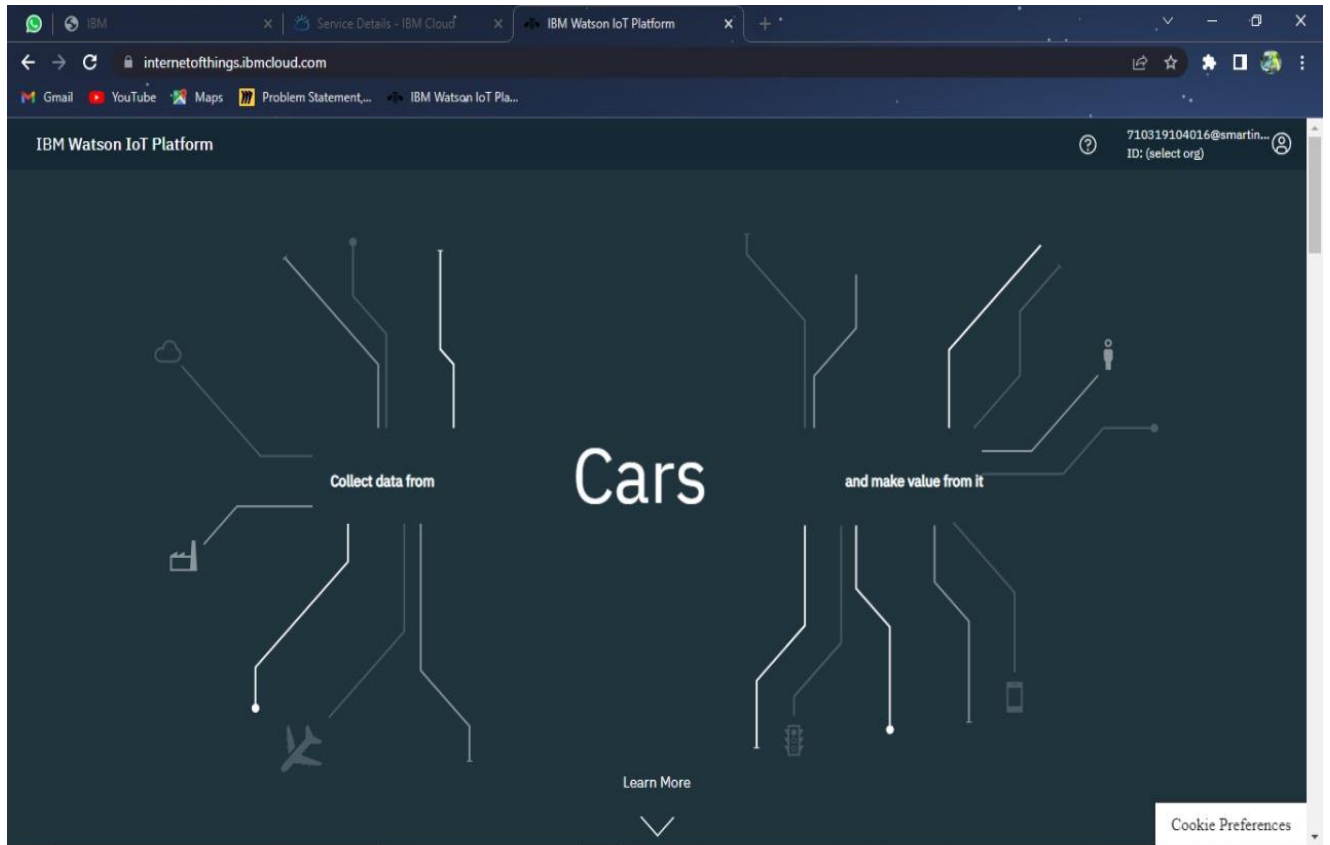
---

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

## 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 dashboard. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar labeled 'Search by Device ID' is present. A table lists devices, with one device named 'json' shown in detail. The device's status is 'Disconnected', and it was added on '14 Nov 2022 9:07 PM'. A sidebar on the left contains various icons for navigation. The bottom of the page shows pagination information: 'Items per page 50' and '1-1 of 1 item'.

Device ID	Status	Device Type	Class ID	Date Added
json	Disconnected	Test_1	Device	14 Nov 2022 9:07 PM

Identity	Device Information	Recent Events	State	Logs
Device ID	json			
Device Type	Test_1			
Date Added	14 Nov 2022 9:07 PM			
Added By	nikhilasisa5@gmail.com			
Connection Status	Disconnected			

## STEP 7: CONNECT THE DEVICE AND START SIMULATING.

The screenshot displays the IBM Watson IoT Platform interface. The main dashboard shows a table of devices with columns for Device ID, Status, and Device Type. A device named 'Test\_1' is listed with a status of 'Disconnected' and a device type of 'demo\_123'. Below the table, there are tabs for Identity, Device Information, Recent Events, and State. The 'Recent Events' tab is active, showing a list of events with columns for Event and Value. The events listed are 'event\_2' with values like '{"randomNumber":95,"sampleObject":{"xcord":...'. A modal window is open on the right, titled 'Device Type: demo\_123'. It contains a section for 'Events' with a 'New event type' button and a 'Send' button. Below this, there is a 'Schedule' section with a dropdown set to 'Every Minute'. The 'Payload' section is open, showing a JSON structure for an event payload. The payload is a JSON object with a 'randomNumber' field and a 'sampleObject' field containing 'xcord' and 'ycord' values. The 'xcord' value is '32.514' and the 'ycord' value is '151.521'. The modal window also has 'Cancel' and 'Save' buttons at the bottom.

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Search by Device ID

Device ID	Status	Device Type
Test_1	Disconnected	demo_123

Identity Device Information Recent Events State

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

Event	Value
event_2	{"randomNumber":95,"sampleObject":{"xcord":...
event_2	{"randomNumber":43,"sampleObject":{"xcord":...
event_2	{"randomNumber":53,"sampleObject":{"xcord":...
event_2	{"randomNumber":74,"sampleObject":{"xcord":...

Device Type: demo\_123

Events 2 New event type

Event type name event\_2 Send

Schedule 1 Every Minute

Payload Specify the event payload in the editor window or by uploading a CSV file.

```
0 {
1   "randomNumber": random(0, 100),
2   "sampleObject": {
3     "xcord": 32.514,
4     "ycord": 151.521
5   }
6 }
```

Cancel Save



## SIMULATION:

THE SIMULATION SHOWS THE AVAILABLE SEATS, LONGITUDE AND LATITUDE.

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes the IBM Cloud logo and the text 'Service Details - IBM Cloud'. The main header shows the user's email '710319104021@smartinternz.com' and ID 'sflk2sq'. The left sidebar contains various icons for navigation. The main content area is titled 'Browse' and shows a list of devices. The 'Recent Events' tab is selected, displaying a table of events. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. The events are simulated and show random numbers. A status bar at the bottom indicates '1 Simulation running'.

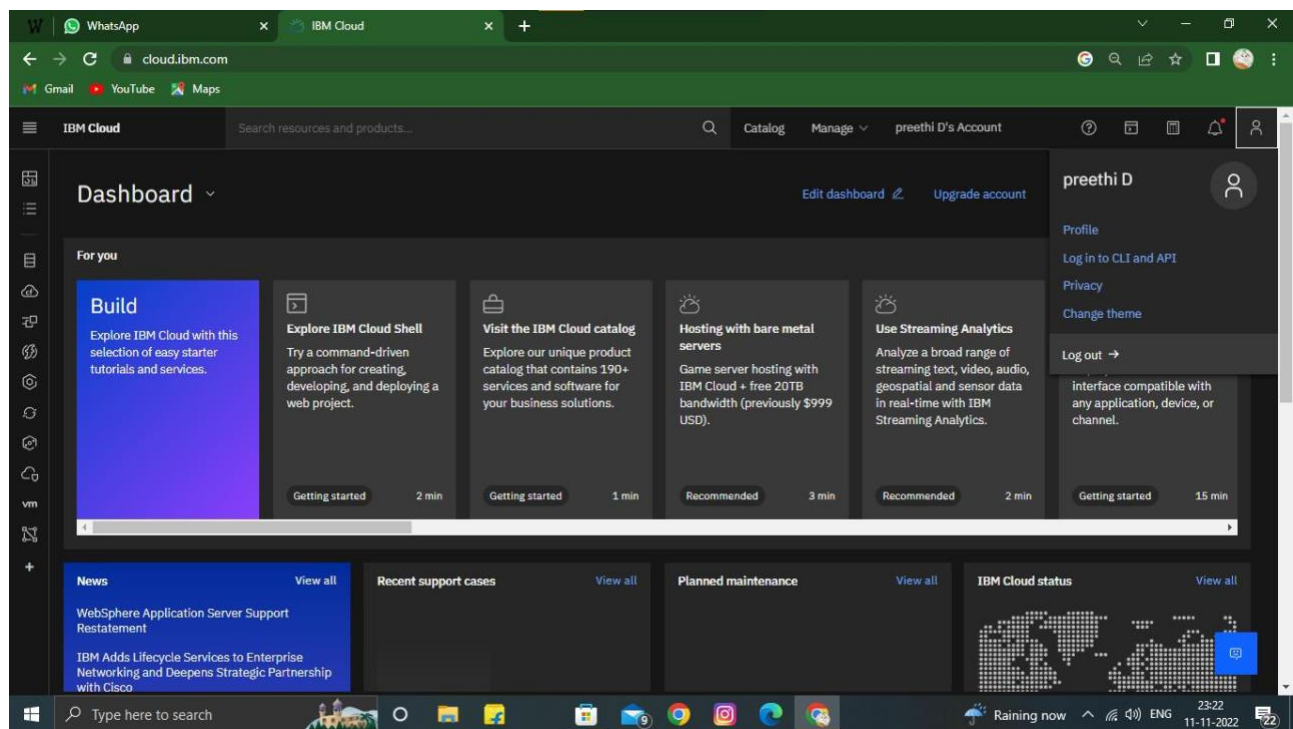
Event	Value	Format	Last Received
event_1	{"randomNumber":78}	json	a few seconds ago
event_1	{"randomNumber":5}	json	a minute ago
event_1	{"randomNumber":24}	json	a minute ago
event_1	{"randomNumber":59}	json	2 minutes ago

Items per page: 50 | 1-1 of 1 item

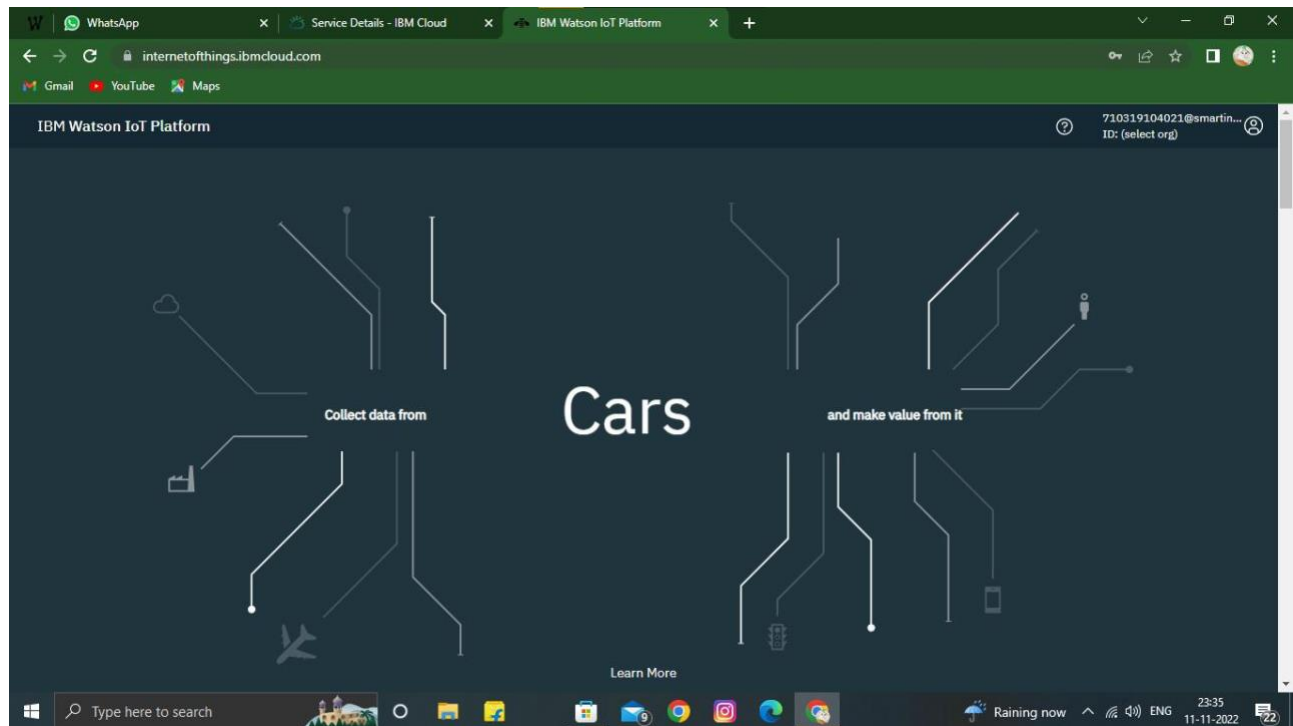
1 Simulation running

Preethiha. D (Team member 1)

## CREATING IBM Cloud:

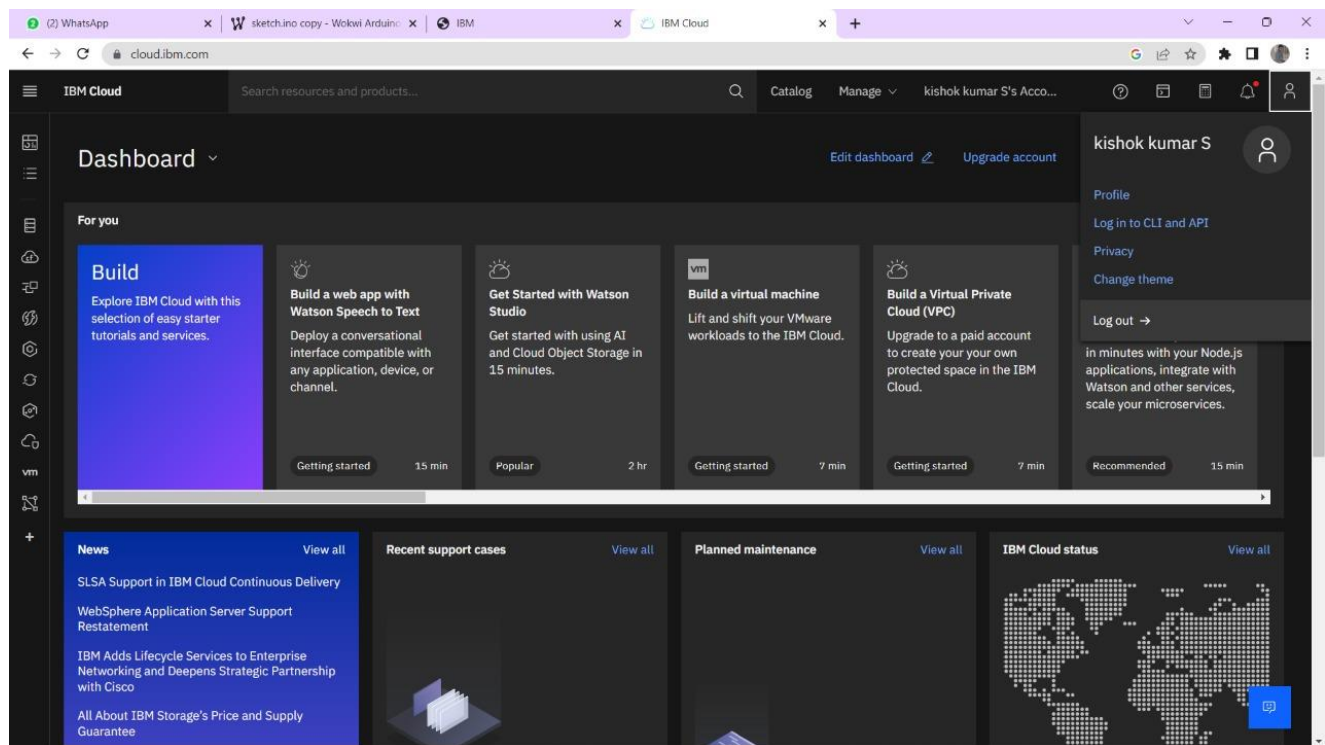


# IBM WATSON IOT PLATFORM IS CREATED:

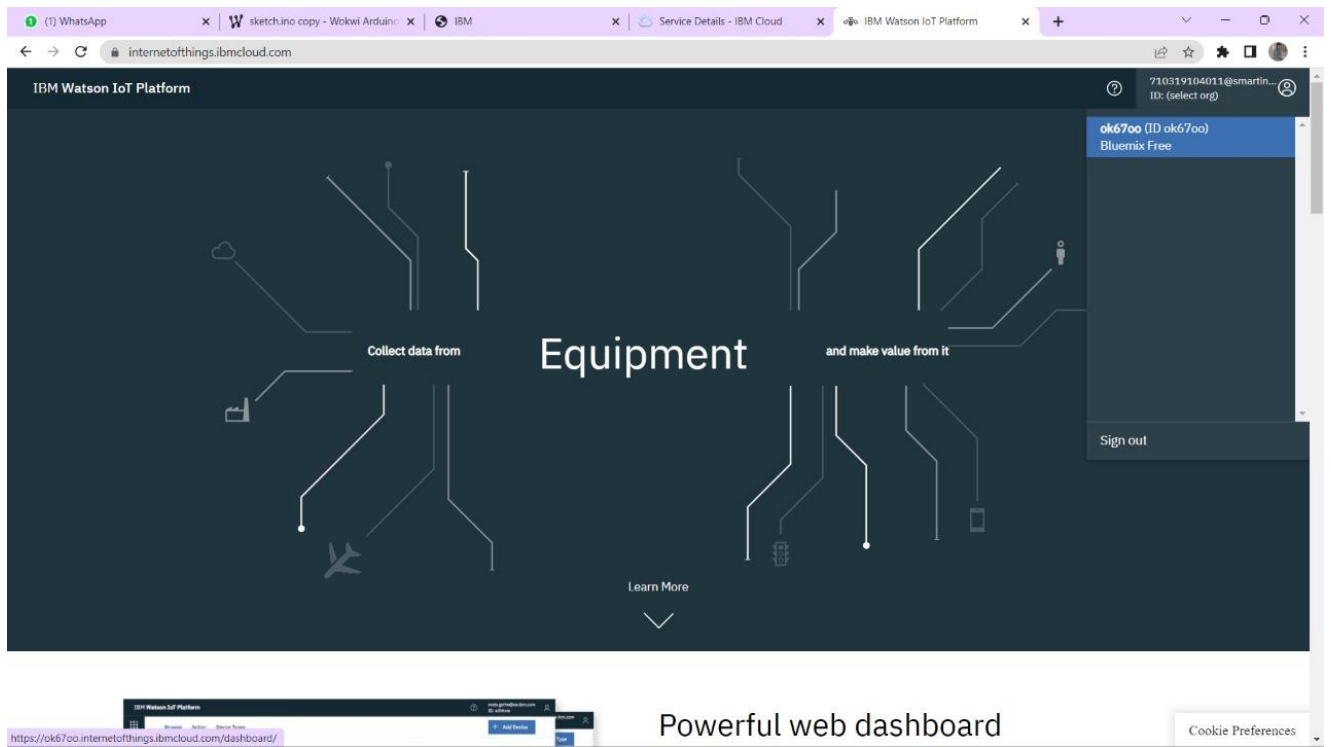


Kishok kumar. S( Team member 2)

## CREATING IBM Cloud:

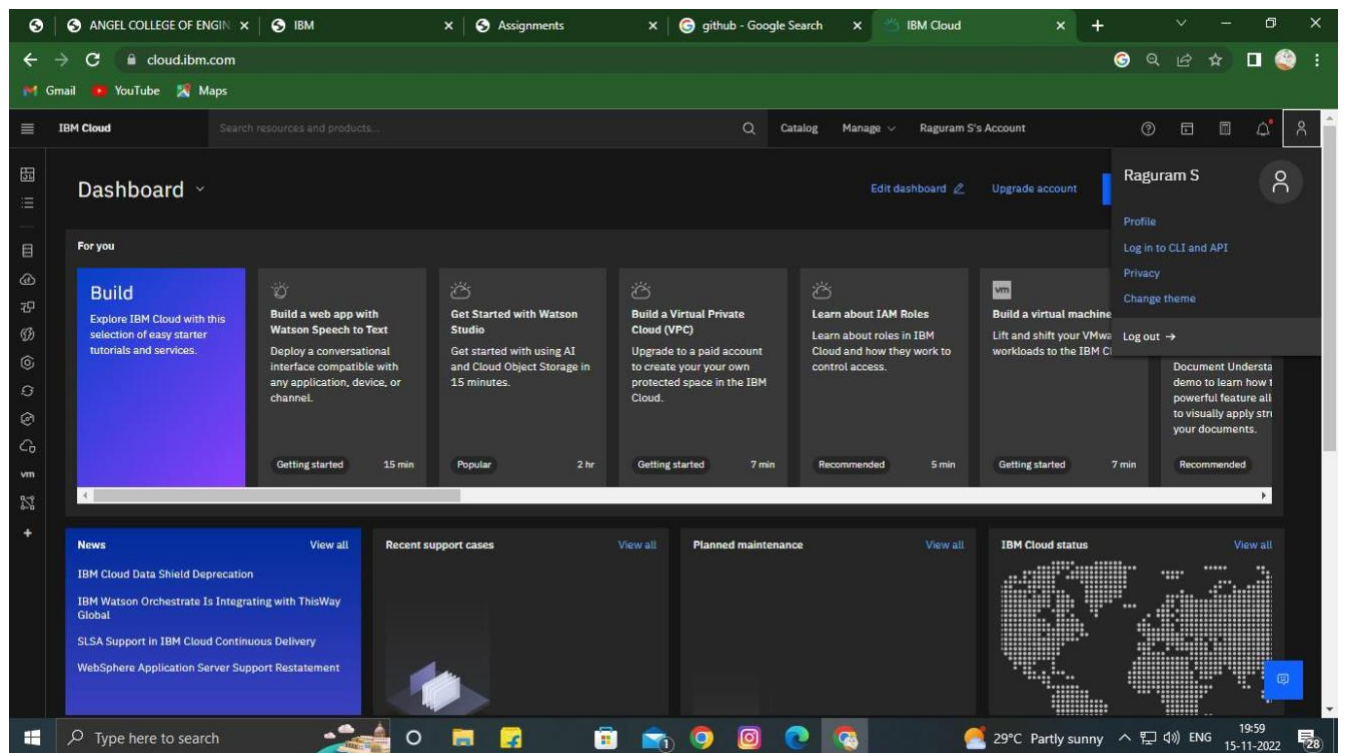


# IBM WATSON IOT PLATFORM IS CREATED:



Raguram. S(Team member 3)

## CREATING IBM Cloud:



# IBM WATSON IOT PLATFORM IS CREATED:

