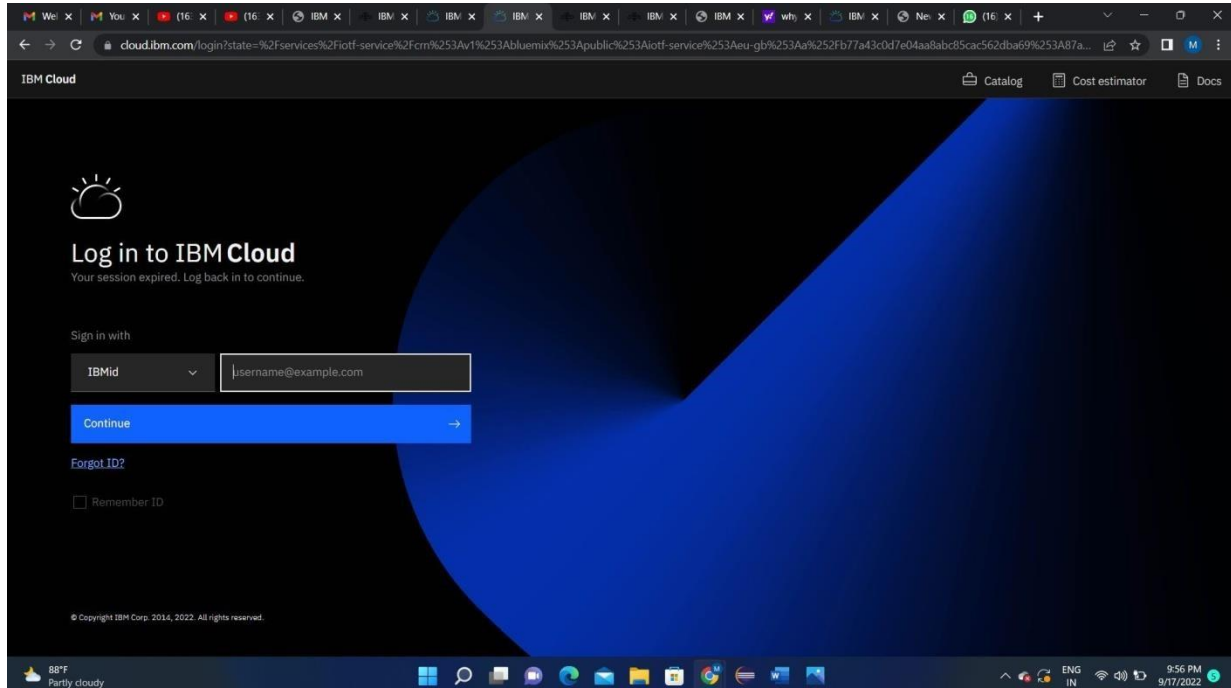


CREATE IBM WATSON IOT PLATFORM AND DEVICE

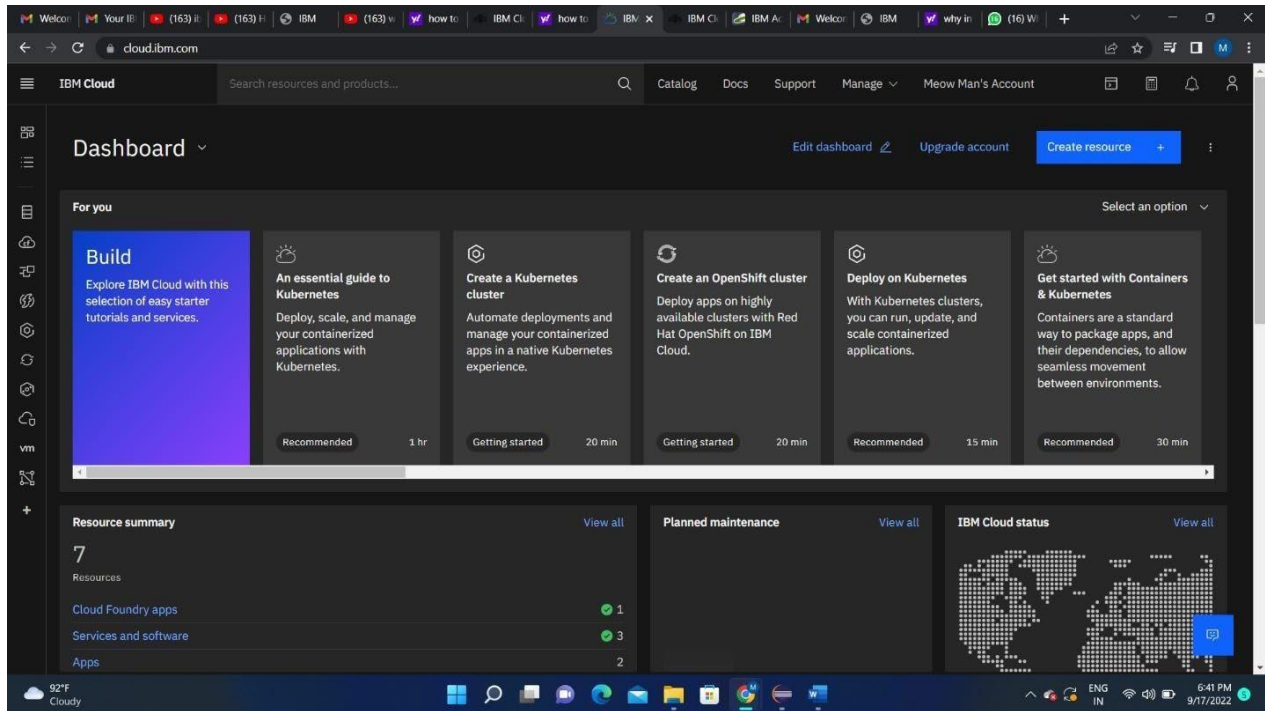
Date	07-11-2022
Team ID	PNT2022TMID01089
Project Name	Smart Solutions For Railways
Maximum Marks	4 Marks
Submitted By	Naveen G Prasanna Venkatesh S Nandha kumar S Kamalesh S

STEPS:

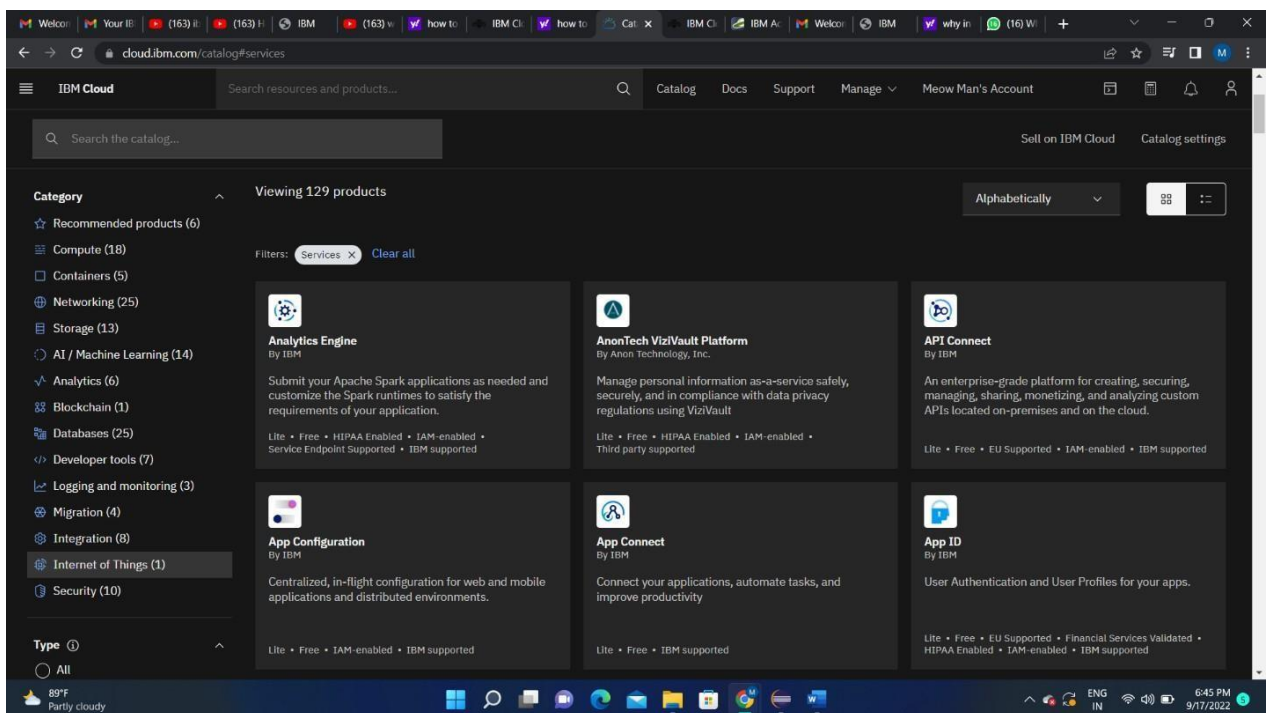
1. Firstly create an IBM cloud account with IBMid and password



2. Home page of IBM cloud



3. Click on the catalog on the top



Click on IoT in the category mentioned

IBM Cloud

Search resources and products...

Catalog Docs Support Manage Meow Man'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

Updated on: 08/15/2022

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

Select a location: Dallas (us-south)

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

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.

The Lite plan services are deleted after 30 days of inactivity.

Summary

Internet of Things Platform Free

Location: Dallas

Plan: Lite

Service name: Internet of Things Platform-bb

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

4. If already a lite is present delete it else u can't create another

IBM Cloud

Search resources and products...

Catalog Docs Support Manage Meow Man's Account

Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

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

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.

The Lite plan services are deleted after 30 days of inactivity.

Configure your resource

Service name: Internet of Things Platform-bb

Select a resource group: Default

Tags: env:dev, version-1

Access management tags: access:dev, proj:version-1

Create

Add to estimate

Summary

Internet of Things Platform Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-bb

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](#)

5.

Enter the location and in the configure your resource type the service name and choose the plan, tick the agree with agreements and then click on create

The screenshot shows the IBM Cloud catalog page for the 'Internet of Things Platform'. The 'Create' tab is active, displaying a 'Select a location' dropdown menu with 'Dallas (us-south)' selected. Below this, a 'Select a pricing plan' section shows a table with one plan, 'Lite', which is free. The table lists features such as up to 500 registered devices and 200 MB of data metric. A summary panel on the right shows the service name 'Internet of Things Platform-2w' and a warning about existing Lite plan instances. A 'Create' button is visible at the bottom right.

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

The screenshot shows the 'Configure your resource' section of the IBM Cloud catalog page for the 'Internet of Things Platform'. The 'Lite' plan is selected. The 'Service name' field is filled with 'Internet of Things Platform-child_safety'. The 'Resource group' is set to 'Default'. The 'Access management tags' field is filled with 'Examples: access:dev, proj:version-1'. A summary panel on the right shows the service name 'Internet of Things Platform' and a 'Create' button.

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

6.

Internet of Things Platform Child_safety will be created, where there are different options like manage, plan, and connection (manage is for launch, Plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IoT with other services)

The screenshot shows the IBM Cloud IoT Platform console. The left sidebar has a 'Manage' tab selected, with sub-tabs for 'Plan' and 'Connections'. The main content area displays a 'Let's get started with IBM Watson IoT Platform' section with a 'Launch' button. Below this is a 'Ready for the next level?' section titled 'IBM Watson IoT Platform Journey' showing three stages: 'Lite' (checked), 'Non-Production', and 'Production'. The 'Lite' stage is described as a lightweight development environment. The 'Non-Production' stage is a full-featured offering. The 'Production' stage is a fully managed SaaS offering. A status bar at the bottom shows '89°F Partly cloudy' and the time '7:28 PM 9/17/2022'.

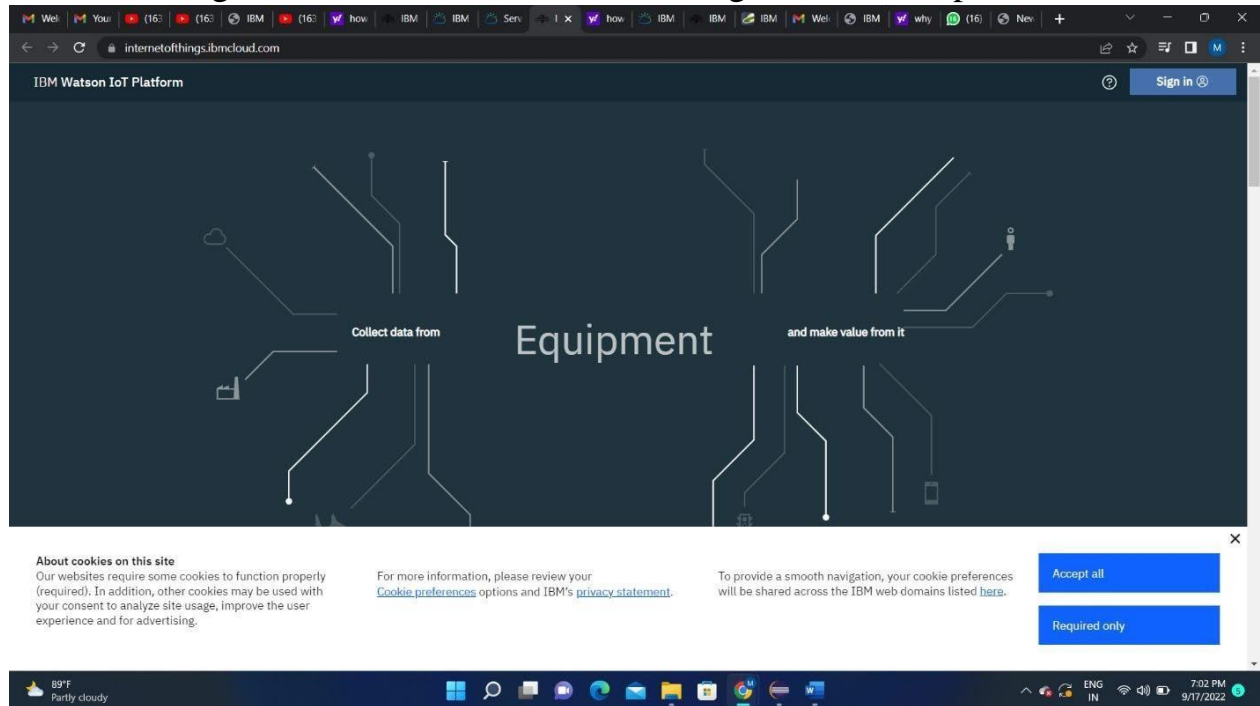
The screenshot shows the IBM Cloud IoT Platform console with the 'Plan' tab selected. The main content area displays the 'Current plan' as 'Lite'. The 'Features' section lists: 'Includes up to 500 registered devices, and a maximum of 200 MB of each data metric', 'Maximum of 500 registered devices', 'Maximum of 500 application bindings', and 'Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed'. The 'Current usage' section shows 'N/A' and a note: 'Lite plan services are deleted after 30 days of inactivity.' Below this is a 'Change pricing plan' section with a table showing the 'Lite' plan and its features.

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

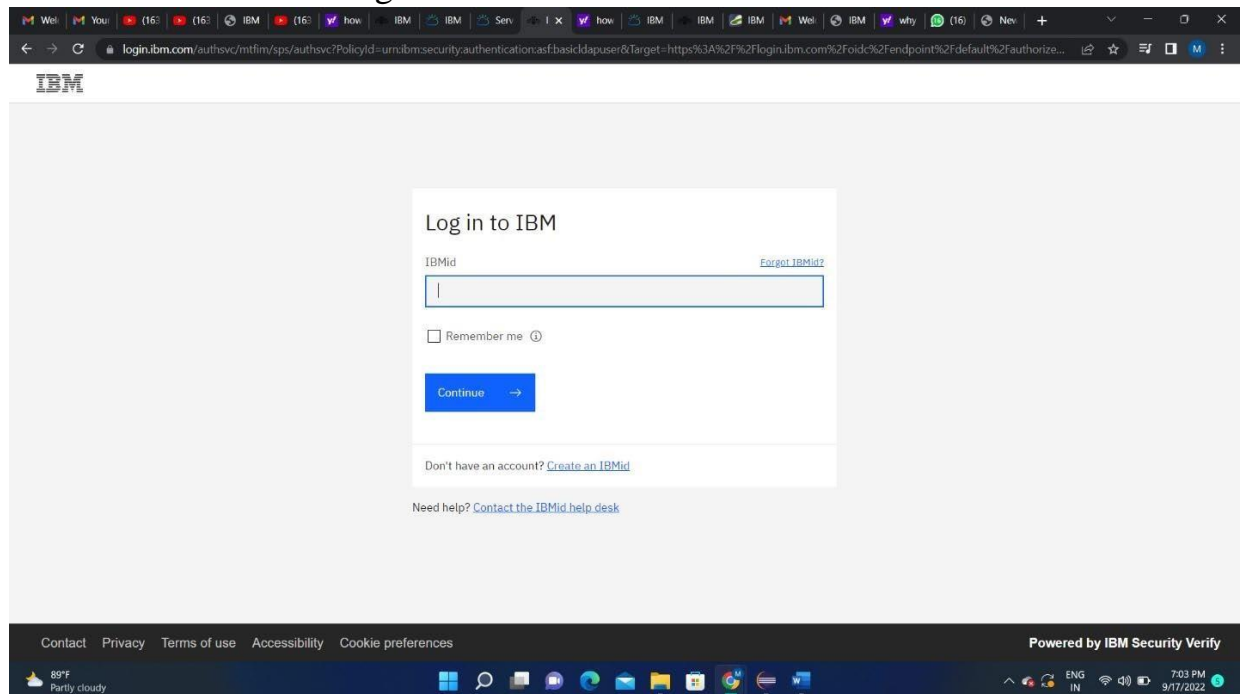
The status bar at the bottom shows '89°F Partly cloudy' and the time '7:28 PM 9/17/2022'.

7.

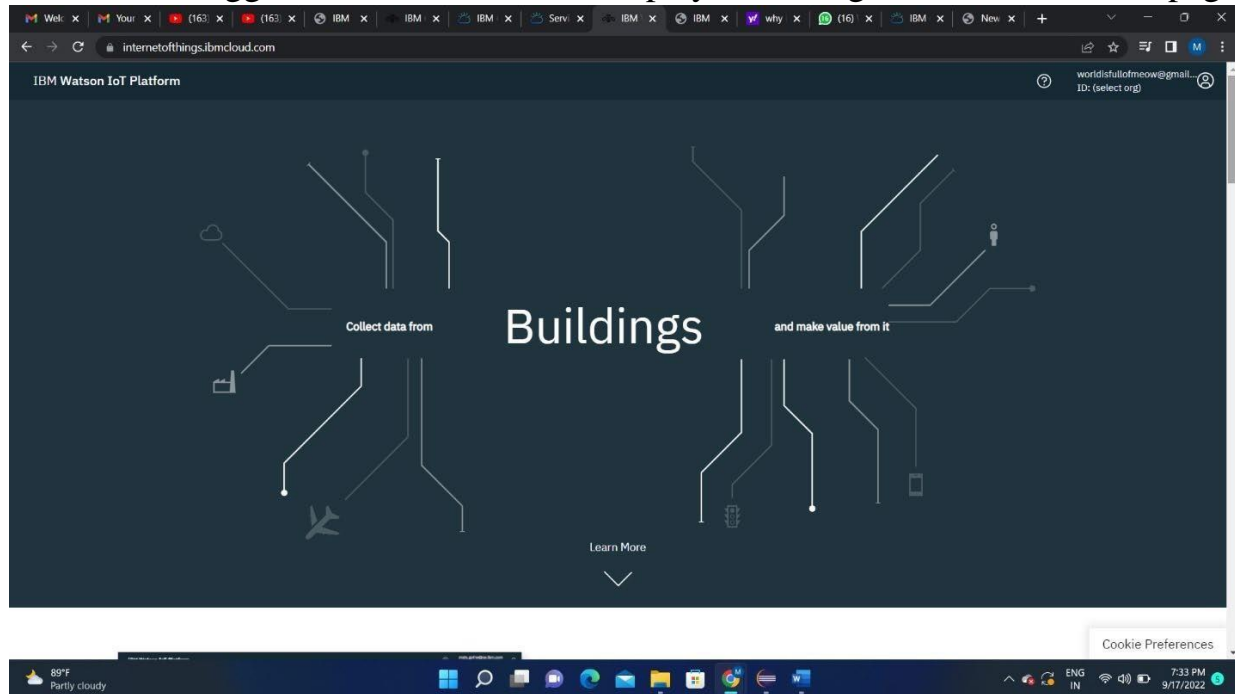
Clicking on the launch button in the manage tab, it will open to this



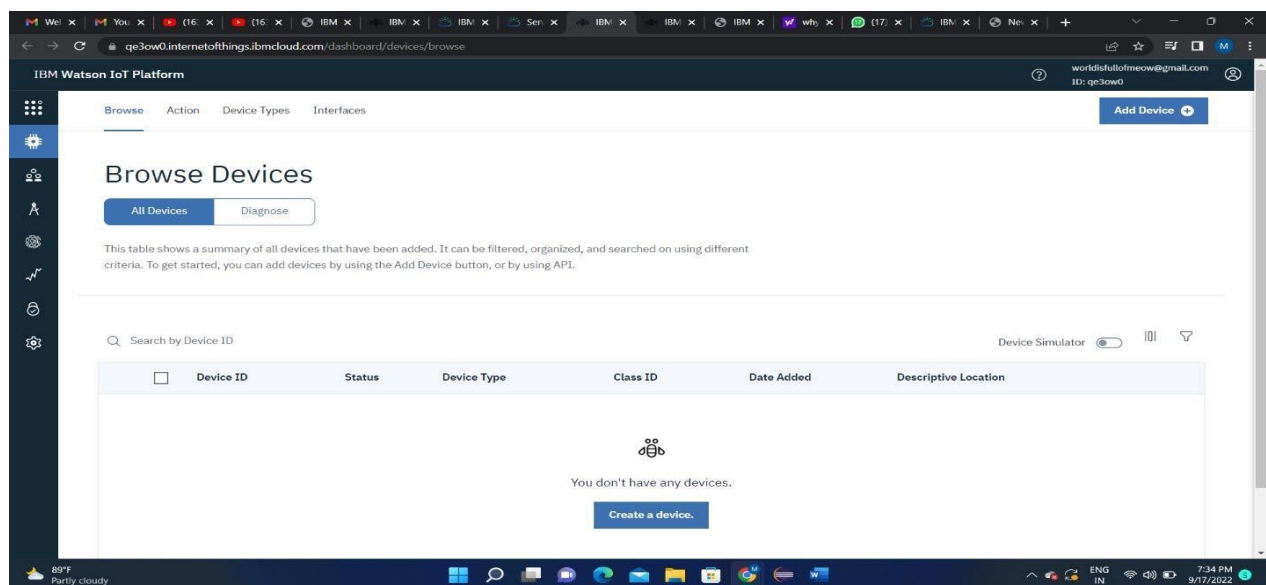
8. Enter the details to sign in to the Watson Cloud to create a device



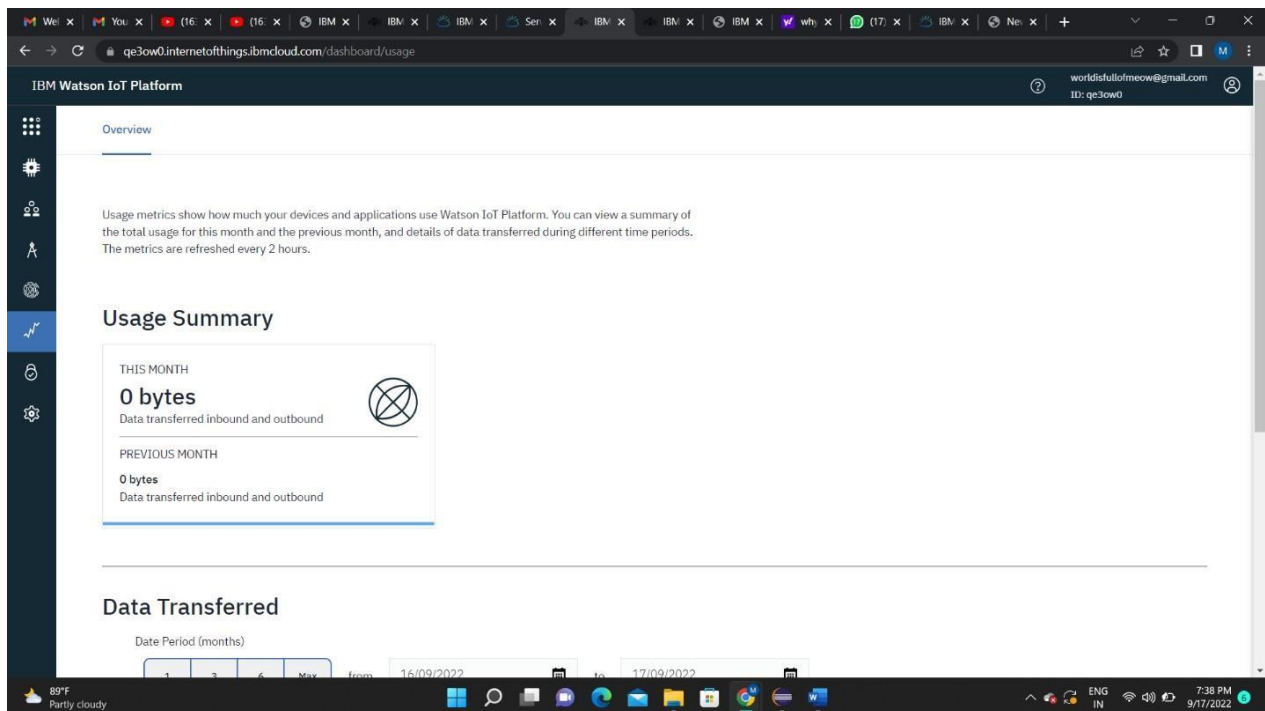
9. Once logged in the name will be displayed and it goes back to the first page



10. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices



11. Usage gives the summary of how many bytes are used between the devices and the IBM cloud.



12. The member tab is add the teams members to work in the platform

The screenshot shows the 'Browse Members' page in the IBM Watson IoT Platform. The page displays a table of members. The table has columns for Email Address, Name, Role, Added By, and Expires. There is one member listed: worldisfulofmeow@gmail.com, worldisfulofmeow@gmail.com, Administrator, -, -. The page includes a search bar and an 'Add Members' button.

IBM Watson IoT Platform

Browse

+ Add Members

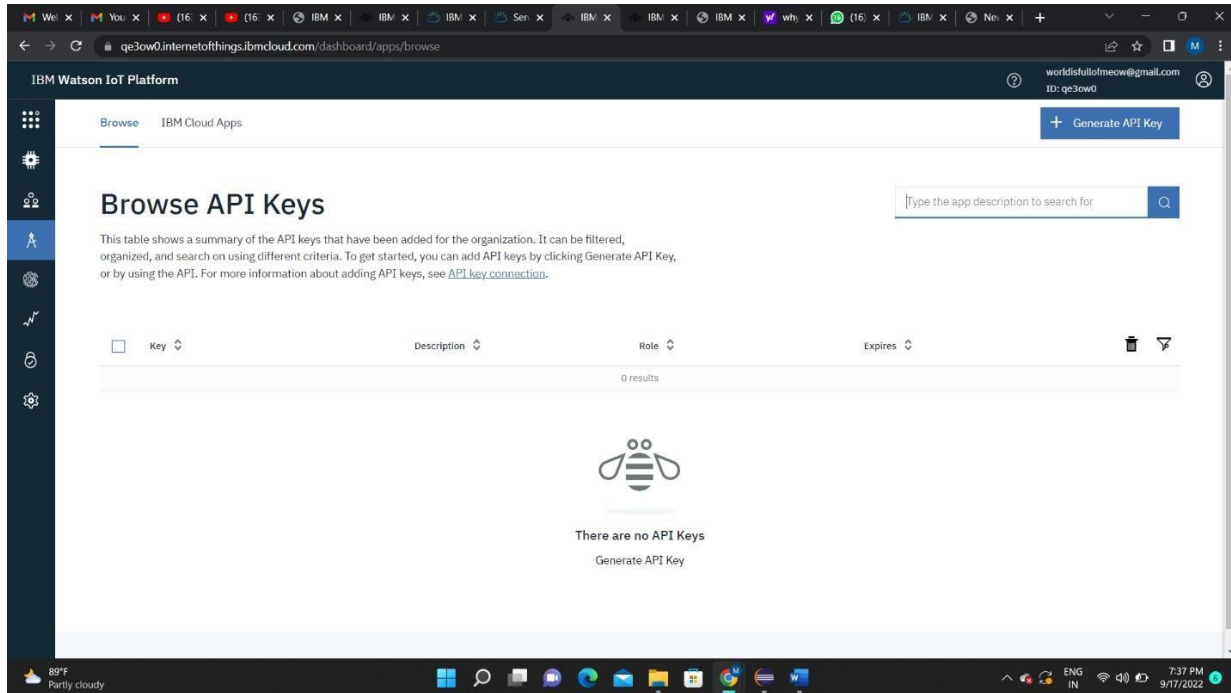
Browse Members

Type the member email to search for

This table shows a summary of the members of the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add members by clicking Add Members, or by using the API. For more information about members, see [Managing user access](#).

<input type="checkbox"/>	Email Address	Name	Role	Added By	Expires	
1 result						
<input type="checkbox"/>	worldisfulofmeow@gmail.com	worldisfulofmeow@gmail.com	Administrator	-	-	

13. This tab is used when you want to connect to some other platform and to integrate with other services.



14. Click on the device tab and click on the add device button, then give the device type and device id and click next

IBM Watson IoT Platform

worldisfullofmecow@gmail.com
ID: qe3ow0

Boards | Device Types | Interfaces

Devices

Members

Apps

Access Management

Usage

Security

Settings

Diagnose

Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
-----------	--------	-------------	----------	------------	----------------------

You don't have any devices.

Create a device.

89°F Partly cloudy

IBM Watson IoT Platform

worldisfullofmecow@gmail.com
ID: qe3ow0

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...

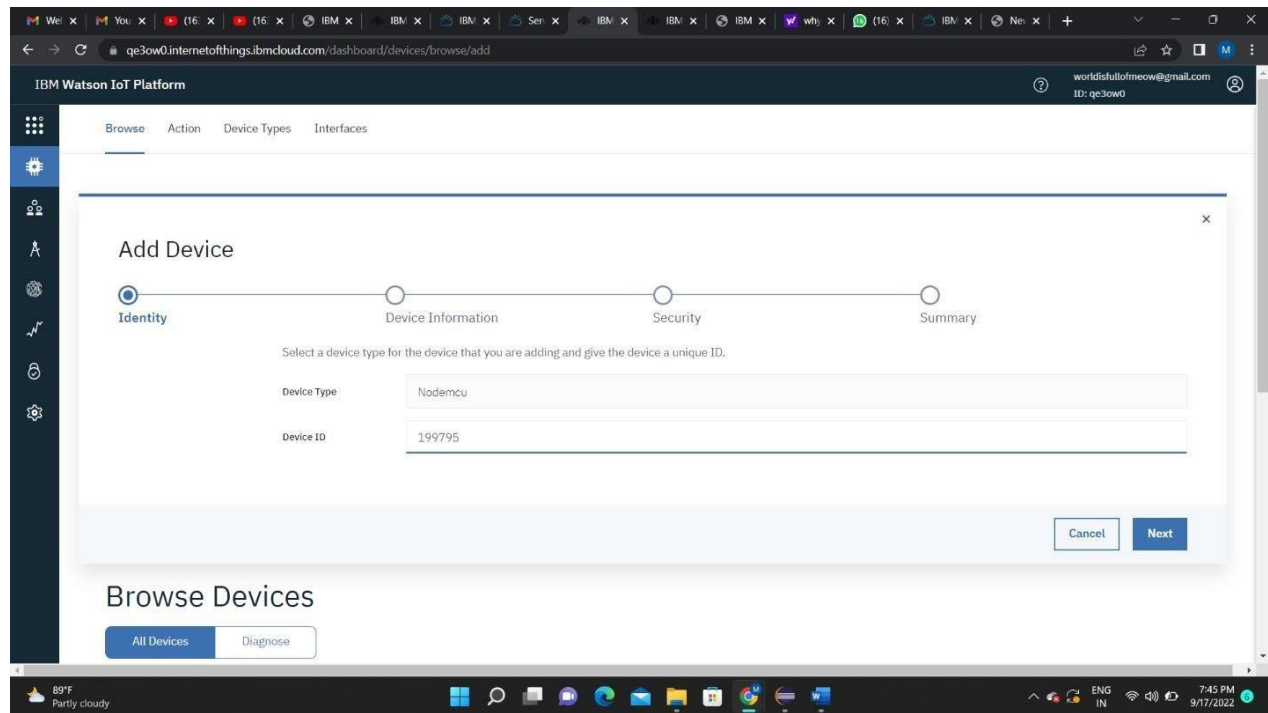
Device ID: Enter Device ID

Cancel Next

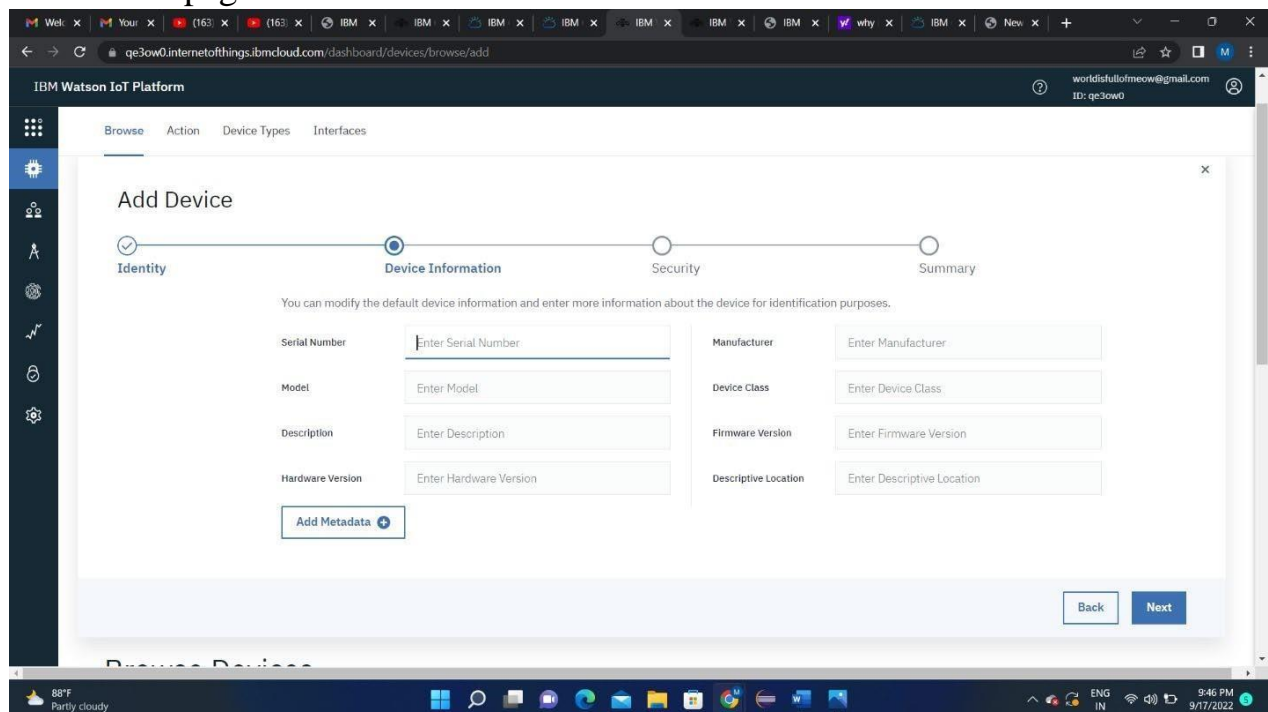
Browse Devices

All Devices Diagnose

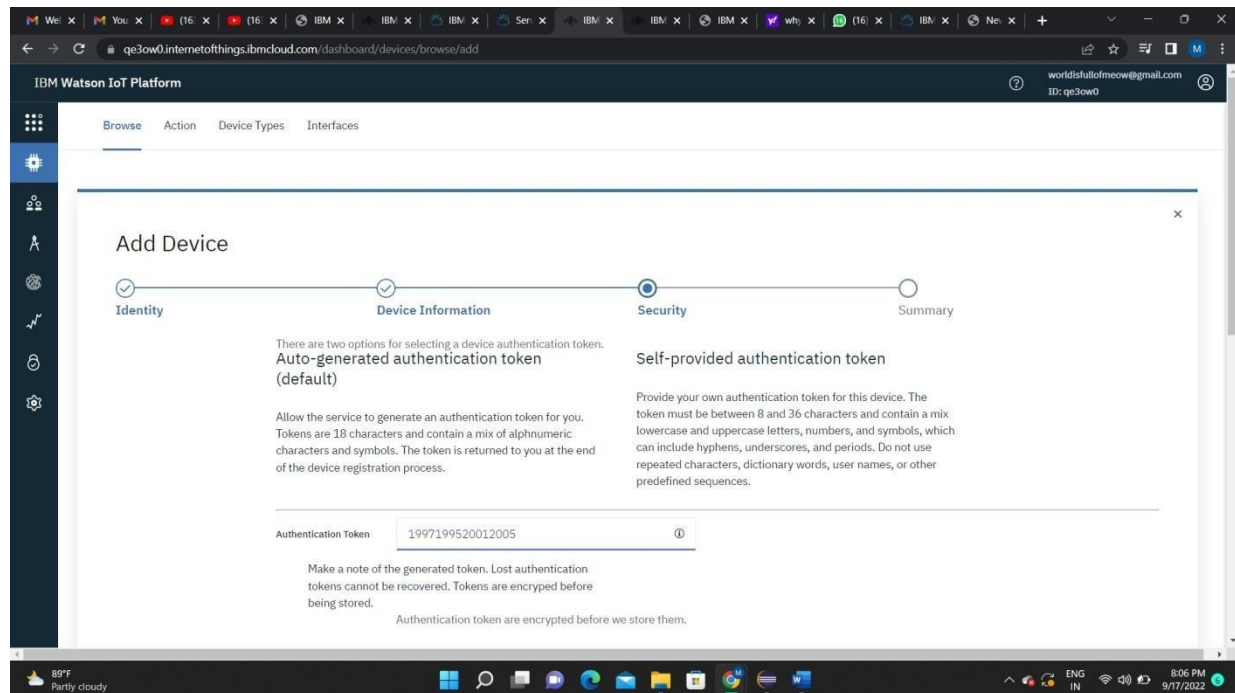
89°F Partly cloudy



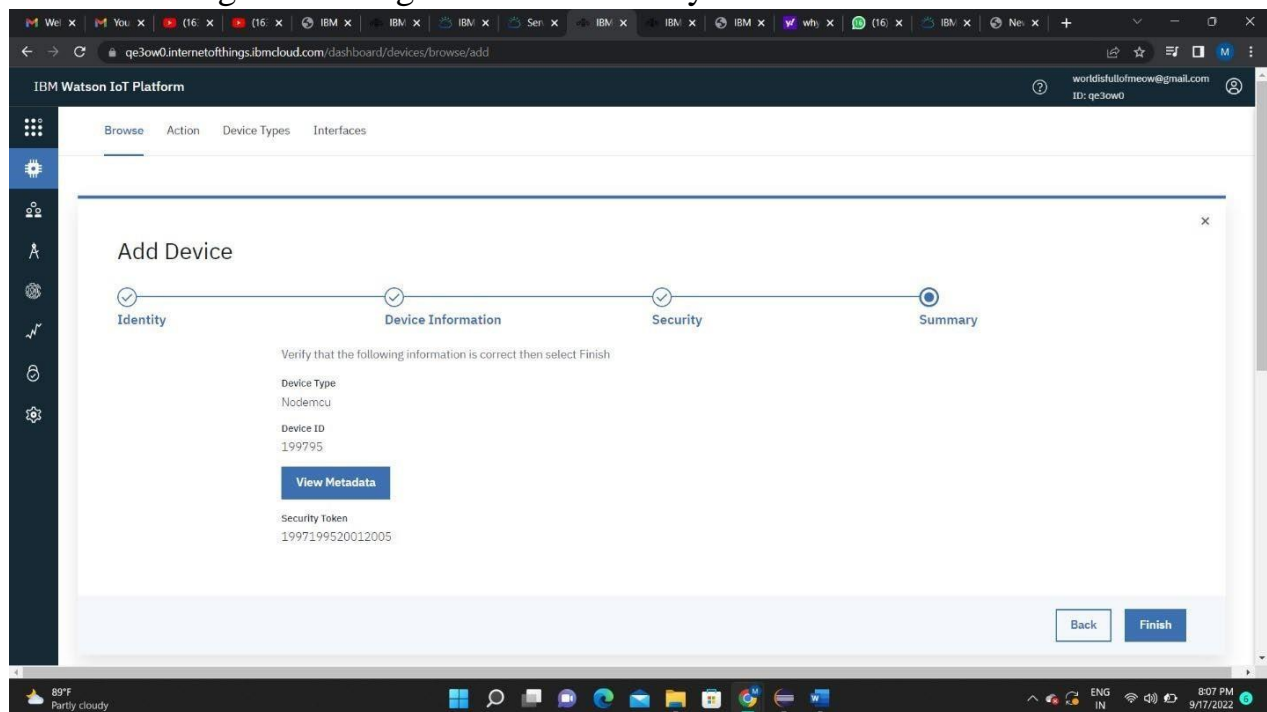
15. This page to enter extra details and of the hardware



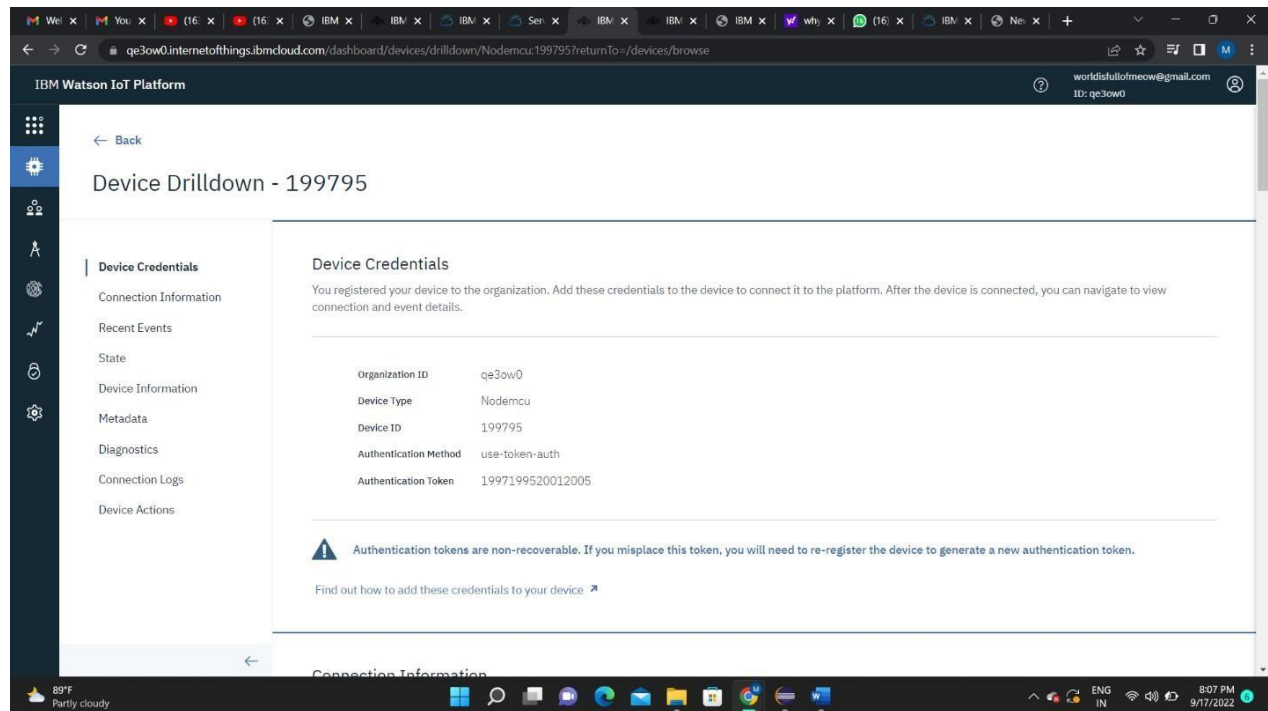
16. Clicking next it goes to the security where we do authentication token id.



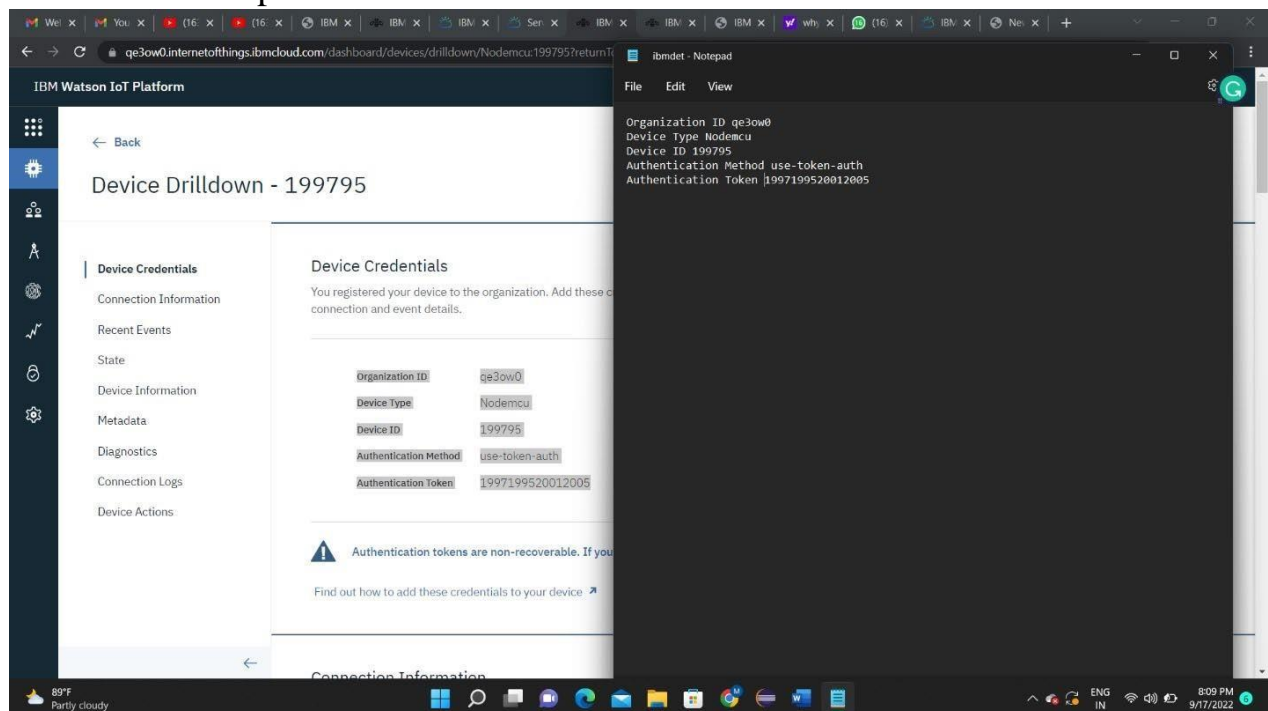
17. Clicking on next it goes to the summary of the device then click finish



18. The device credentials will be displayed with all the details



19. Save the details of the device as the authentication tokens are non-recoverable and if misplaced then we have to create a new one.



20. Clicking on the device tab we can now see the added device. Clicking on it will display the other details. It has different tabs like Identity, Device Information, State and login.

The top screenshot shows the IBM Watson IoT Platform dashboard with the 'Recent Events' tab selected. The device is '199795', status is 'Disconnected', and type is 'Nodemcu'. The 'Recent Events' section is empty, with a message: 'The recent events listed show the live stream of data that is coming and going from this device.'

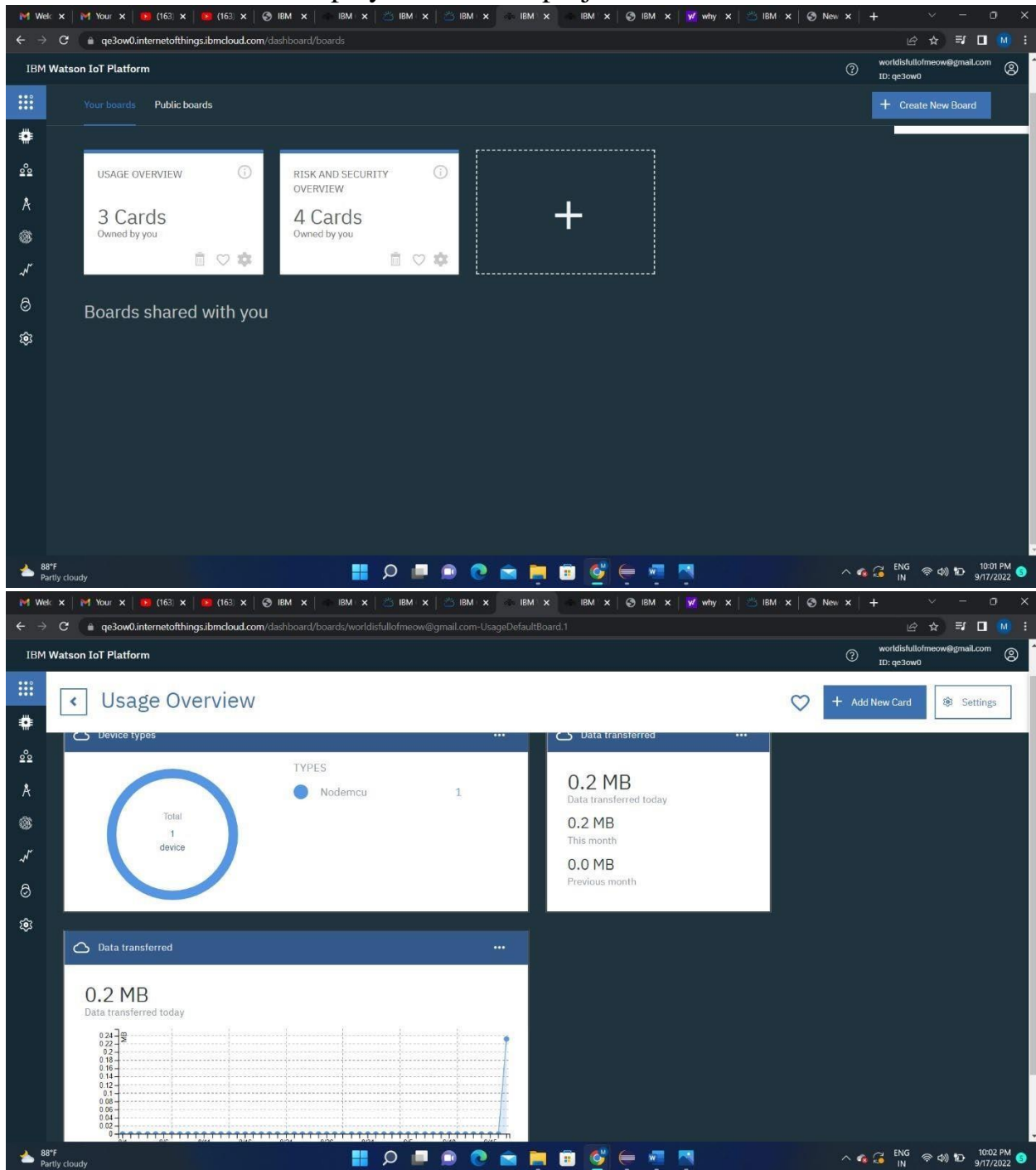
The bottom screenshot shows the 'Device Information' tab for the same device. The details are as follows:

Property	Value
Device ID	199795
Device Type	Nodemcu
Date Added	17 Sep 2022 20:07
Added By	worldisfullofmeow@gmail.com
Connection Status	Disconnected

At the bottom of the device information panel, it shows 'Items per page: 50' and '1-1 of 1 item'.

In a similar way, we can create n number of devices with a 50 per page limit as per the requirement of our project.

21. The Boards will display card for the project.



RESULT:

An IBM Watson cloud for IoT and a device is created