

**Team id: PNT2022TMID26725**

**Topic: SMART WASTE MANAGEENT SYSTEM IN METRPOLITAN CITIES**

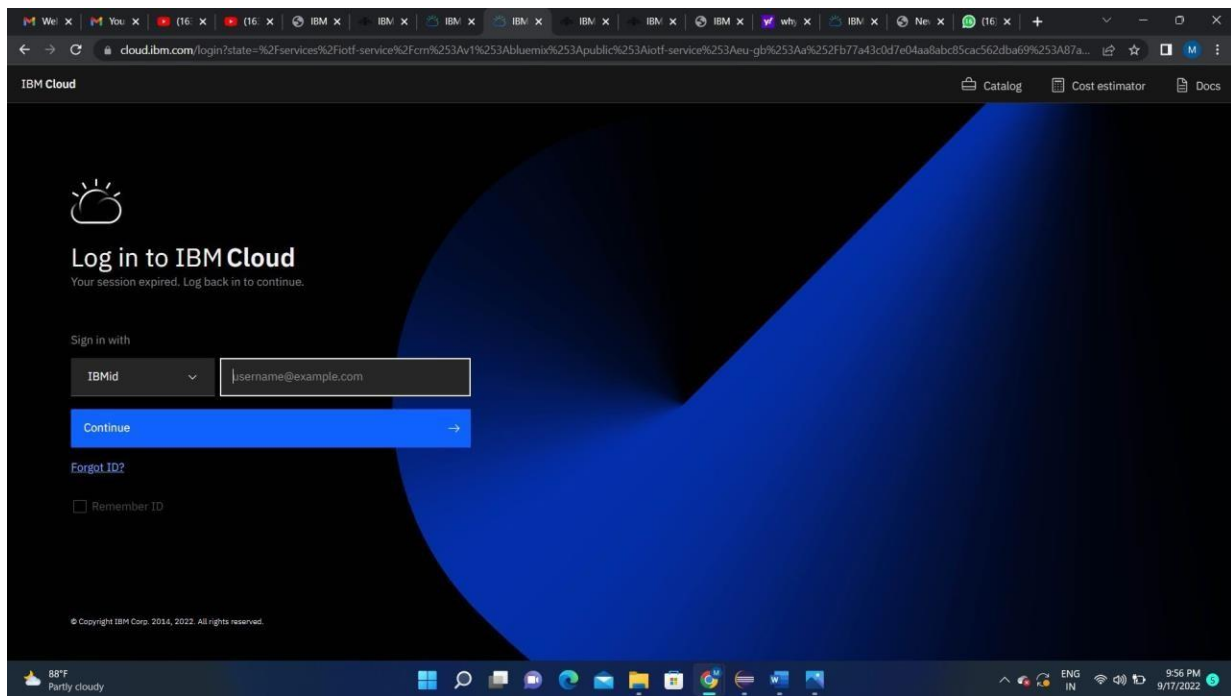
## **CREATE IBM WATSON IOT PLATFORM AND DEVICE**

### **AIM:**

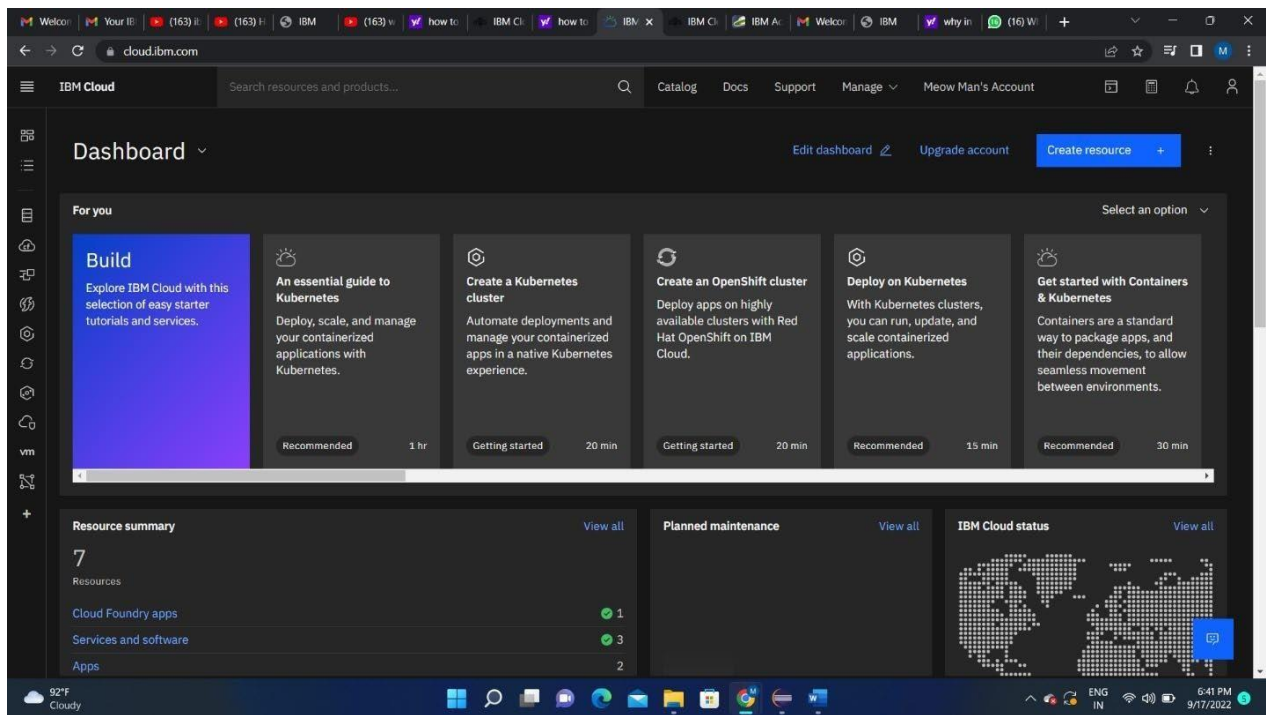
To create the IBM Watson IoT platform and device

### **STEPS:**

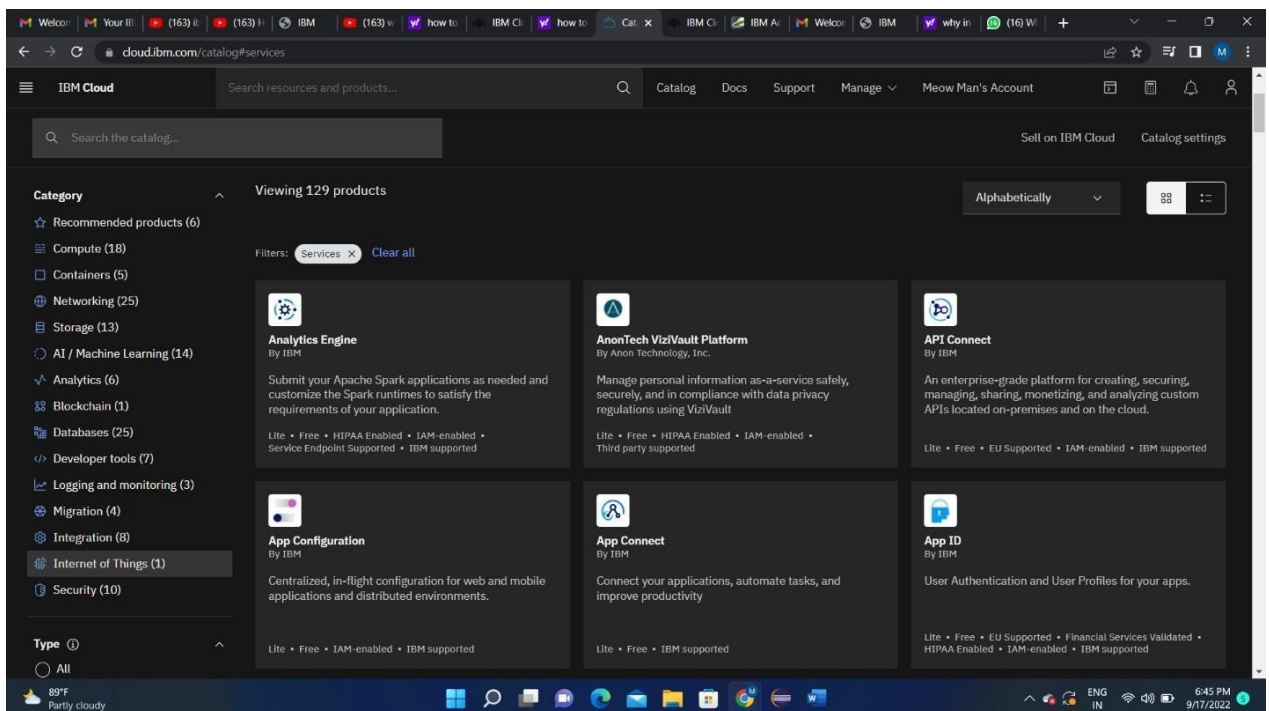
1. Firstly create an IBM cloud account with IBMid and password



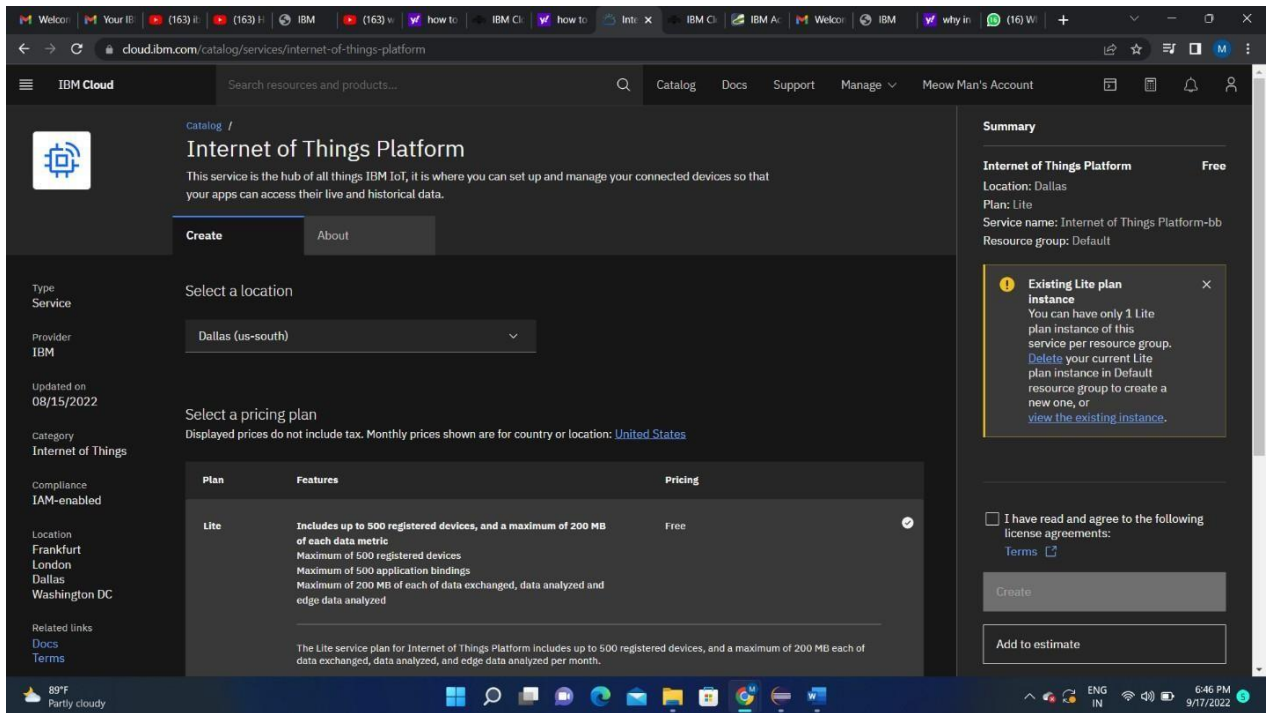
2. Home page of IBM cloud



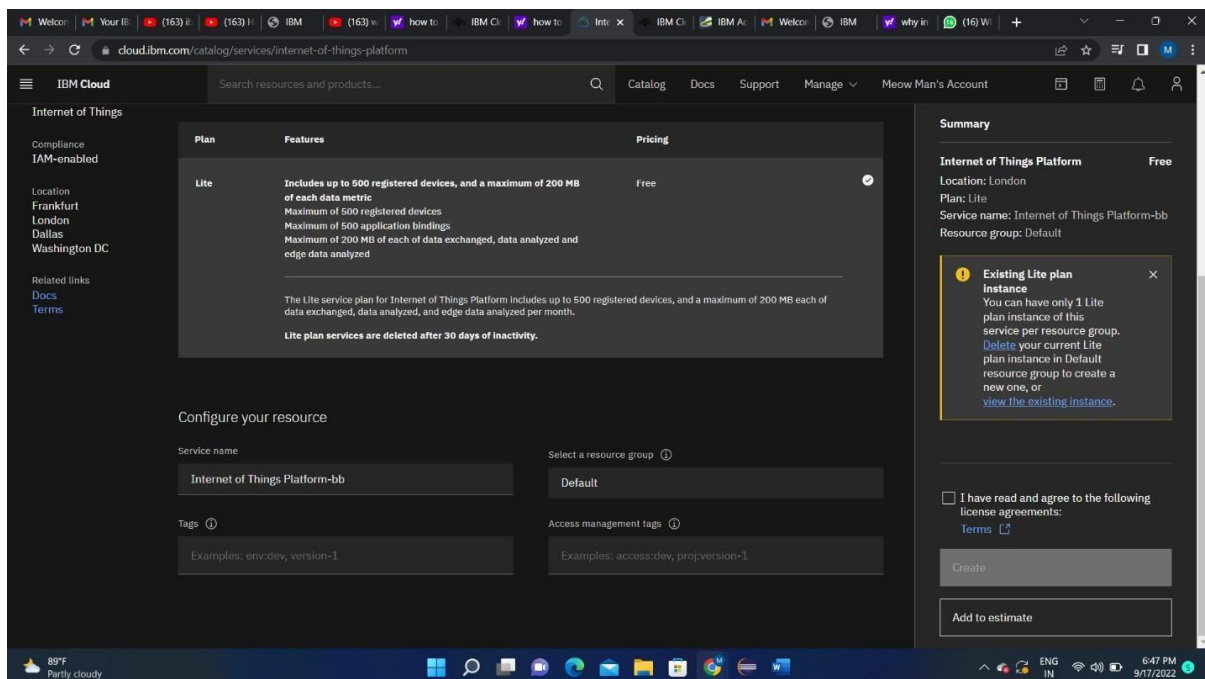
3. Click on the catalog on the top



4. Click on IoT in the category mentioned



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



6. 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

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

89°F Partly cloudy

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.

**Summary**

**Internet of Things Platform** Free

Location: Dallas

Plan: Lite

Service name: Internet of Things Platform-2w

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

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

89°F Partly cloudy

**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

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.

Lite plan services are deleted after 30 days of inactivity.

**Summary**

**Internet of Things Platform** Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-child\_safety

Resource group: Default

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

Create

Add to estimate

**Configure your resource**

Service name: Internet of Things Platform-child\_safety

Select a resource group: Default

Tags: Examples: env:dev, version=1

Access management tags: Examples: access:dev, proj:version=1

7. 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 servies)

The screenshot shows the IBM Cloud IoT Platform console. The top navigation bar includes 'Catalog', 'Docs', 'Support', 'Manage', and 'Meow Man's Account'. The main content area is titled 'Internet of Things Platform-child\_safety' and is in the 'Manage' tab. A sidebar on the left shows 'Plan' and 'Connections' options. The main content area features a 'Let's get started with IBM Watson IoT Platform' section with a 'Launch' button. Below this, there's a 'Ready for the next level?' section titled 'IBM Watson IoT Platform Journey' with three options: 'Lite', 'Non-Production', and 'Production'. The 'Lite' option is selected and shows a 'Free' price point.

Resource list / Internet of Things Platform-child\_safety 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 with the connectivity capabilities of Watson IoT Platform.

Free

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.

Starts at \$500 per month

Production

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

Includes IBM Service & Support

The screenshot shows the IBM Cloud IoT Platform console with the 'Plan' tab selected. The main content area is titled 'Internet of Things Platform-child\_safety' and is in the 'Plan' tab. A sidebar on the left shows 'Manage', 'Plan', and 'Connections' options. The main content area features a 'Current plan' section titled 'Lite' with a 'Features' list. Below this, there's a 'Change pricing plan' section with a table showing the 'Lite' plan and its features. The 'Current usage' section shows 'N/A'.

Resource list / Internet of Things Platform-child\_safety Active Add tags Details Actions...

Manage Plan Connections

Current plan

Lite

Features

- 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

Change pricing plan

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

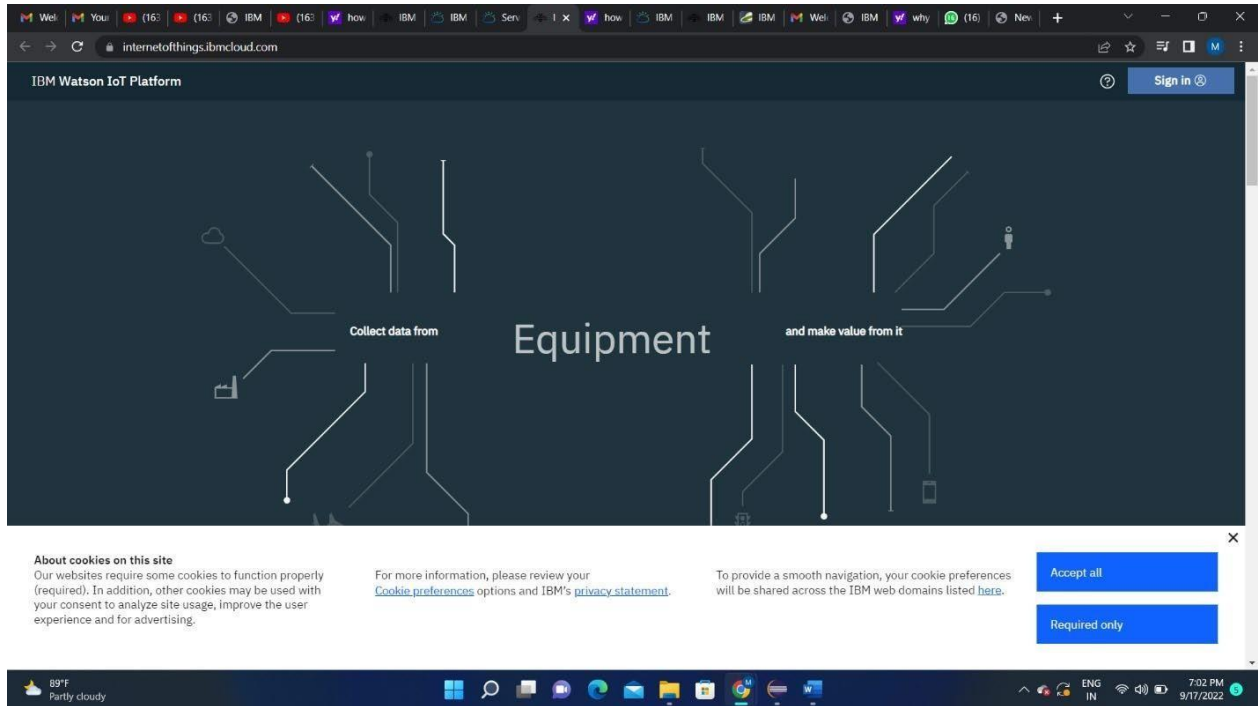
Current usage

N/A

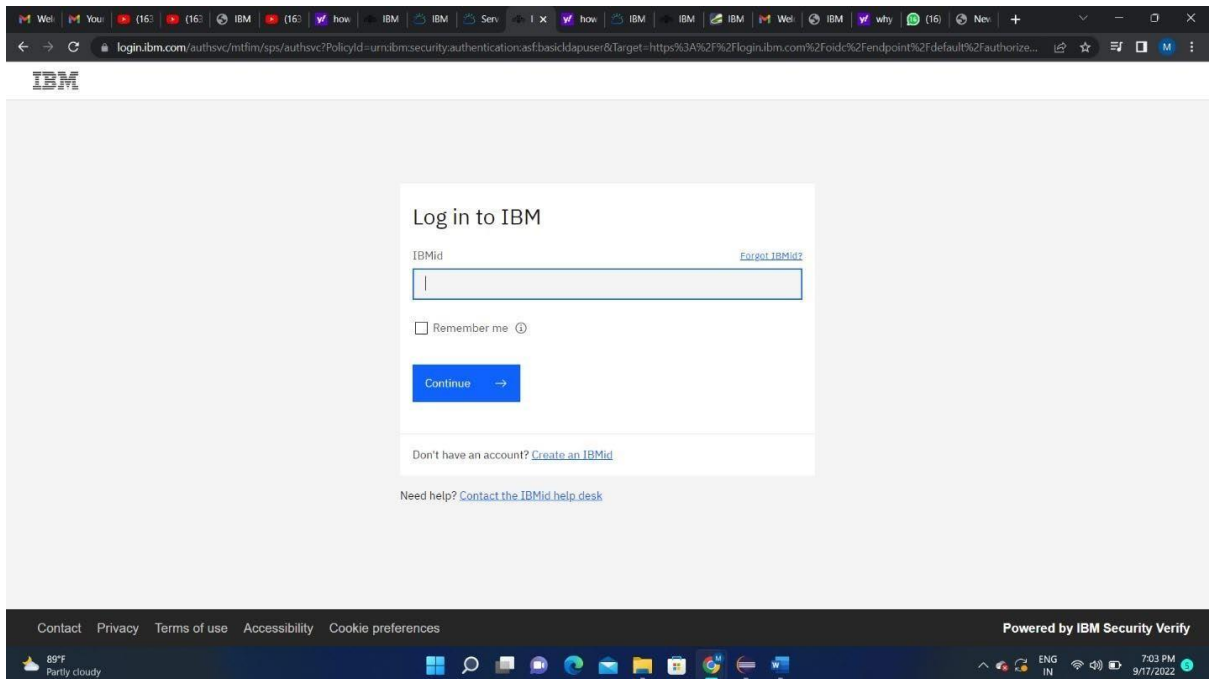
Lite plan services are deleted after 30 days of inactivity.

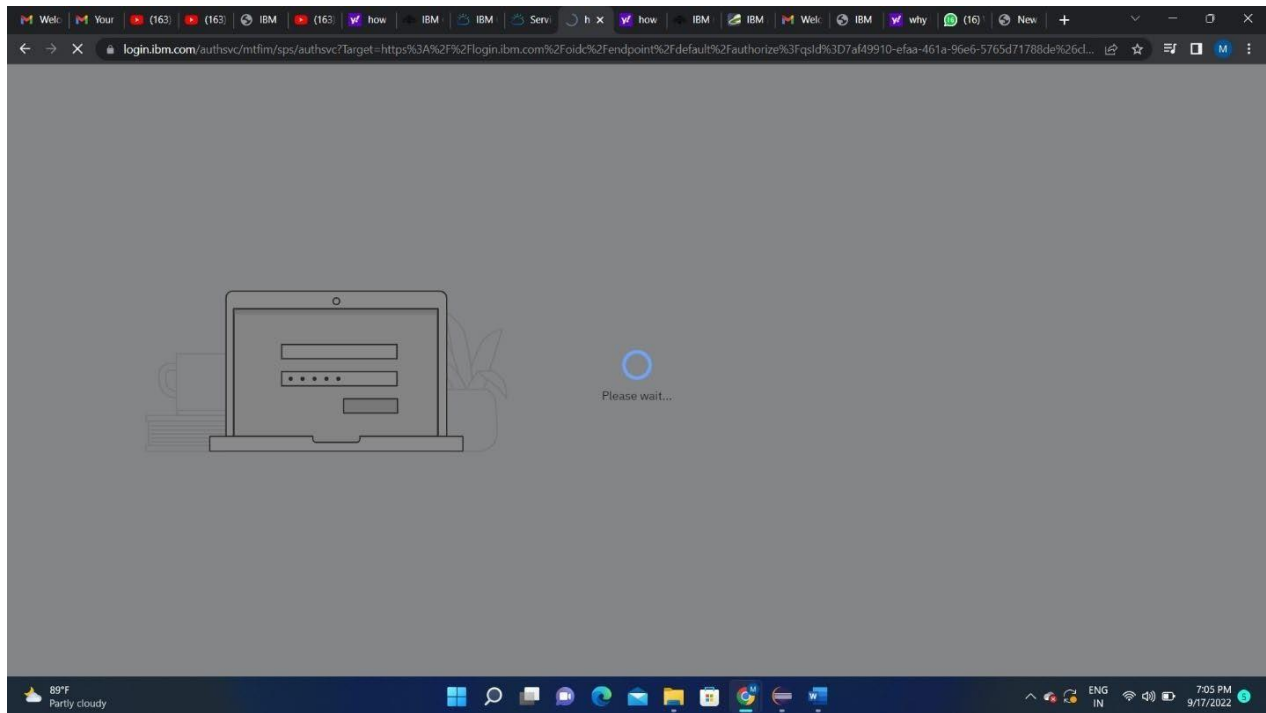


8. Clicking on the launch button in the manage tab, it will open to this

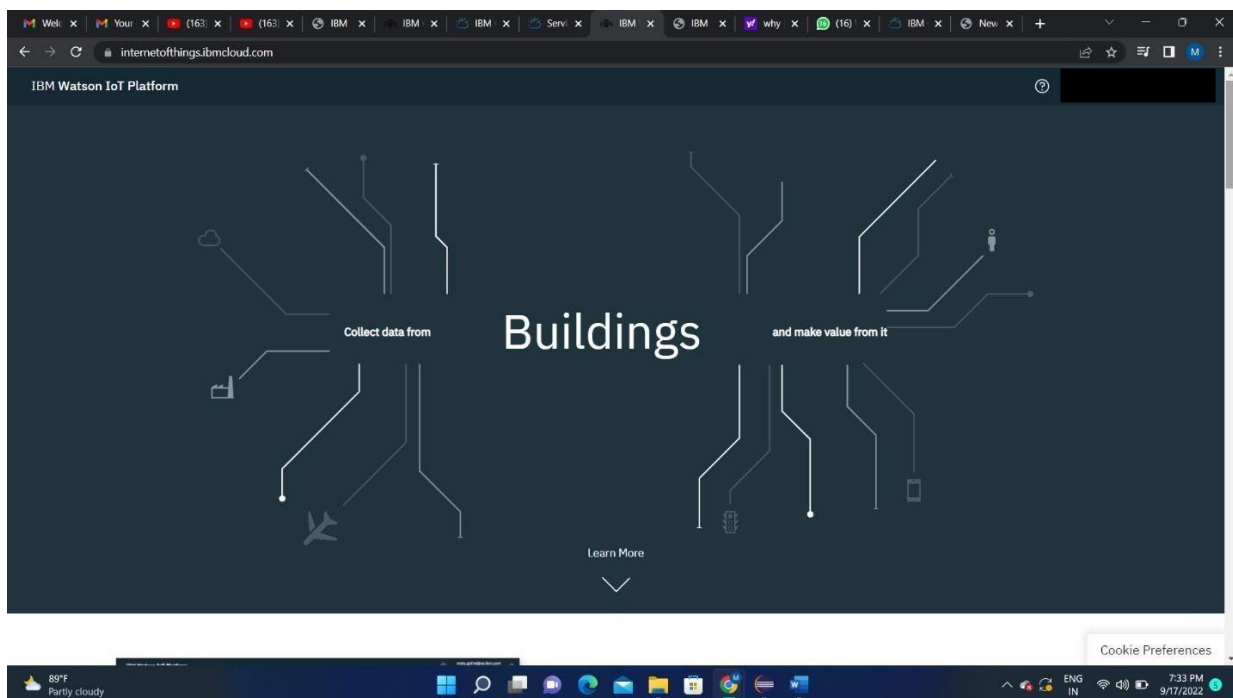


9. Enter the details to sign in to the Watson Cloud to create a device

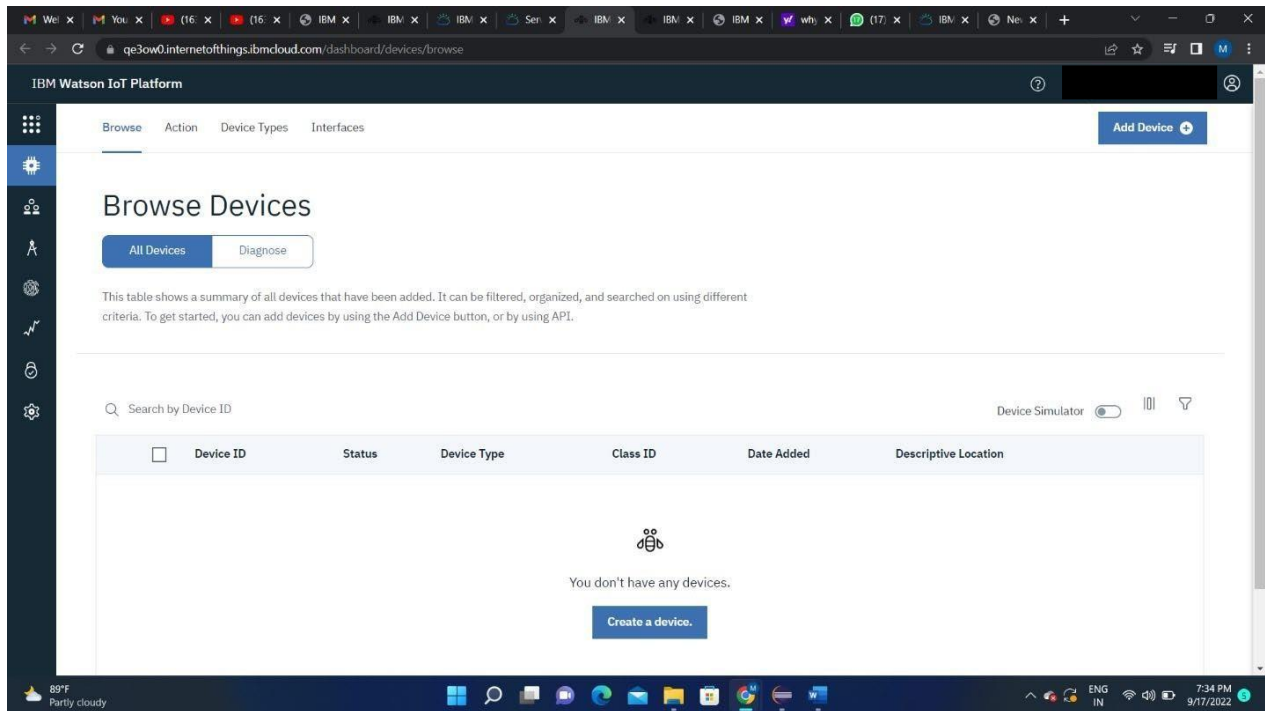




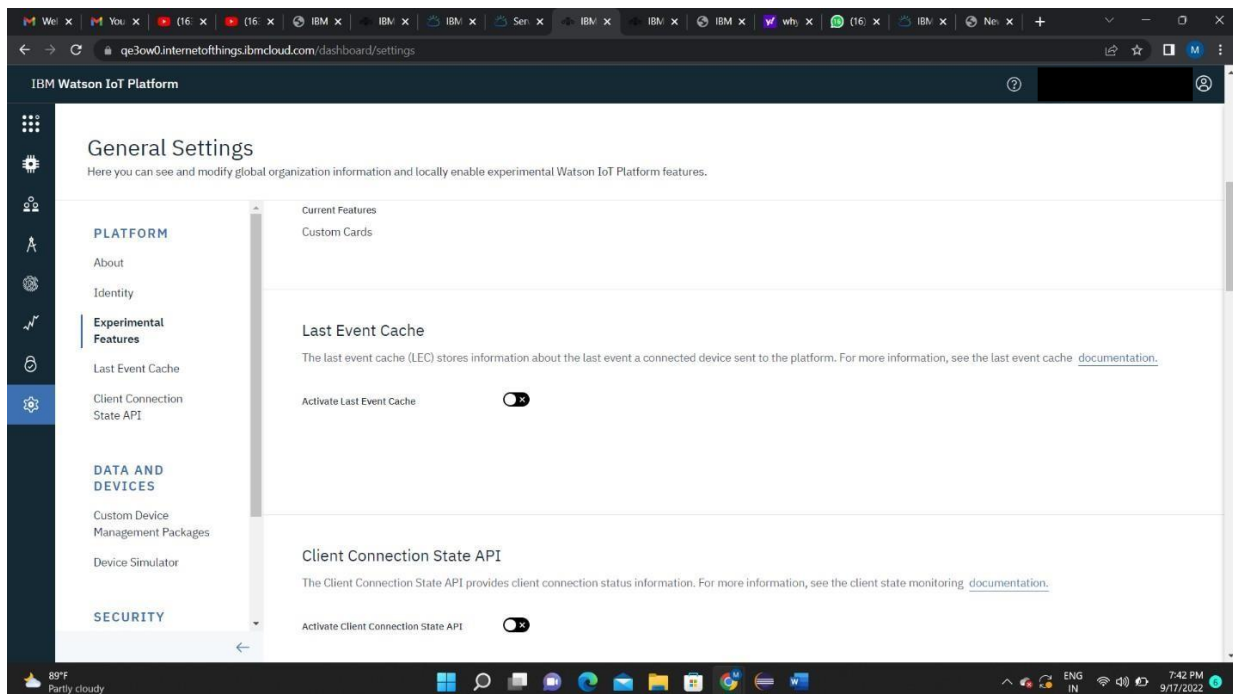
10. Once logged in the name will be displayed and it goes back to the first page



11. 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.

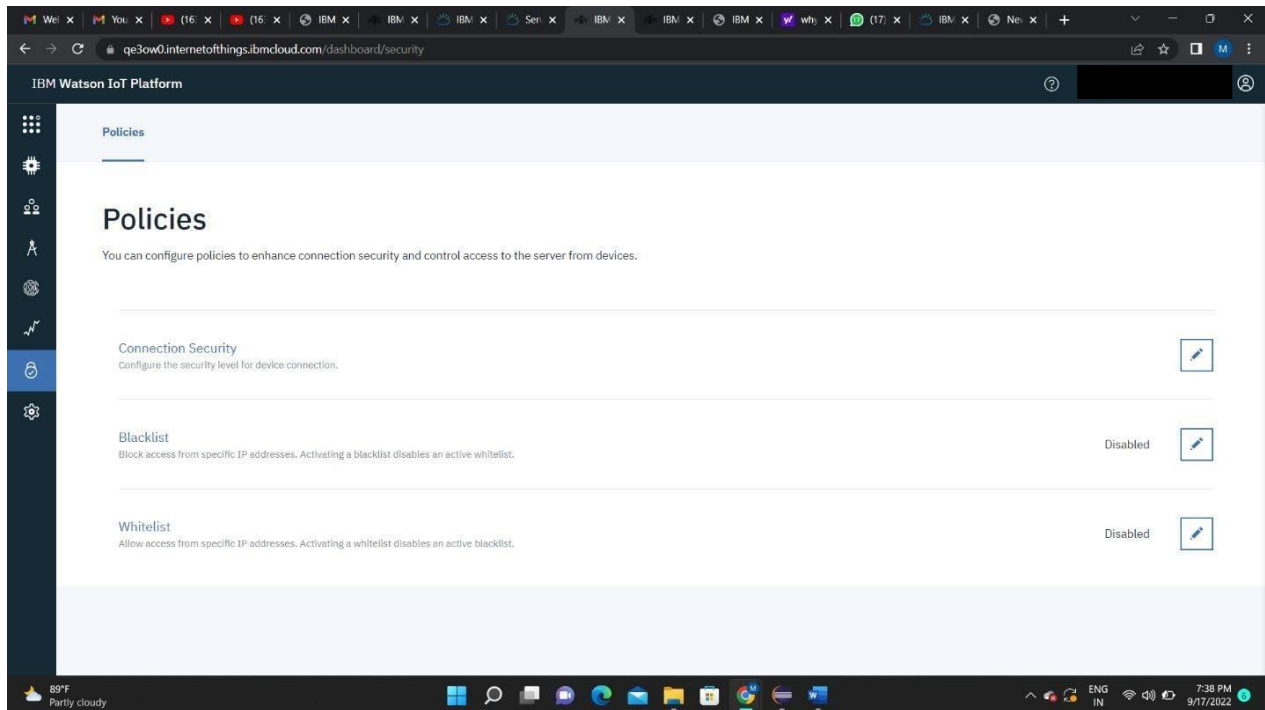


12. The setting tab is used to change the general setting if needed for the project.

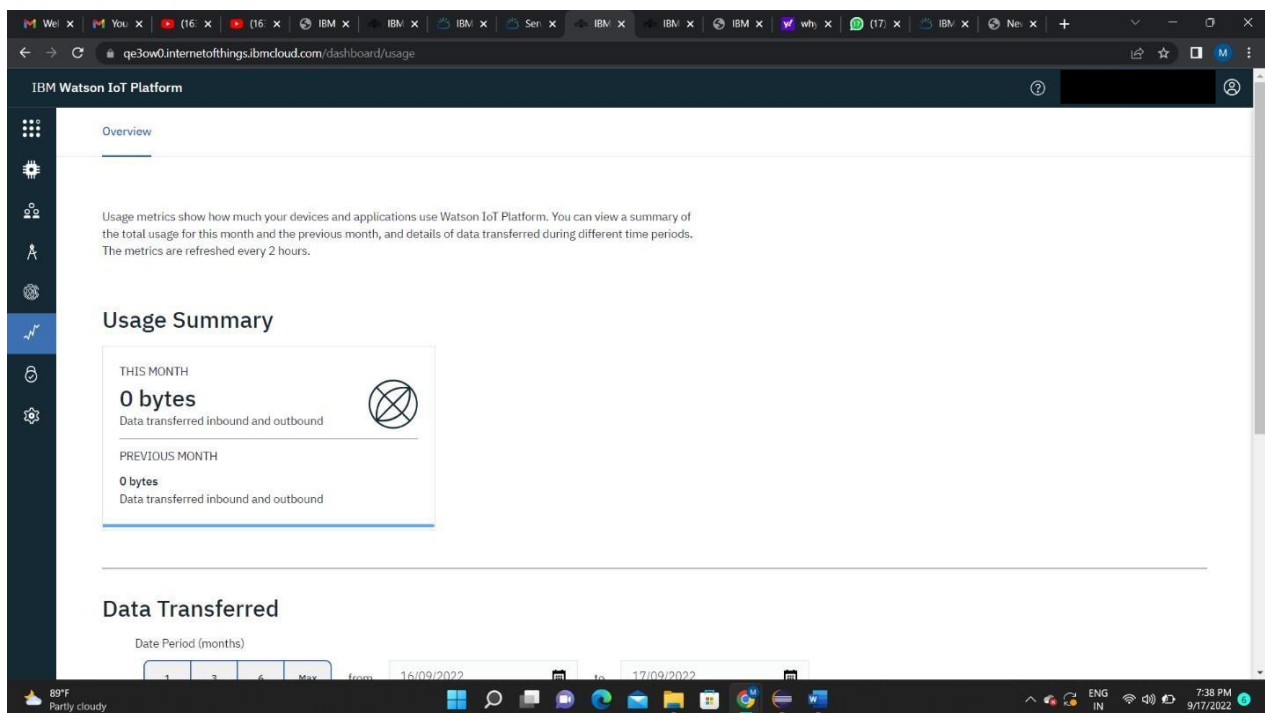




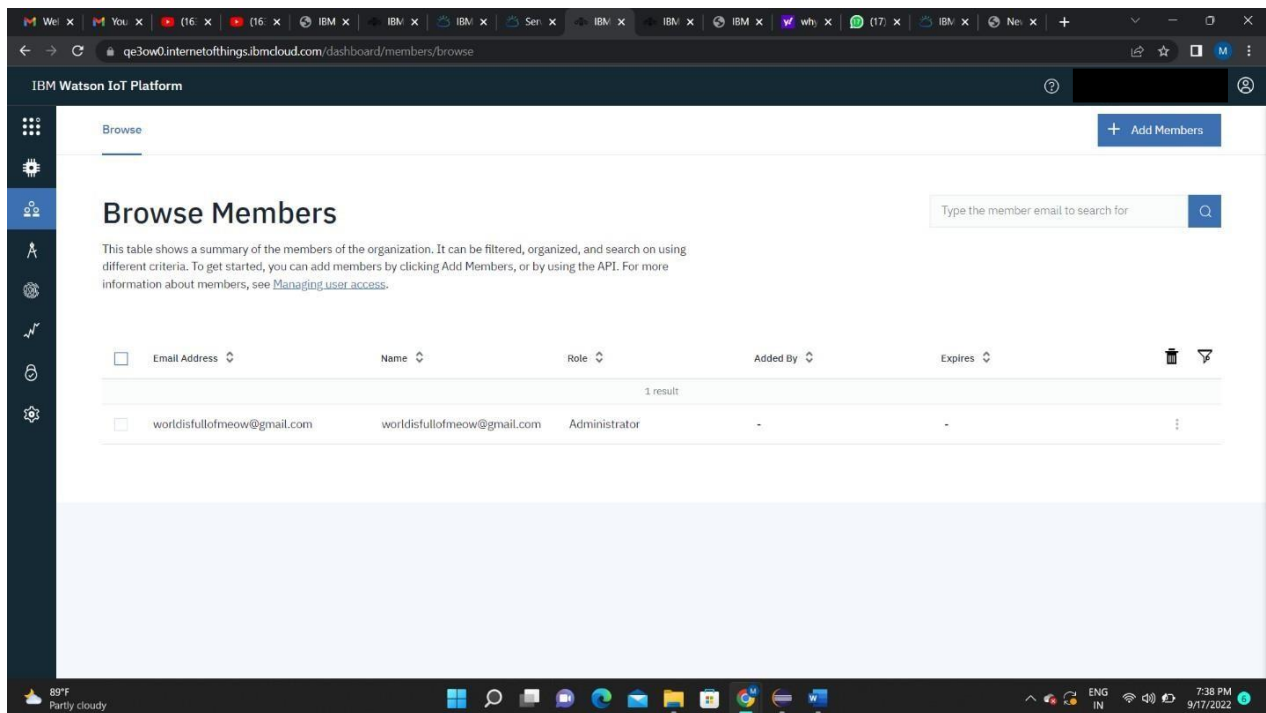
13. In the security tab we can choose the type of security connection and can change according to specification



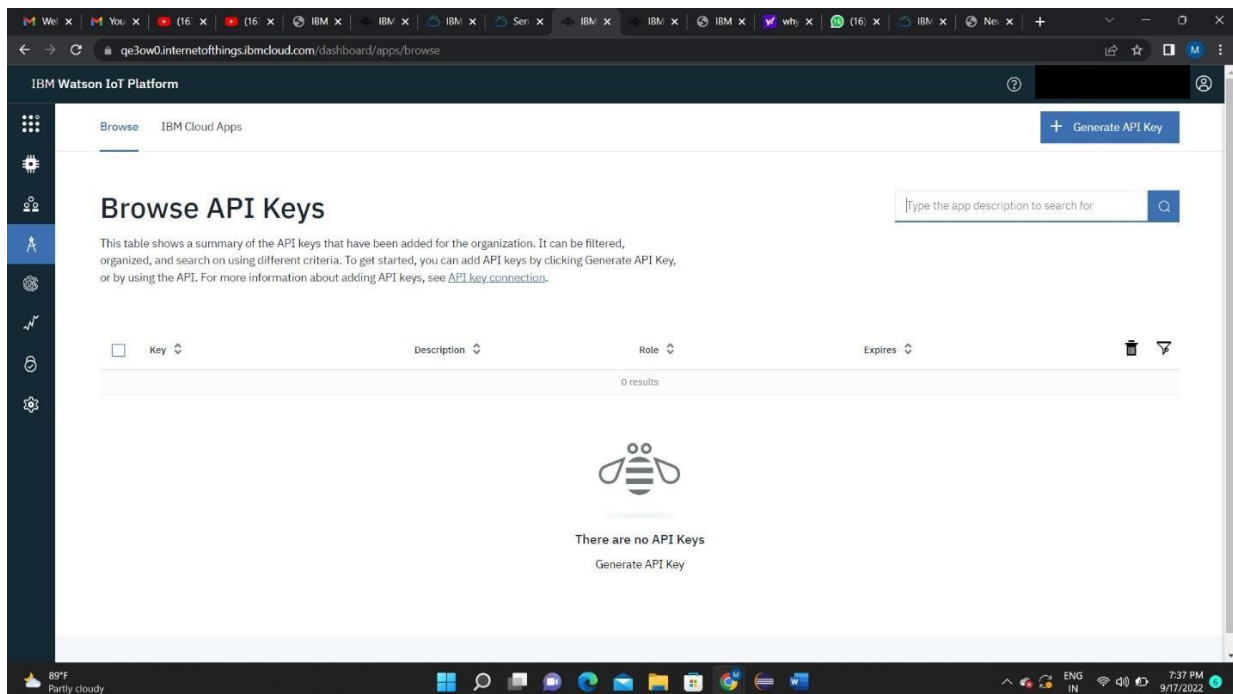
14. Usage gives the summary of how many bytes are used between the devices and the IBM cloud.



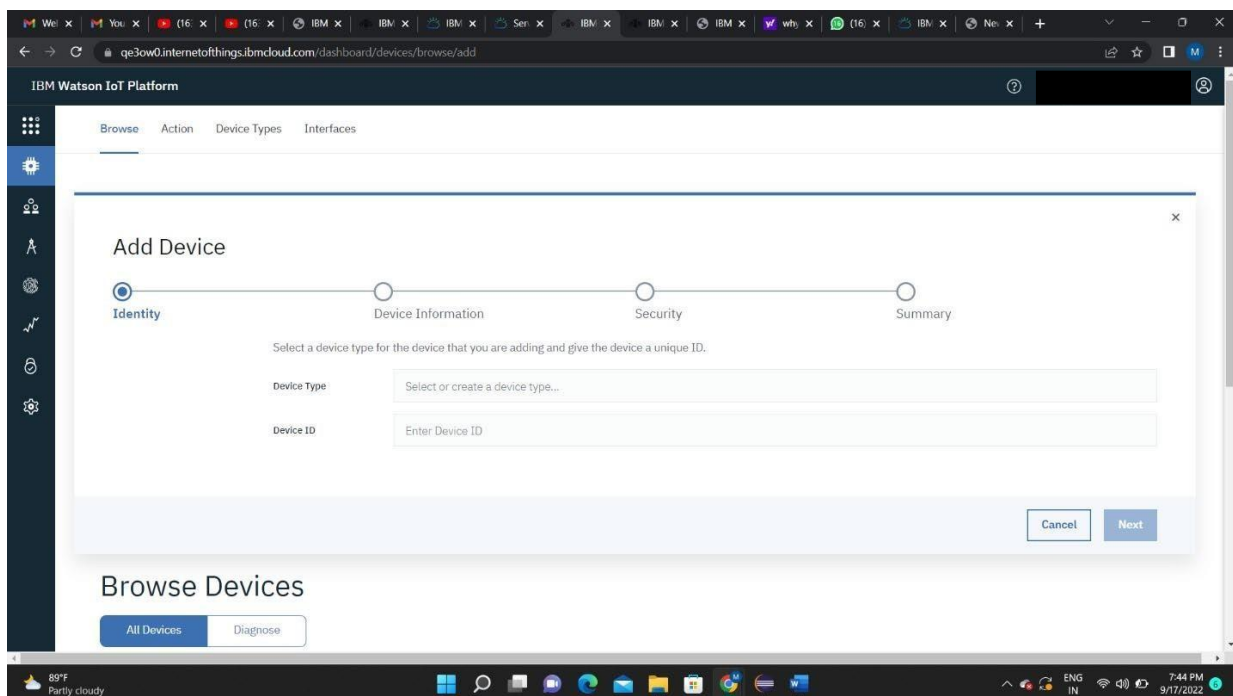
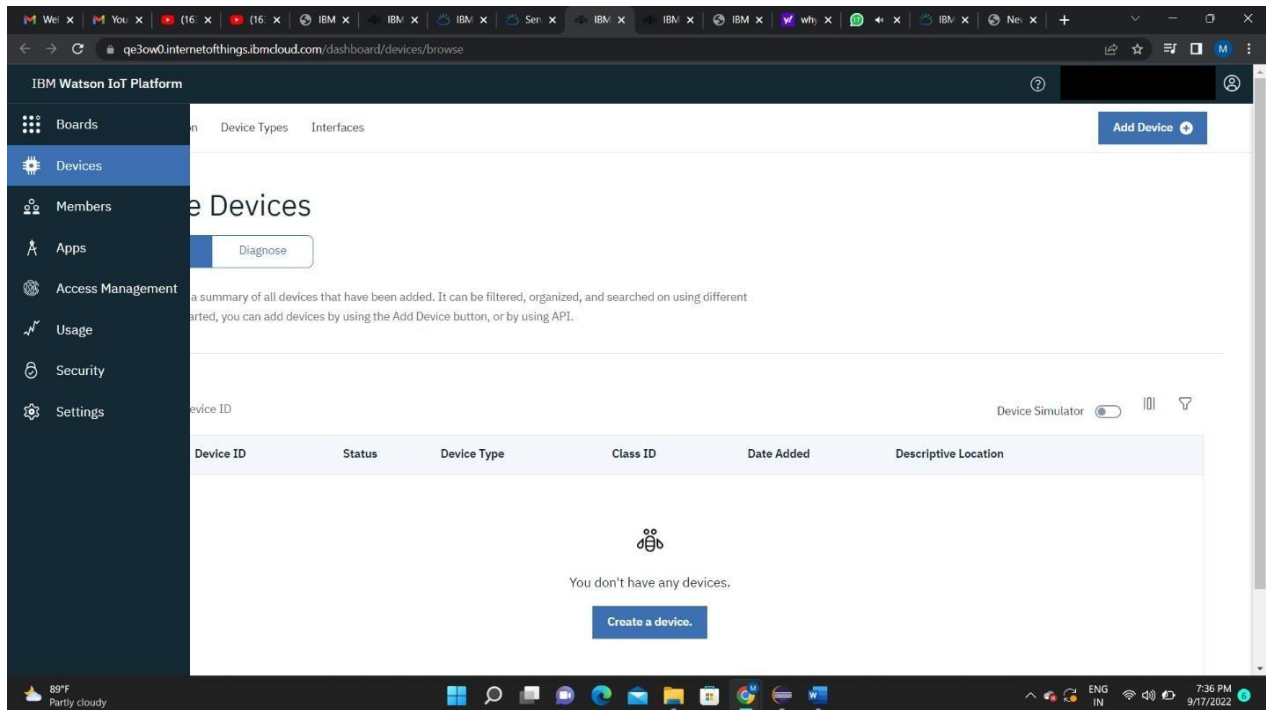
15. The member tab is add the teams members to work in the platform

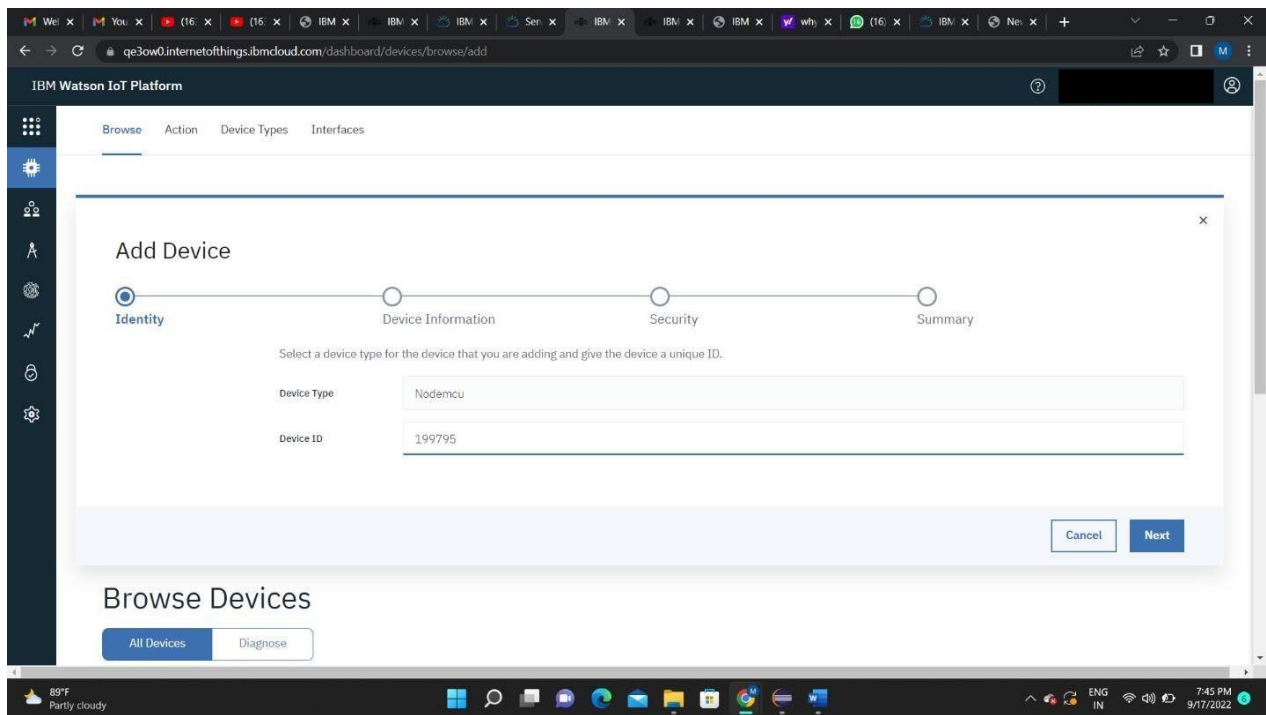


16. This tab is used when you want to connect to some other platform and to integrate with other services.

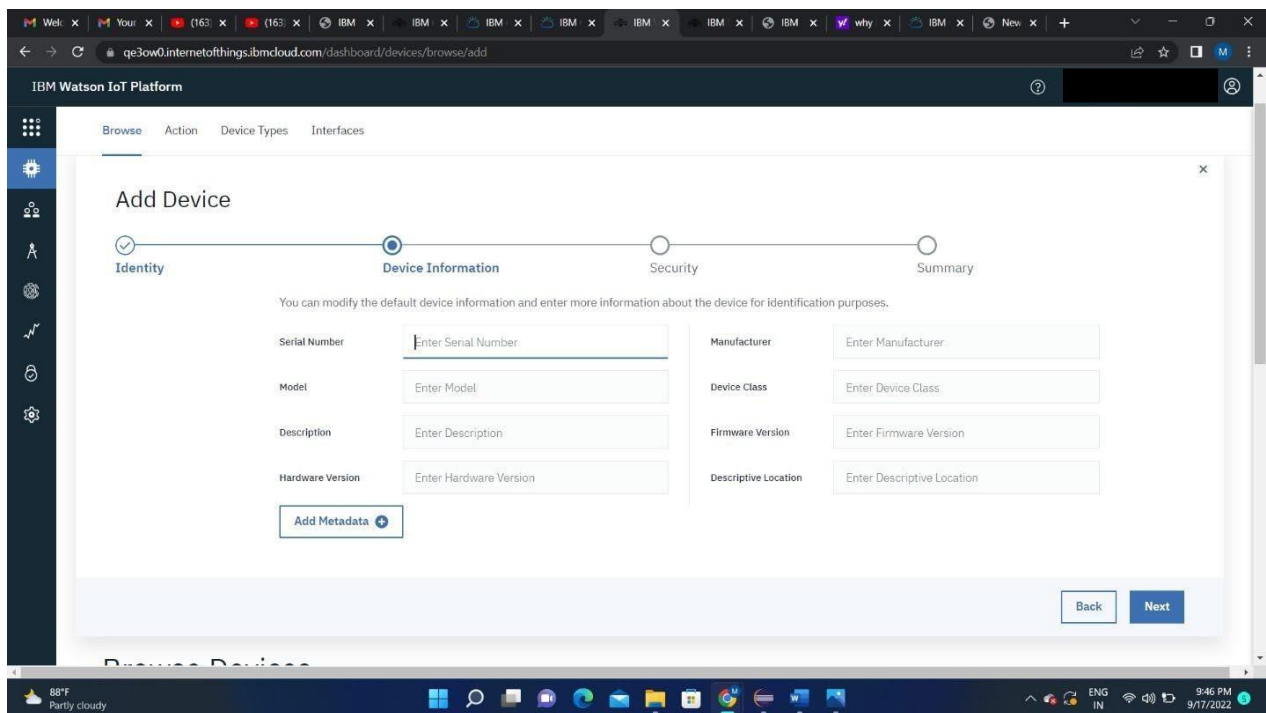


17. Click on the device tab and click on the add device button, then give the device type and device id and click next

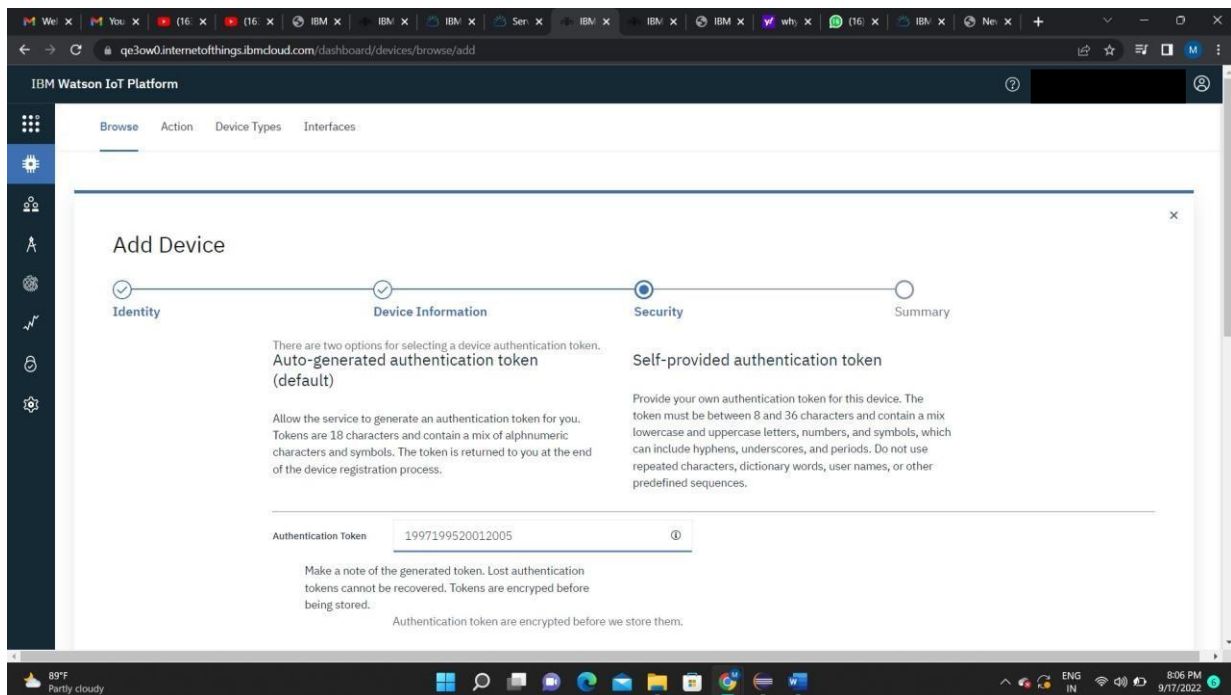




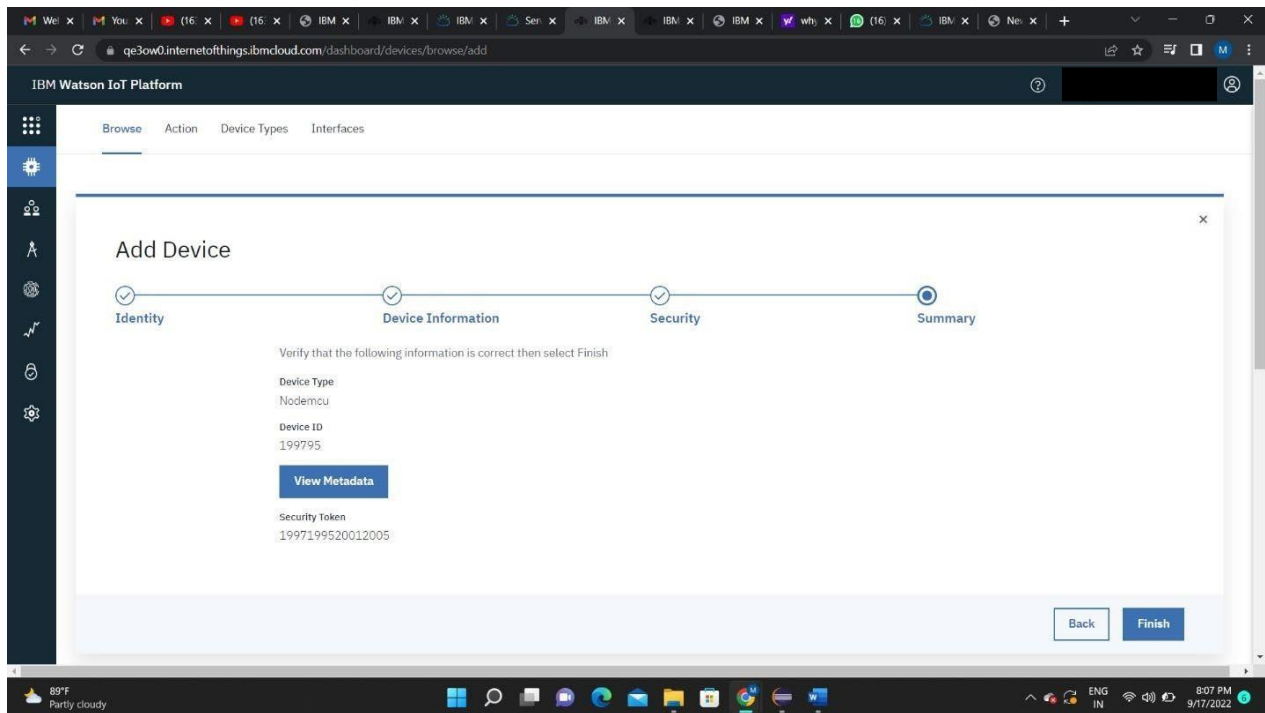
18. This page to enter extra details and of the hardware



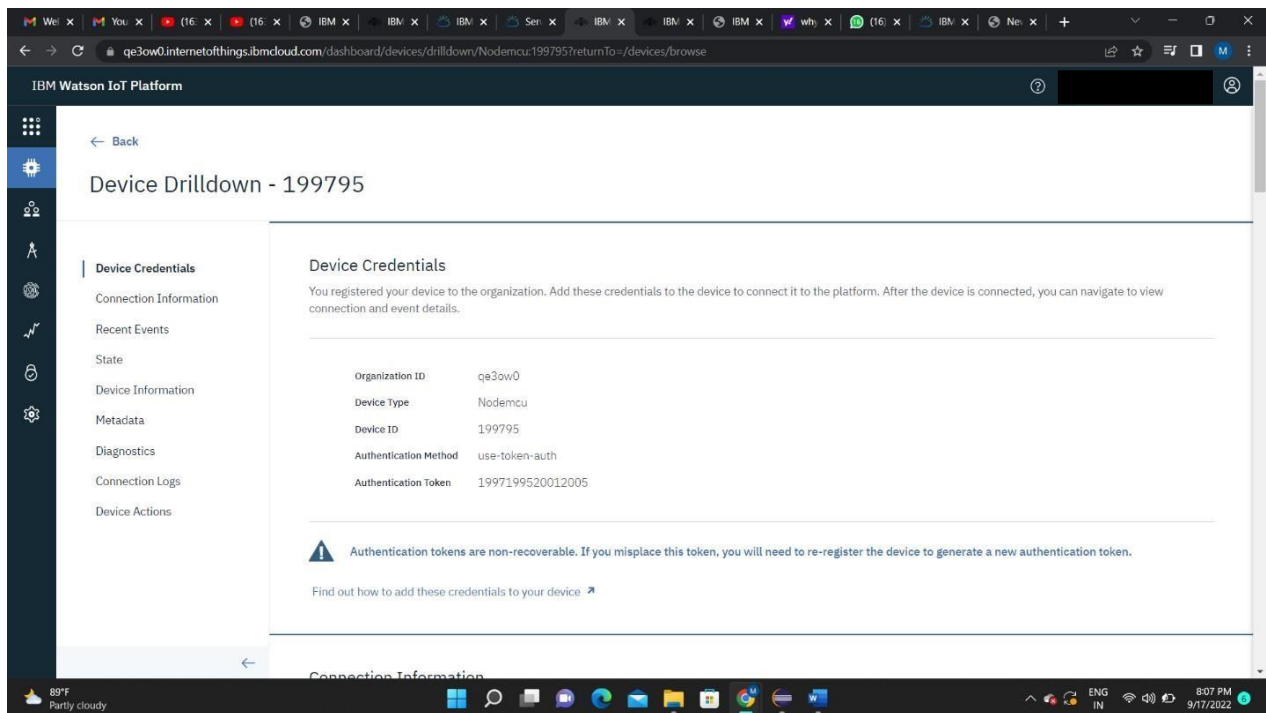
19. Clicking next it goes to the security where we do authentication token id.



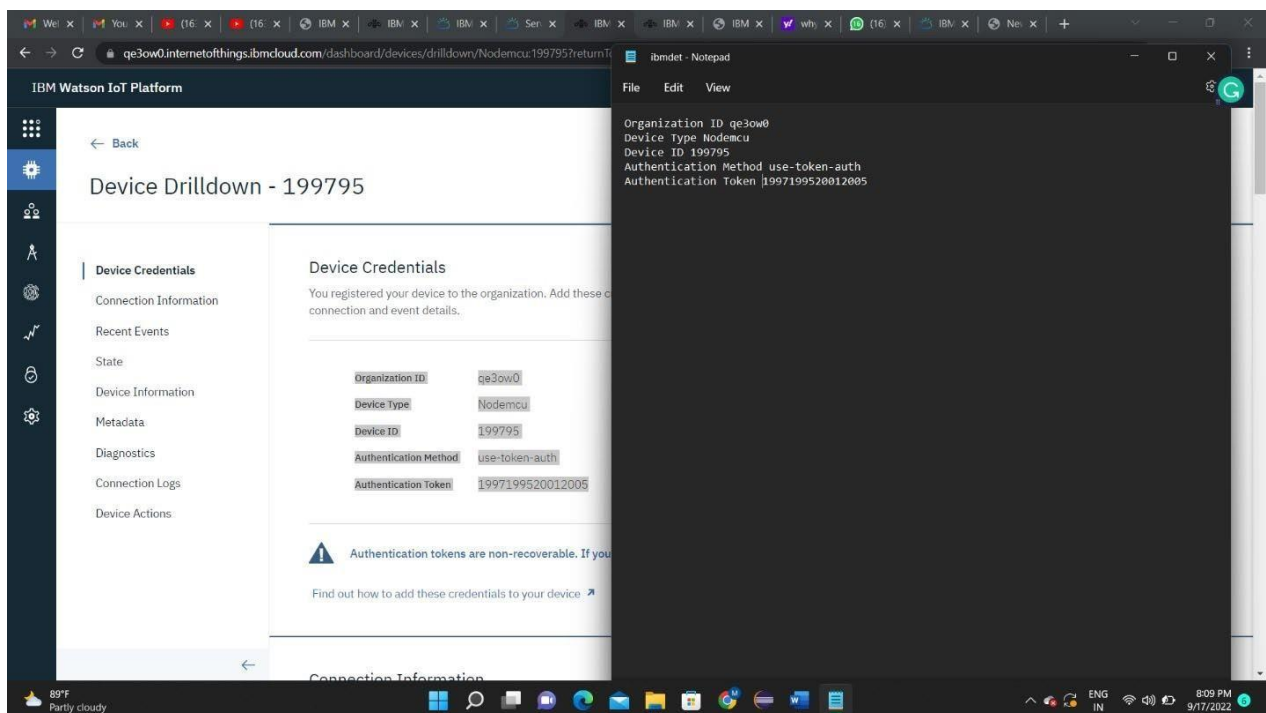
20. Clicking on next it goes to the summary of the device then click finish



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



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



23. 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 screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar labeled 'Search by Device ID' is present. A table lists devices with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. The first device is 199795, status 'Disconnected', type 'Nodemcu', class 'Device', added on '17 Sep 2022 20:07'. Below the table, a modal window is open for the selected device, showing tabs: 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, displaying a message: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table with columns: Event, Value, Format, and Last Received. The table is currently empty. At the bottom of the modal, there is a large IBM logo and the text 'Waiting for device events...'. The bottom status bar shows '89°F Partly cloudy' and the time '8:11 PM 9/17/2022'.

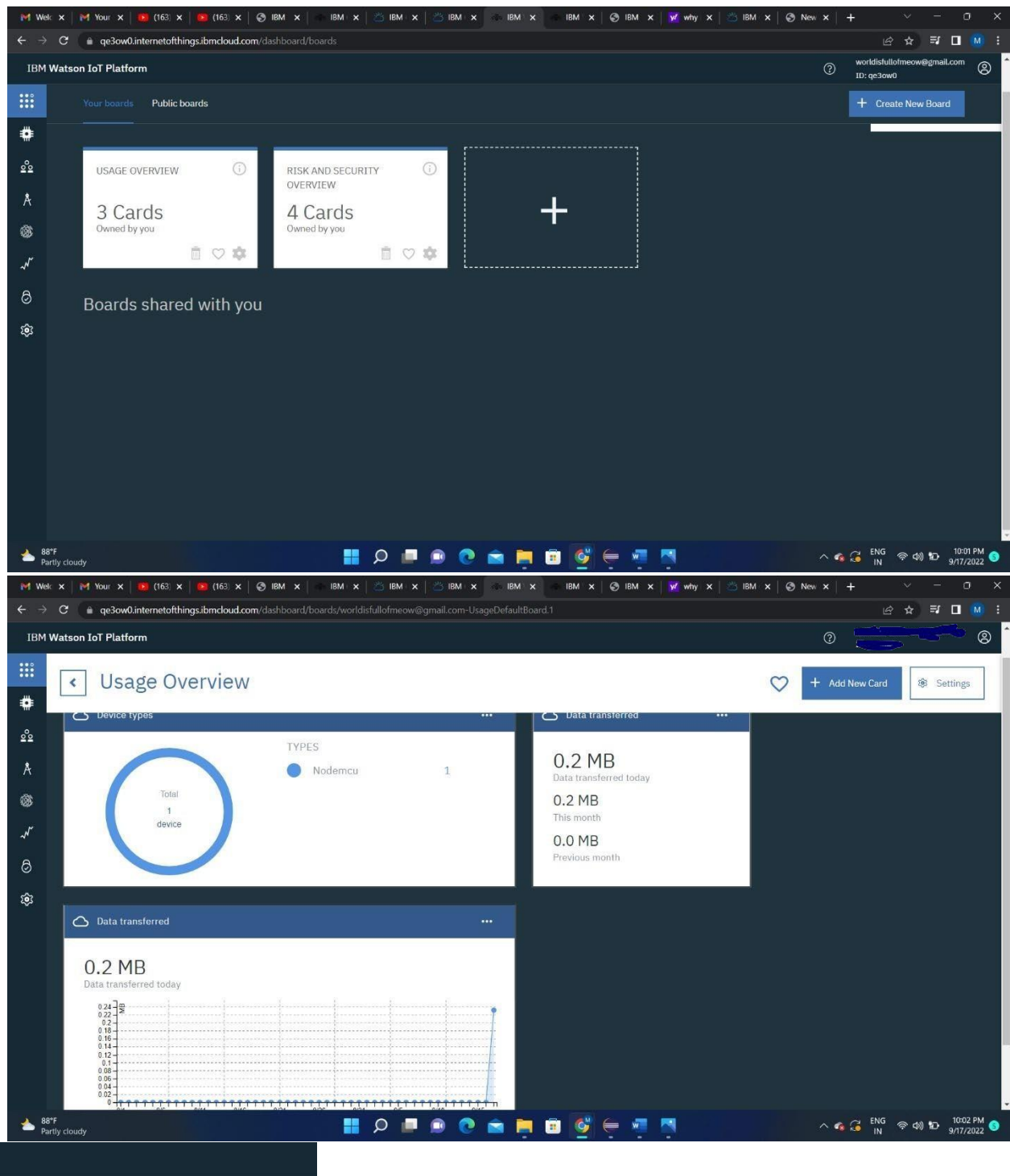
The screenshot shows the IBM Watson IoT Platform dashboard, similar to the previous one. The 'Device Information' tab is now active in the modal window. It displays the following details for device 199795:

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

At the bottom of the modal, it shows 'Items per page: 50' and '1 of 1 page'. The bottom status bar shows '89°F Partly cloudy' and the time '8:10 PM 9/17/2022'.

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

24. The Boards will display card for the project.



**RESULT:**

An IBM Watson cloud for IoT and a device is created