

Team ID	PNT2022TMID11775
Project Name	Industry specific intelligent fire management system

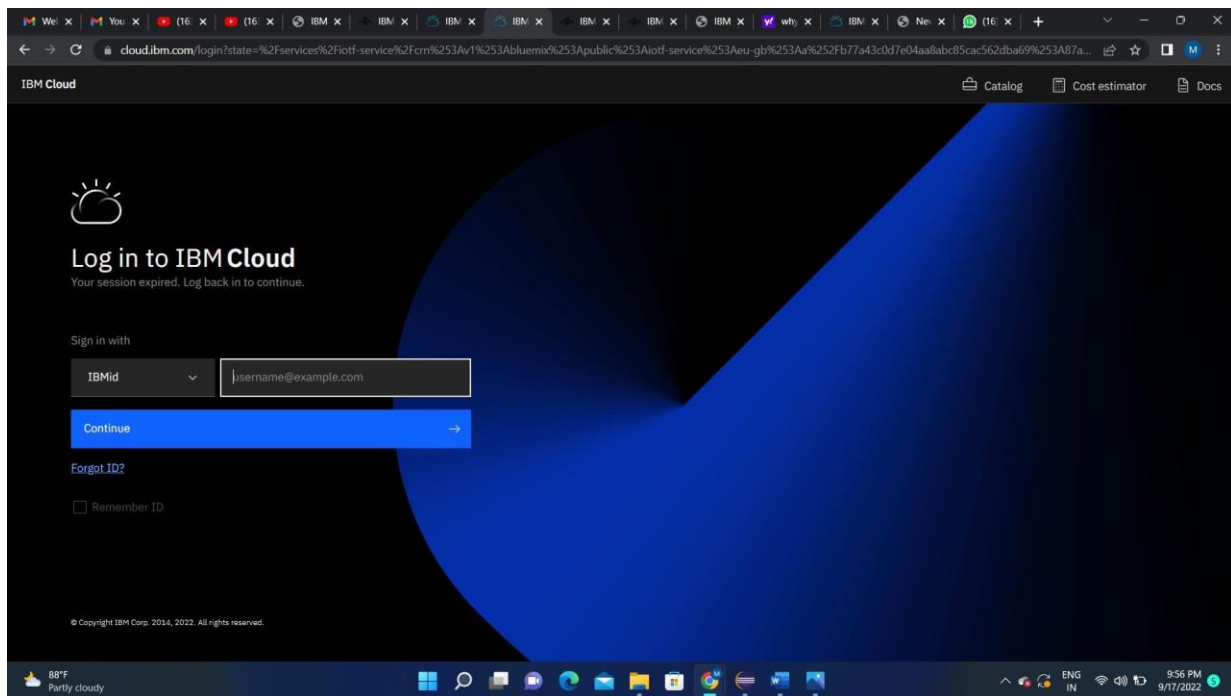
CREATE IBM WATSON IOT PLATFORM AND DEVICE

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

The screenshot shows the IBM Cloud dashboard interface. At the top, there's a navigation bar with the IBM Cloud logo, a search bar, and links for Catalog, Docs, Support, Manage, and the user's account (Meow Man's Account). Below the navigation bar, the main section is titled "Dashboard" and includes links to "Edit dashboard", "Upgrade account", and a prominent "Create resource" button. The dashboard is divided into two main sections: "For you" and "Resource summary".

For you section:

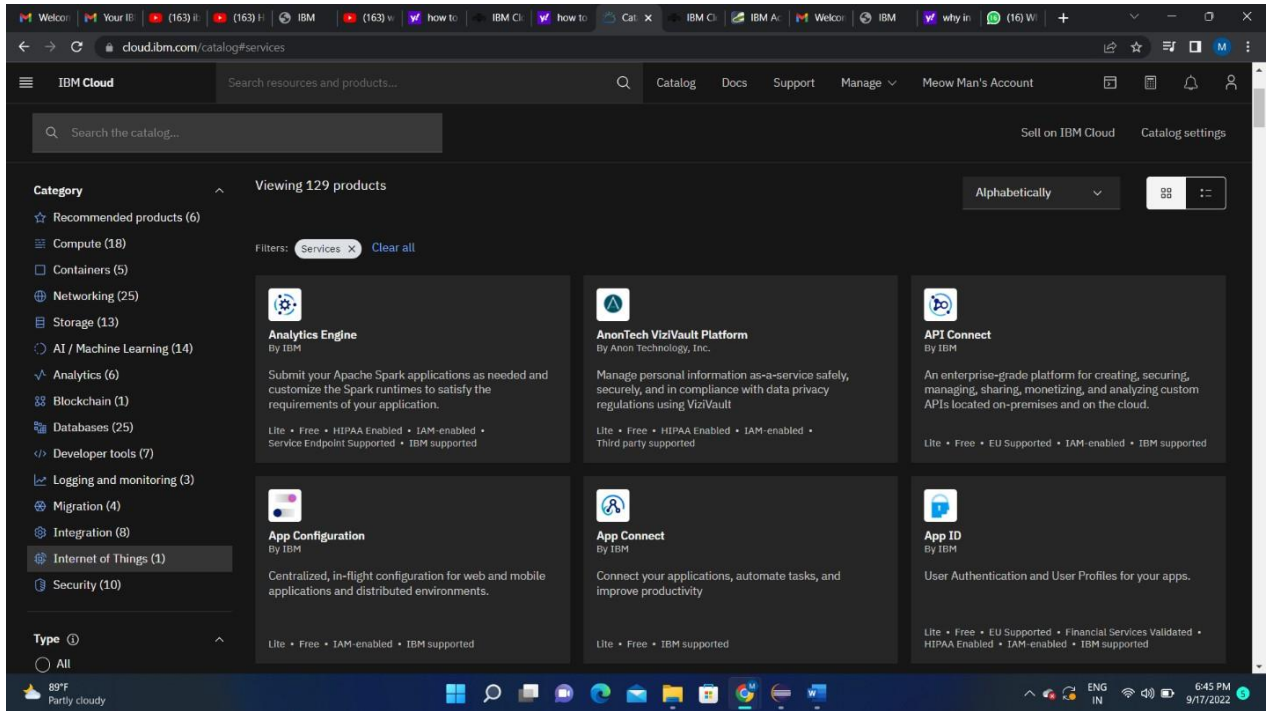
- Build**: Explore IBM Cloud with this selection of easy starter tutorials and services. (Recommended, 1 hr)
- An essential guide to Kubernetes**: Deploy, scale, and manage your containerized applications with Kubernetes. (Recommended, 1 hr)
- Create a Kubernetes cluster**: Automate deployments and manage your containerized apps in a native Kubernetes experience. (Getting started, 20 min)
- Create an OpenShift cluster**: Deploy apps on highly available clusters with Red Hat OpenShift on IBM Cloud. (Getting started, 20 min)
- Deploy on Kubernetes**: With Kubernetes clusters, you can run, update, and scale containerized applications. (Recommended, 15 min)
- Get started with Containers & Kubernetes**: Containers are a standard way to package apps, and their dependencies, to allow seamless movement between environments. (Recommended, 30 min)

Resource summary section:

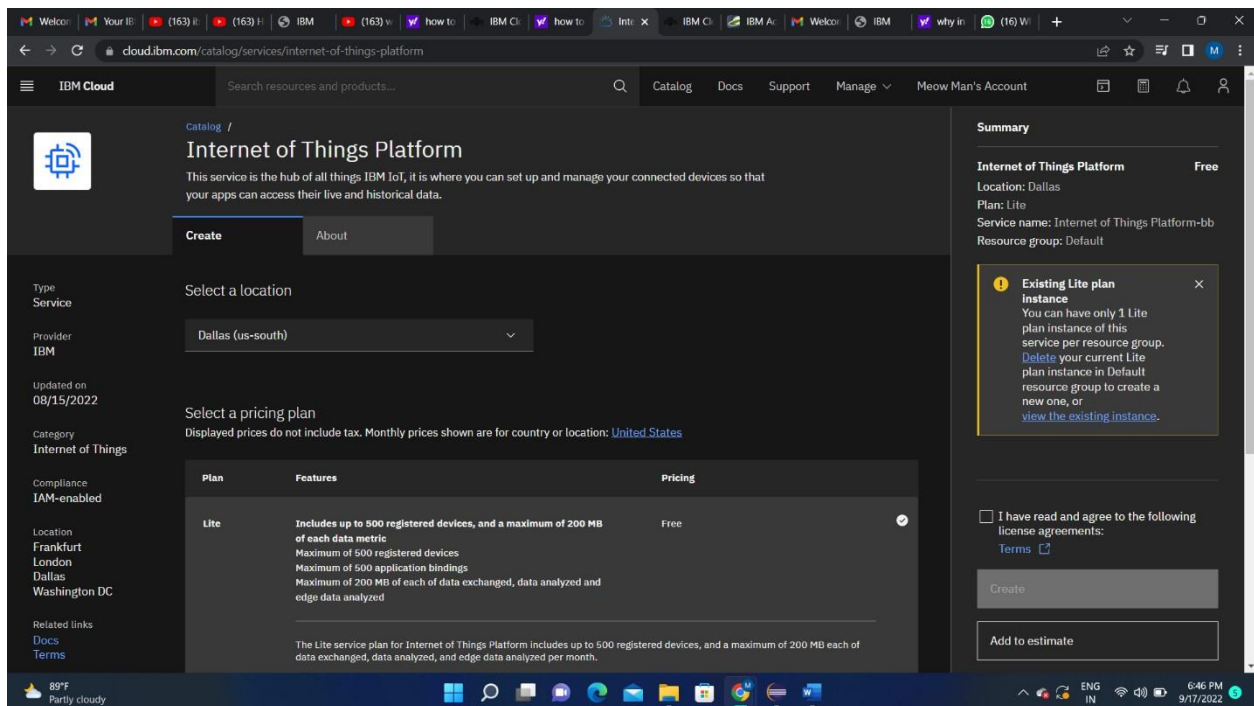
Resource	Count
Cloud Foundry apps	1
Services and software	3
Apps	2

The bottom of the dashboard features a "Planned maintenance" section and an "IBM Cloud status" section with a world map. The footer shows the system tray with weather (92°F Cloudy), taskbar icons, and system information (ENG IN, 6:41 PM, 9/17/2022).

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

The screenshot shows the IBM Cloud console for the Internet of Things Platform. The main content area displays the 'Lite' plan details, including features like up to 500 registered devices and 200 MB of data metric. The 'Configure your resource' section shows the service name 'Internet of Things Platform-bb' and the resource group 'Default'. A warning message is displayed on the right side, stating: '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.' The console also includes a 'Summary' section on the right with details like Location (London), Plan (Lite), Service name, and Resource group (Default). At the bottom, there are buttons for 'Create' and 'Add to estimate'.

IBM Cloud

Search resources and products...

Internet of Things

Compliance
IAM-enabled

Location
Frankfurt
London
Dallas
Washington DC

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

Plan	Features	Pricing
Lite	<p>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</p> <ul style="list-style-type: none">Maximum of 500 registered devicesMaximum of 500 application bindingsMaximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed <p>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.</p> <p>Lite plan services are deleted after 30 days of inactivity.</p>	Free

Configure your resource

Service name
Internet of Things Platform-bb

Tags
Examples: env:dev, version=1

Select a resource group
Default

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

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](#)

Create

Add to estimate

89°F Partly cloudy

6:47 PM 9/17/2022

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

The screenshot shows the IBM Cloud 'Internet of Things Platform' service page. The 'Create' tab is active, displaying a 'Select a location' dropdown menu with 'Dallas (us-south)' selected. Below this 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

On the right, the 'Summary' panel shows the service details: 'Internet of Things Platform', 'Free', 'Location: Dallas', 'Plan: Lite', 'Service name: Internet of Things Platform-2w', 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.' At the bottom, there is a checkbox for 'I have read and agree to the following license agreements.' and buttons for 'Create' and 'Add to estimate'.

This screenshot shows the 'Configure your resource' section of the IBM Cloud 'Internet of Things Platform' service page. The 'Lite' plan is selected. The 'Service name' field is populated with 'Internet of Things Platform-child_safety'. The 'Select a resource group' dropdown shows 'Default' selected. Below these, there are fields for 'Tags' and 'Access management tags' with example text: 'Examples: env:dev, version-1' and 'Examples: access:dev, proj:version-1'. The 'Summary' panel on the right is updated to show 'Location: London' and 'Service name: Internet of Things Platform-child_safety'. The 'Create' button is now highlighted in blue, indicating it is ready to be clicked.

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 left sidebar has a 'Manage' tab selected. The main content area displays 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 highlighted.

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 displays the 'Current plan' as 'Lite' and 'Current usage' as 'N/A'. Below this, there's a 'Change pricing plan' section with a table showing the 'Lite' plan details.

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

Current usage

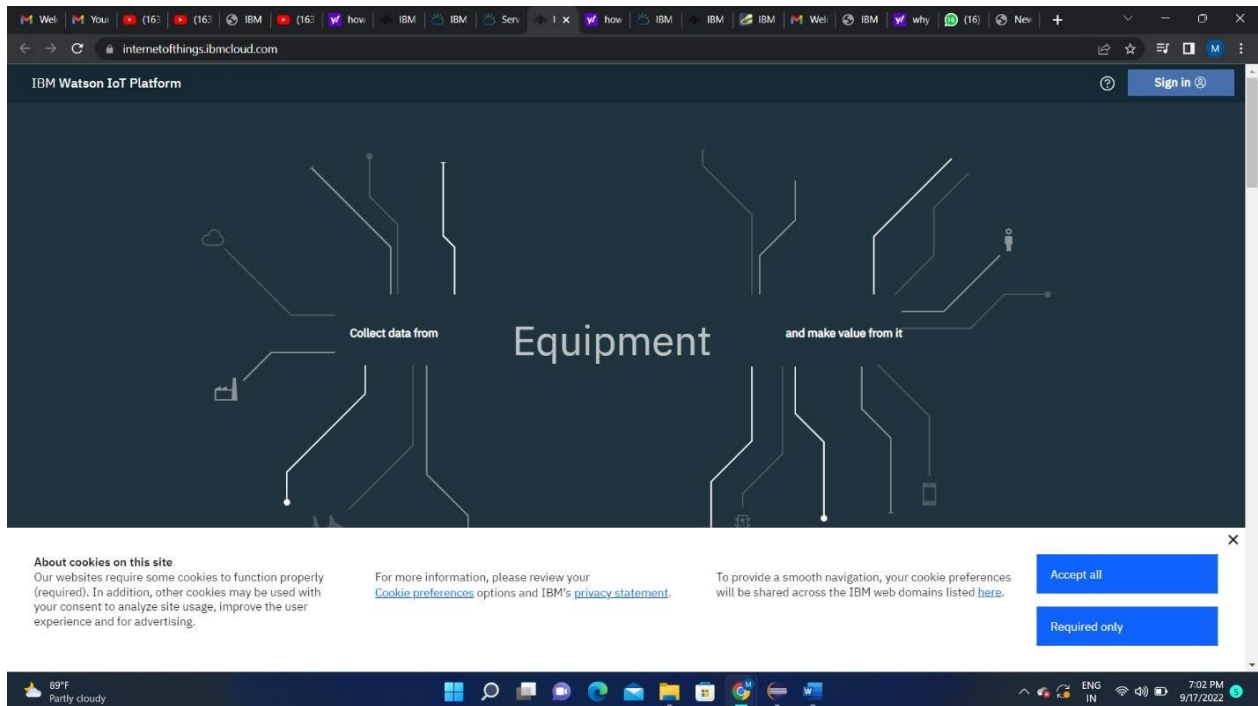
N/A

Lite plan services are deleted after 30 days of inactivity.

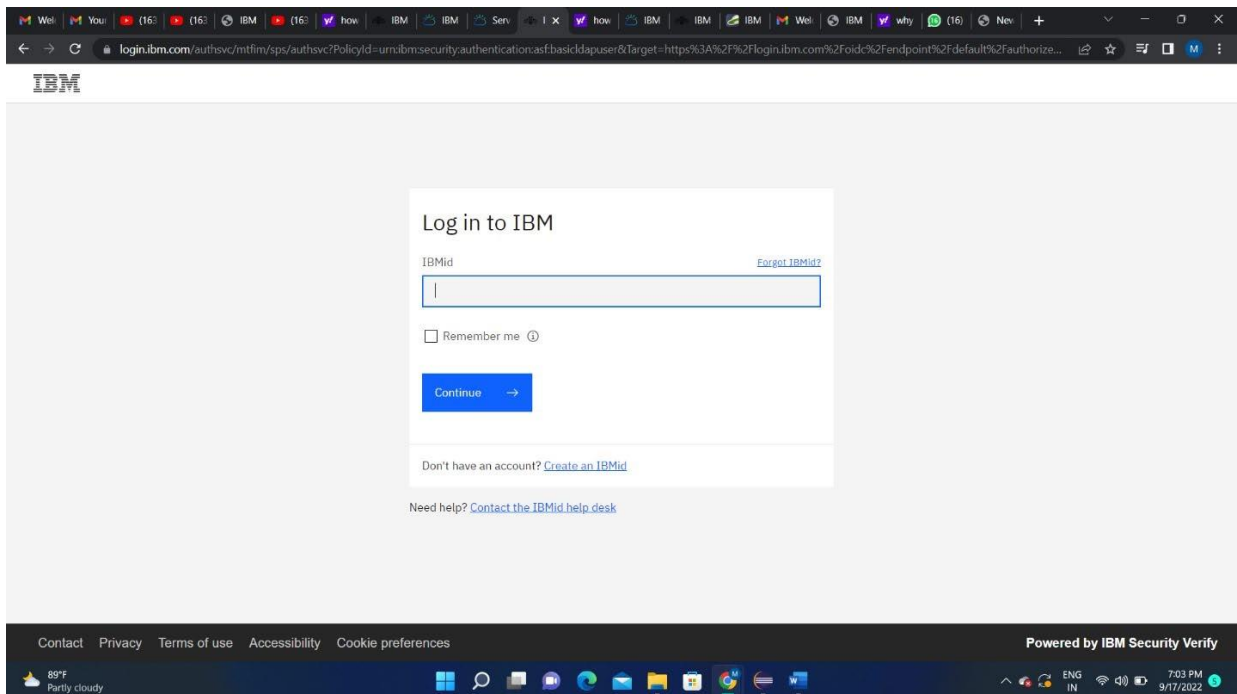
Change pricing plan

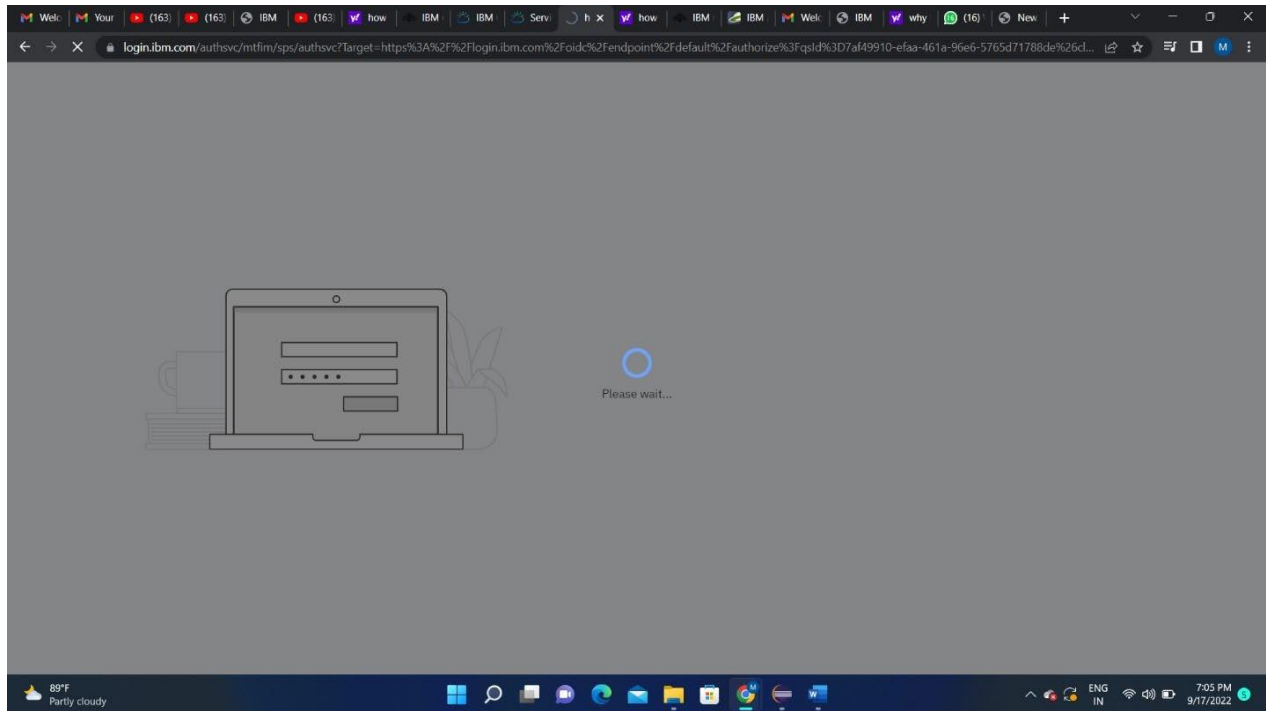
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free

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

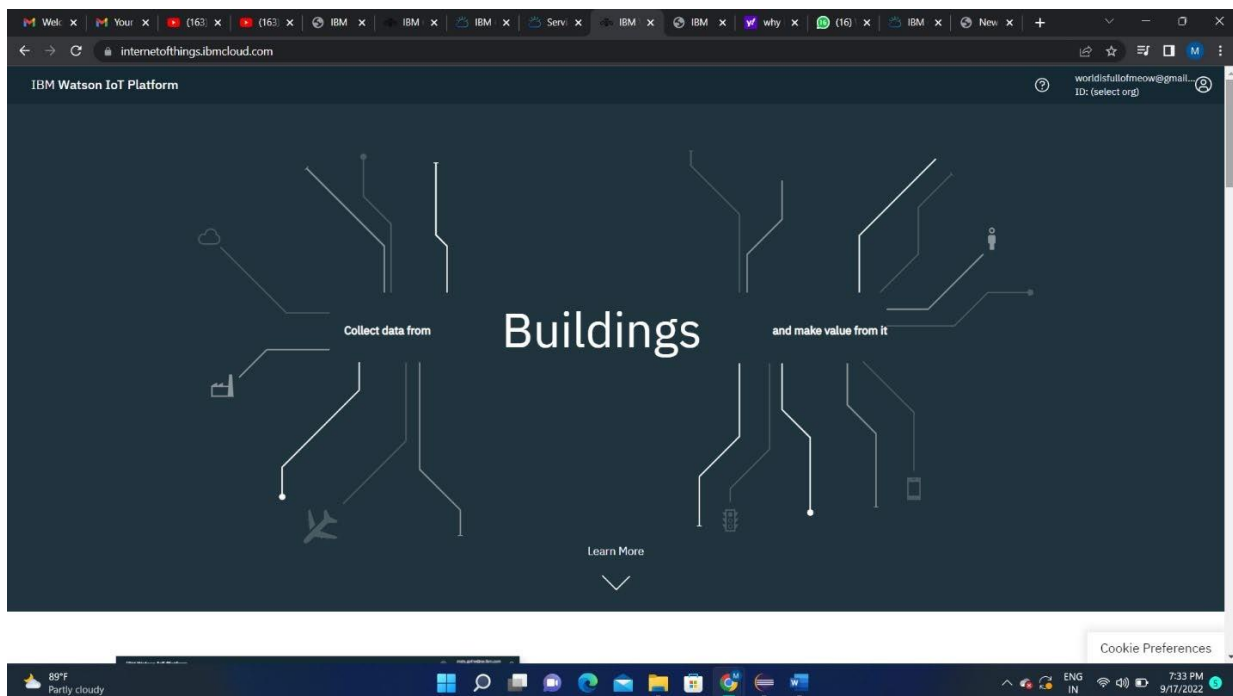


9. Enter the details to sign in to the Watson Cloud to create a device

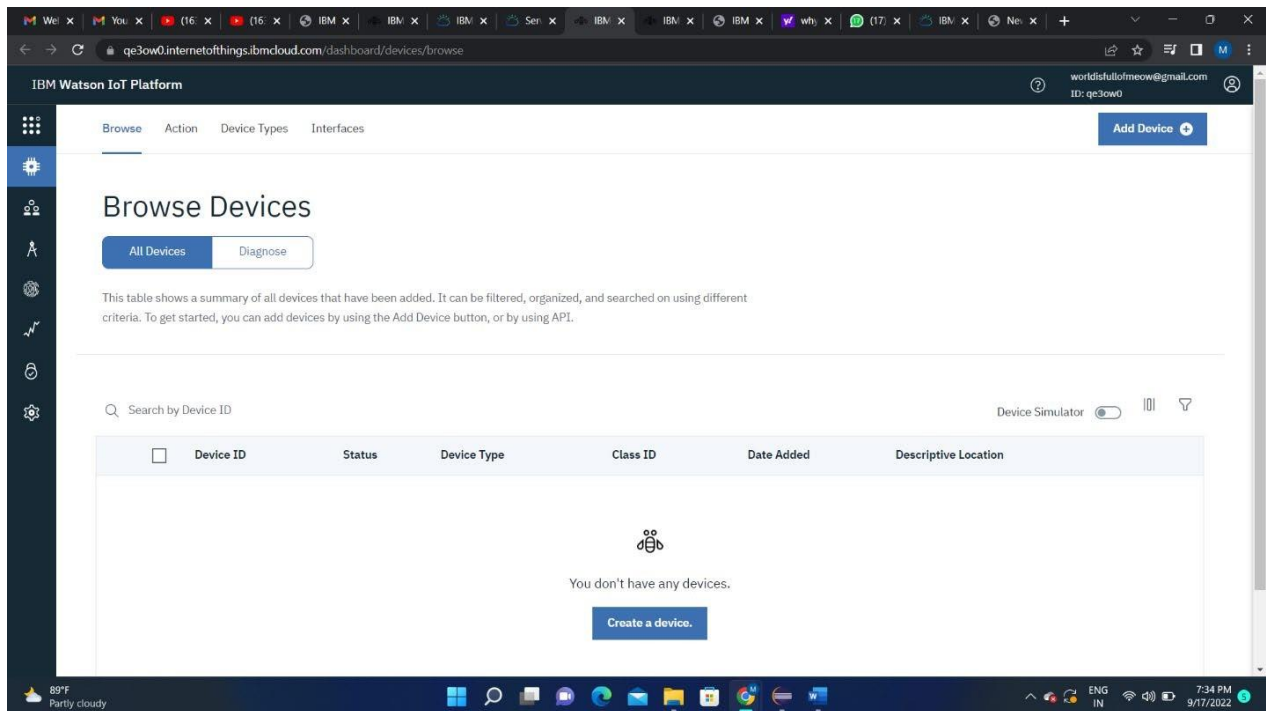




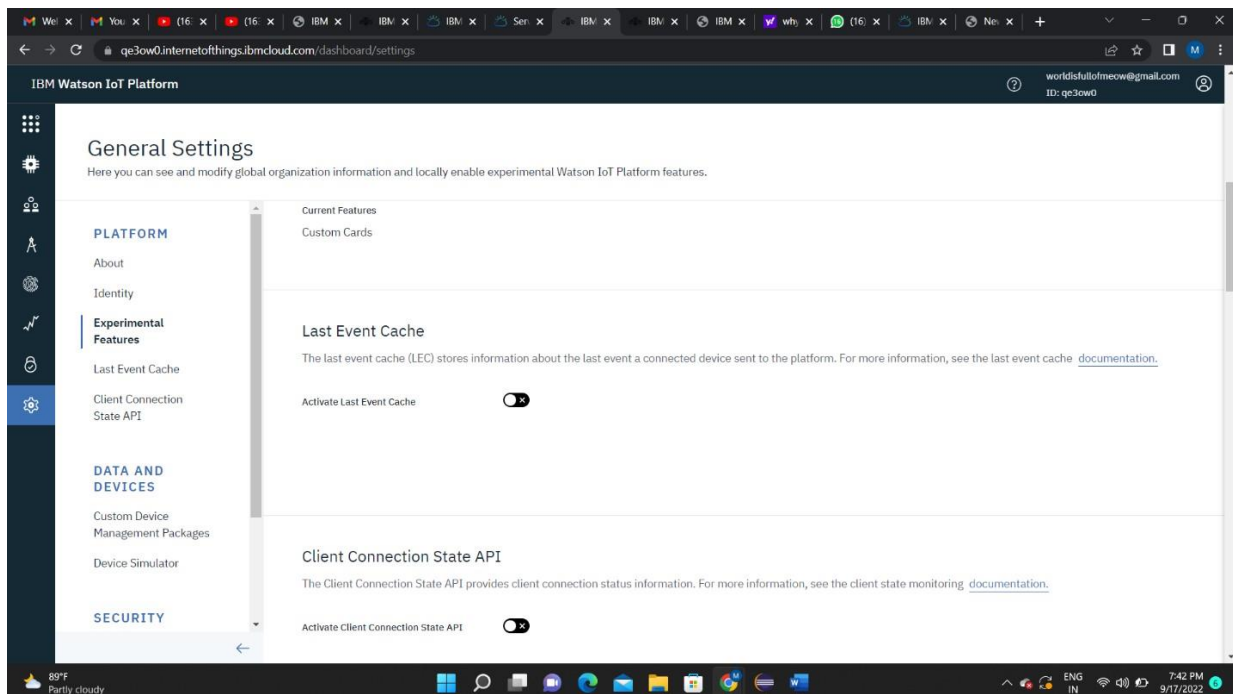
10. Once logged in the name will be displayed and it goes back to the first page



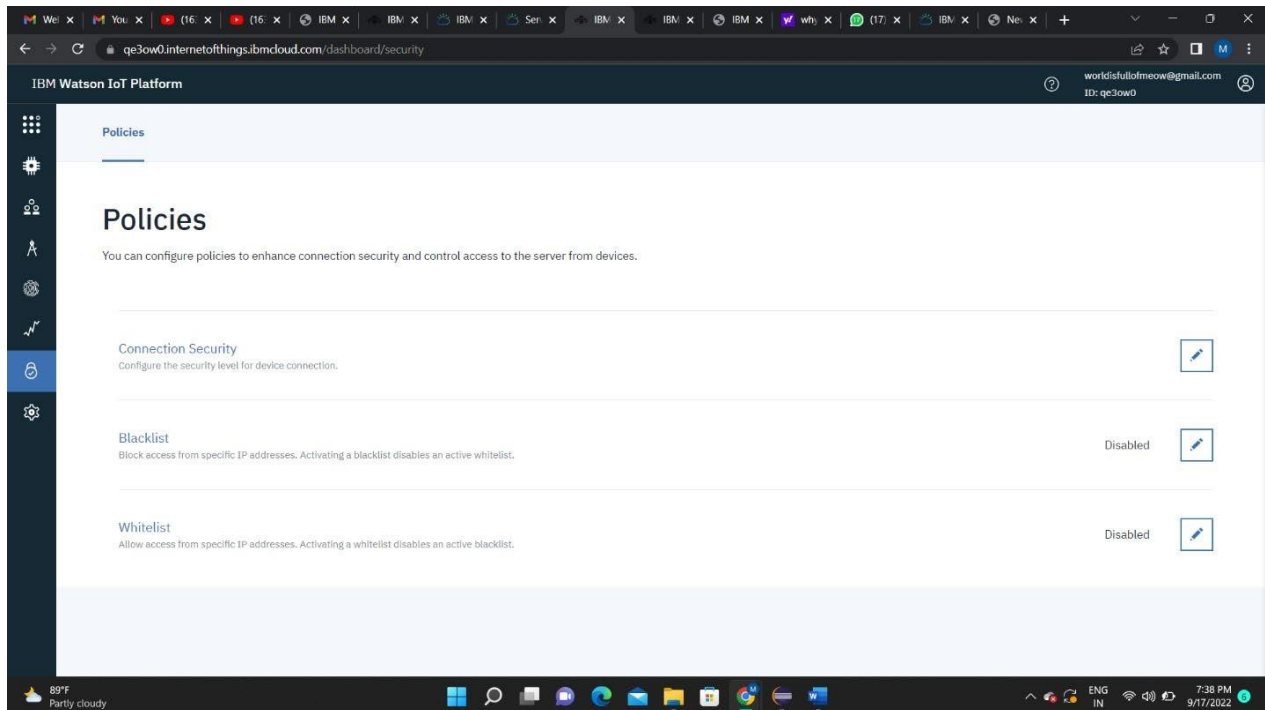
11. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices.



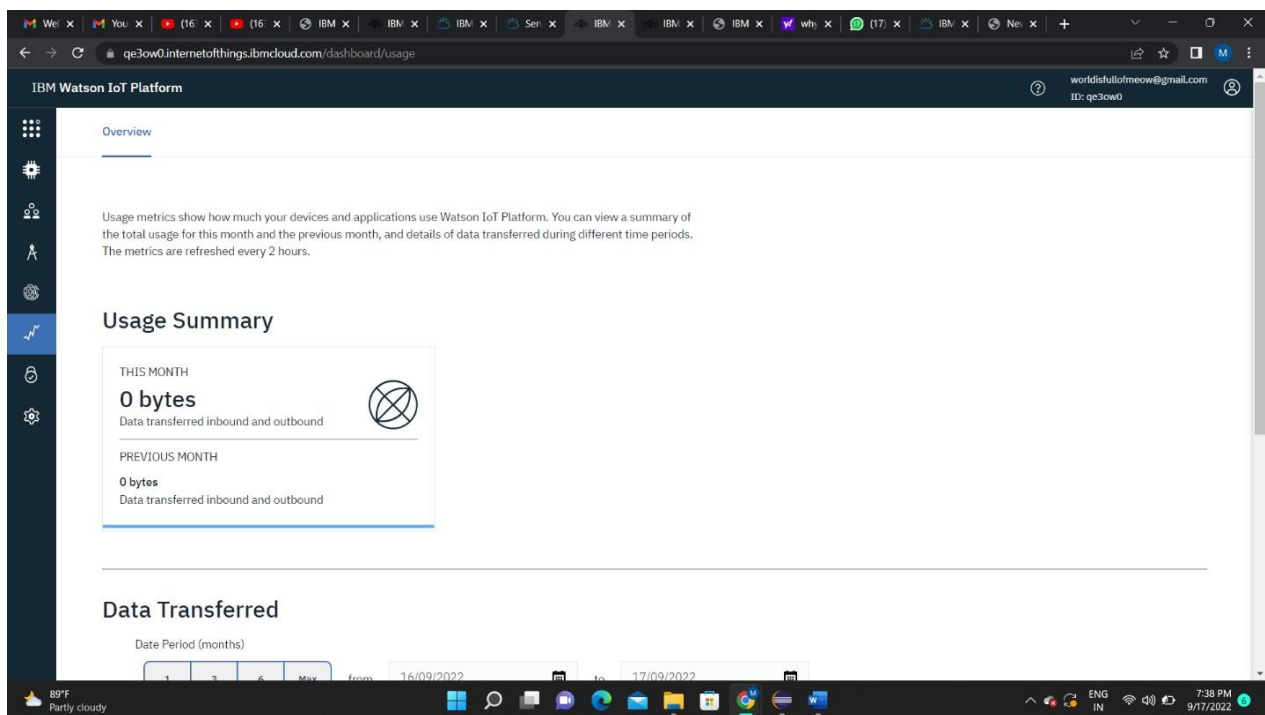
12. The setting tab is used to change the general setting if needed for the project.



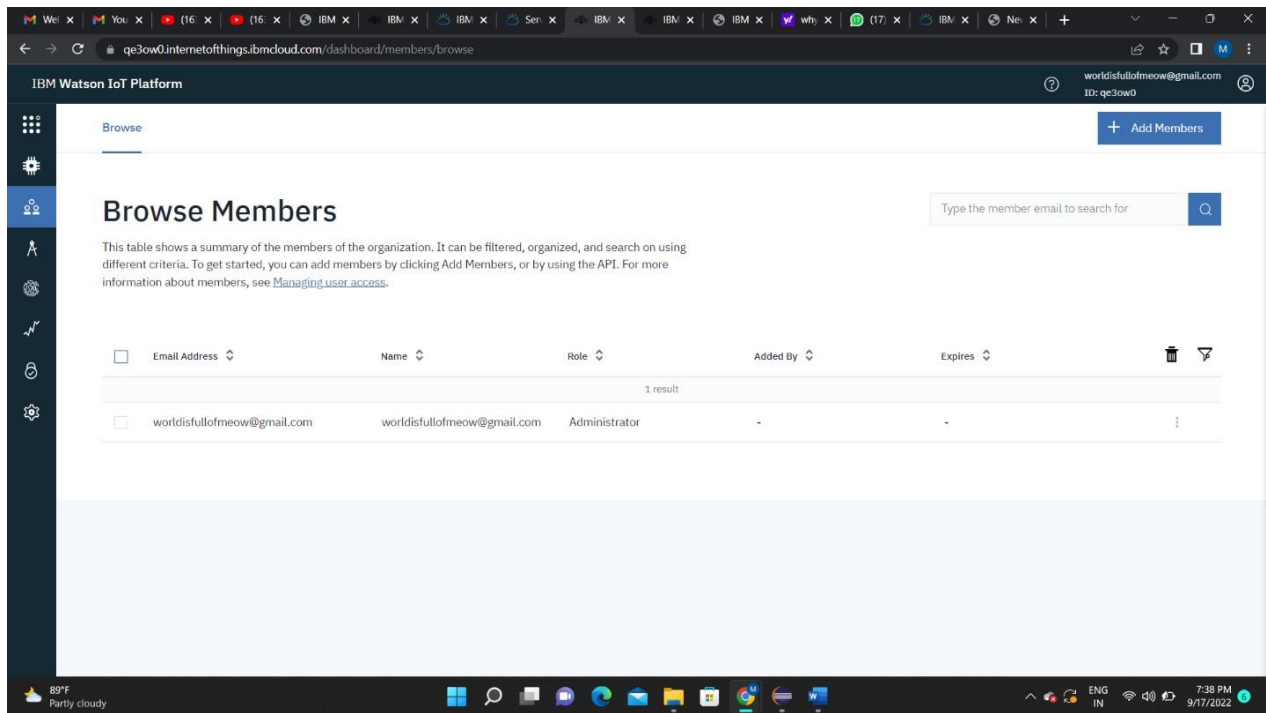
13. In the security tab we can choose the type of security connection and can change according to specification



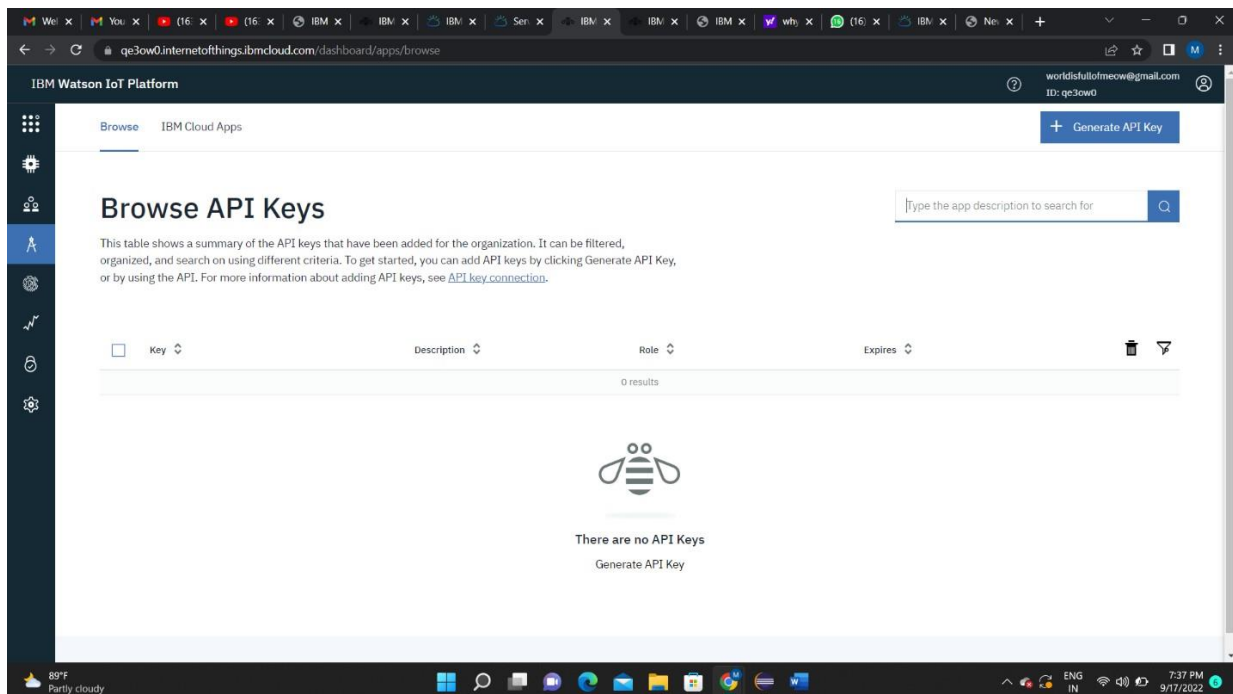
14. Usage gives the summary of how many bytes are used between the devices and the IBM cloud.



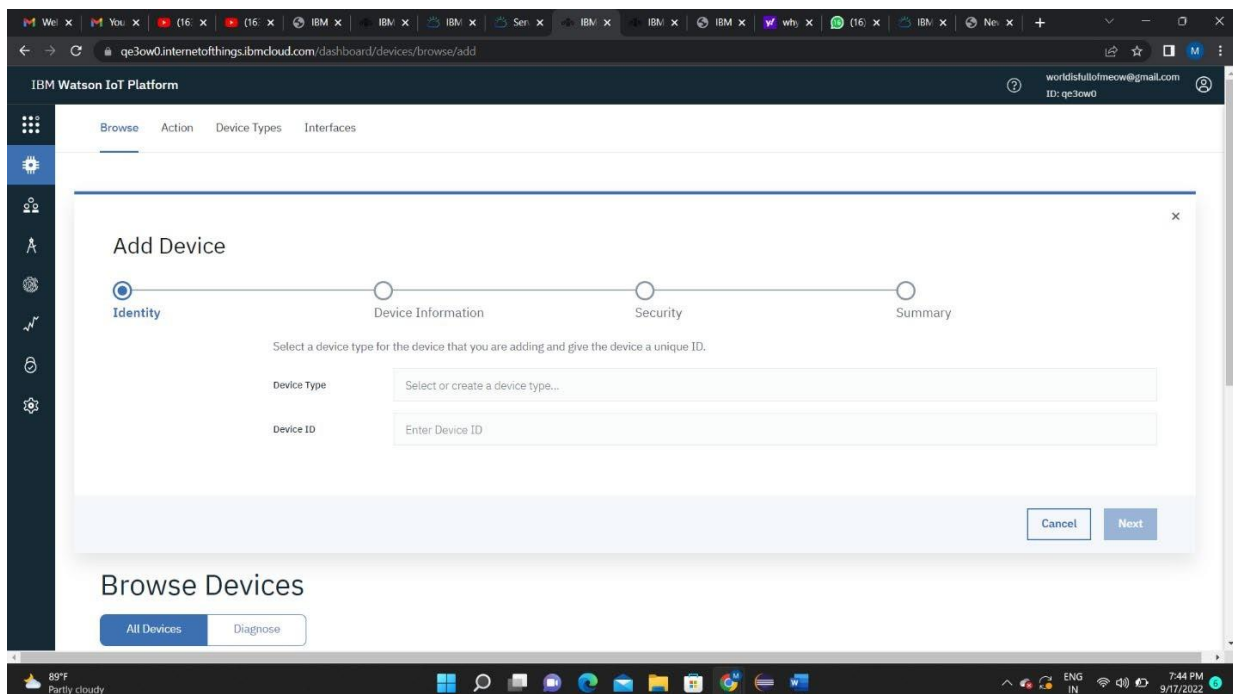
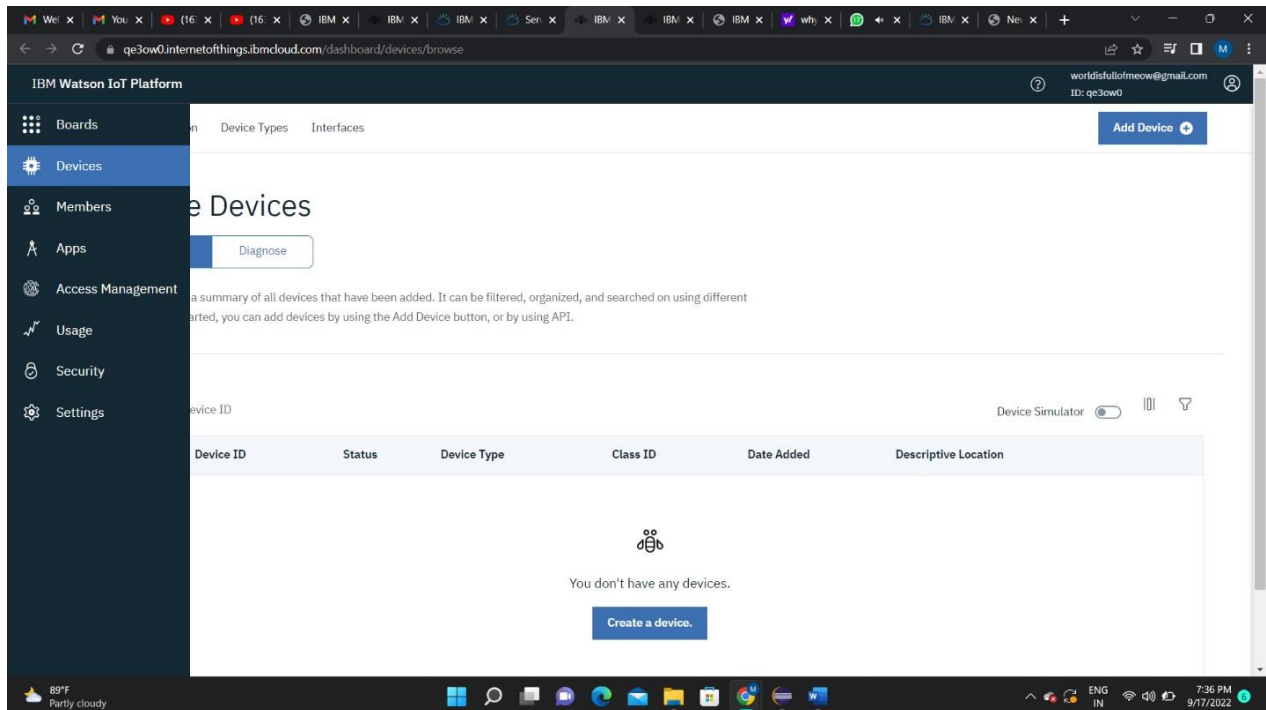
15. The member tab is add the teams members to work in the platform

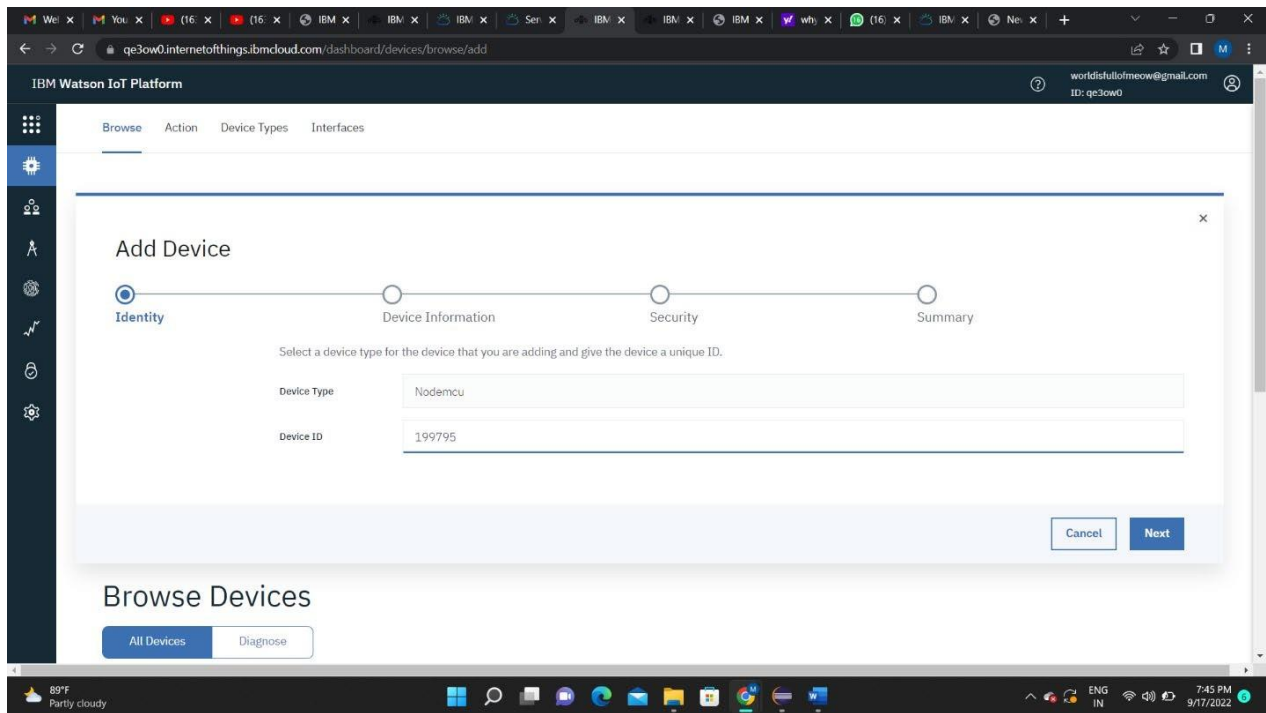


16. This tab is used when you want to connect to some other platform and to integrate with other services.

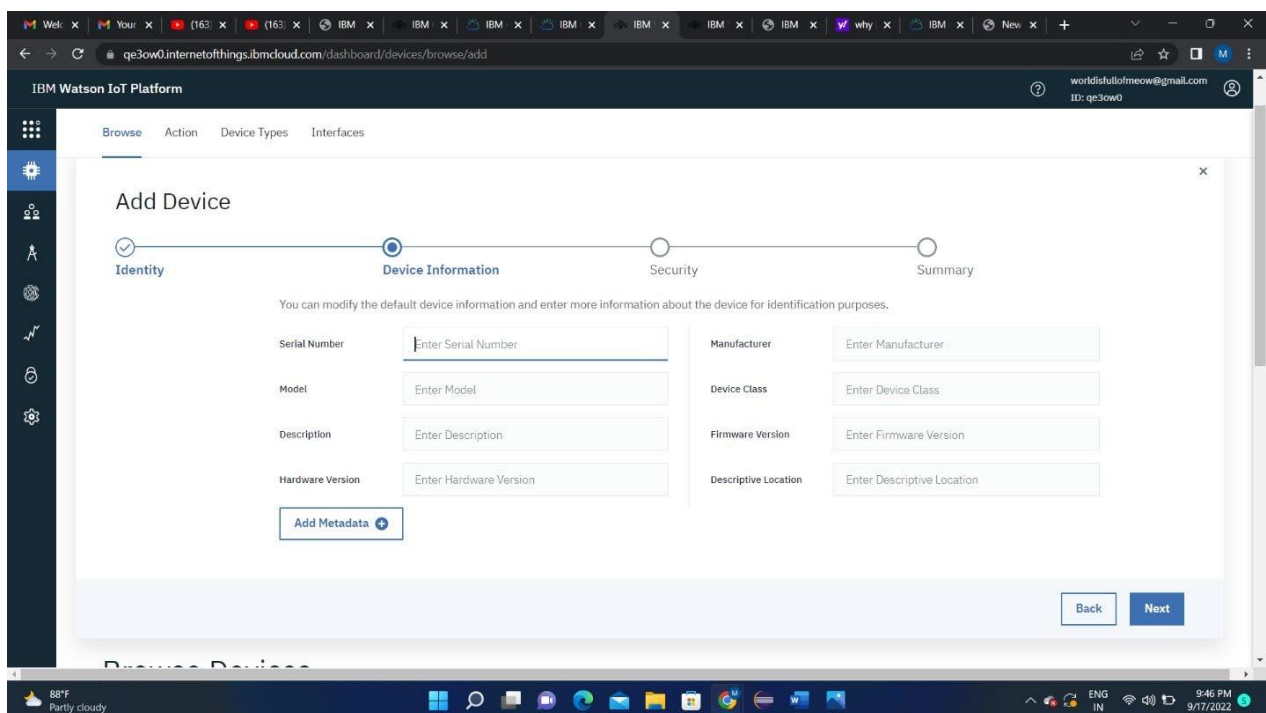


17. Click on the device tab and click on the add device button, then give the device type and device id and click next

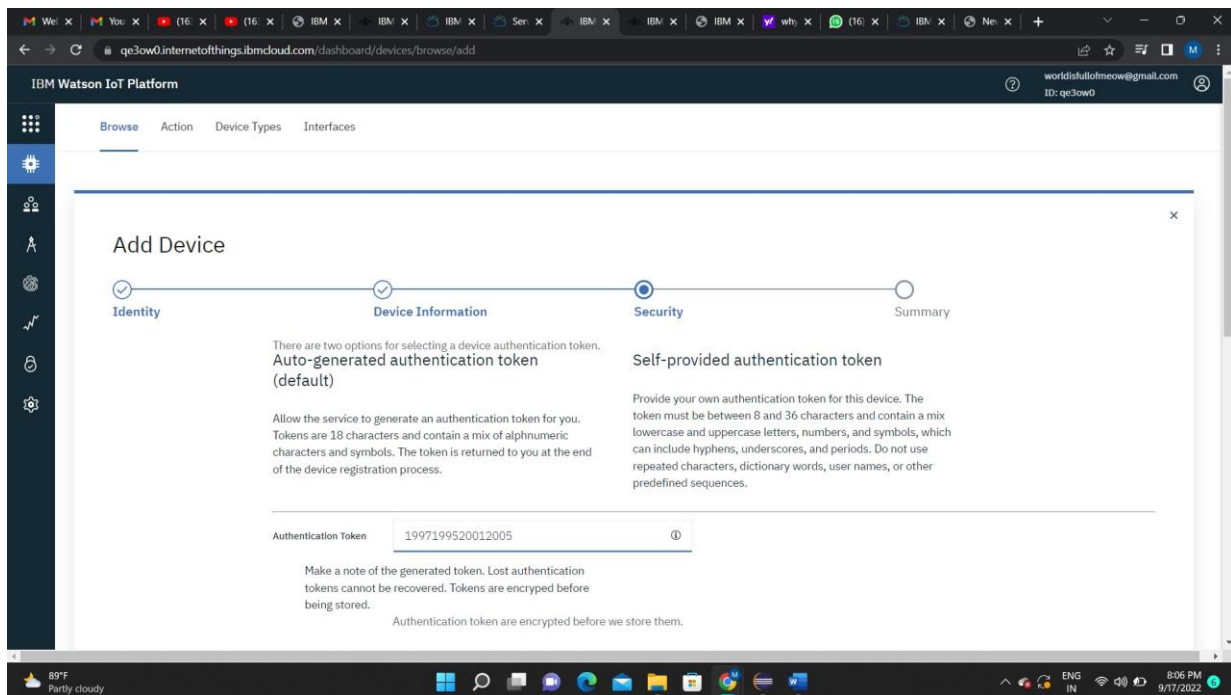




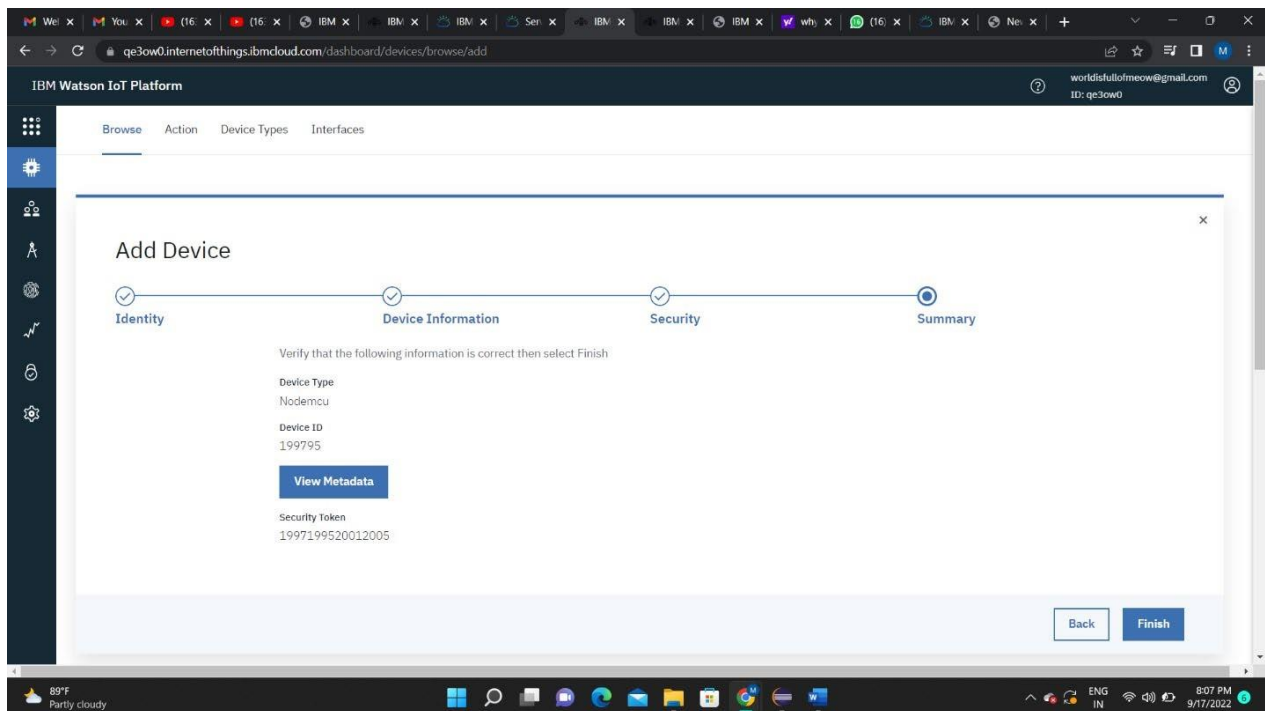
18. This page to enter extra details and of the hardware



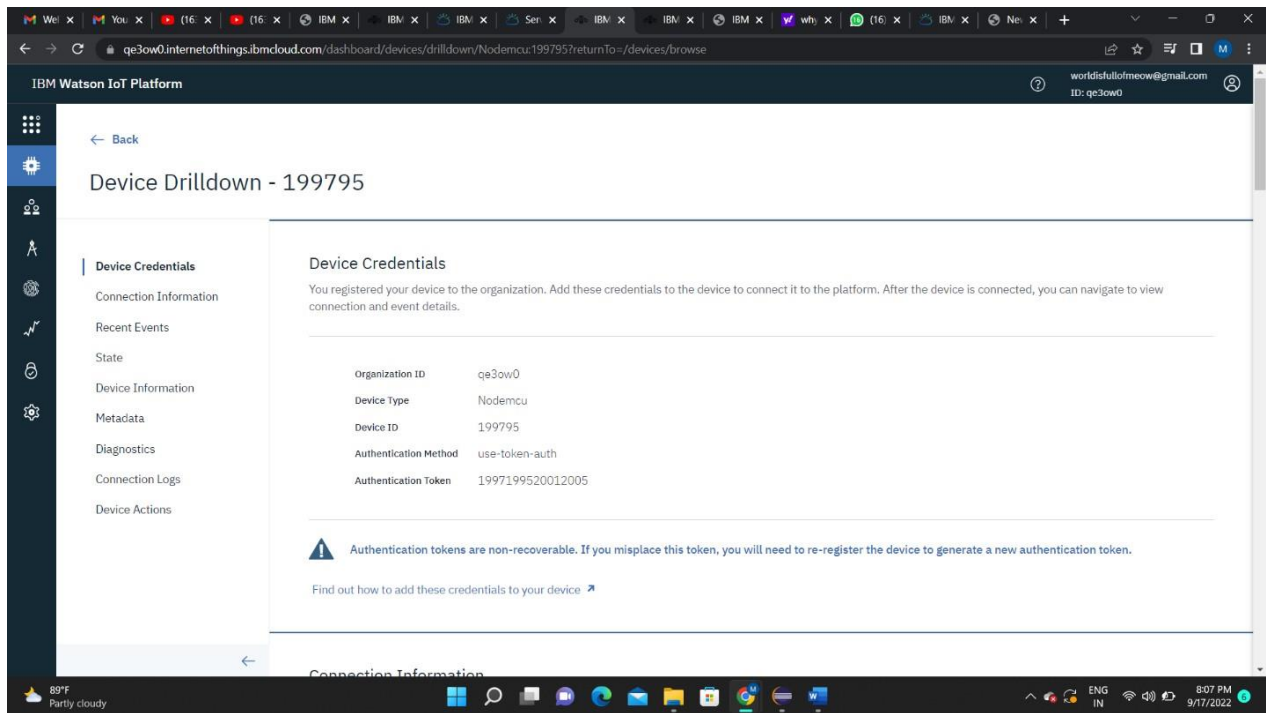
19. Clicking next it goes to the security where we do authentication token id.



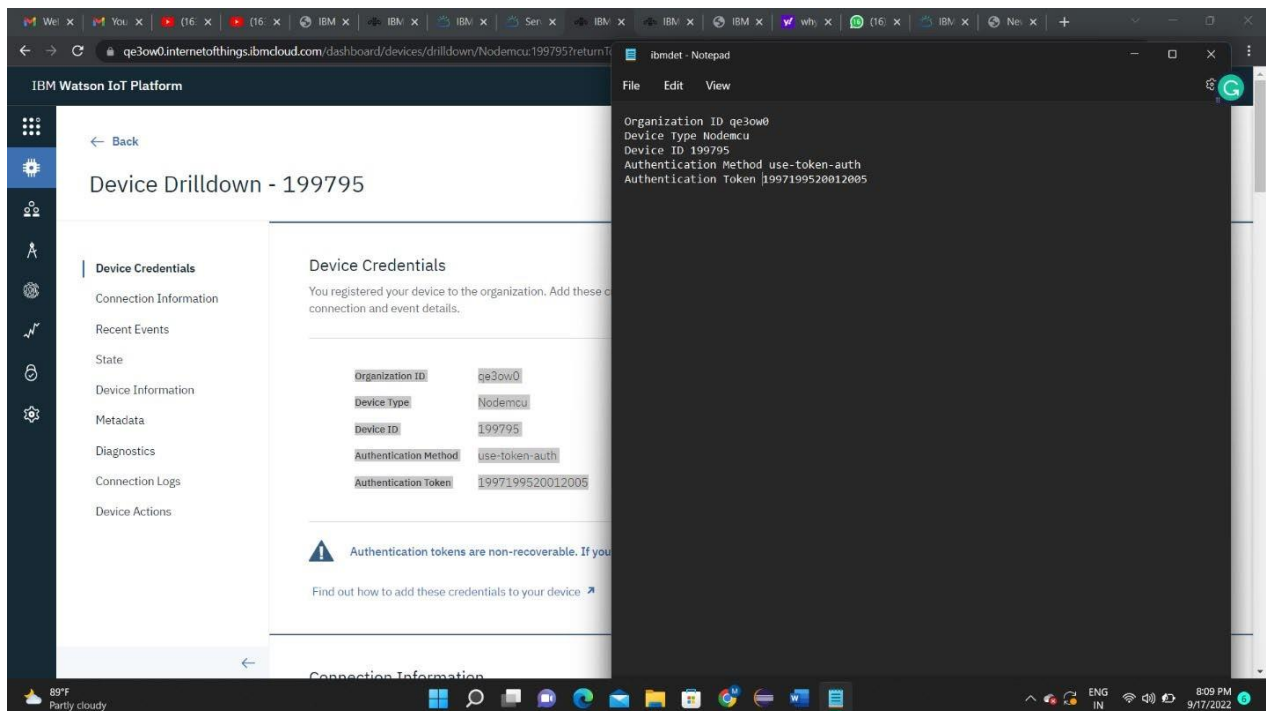
20. Clicking on next it goes to the summary of the device then click finish



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



22.Safe 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, the 'Recent Events' tab is active, showing 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 bottom of the screen shows a weather widget (89°F, Partly cloudy) and a taskbar with various application icons.

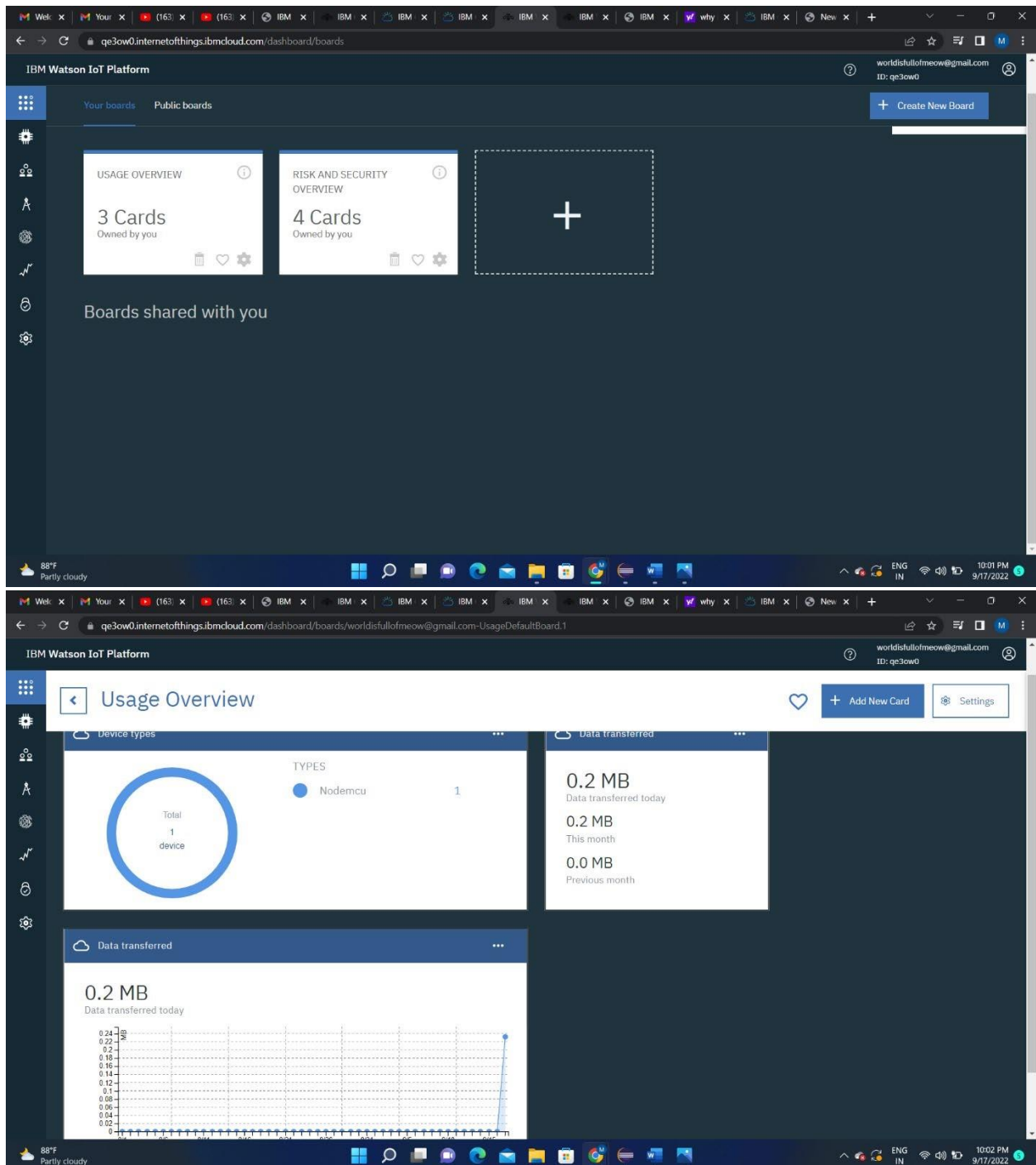
The screenshot shows the IBM Watson IoT Platform dashboard with the 'Device Information' tab selected for device 199795. The tab displays the following information:

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 tab, it shows 'Items per page: 50' and '1 of 1 page'.

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