

CREATE IBM WATSON IOT PLATFORM AND DEVICE

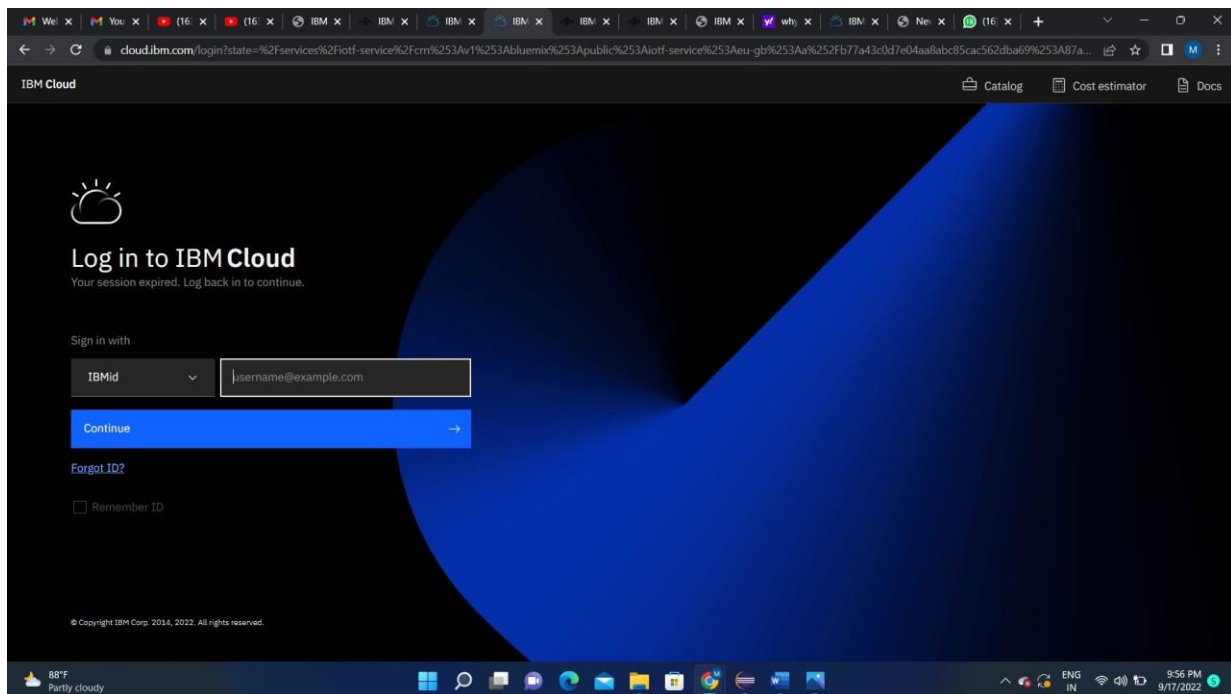
TEAM ID	PNT2022TMID33322
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION

AIM:

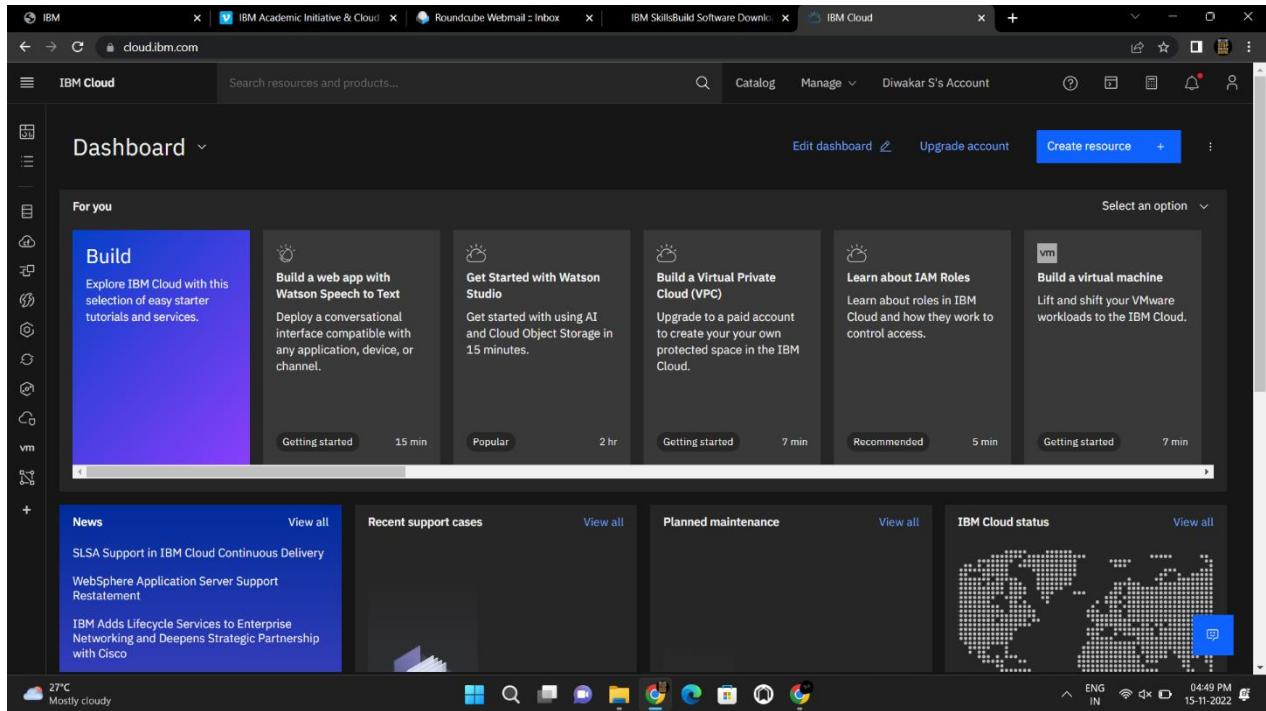
To create the IBM Watson IoT platform and device

STEPS:

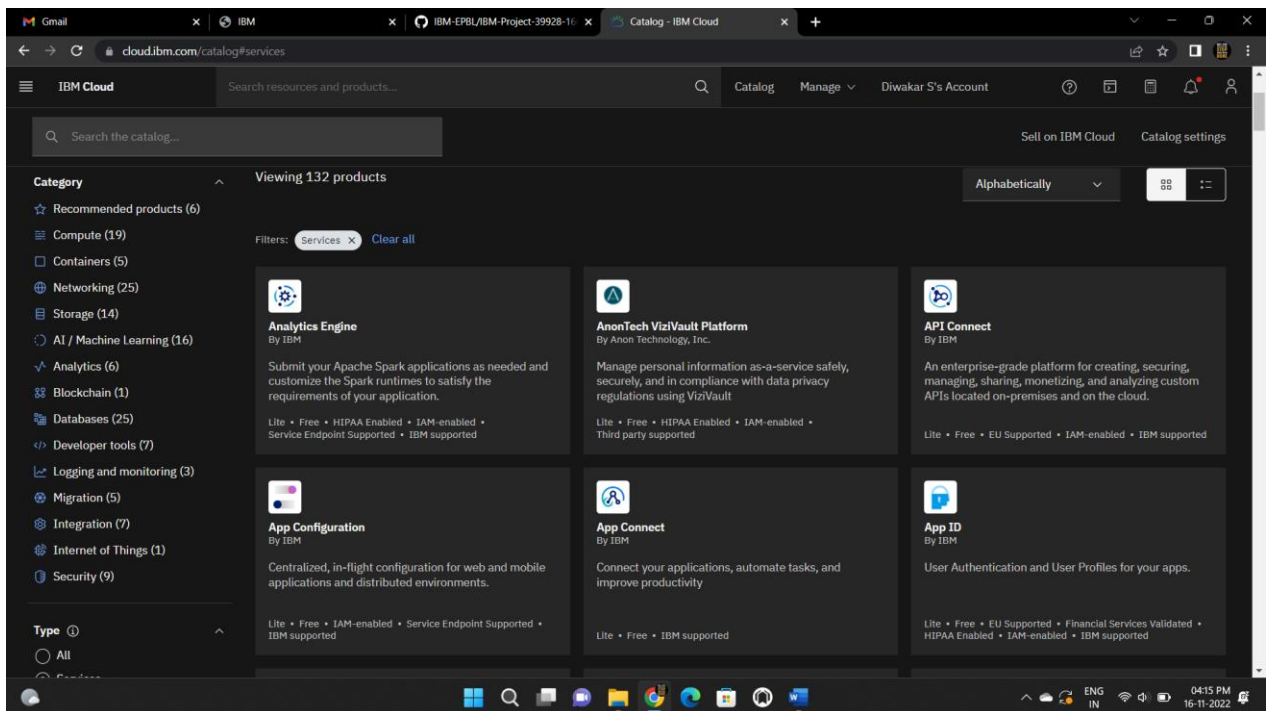
1. Firstly create an IBM cloud account with IBMid and password



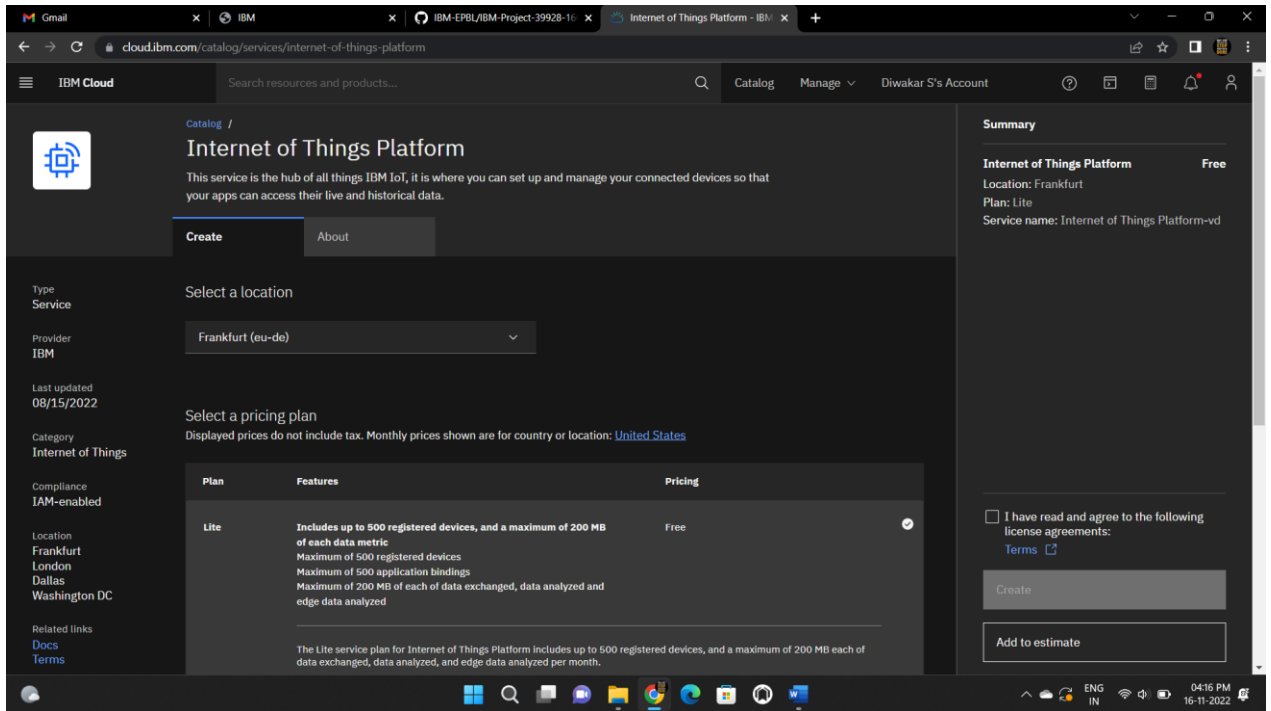
2. Home page of IBM cloud



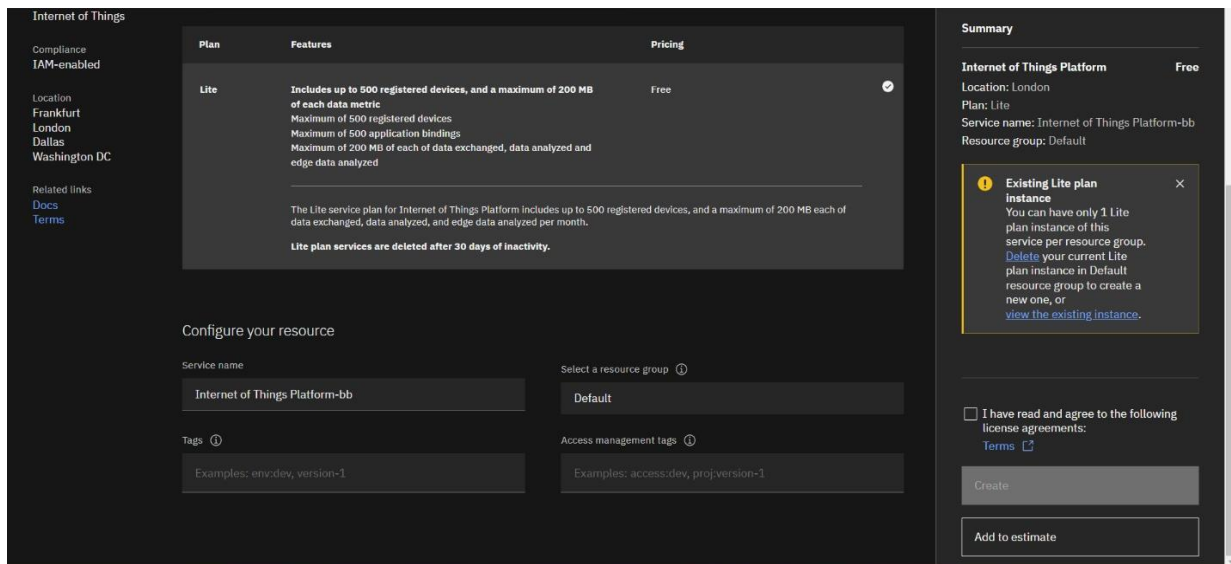
3. Click on the catalog on the top




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



Internet of Things

Compliance
IAM-enabled

Location
Frankfurt
London
Dallas
Washington DC

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

Catalog /

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

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-child_safety

Select a resource group ⓘ

Default

Tags ⓘ

Examples: env:dev, version-1

Access management tags ⓘ

Examples: access:dev, proj:version-1

Summary

Internet of Things Platform	Free
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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](#)

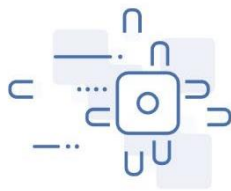
Create

Add to estimate

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)

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

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

Current usage

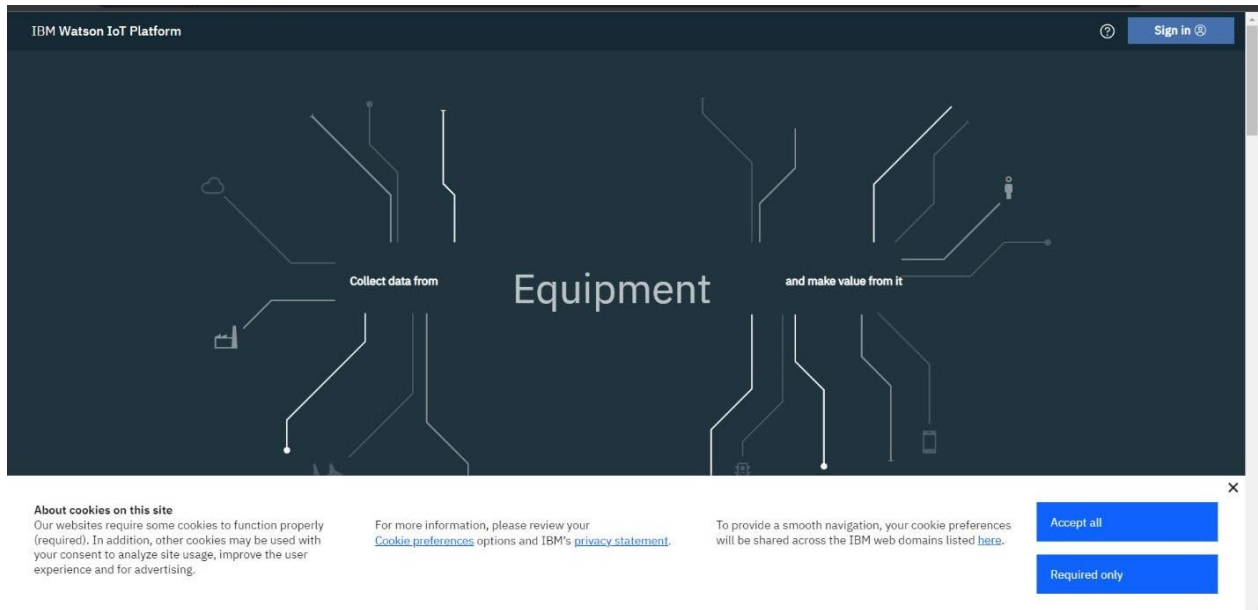
N/A

Lite plan services are deleted after 30 days of inactivity.

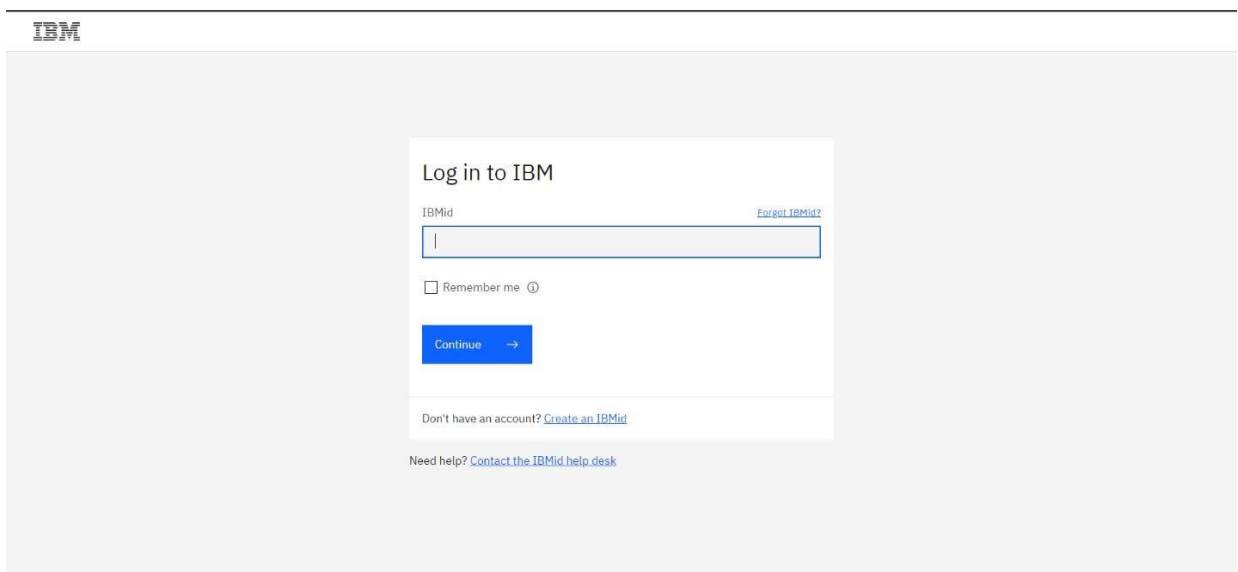
Change pricing plan

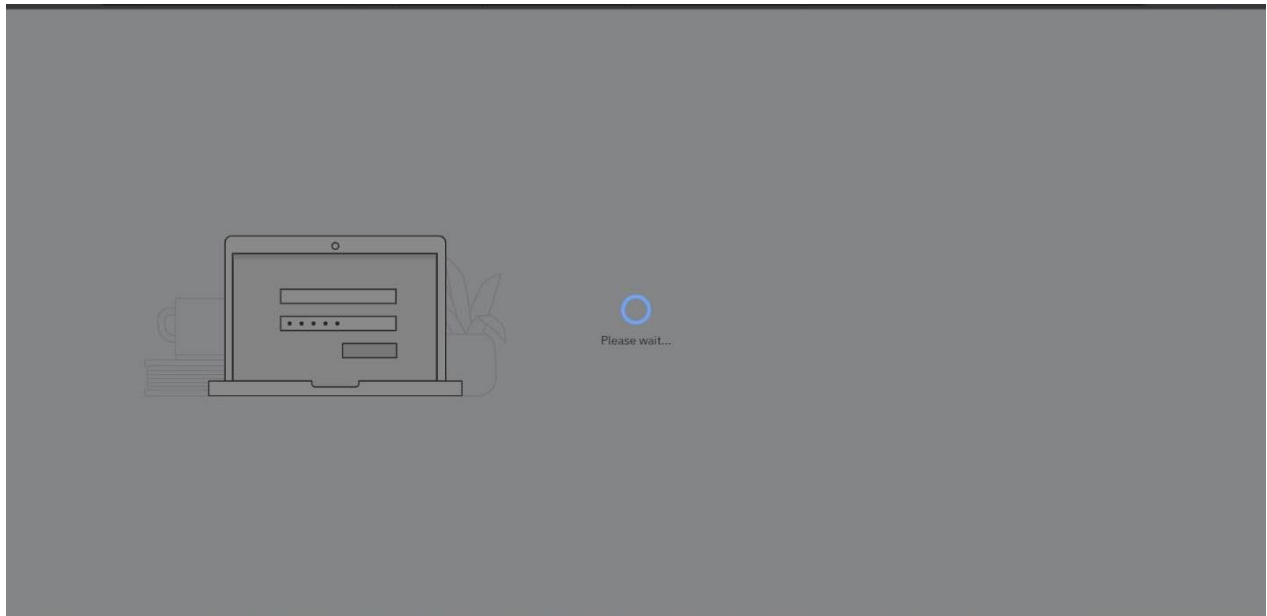
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free <input checked="" type="radio"/>

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

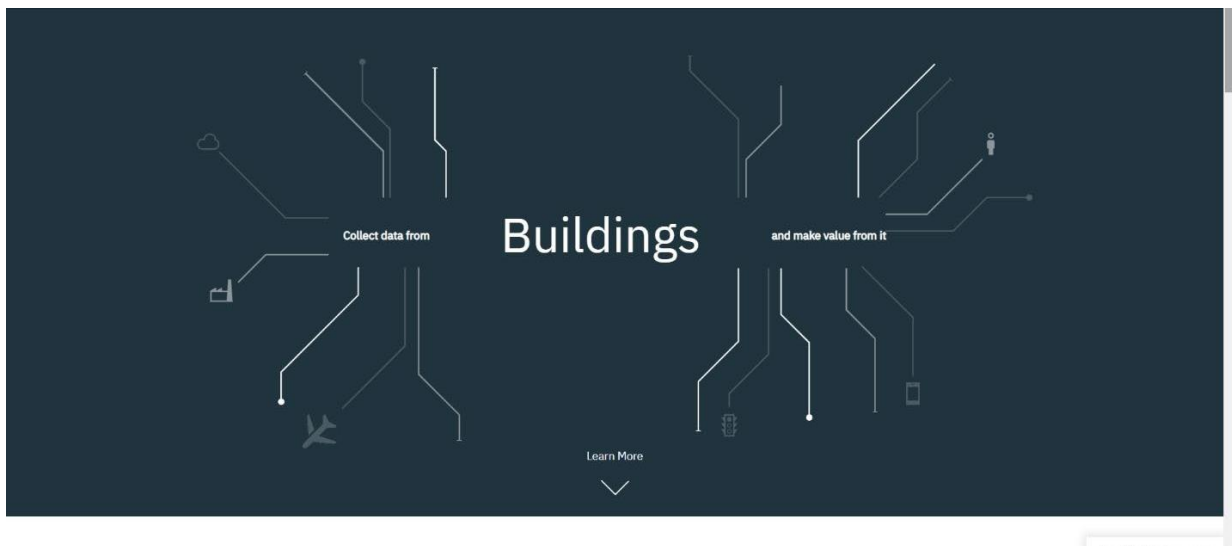


9. Enter the details to sign in to the Watson Cloud to create a device



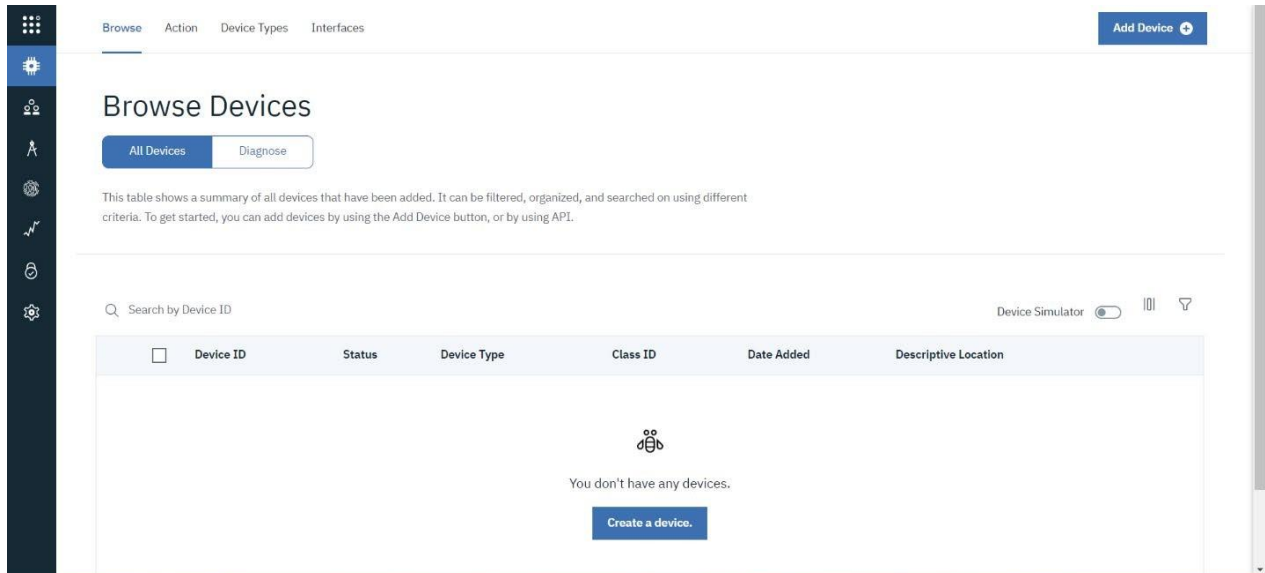


10. Once logged in the name will be displayed and it goes back to the first page



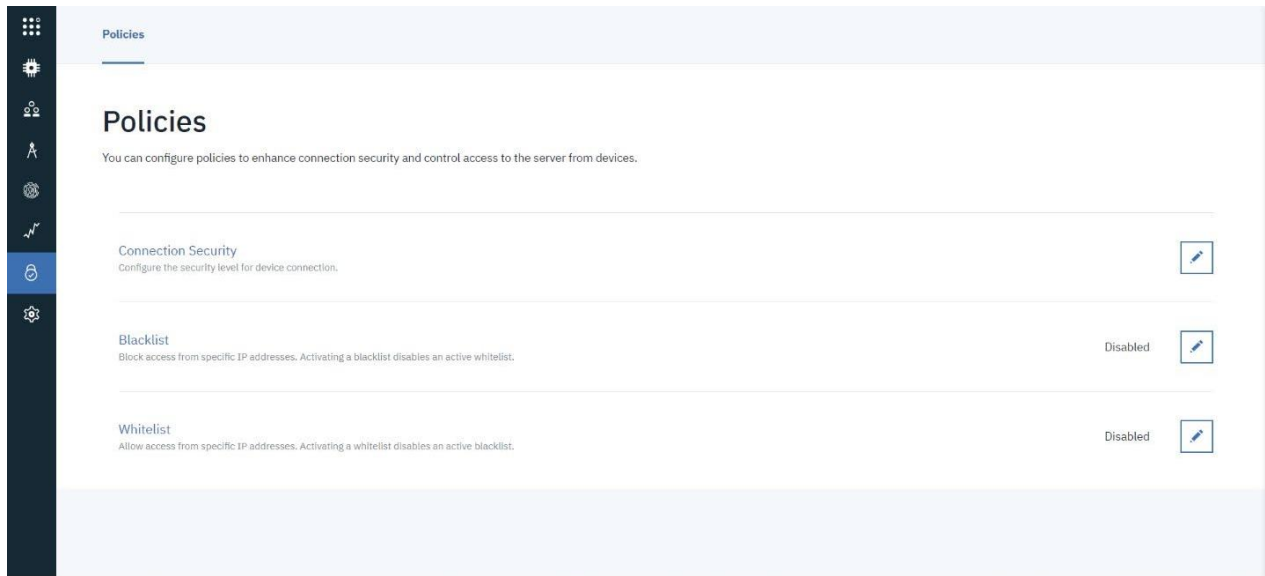
11. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices.

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



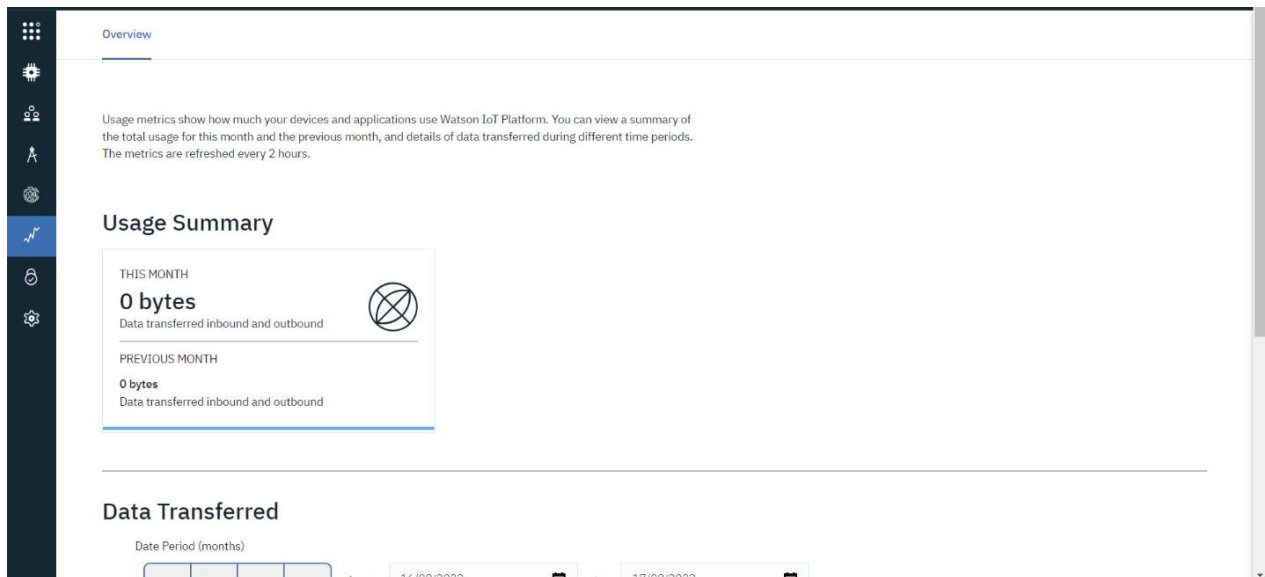
13. In the security tab we can choose the type of security connection and can change according to specification

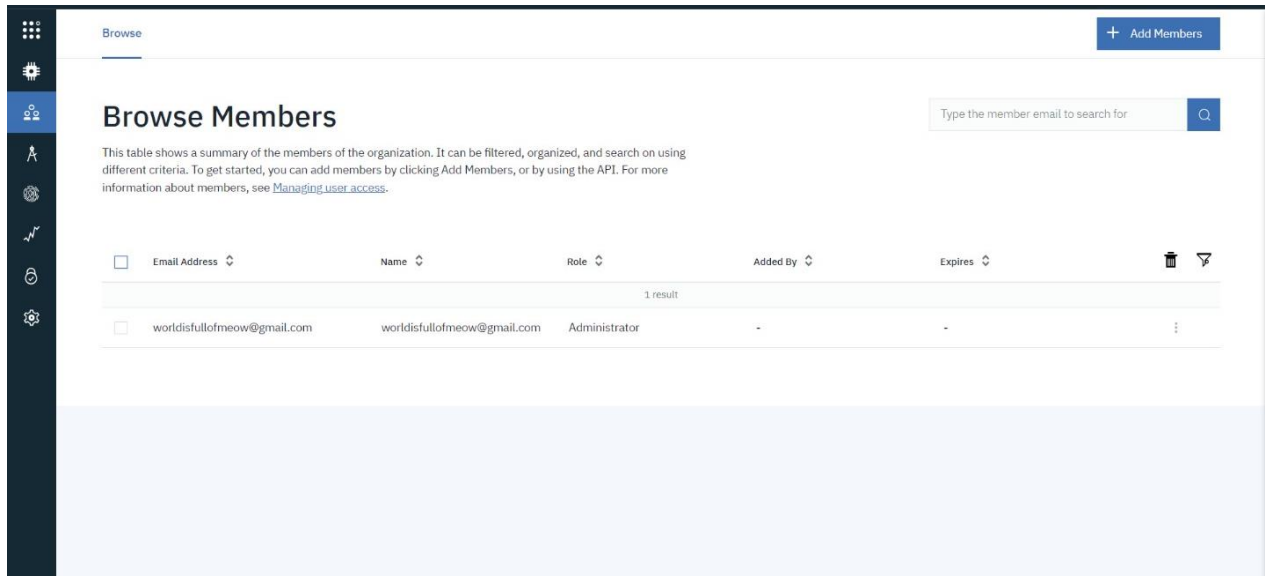
14. Usage gives the summary of how many bytes are used between the devices



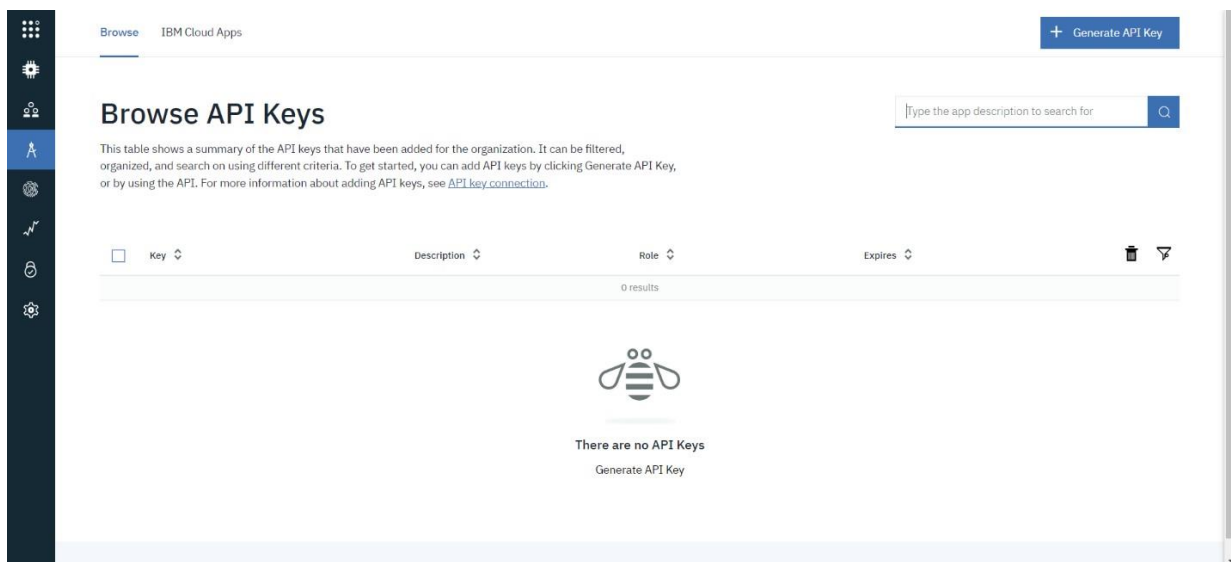
and the IBM cloud.

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

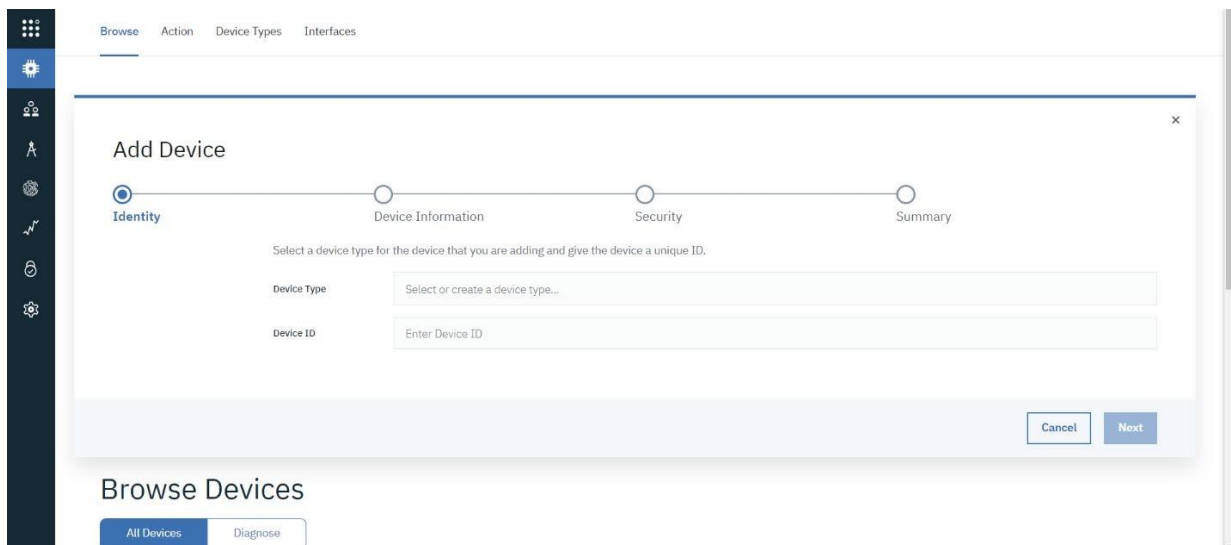
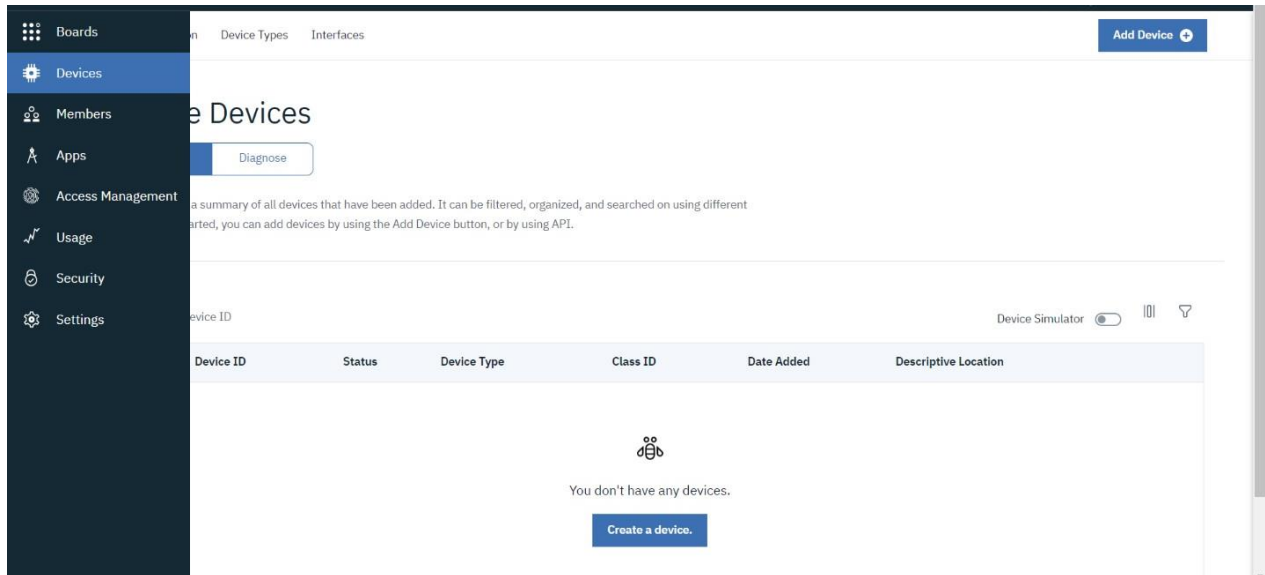




16. This tab is used when you want to connect to some other platform and to integrate with other services.



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



The screenshot shows a web application interface with a dark sidebar on the left containing various icons. The main content area has a top navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. Below this, a modal window titled 'Add Device' is open. It features a progress bar with four steps: 'Identity' (active), 'Device Information', 'Security', and 'Summary'. The 'Identity' step contains a text input for 'Device Type' with 'Nodemcu' entered and another for 'Device ID' with '199795' entered. At the bottom right of the modal are 'Cancel' and 'Next' buttons. Below the modal, the 'Browse Devices' section is visible with 'All Devices' and 'Diagnose' buttons.

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

The screenshot shows the same web application interface, but the 'Add Device' modal is now on the 'Device Information' step. The progress bar shows 'Identity' as completed and 'Device Information' as the current step. The modal contains a text area for 'Serial Number' with 'Enter Serial Number' as a placeholder, and several other text inputs for 'Model', 'Description', 'Hardware Version', 'Manufacturer', 'Device Class', 'Firmware Version', and 'Descriptive Location', each with their respective placeholder text. An 'Add Metadata' button with a plus icon is located at the bottom left of the input area. At the bottom right of the modal are 'Back' and 'Next' buttons.

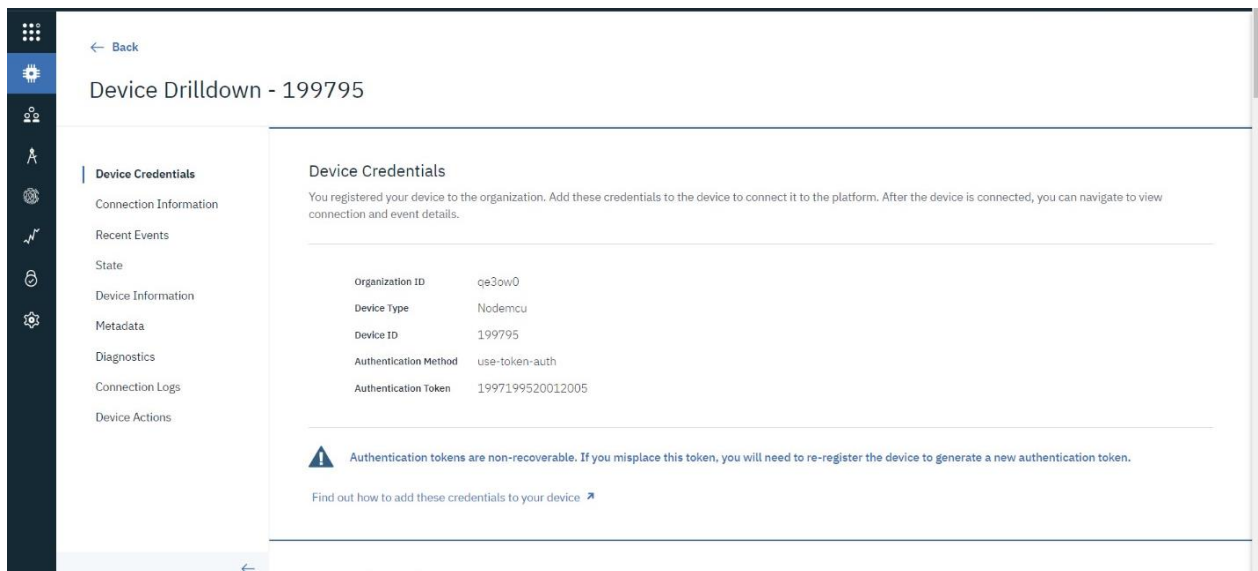
19. Clicking next it goes to the security where we do authentication token id.

The screenshot shows the 'Add Device' wizard in the 'Security' step. The progress bar at the top indicates the following steps: Identity (checked), Device Information (checked), Security (active), and Summary (pending). The main content area is titled 'Add Device' and contains two options for selecting a device authentication token. The first option, 'Auto-generated authentication token (default)', is selected and shows a generated token '1997199520012005'. The second option, 'Self-provided authentication token', is unselected. Below the token field, there is a warning message: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' and a note: 'Authentication token are encrypted before we store them.'

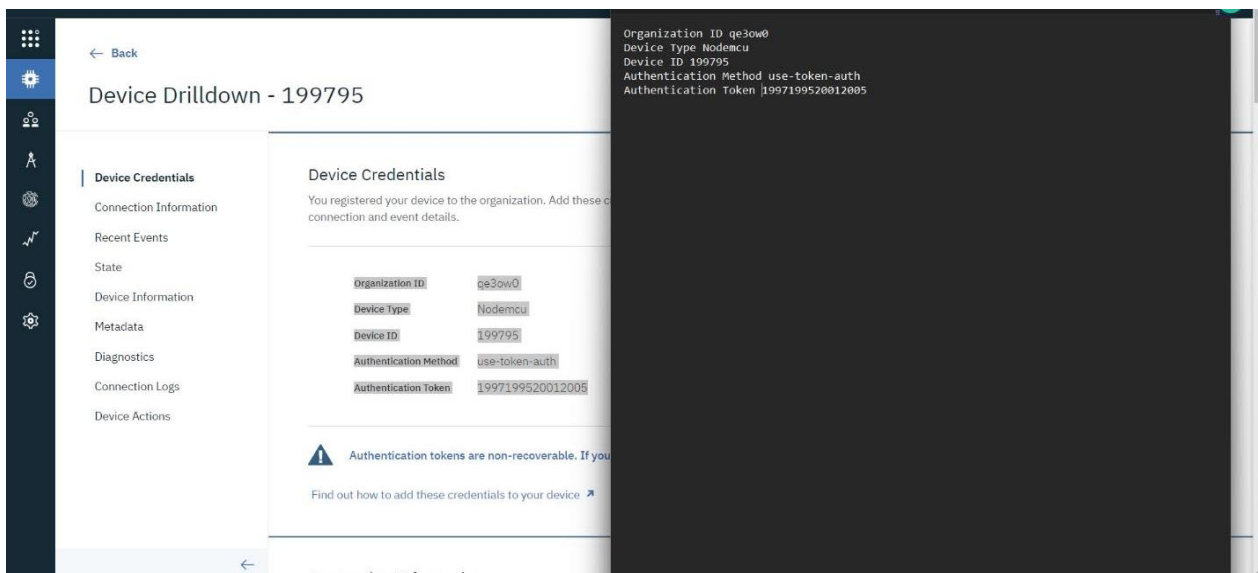
20. Clicking on next it goes to the summary of the device then click finish

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

The screenshot shows the 'Add Device' wizard in the 'Summary' step. The progress bar at the top indicates the following steps: Identity (checked), Device Information (checked), Security (checked), and Summary (active). The main content area is titled 'Add Device' and contains a verification message: 'Verify that the following information is correct then select Finish'. Below this, the following information is displayed: 'Device Type: Nodemcu', 'Device ID: 199795', and 'Security Token: 1997199520012005'. There is a 'View Metadata' button next to the Device ID. At the bottom right, there are 'Back' and 'Finish' buttons.



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 a web application interface for managing IoT devices. On the left is a dark sidebar with icons for home, users, devices, analytics, settings, and a gear. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces', with an 'Add Device' button on the right. Below the navigation is a search bar 'Search by Device ID' and a 'Device Simulator' toggle. The main content area displays a table of devices. The first device, with ID 199795, is selected, and its details are shown in a modal window. The modal has tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. 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 table is currently empty. A stylized robot icon is centered at the bottom of the modal.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
199795	Disconnected	Nodemcu	Device	17 Sep 2022 20:07	

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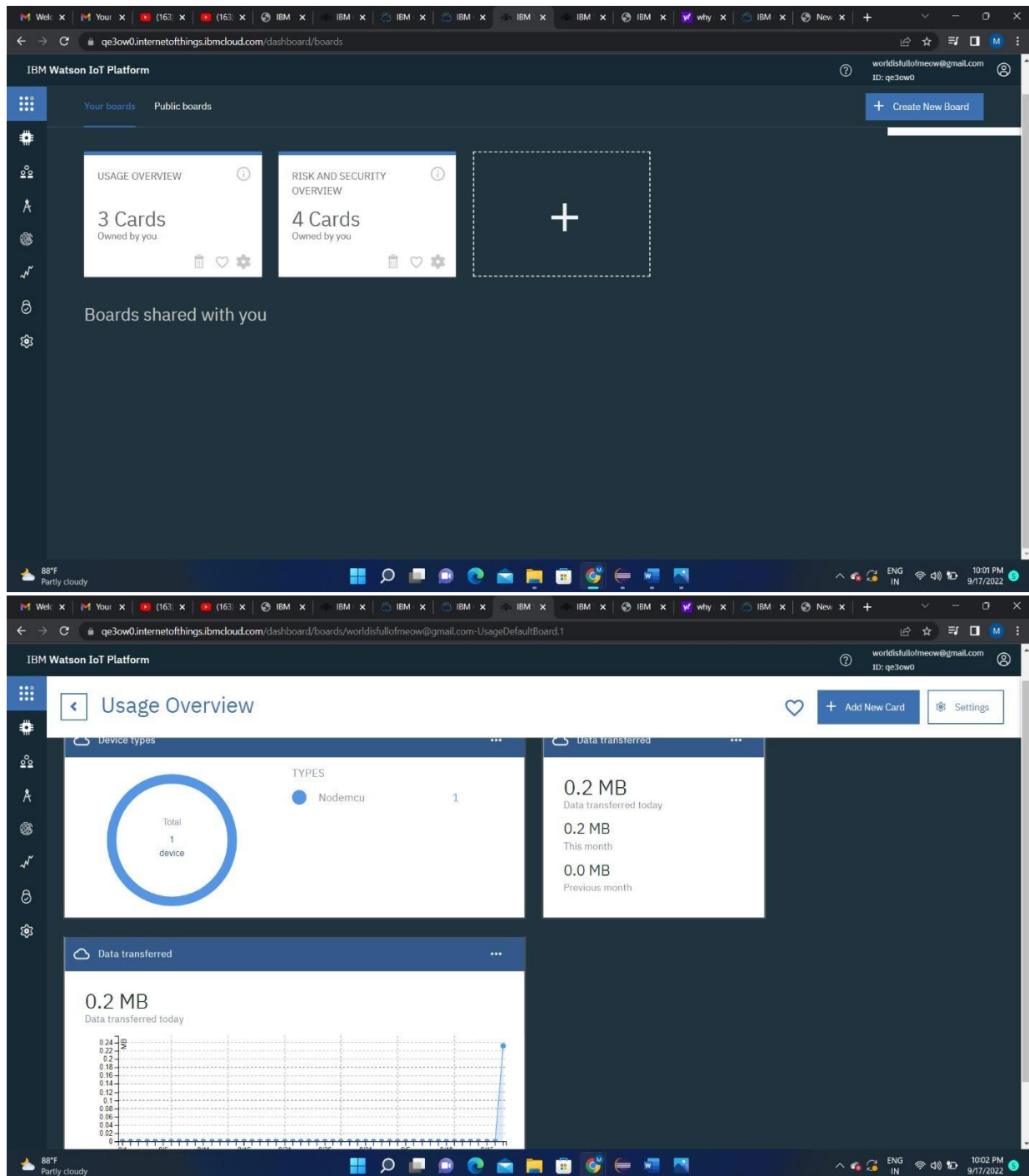
In a similar way, we can create n number of devices with a 50 per page limit as per the requirement of our project.

This screenshot shows the same web application interface, but with the 'Device Information' tab selected in the modal window. The 'Recent Events' tab is no longer active. The 'Device Information' tab displays a table with the following data:

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 modal, there is a footer area with 'Items per page 50' and a pagination control showing '1 of 1 page'.

24. The Boards will display card for the project.



RESULT:

An IBM Watson cloud for IoT and a device is created