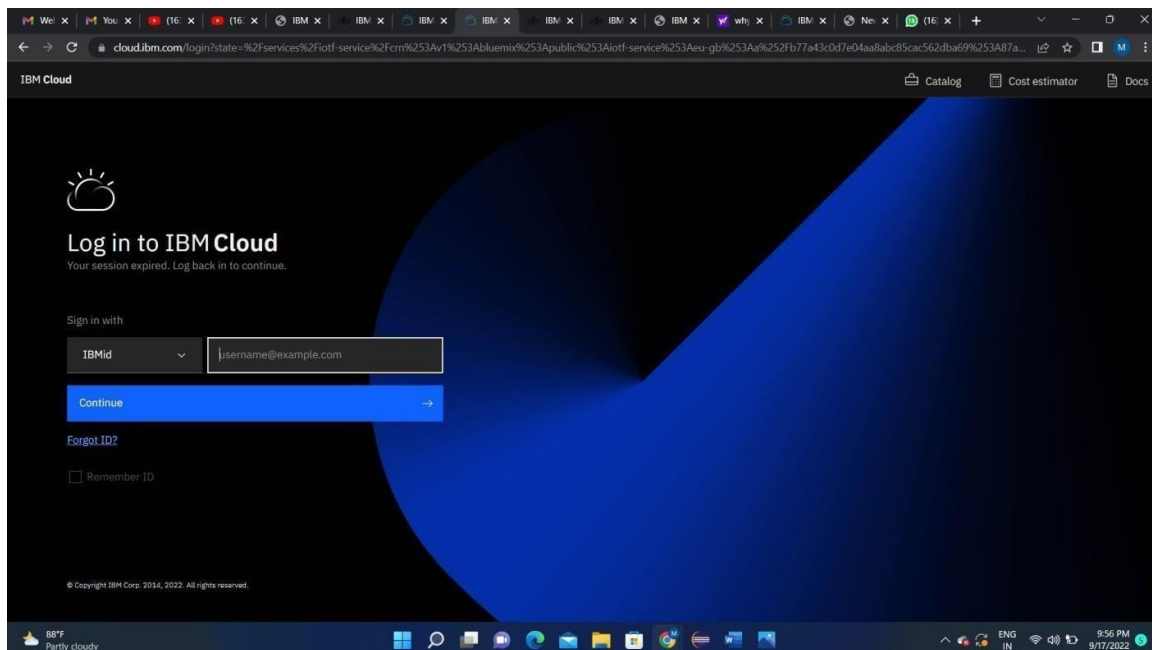


## CREATE IBM WATSON IOT PLATFORM AND DEVICE

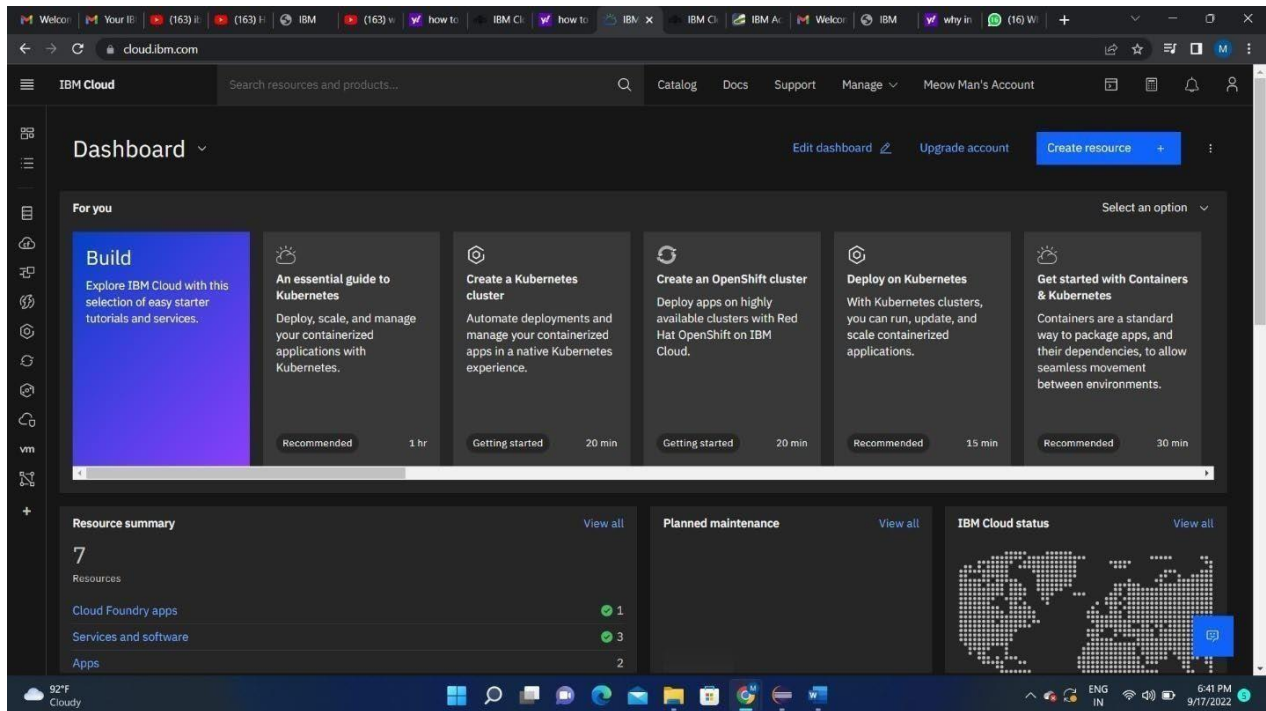
Date	11-11-2022
Team ID	PNT2022TMID42919
Project Name	IOT based safety gadget for child safety monitoring and notification
Maximum Marks	4Marks
Submitted By	Ashwin C Kumar

### STEPS:

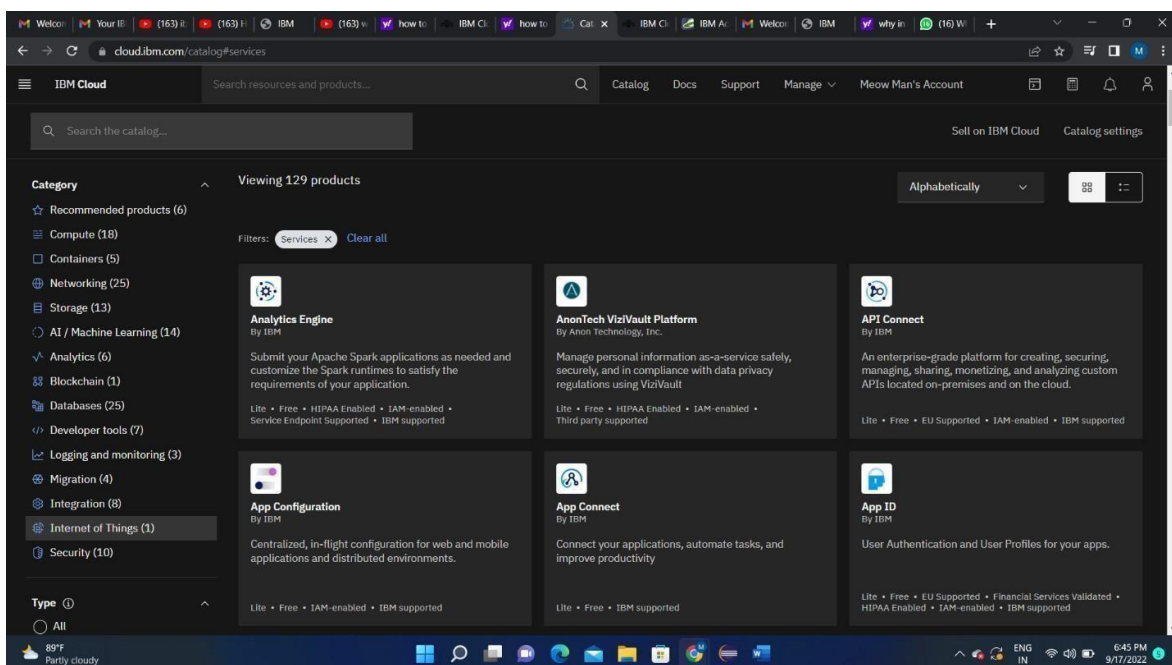
1. Firstly create an IBM cloud account with IBM id and password



## 2. Homepage of IBM cloud



## 3. Click on the catalog on the top



## Click on IOT in the category mentioned

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform. The page is titled "Internet of Things Platform" and includes a description: "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." The "Create" tab is selected, and the "Select a location" dropdown is set to "Dallas (us-south)". The "Select a pricing plan" section shows a table with the "Lite" plan selected. The table has columns for Plan, Features, and Pricing. The "Lite" plan is free and includes up to 500 registered devices and a maximum of 200 MB of each data metric. The "Summary" panel on the right shows the service name "Internet of Things Platform-bb" and a warning about existing Lite plan instances. The "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

## 4. If already alite is present delete it else you can't create another

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform, specifically the "Configure your resource" section. The "Lite" plan is selected. The "Service name" field is set to "Internet of Things Platform-bb". The "Select a resource group" dropdown is set to "Default". The "Access management tags" field is set to "Examples: access.dev, proj:version-1". The "Summary" panel on the right shows the service name "Internet of Things Platform-bb" and a warning about existing Lite plan instances. The "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

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

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.

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

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.

Lite plan services are deleted after 30 days of inactivity.

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

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

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 )

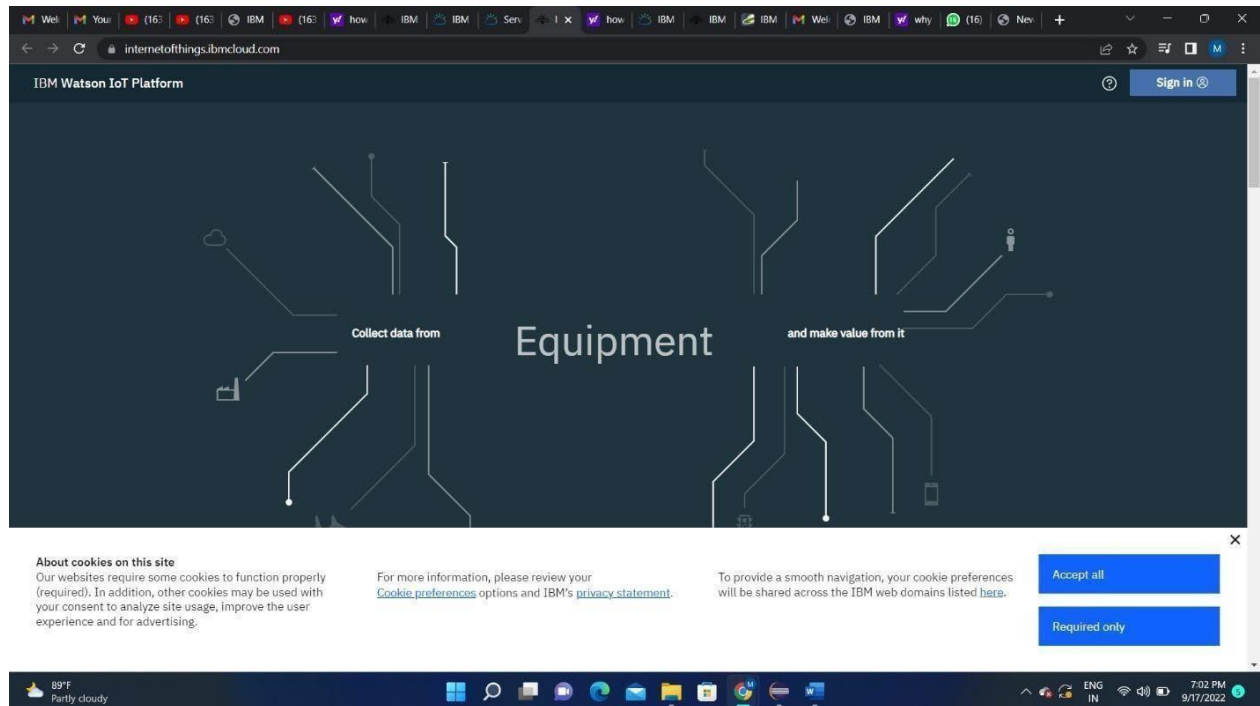
The screenshot shows the IBM Cloud IoT Platform console. The left sidebar has a 'Manage' tab selected. The main content area displays a 'Let's get started with IBM Watson IoT Platform' section with a 'Launch' button. Below this, there's a 'Ready for the next level?' section titled 'IBM Watson IoT Platform Journey' with three options: 'Lite' (Free), 'Non-Production' (Starts at \$500 per month), and 'Production' (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'. Below this, there's a 'Features' section listing: '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'. To the right, the 'Current usage' section shows 'N/A' and a note: 'Lite plan services are deleted after 30 days of inactivity.' Below this, there's a 'Change pricing plan' section with a table showing the 'Lite' plan and its features.

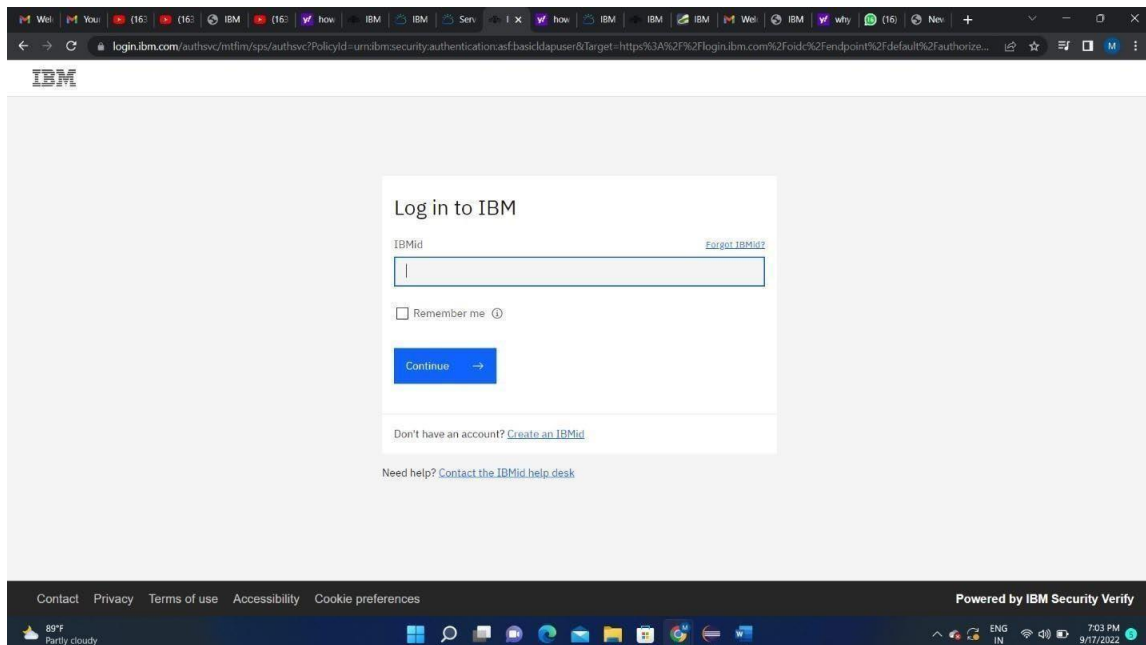
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free



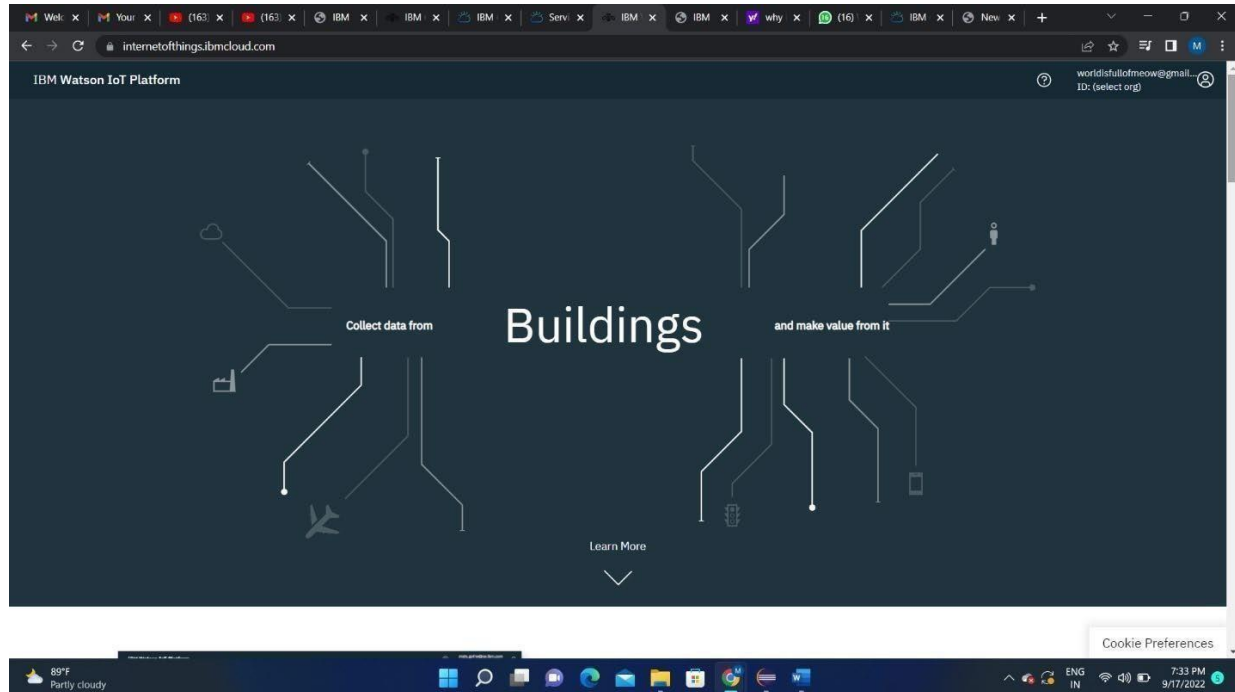
7. Clicking on the launch button in the manage tab, it will open to this.



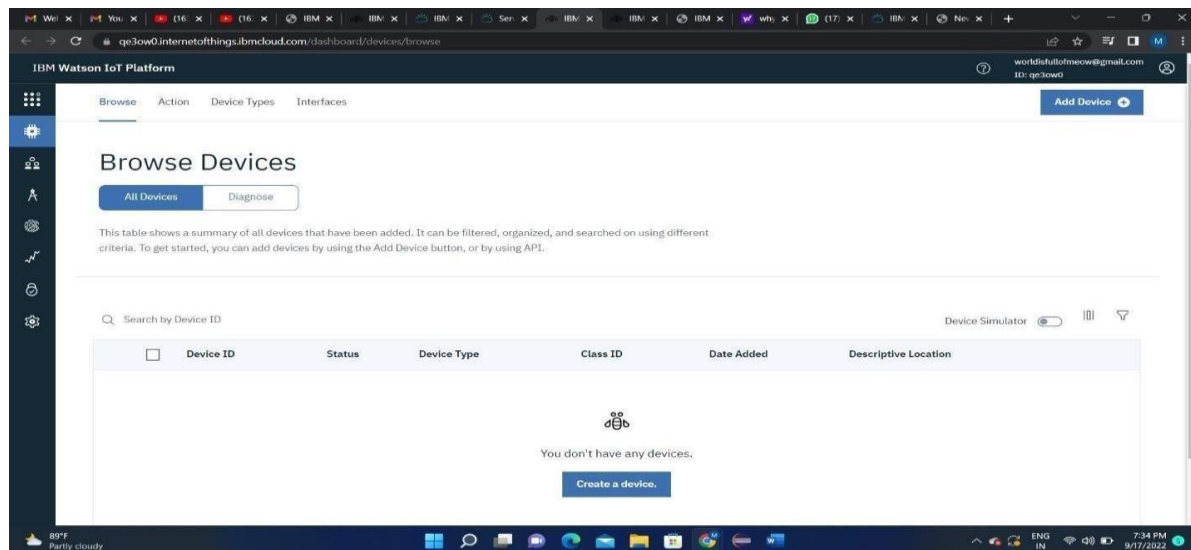
8. Enter the details to sign in to the Watson Cloud to create a device



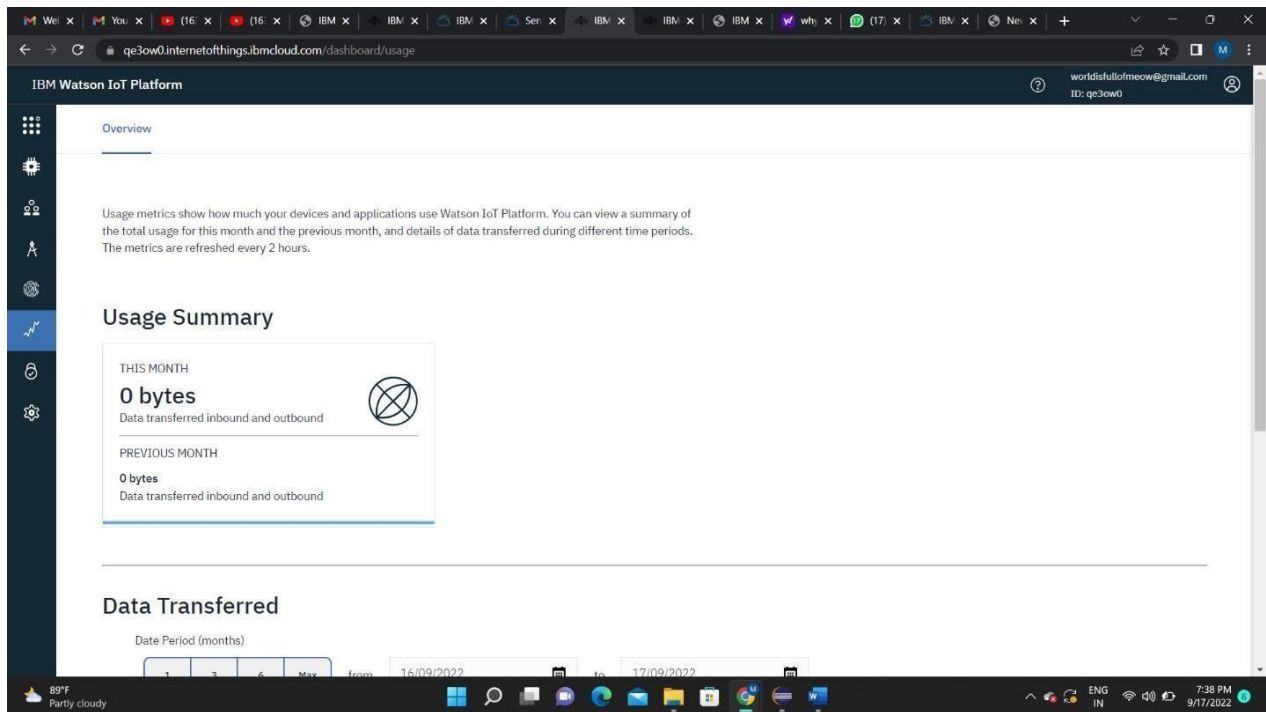
9. Once logged in the name will be displayed and it goes back to the first page



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.



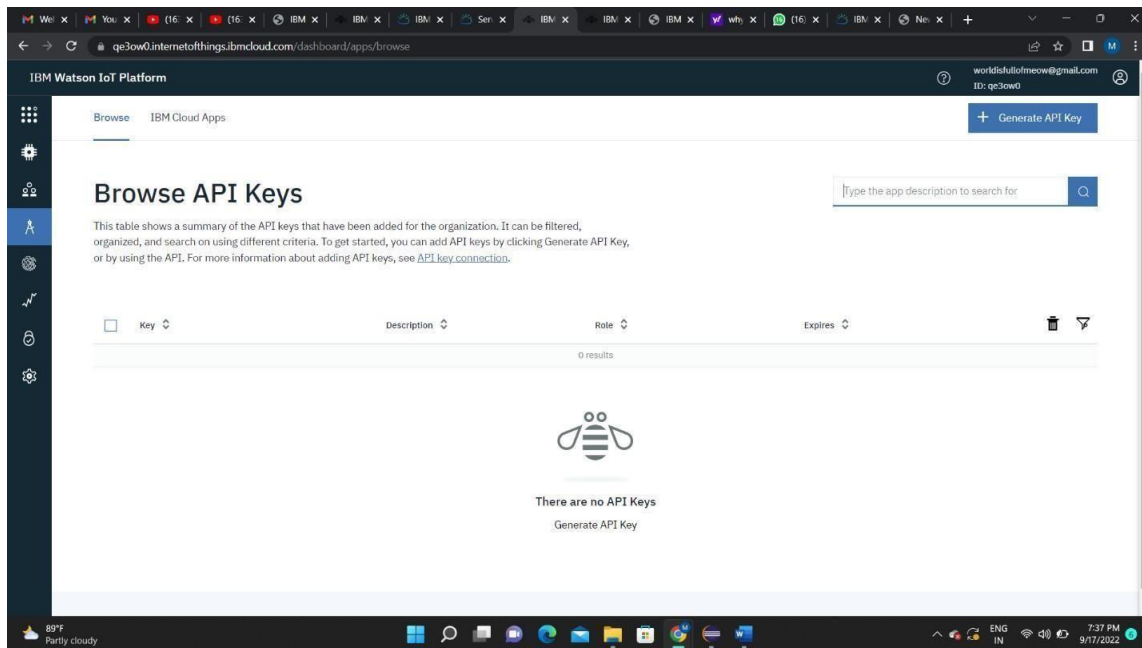
12. The member tab is add the teams members to work in the platform

The screenshot shows the 'Browse Members' page in the IBM Watson IoT Platform. The page title is 'Browse Members'. Below the title, there is a search bar with the placeholder text 'Type the member email to search for'. Below the search bar, there is a table showing the members of the organization. The table has columns for 'Email Address', 'Name', 'Role', 'Added By', and 'Expires'. There is a '1 result' indicator above the table. The table contains one row with the email 'worldisfulofmeow@gmail.com', the name 'worldisfulofmeow@gmail.com', the role 'Administrator', and the 'Added By' and 'Expires' fields are empty. The page also features a sidebar with various icons and a top navigation bar with the user's email 'worldisfulofmeow@gmail.com' and ID 'qe3ow0'.

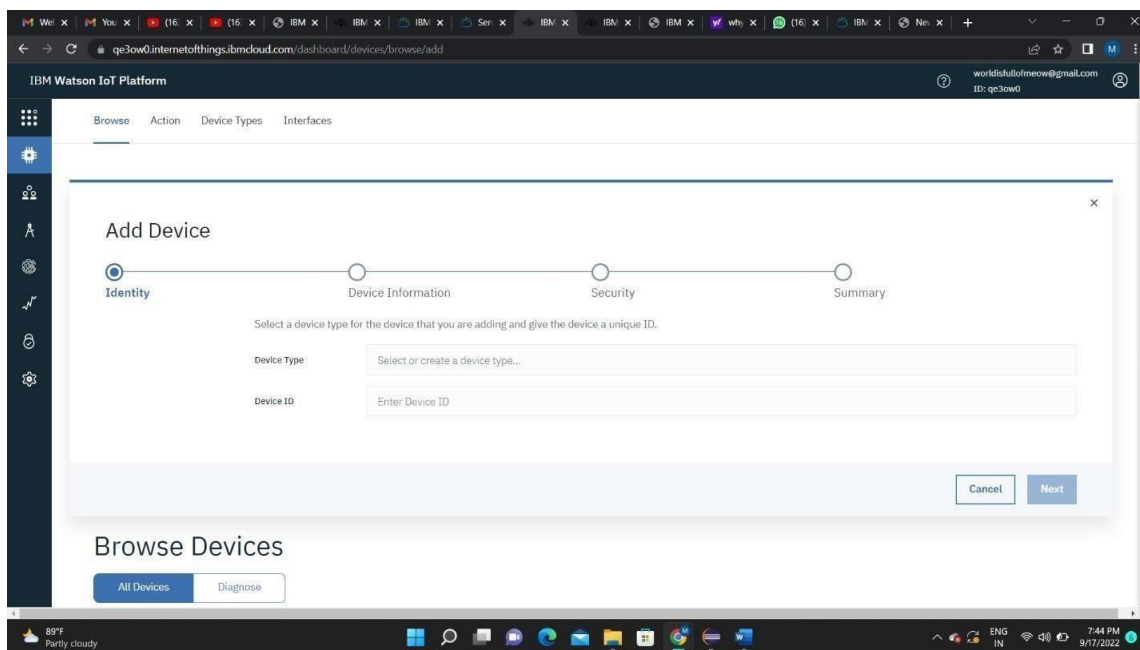
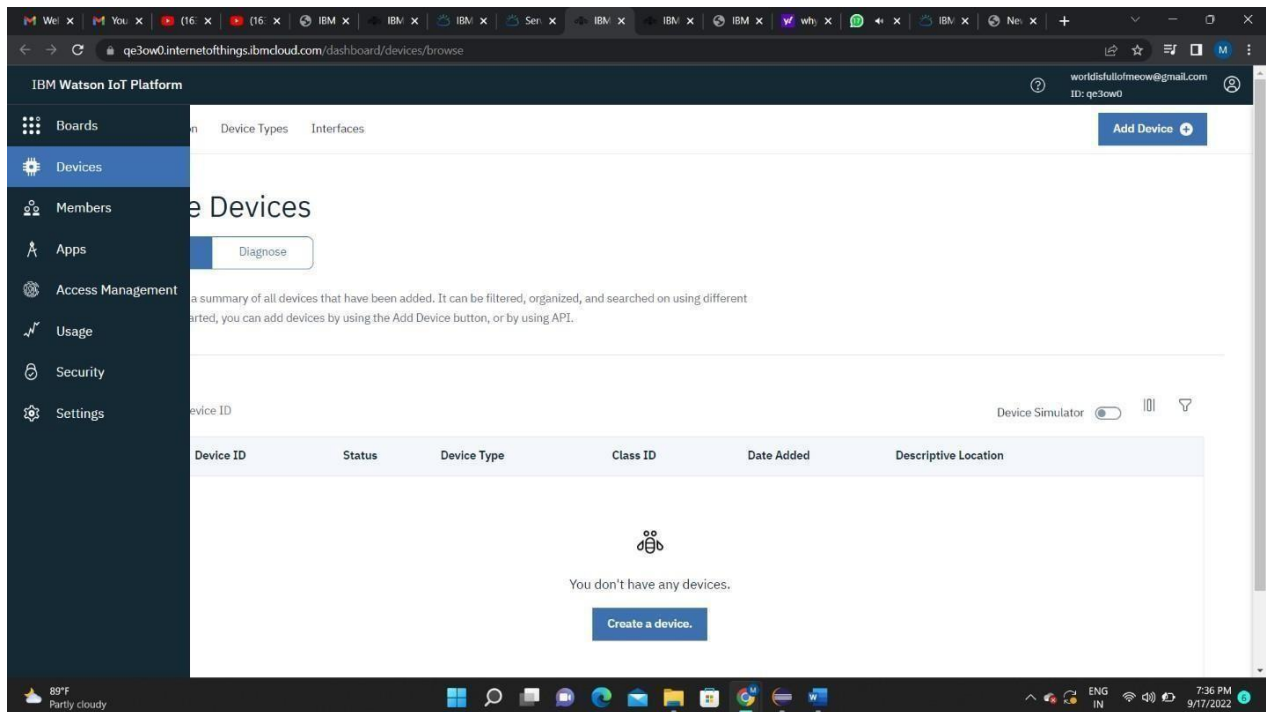
Email Address	Name	Role	Added By	Expires
worldisfulofmeow@gmail.com	worldisfulofmeow@gmail.com	Administrator	-	-

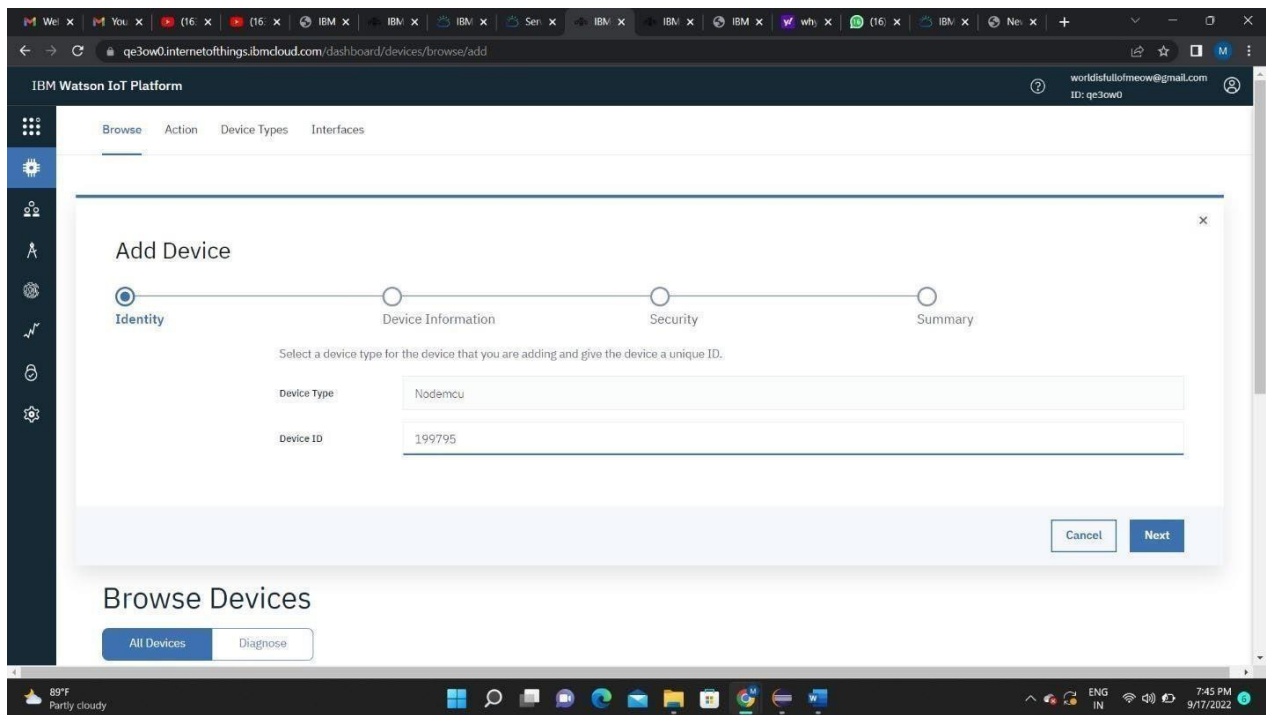


13. This tab is used when you want to connect to some other platform and to integrate with other services.

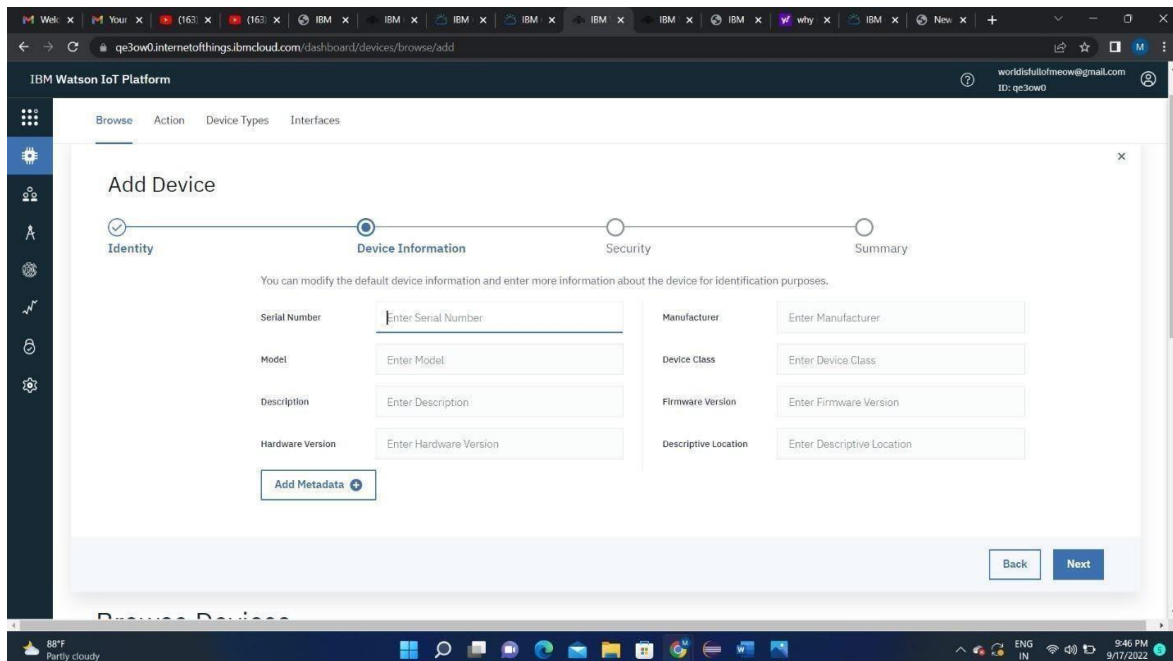


14. Click on the device tab and click on the add device button, then give the device type and device id and click next.

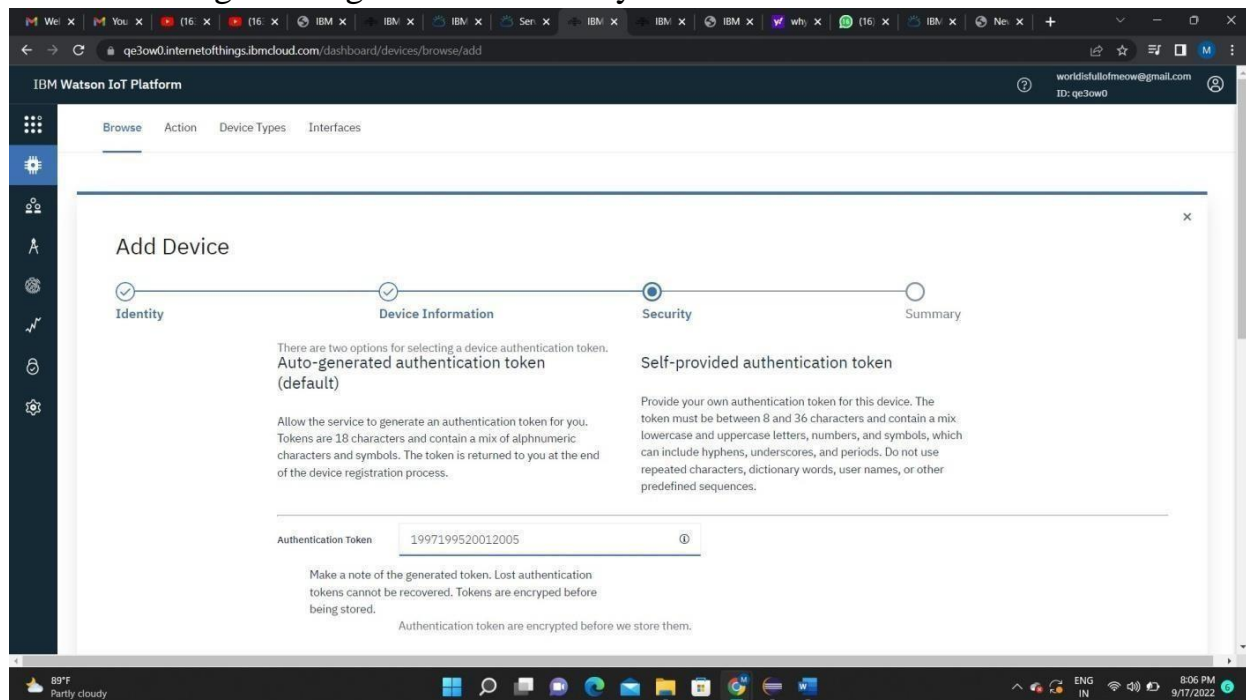




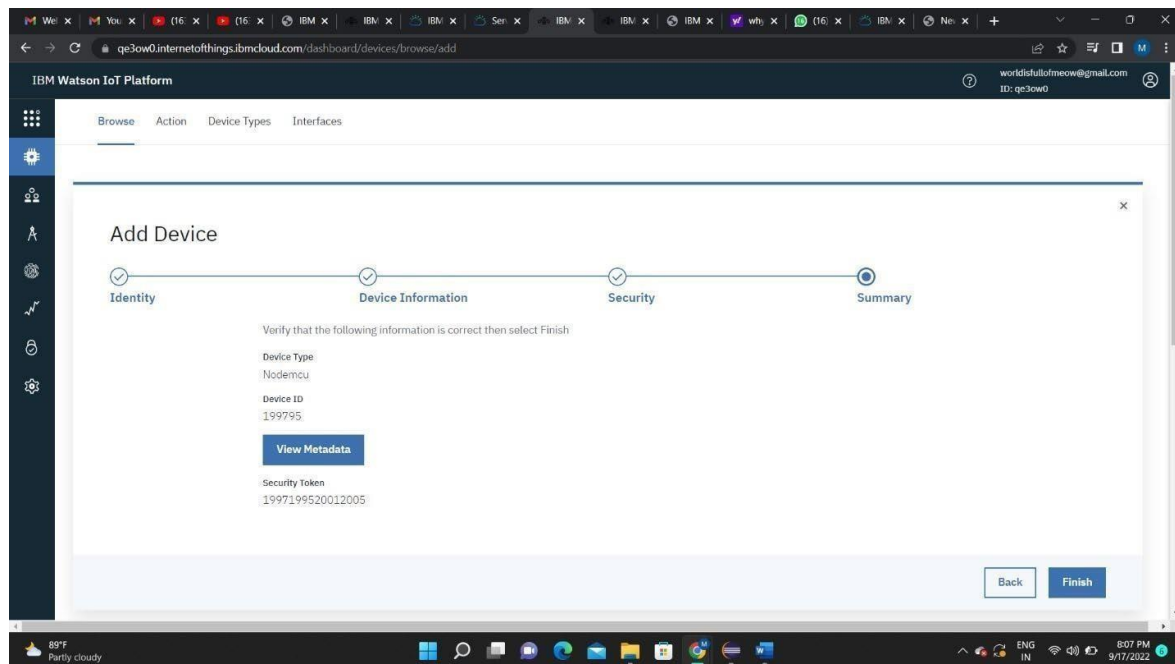
15. This page to enter extra details and of the hardware



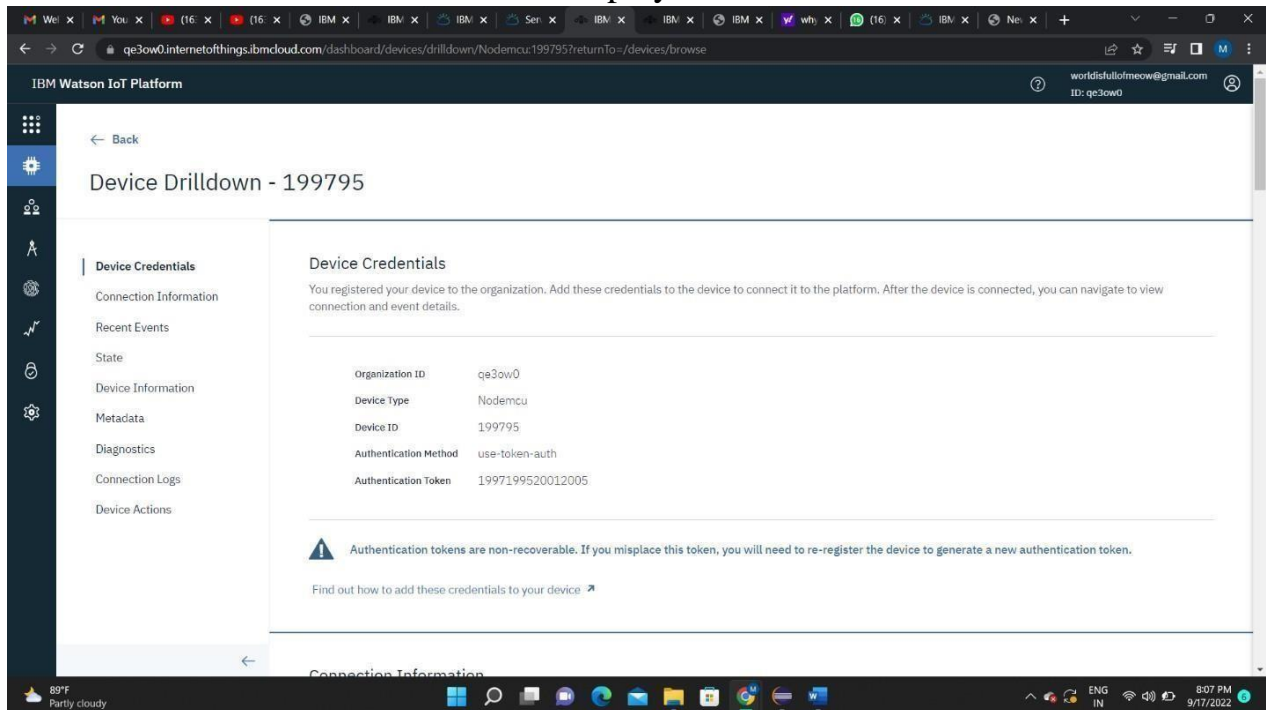
16. Clicking next it goes to the security where we do authentication token id.



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



IBM Watson IoT Platform

Device Drilldown - 199795

Device Credentials

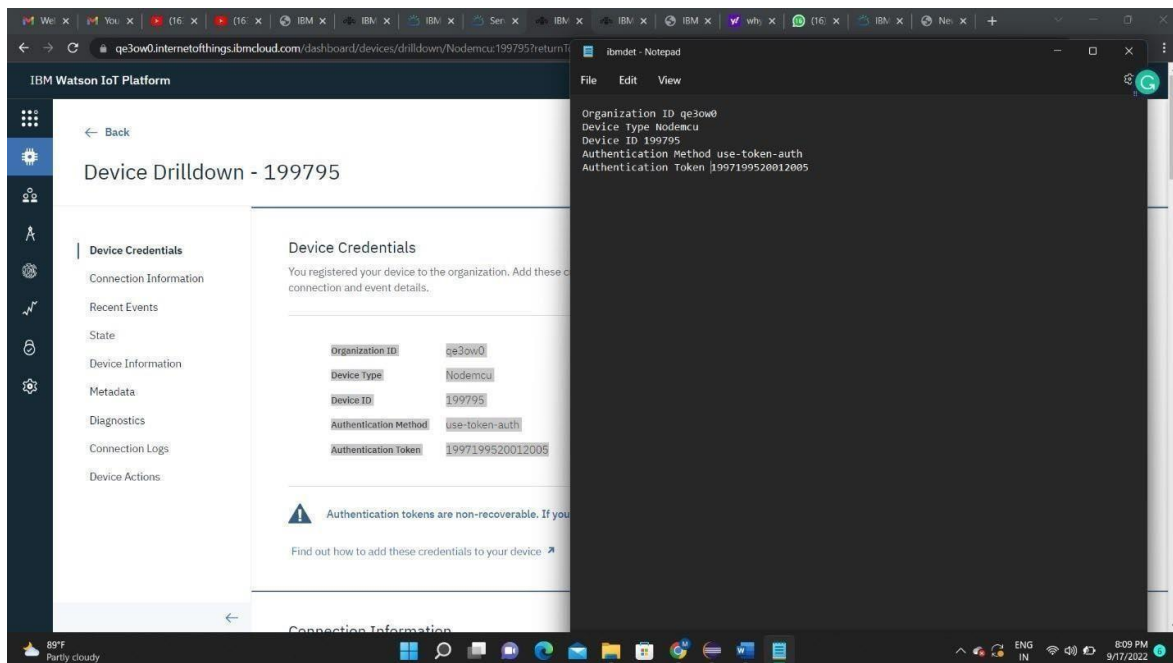
You registered your device to the organization. Add these credentials to the device to connect it to the platform. After the device is connected, you can navigate to view connection and event details.

Organization ID	qe3ow0
Device Type	Nodemcu
Device ID	199795
Authentication Method	use-token-auth
Authentication Token	1997199520012005

Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.

Find out how to add these credentials to your device

## 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.



IBM Watson IoT Platform

Device Drilldown - 199795

Device Credentials

You registered your device to the organization. Add these credentials to the device to connect it to the platform. After the device is connected, you can navigate to view connection and event details.

Organization ID	qe3ow0
Device Type	Nodemcu
Device ID	199795
Authentication Method	use-token-auth
Authentication Token	1997199520012005

Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.

Find out how to add these credentials to your device

ibmdet - Notepad

File Edit View

```
Organization ID qe3ow0
Device Type Nodemcu
Device ID 199795
Authentication Method use-token-auth
Authentication Token 1997199520012005
```

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 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. One device is listed with ID 199795, Status 'Disconnected', and Device Type 'Nodemcu'. Below the table, a dropdown menu is open, showing tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is selected, 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 bottom of the screen shows a Windows taskbar with the date 9/17/2022 and time 8:11 PM.

This screenshot shows the details of the device selected in the previous screenshot. The 'Device Information' tab is selected, displaying a table with the following details:

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

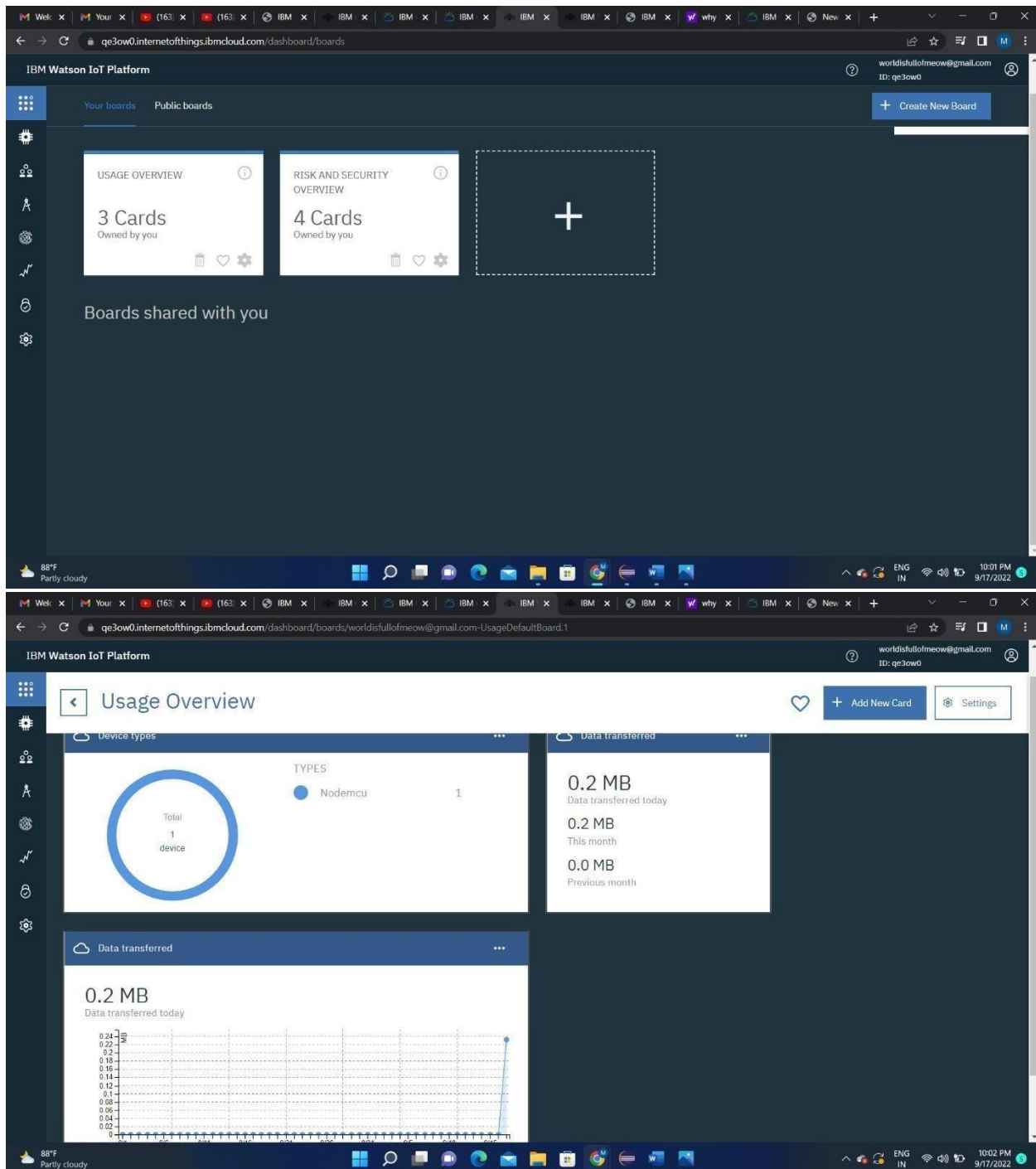
At the bottom of the details view, it says 'Items per page: 50' and '1 of 1 page'.

In a similar way, we can create n number of devices with a 50 per page limit as



Per the requirement of our project.

21. The Boards will display card for the project.



## RESULT:

An IBM Watson cloud for IoT and a device is created