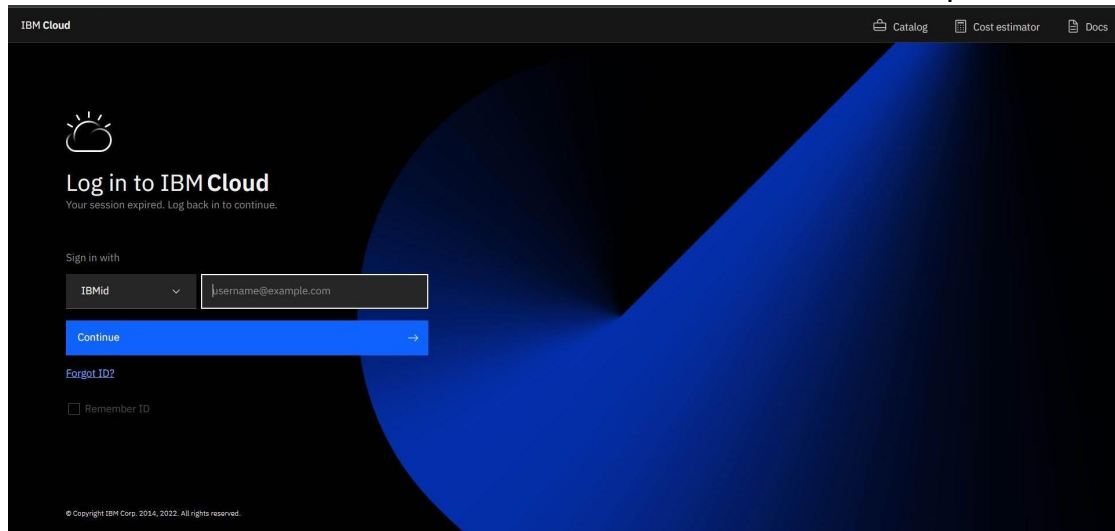


# CREATE IBM WATSON IOT PLATFORM AND DEVICE

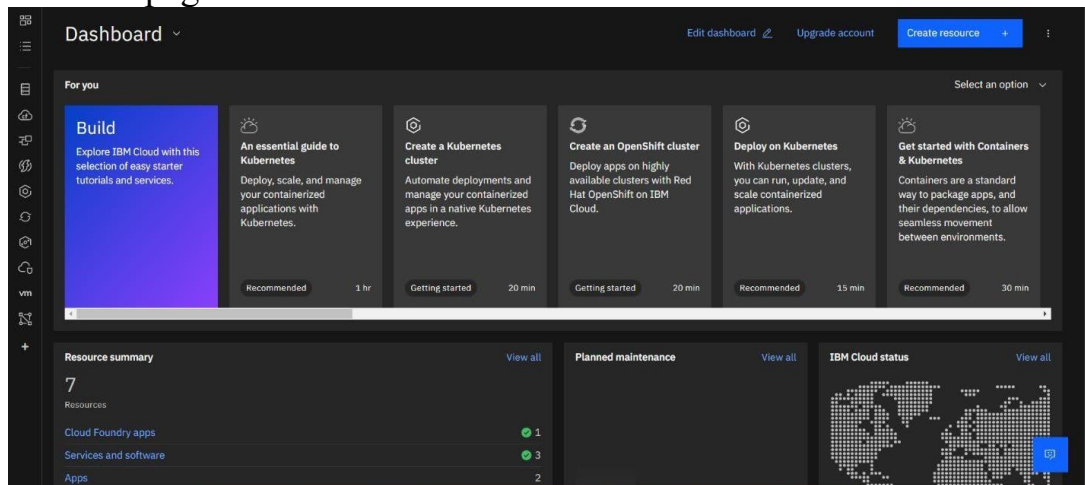
1. To create the IBM Watson IOT platform and device

## STEPS:

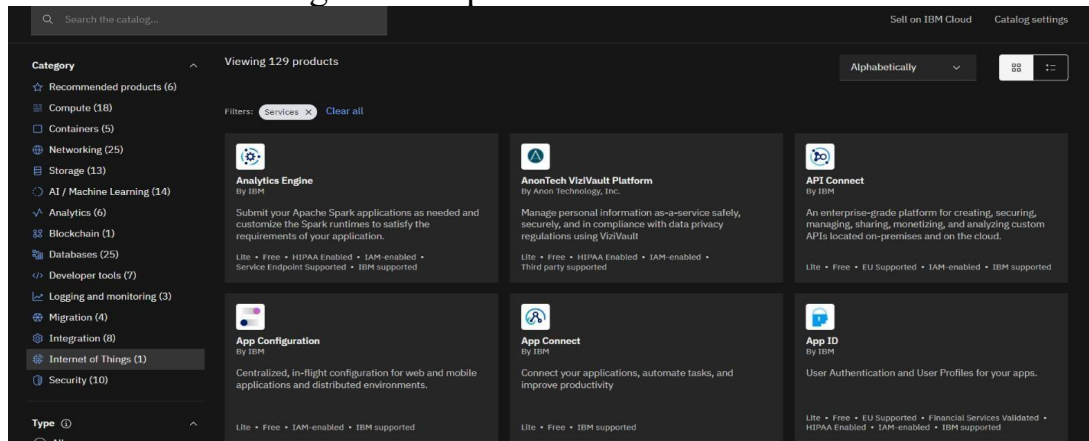
1. create an IBM cloud account with the individual IBM id and password



2. Home page of IBM cloud



3. Click on the catalog on the top



#### 4. Click on IoT in the category mentioned

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: Lite

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.

Pricing: 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.

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

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

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: Lite

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.

Pricing: 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.

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

#### 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 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: Lite

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.

Pricing: 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.

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

#### 7. click create

Internet of Things

Compliance  
IAM-enabled

Location  
Frankfurt  
London  
Dallas  
Washington DC

Related links  
Docs  
Terms

Plan	Features	Pricing
Lite	<ul style="list-style-type: none"> <li>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</li> <li>Maximum of 500 registered devices</li> <li>Maximum of 500 application bindings</li> <li>Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed</li> </ul> <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

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-child\_safety  
Resource group: Default

☒ I have read and agree to the following license agreements:  
Terms

Create

Add to estimate

8. Internet of Things Platform Child\_safety will be created, where there are different options like manage, plan, and connection

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

9. 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

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

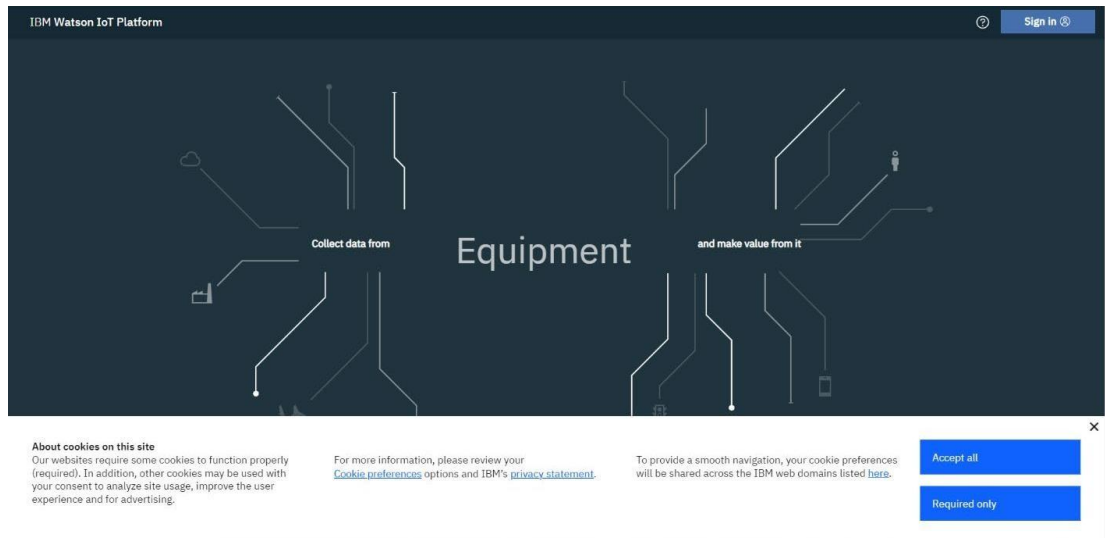
N/A

Lite plan services are deleted after 30 days of inactivity.

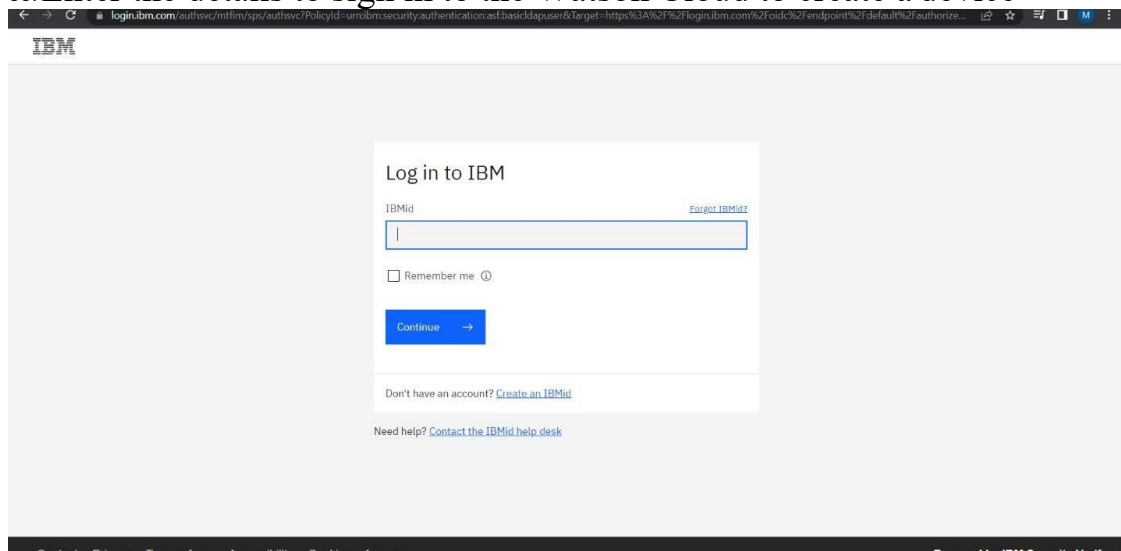
Change pricing plan

Plan	Features	Pricing
Lite	<ul style="list-style-type: none"> <li>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</li> <li>Maximum of 500 registered devices</li> <li>Maximum of 500 application bindings</li> <li>Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed</li> </ul>	Free

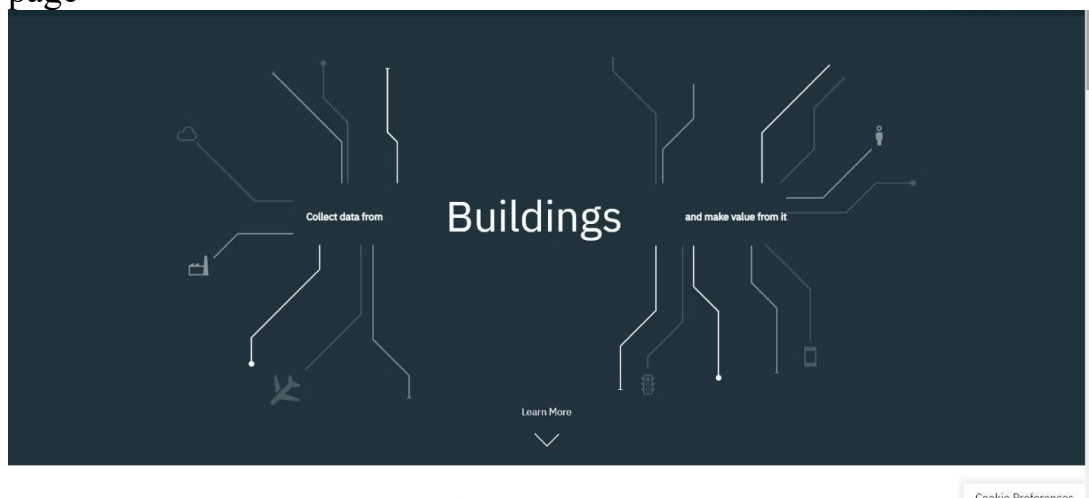
10. Click on the launch button in the manage tab, it will open to this



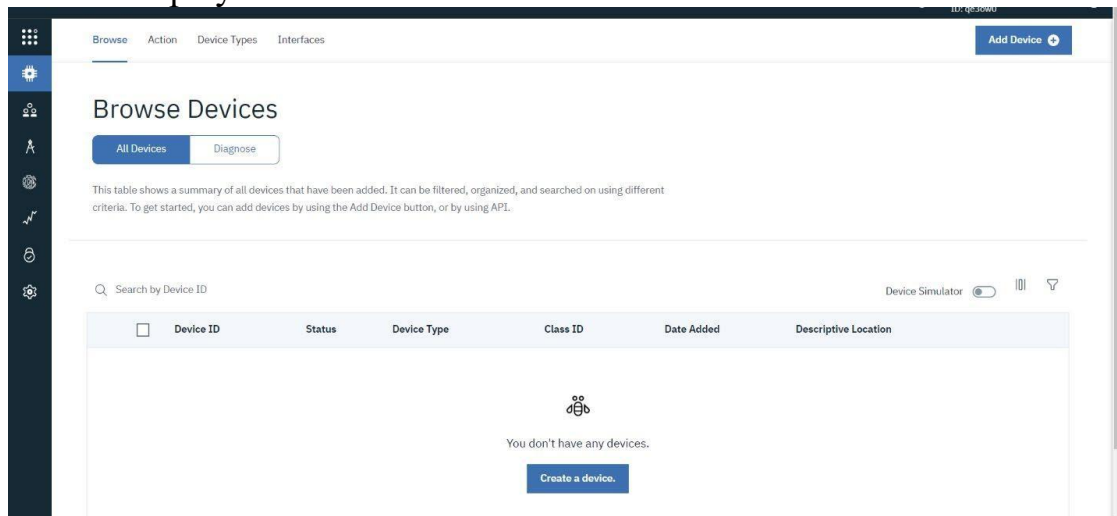
## 11. Enter the details to sign in to the Watson Cloud to create a device



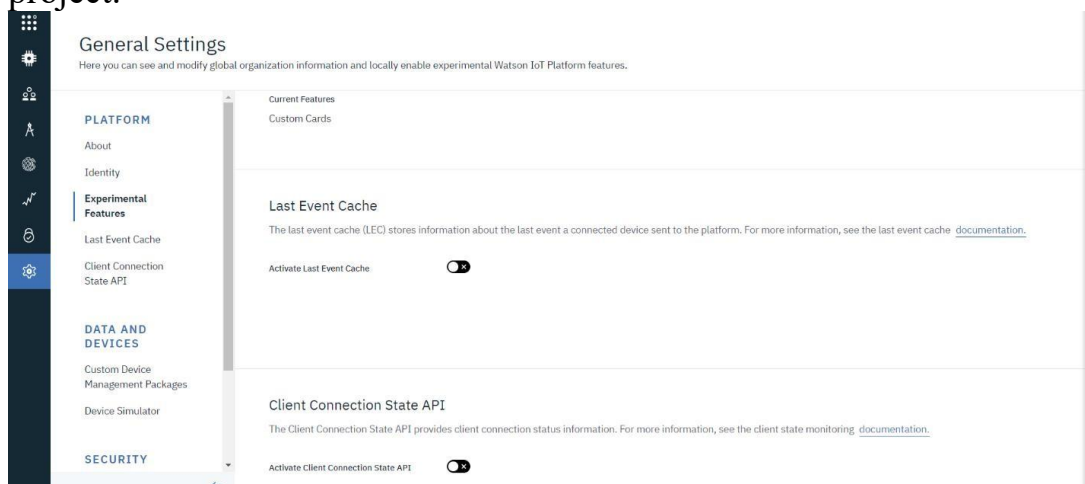
## 12. Once logged in the name will be displayed and it goes back to the first page



13. 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.



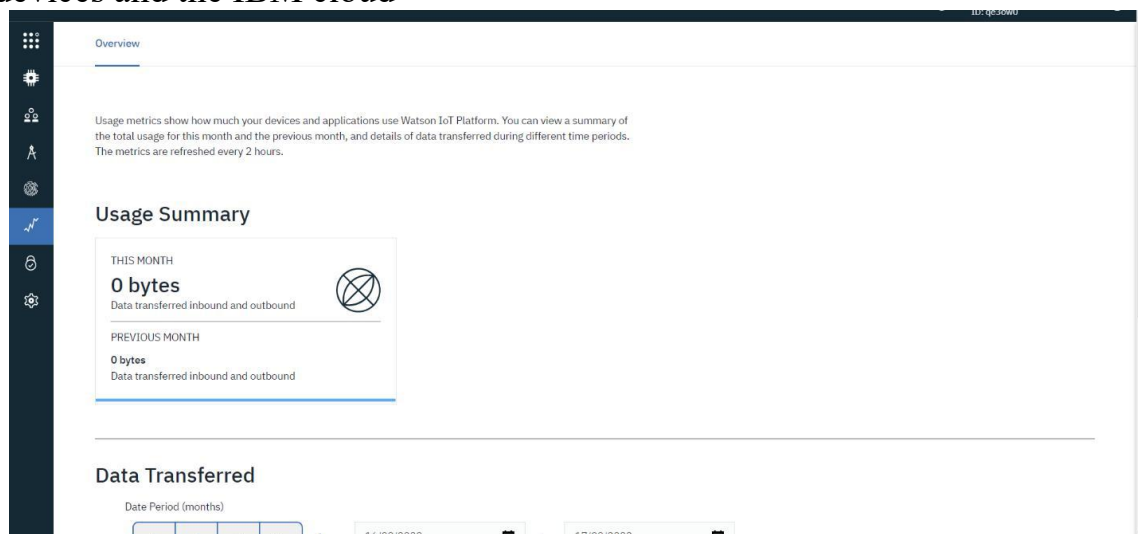
14. The setting tab is used to change the general setting if needed for the project.



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



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



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

The screenshot shows the 'Browse Members' page in the IBM IoT Platform. The page has a dark sidebar with navigation icons. The main content area is titled 'Browse' and contains a 'Browse Members' section. This section includes a search bar, a table of members, and a '+ Add Members' button. The table has columns for 'Email Address', 'Name', 'Role', 'Added By', and 'Expires'. There is one member listed with the email 'worldisfullofmeow@gmail.com' and the role 'Administrator'.

### 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"/>	worldisfullofmeow@gmail.com	worldisfullofmeow@gmail.com	Administrator	-	-	

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

The screenshot shows the 'Browse API Keys' page in the IBM IoT Platform. The page has a dark sidebar with navigation icons. The main content area is titled 'Browse' and contains a 'Browse API Keys' section. This section includes a search bar, a table of API keys, and a '+ Generate API Key' button. The table has columns for 'Key', 'Description', 'Role', and 'Expires'. There are no API keys listed. Below the table, there is a message 'There are no API Keys' and a 'Generate API Key' button.

### Browse API Keys

Type the app description to search for

This table shows a summary of the API keys that have been added for the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add API keys by clicking Generate API Key, or by using the API. For more information about adding API keys, see [API key connection](#).

<input type="checkbox"/>	Key	Description	Role	Expires	
0 results					

There are no API Keys

Generate API Key

19. 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 the 'Add Device' dialog in the 'Devices' tab. The dialog has a progress bar with four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is currently active. Below the progress bar, there is a text input field for 'Device Type' and a text input field for 'Device ID'. At the bottom right of the dialog, there are 'Cancel' and 'Next' buttons. The background shows a table with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. The table is currently empty, and a 'Create a device.' button is visible below it.

Boards | Action | Device Types | Interfaces | Add Device +

### Add Device

Diagnose

a summary of all devices that have been added. It can be filtered, organized, and searched on using different filters. If you haven't started, you can add devices by using the Add Device button, or by using API.

Device ID

Device Simulator ☐

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

You don't have any devices.

Create a 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

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

The screenshot shows the 'Add Device' dialog in the 'Devices' tab, now at the 'Device Information' step. The progress bar shows 'Identity' as completed and 'Device Information' as the current step. Below the progress bar, there is a text input field for 'Serial Number' and a text input field for 'Manufacturer'. There are also text input fields for 'Model', 'Device Class', 'Description', 'Firmware Version', 'Hardware Version', and 'Descriptive Location'. At the bottom left of the dialog, there is an 'Add Metadata +' button. At the bottom right, there are 'Back' and 'Next' buttons. The background shows the same table as in the previous screenshot, but it is now partially obscured by the dialog.

Boards | Action | Device Types | Interfaces | Add Device +

### Add Device

Identity | Device Information | Security | Summary

You can modify the default device information and enter more information about the device for identification purposes.

Serial Number: Enter Serial Number

Manufacturer: Enter Manufacturer

Model: Enter Model

Device Class: Enter Device Class

Description: Enter Description

Firmware Version: Enter Firmware Version

Hardware Version: Enter Hardware Version

Descriptive Location: Enter Descriptive Location

Add Metadata +

Back Next

### Browse Devices

All Devices Diagnose



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

The screenshot shows the 'Add Device' form with the 'Security' tab selected. The progress bar at the top indicates the following steps: Identity (checked), Device Information (checked), Security (active), and Summary (pending). The 'Security' section offers two options for selecting a device authentication token:

- Auto-generated authentication token (default):** Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphanumeric characters and symbols. The token is returned to you at the end of the device registration process.
- Self-provided authentication token:** Provide your own authentication token for this device. The token must be between 8 and 36 characters and contain a mix of lowercase and uppercase letters, numbers, and symbols, which can include hyphens, underscores, and periods. Do not use repeated characters, dictionary words, user names, or other predefined sequences.

An 'Authentication Token' input field contains the value '1997199520012005'. Below the field, a warning states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' A note below that says: 'Authentication tokens are encrypted before we store them.'

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

The screenshot shows the 'Add Device' form with the 'Summary' tab selected. The progress bar at the top indicates the following steps: Identity (checked), Device Information (checked), Security (checked), and Summary (active). The 'Summary' section displays the following information:

- Device Type: Modem
- Device ID: 199795
- Security Token: 1997199520012005

A 'View Metadata' button is located below the device information. At the bottom right of the form, there are 'Back' and 'Finish' buttons.

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

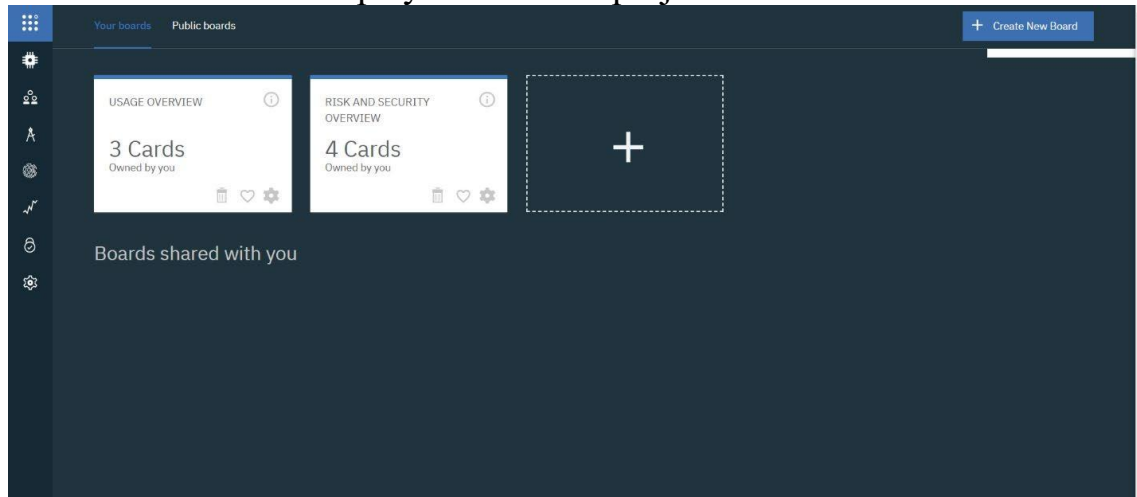
24. Safe the details of the device as the authentication tokens are non recoverable and if misplaced then we have to create a new one.

25. 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.

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



26. The Boards will display card for the project.



**CONCLUSION:**

An IBM Watson cloud for IoT and a device is created