

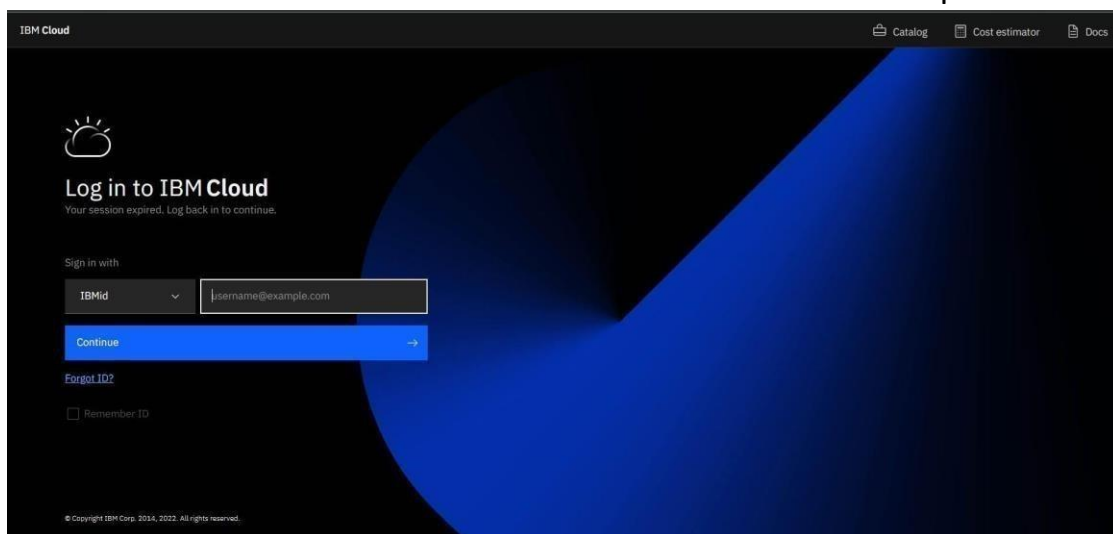
## CREATE IBM WATSON IOT PLATFORM AND DEVICE

<b>Project name</b>	<b>lot Based Smart Crop Protection System for Agriculture</b>
<b>Team ID</b>	<b>PNT2022TMID24112</b>

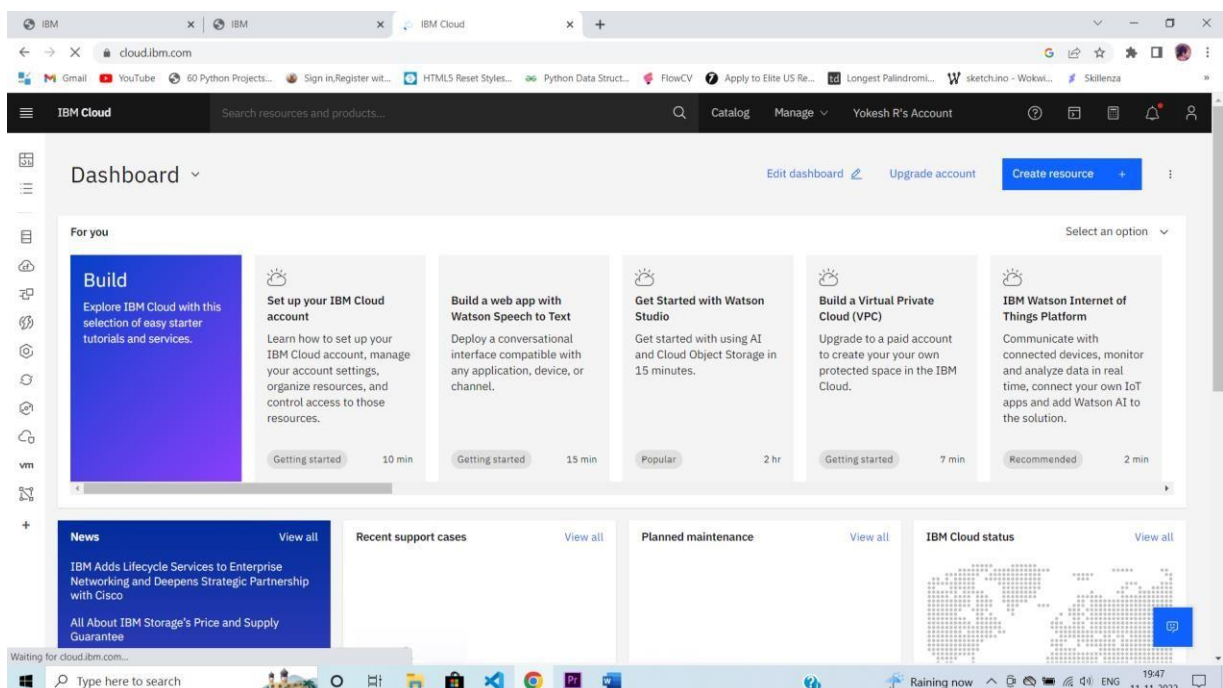
To create the IBM Watson IOT platform and device

### STEPS:

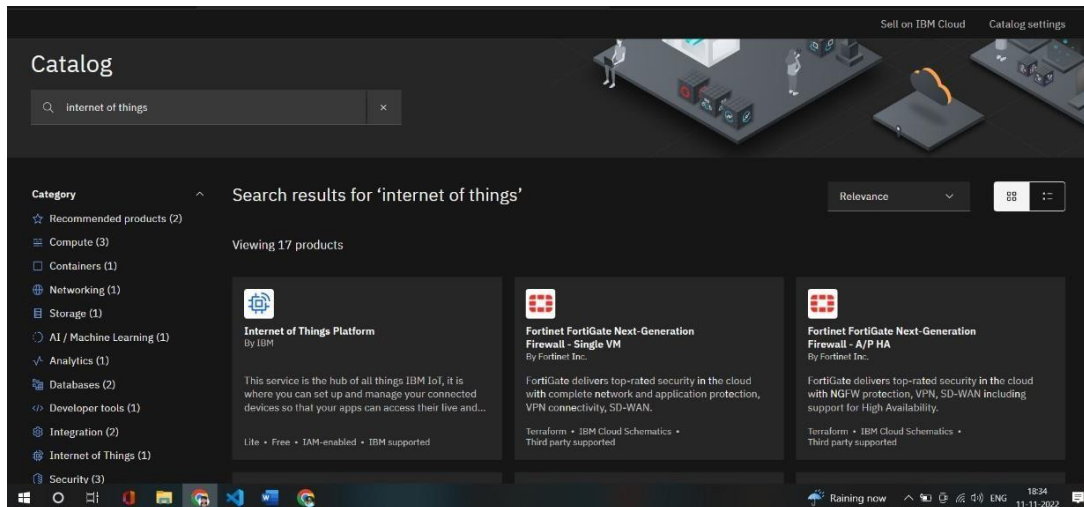
1. create an IBM cloud account with the individual IBM id and password



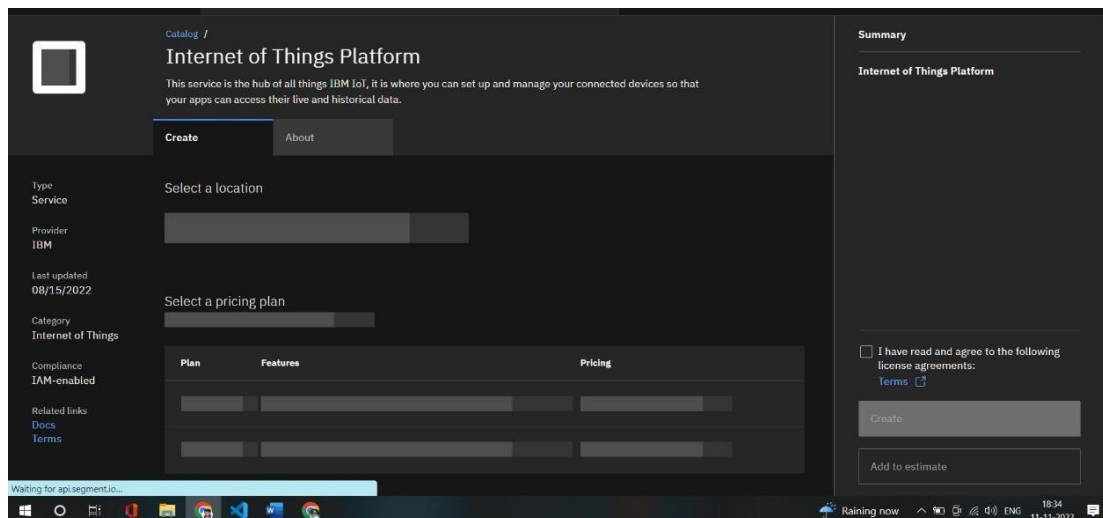
2. Home page of IBM cloud



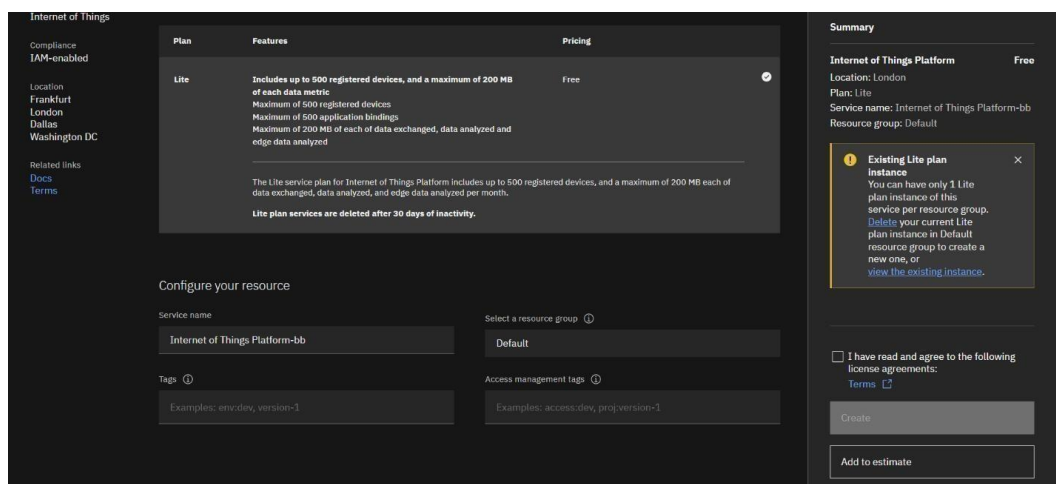
### 3. Click on the catalog on the top



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



### 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 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
<b>Lite</b>	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**

**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.

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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: 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: **env:dev, version-1**

Access management tags: **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

**Resource list** / **Internet of Things Platform-child\_safety** **Active** [Add tags](#)

**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

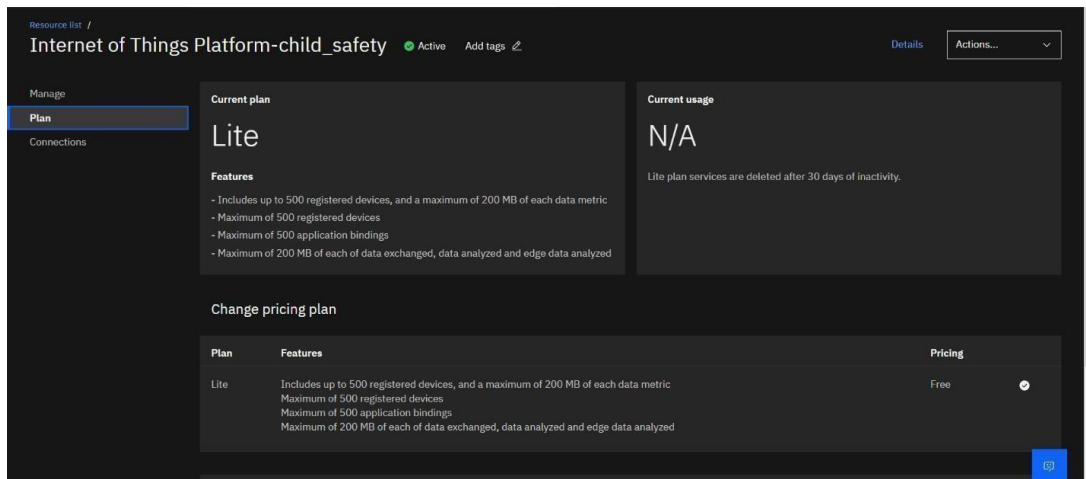
**Production**

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

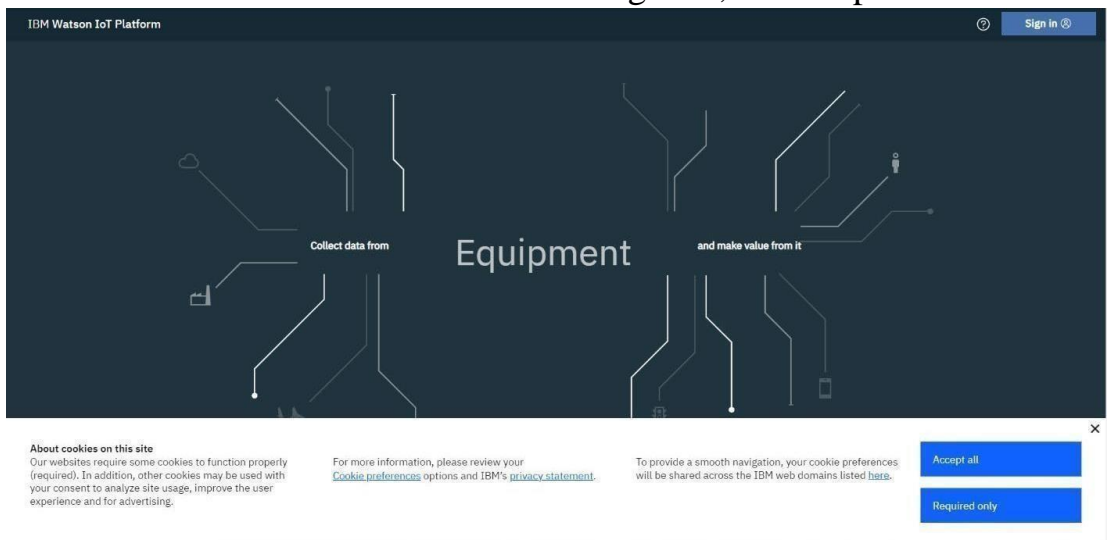
Includes IBM Service & Support

**Create** **Add to estimate**

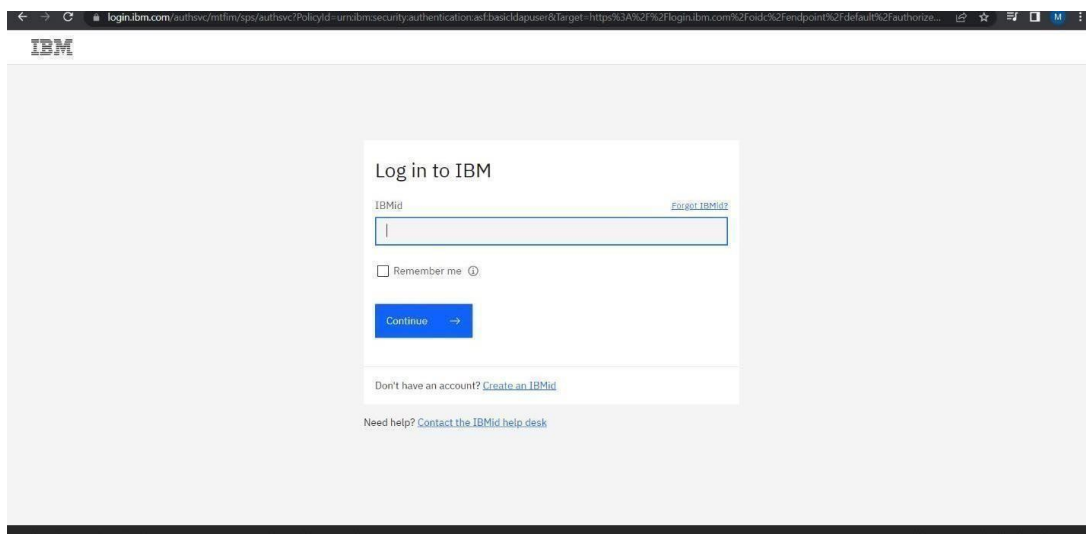
8. Manage is for launch, plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IOT with other services



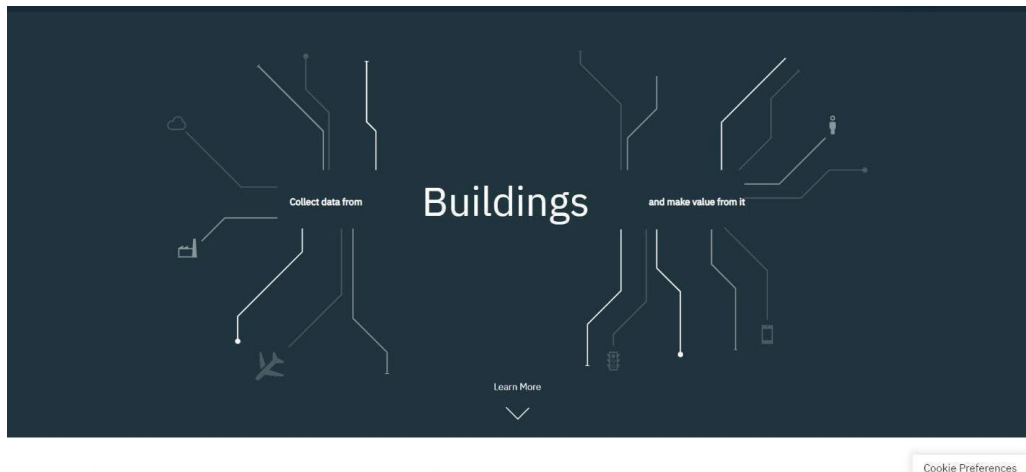
9. Click on the launch button in the manage tab, it will open to this device



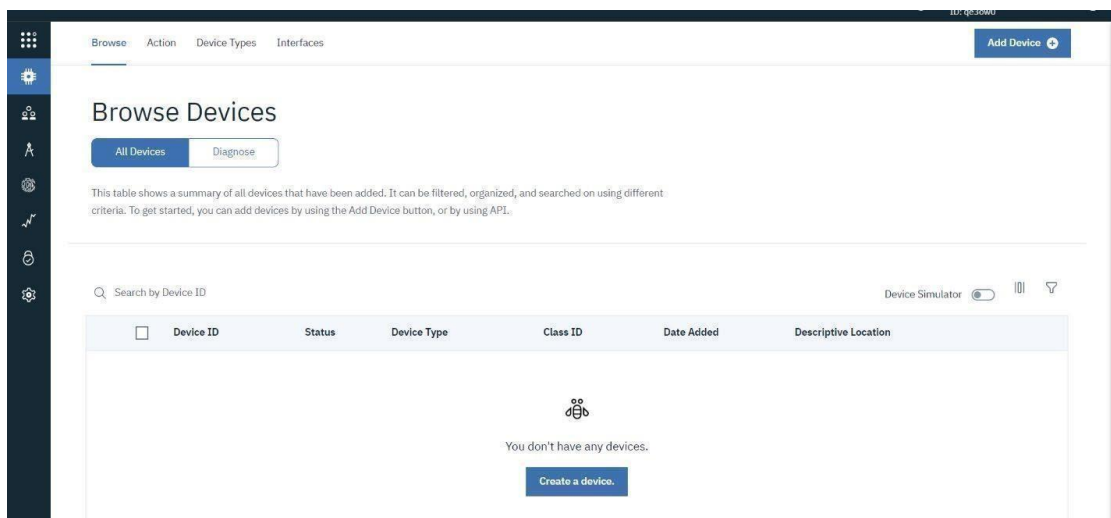
10. Enter the details to sign in to the Watson Cloud to create a device



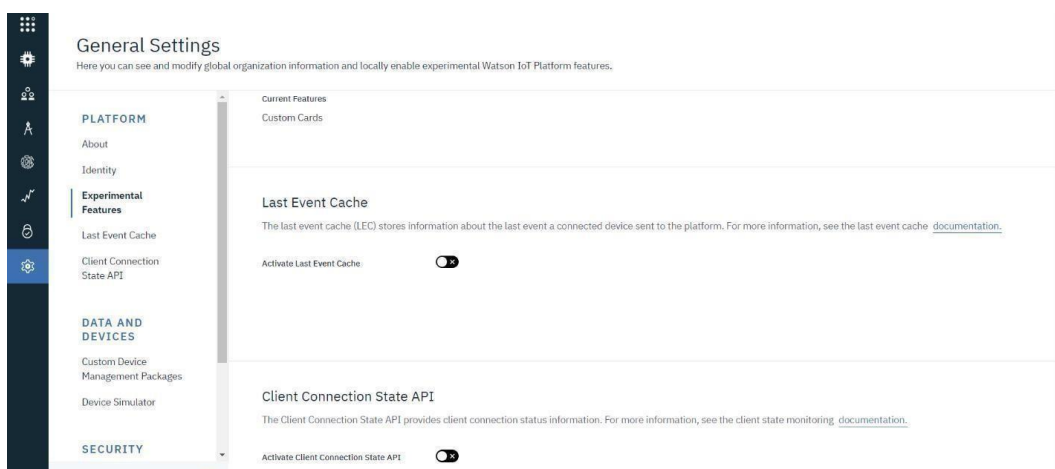
11. Once logged in the name will be displayed and it goes back to the first page



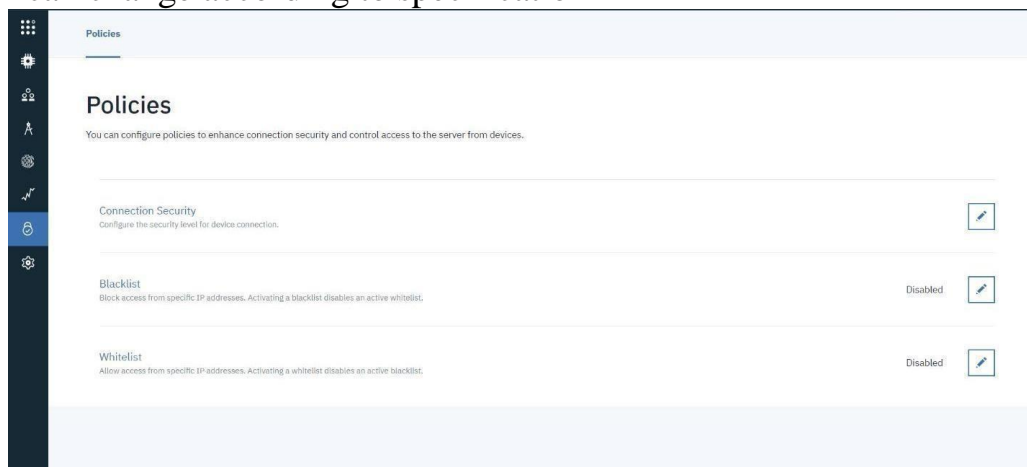
12. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices.



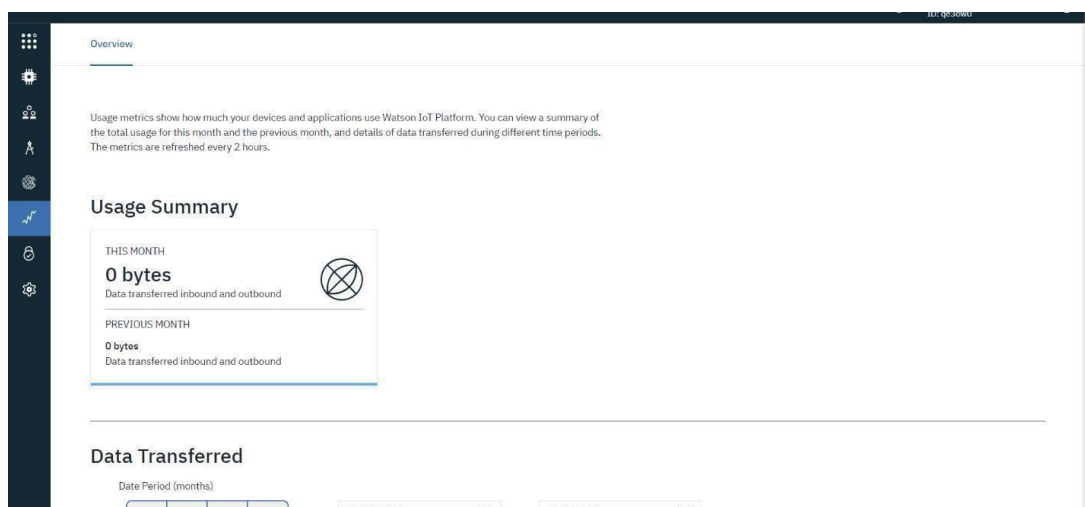
13. The setting tab is used to change the general setting if needed for the project.



14. 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

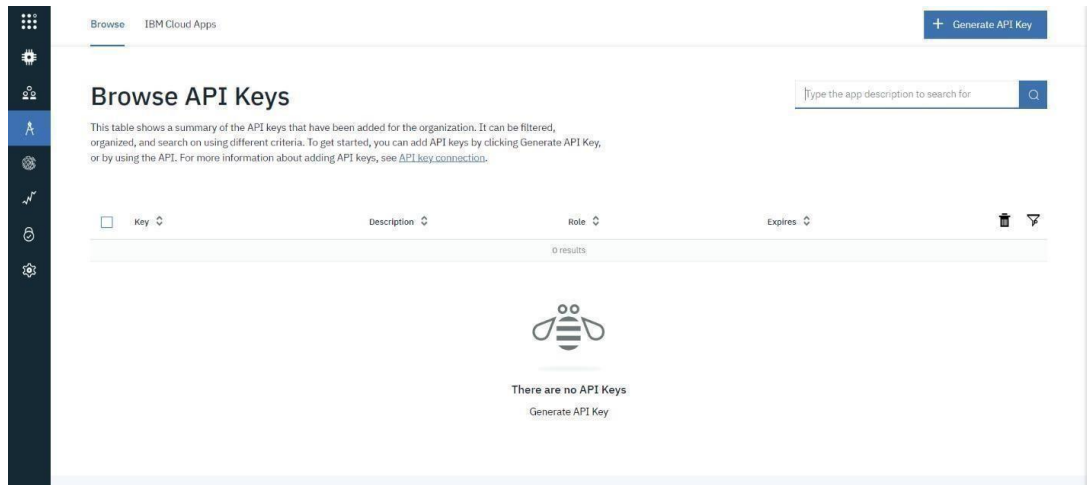


15. The member tab is add the teams members to work in the platform

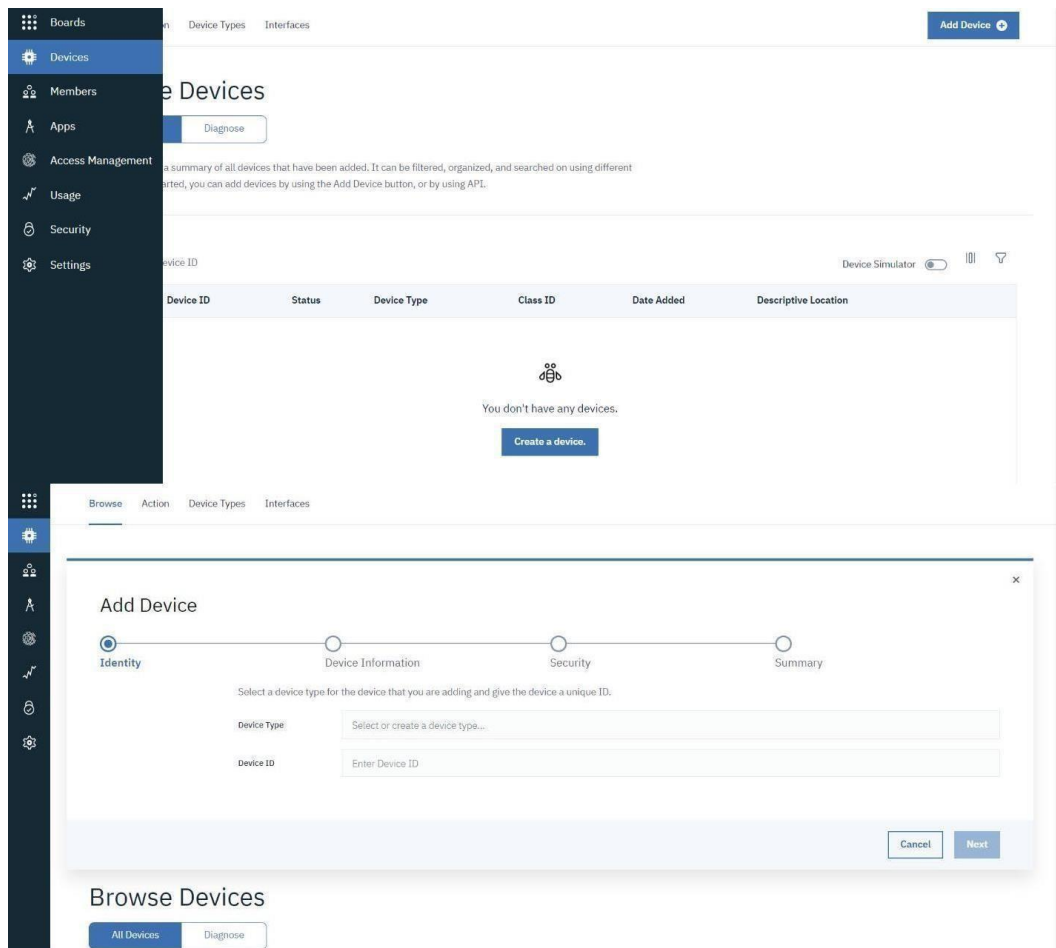
The screenshot shows the 'Browse Members' page in the IBM IoT Platform. The page title is 'Browse Members' with a subtitle 'This table shows a summary of the members of the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add members by clicking Add Members, or by using the API. For more information about members, see [Managing user access](#).' Below this, there is a table with columns: 'Email Address', 'Name', 'Role', 'Added By', 'Expires', and a search icon. The table shows 1 result.

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

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

The screenshot shows the 'Add Device' wizard at the 'Device Information' step. The progress bar indicates that 'Identity' is complete and 'Device Information' is the current step. The instructions state: 'You can modify the default device information and enter more information about the device for identification purposes.' The form contains several input fields: 'Serial Number' (with a placeholder 'Enter Serial Number'), 'Model' (with a placeholder 'Enter Model'), 'Description' (with a placeholder 'Enter Description'), 'Hardware Version' (with a placeholder 'Enter Hardware Version'), 'Manufacturer' (with a placeholder 'Enter Manufacturer'), 'Device Class' (with a placeholder 'Enter Device Class'), 'Firmware Version' (with a placeholder 'Enter Firmware Version'), and 'Descriptive Location' (with a placeholder 'Enter Descriptive Location'). There is an 'Add Metadata' button with a plus icon. At the bottom right, there 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 at the 'Security' step. The progress bar shows 'Identity' and 'Device Information' as completed steps. The instructions state: 'There are two options for selecting a device authentication token.' The first option is 'Auto-generated authentication token (default)', which allows the service to generate a token. The second option is 'Self-provided authentication token (default)', which requires the user to provide their own token. Below the instructions, there is an 'Authentication Token' field containing the value '1997199520012005'. A note below the field states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' and 'Authentication token are encrypted before we store them.' At the bottom right, there are 'Back' and 'Next' buttons.

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

The screenshot shows the 'Add Device' wizard at the 'Summary' step. The progress bar shows 'Identity', 'Device Information', and 'Security' as completed steps. The instructions state: 'Verify that the following information is correct then select Finish'. The summary information displayed is: 'Device Type: Modemcu', 'Device ID: 199795', 'Security Token: 1997199520012005'. There is a 'View Metadata' button. At the bottom right, there are 'Back' and 'Finish' buttons.



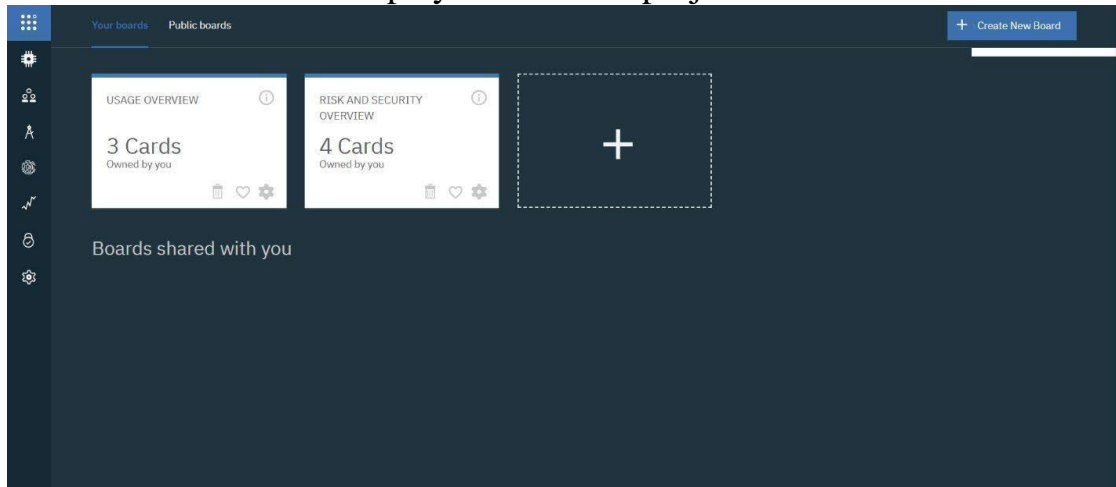
The device credentials will be displayed with all the details

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

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

21. The Boards will display card for the project.



## CONCLUSION:

An IBM Watson cloud for IoT and a device is created