

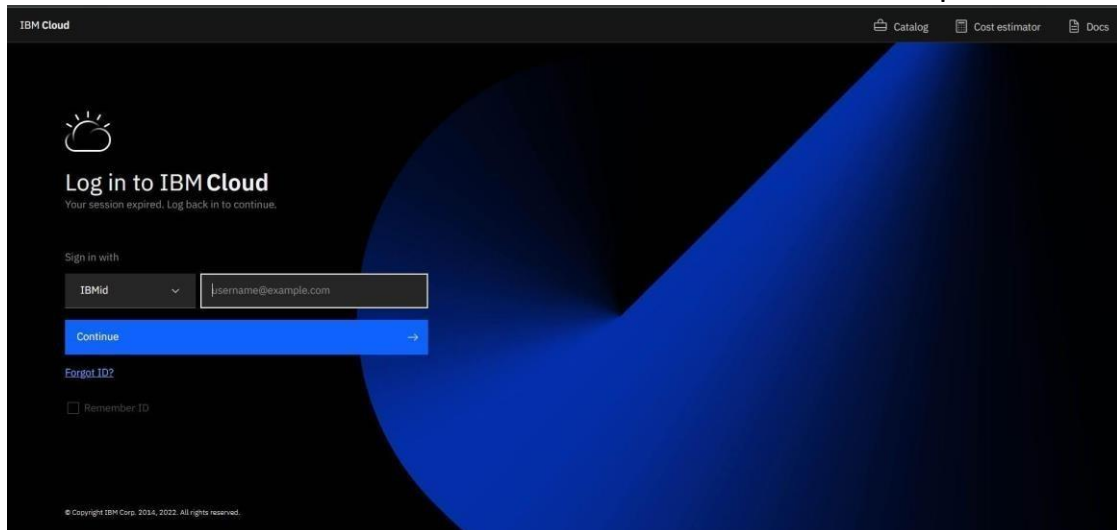
## CREATE IBM WATSON IOT PLATFORM AND DEVICE

Project name	lot Based Smart Crop Protection System for Agriculture
Team ID	PNT2022TMID12173

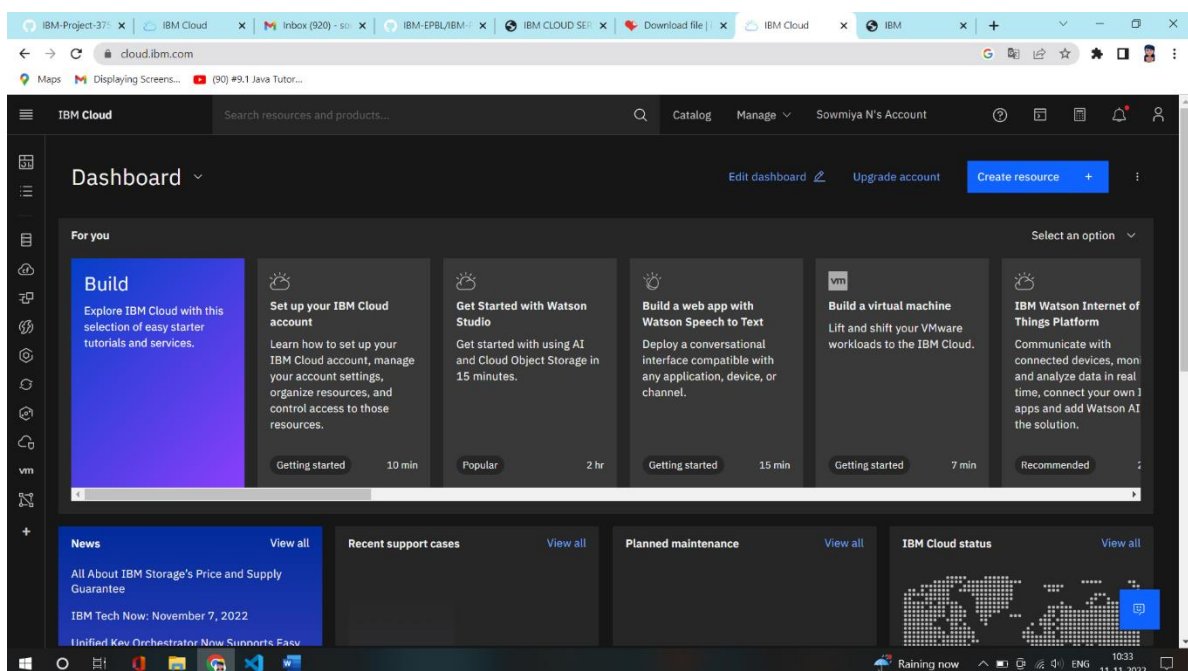
To create the IBM Watson IOT platform and device

### STEPS:

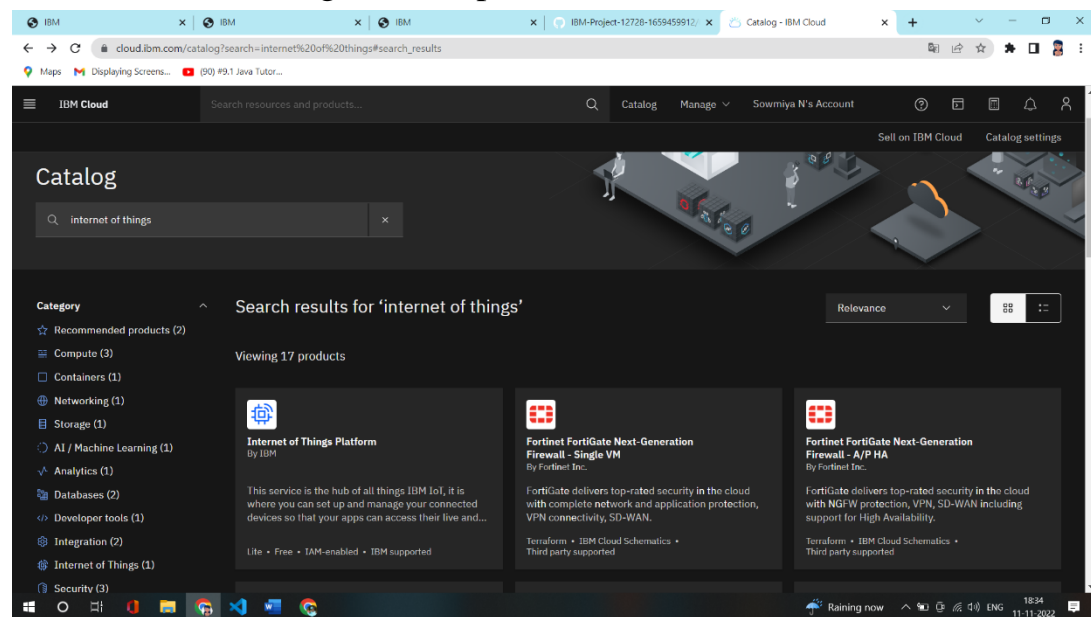
1. create an IBM cloud account with the individual IBM id and password



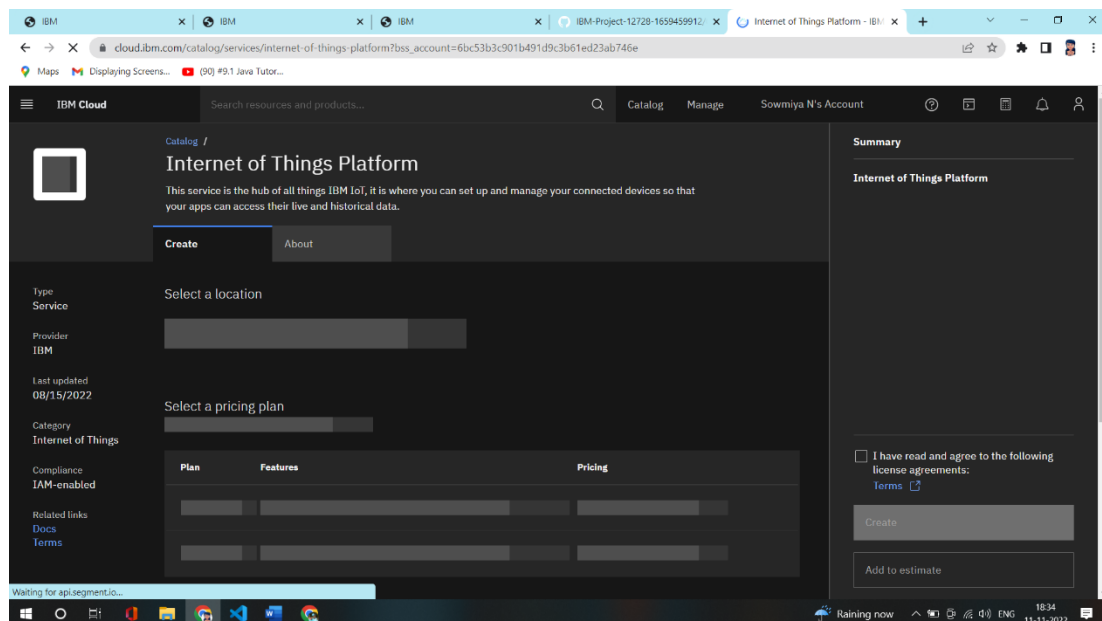
2. Home page of IBM cloud



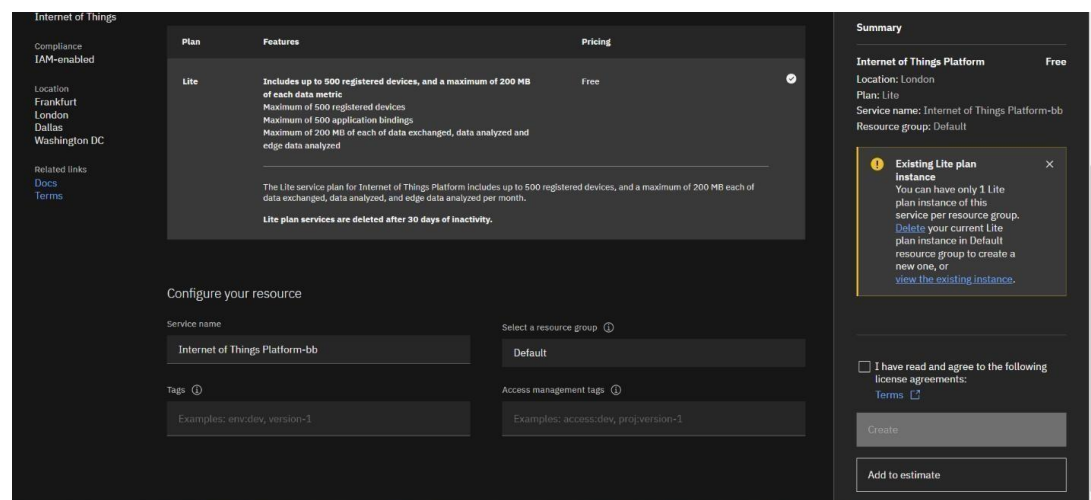
### 3. Click on the catalog on the top



### 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
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.

☐ I have read and agree to the following license agreements:  
[Terms](#)

Create

Add to estimate

**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

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[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

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

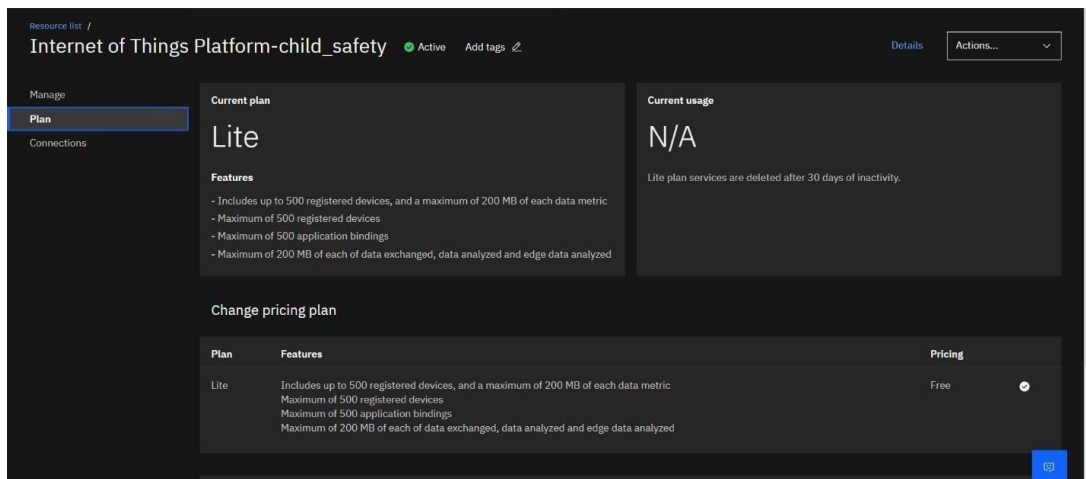
**Manage**  
Plan  
Connections

**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](#)

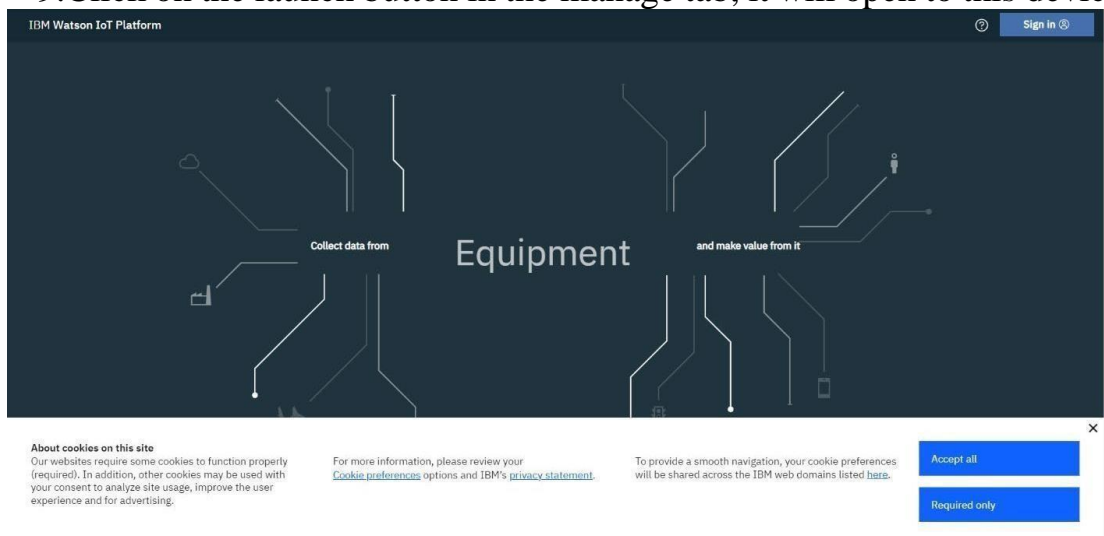
Ready for the next level?  
**IBM Watson IoT Platform Journey**

- ☒ **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

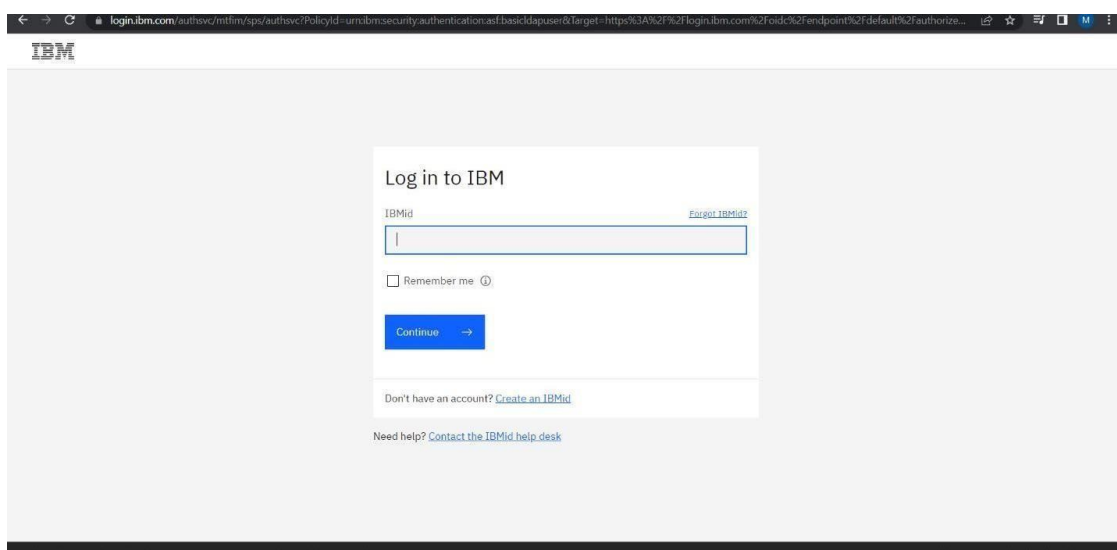
8. Manage is for launch, plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IOT with other services



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

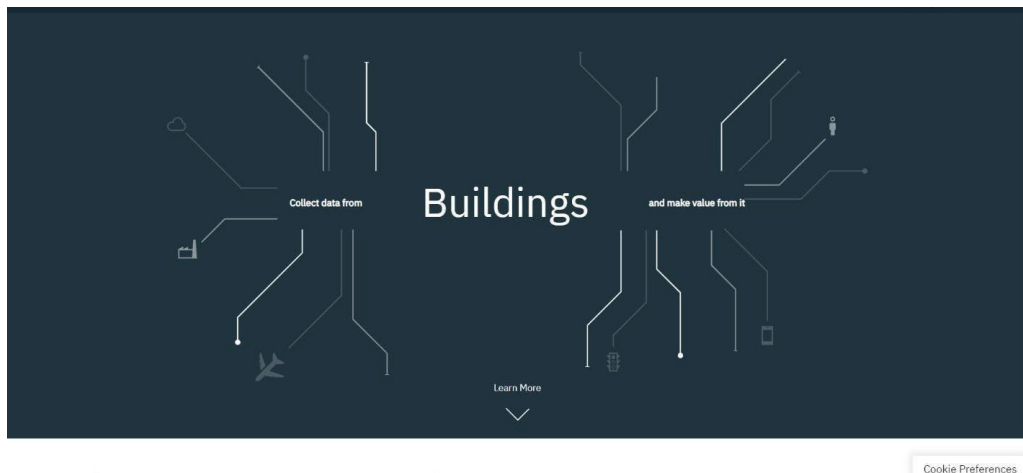


10. Enter the details to sign in to the Watson Cloud to create a device

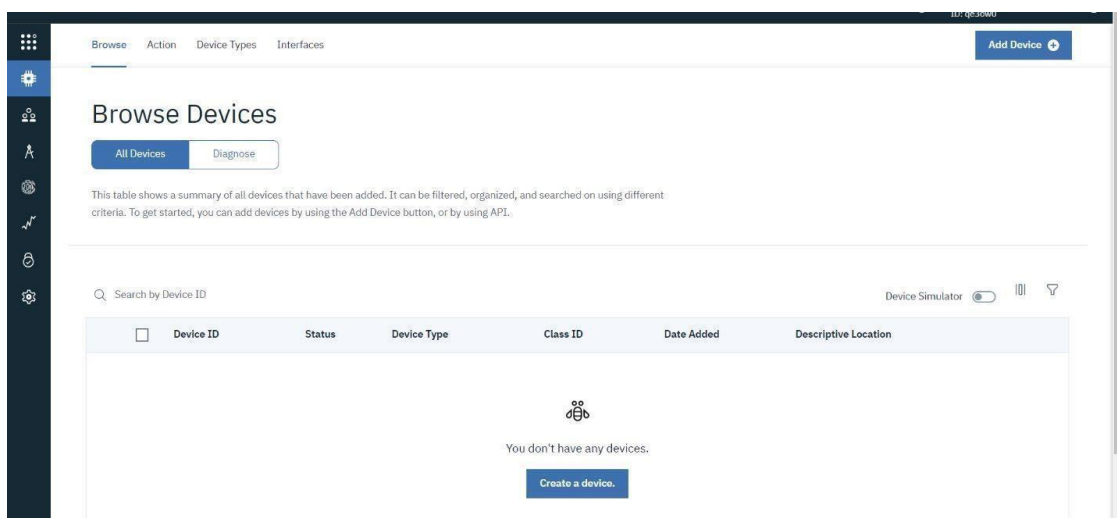


11. Once logged in the name will be displayed and it goes back to the first

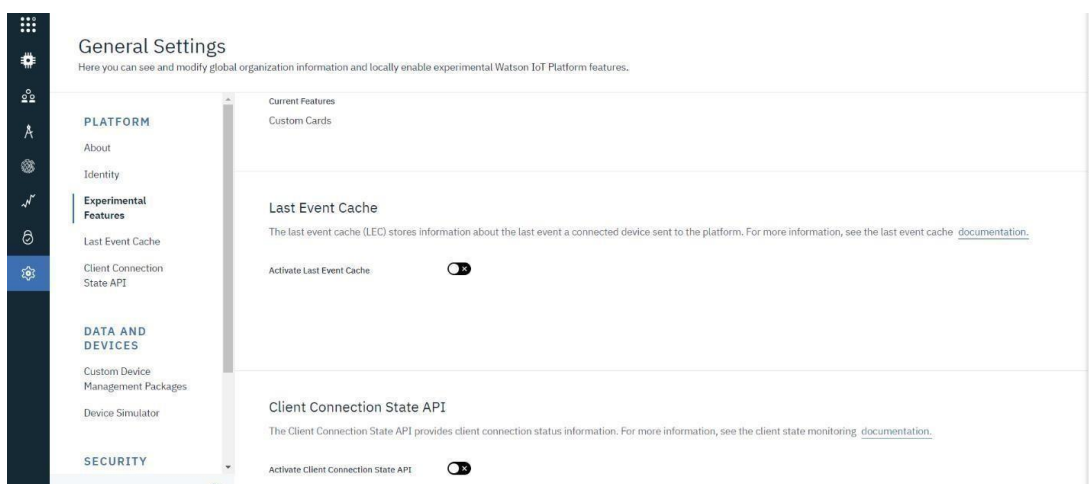
page



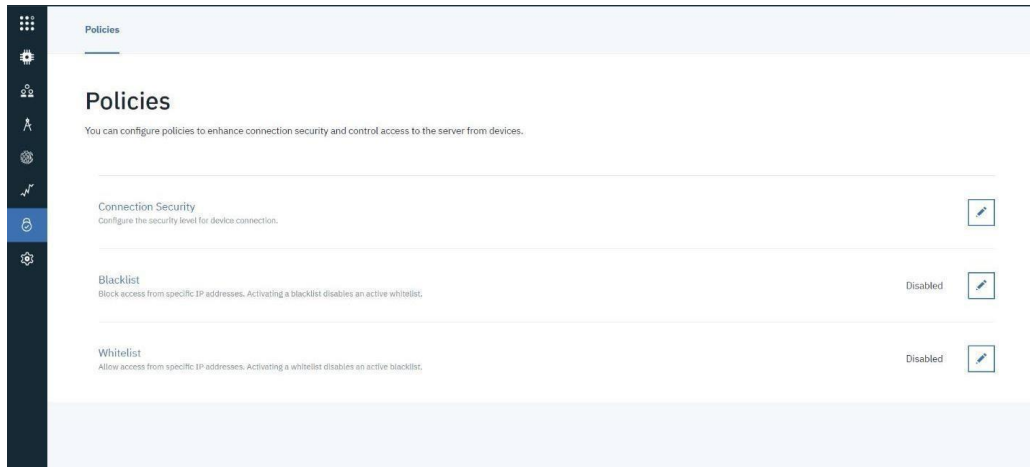
12. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices.



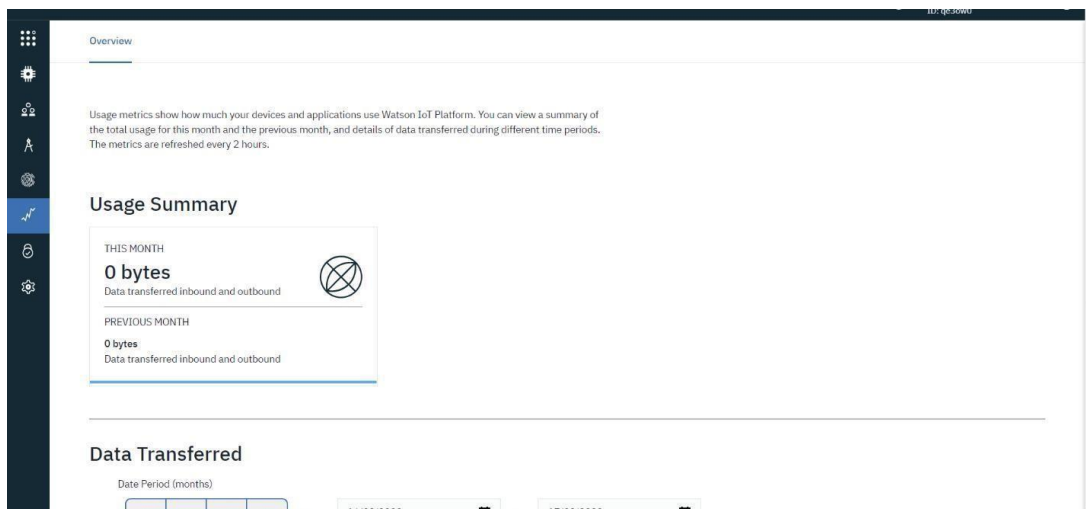
13. The setting tab is used to change the general setting if needed for the project.



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

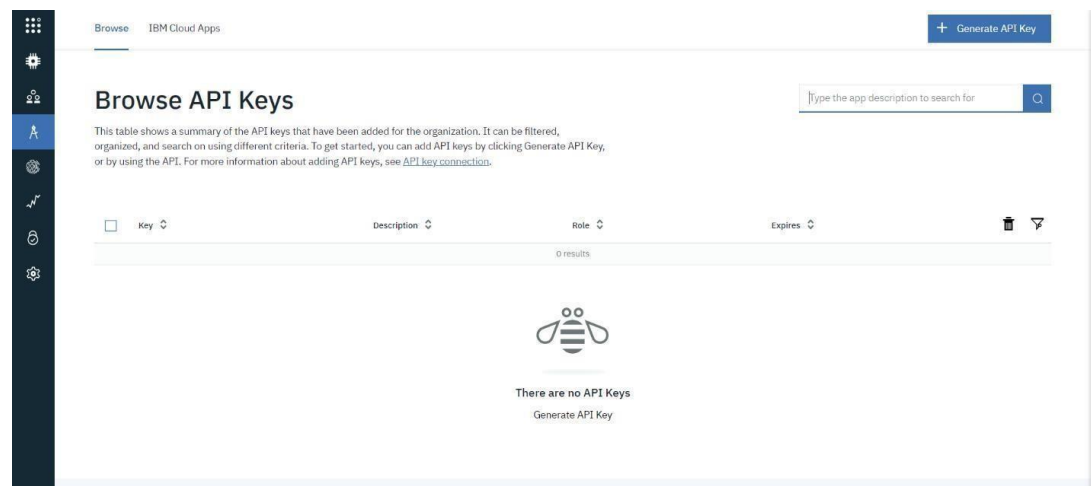
**Browse** + Add Members

**Browse Members** Type the member email to search for

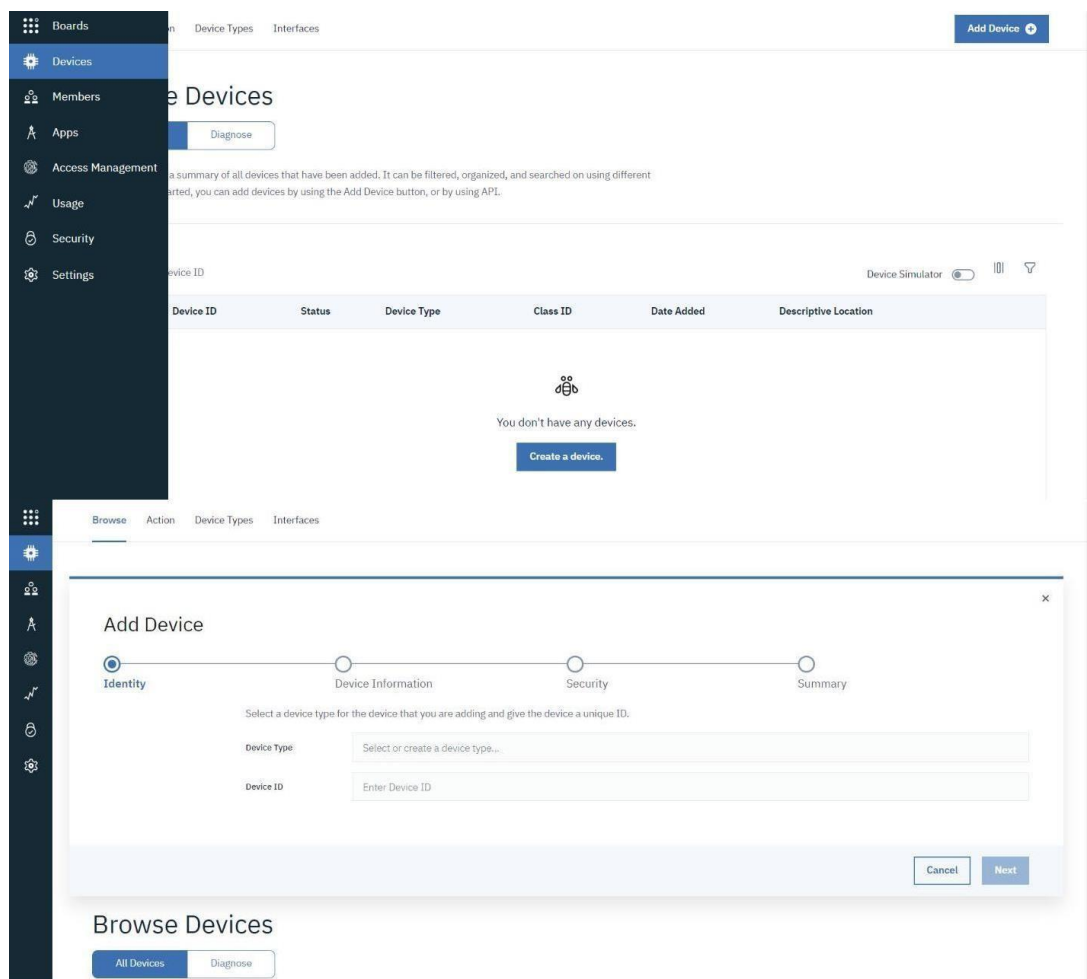
This table shows a summary of the members of the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add members by clicking Add Members, or by using the API. For more information about members, see [Managing user access](#).

<input type="checkbox"/>	Email Address	Name	Role	Added By	Expires	
1 result						
<input type="checkbox"/>	worldisfulofmeow@gmail.com	worldisfulofmeow@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 page contains several input fields for device details:

- Serial Number: Enter Serial Number
- Model: Enter Model
- Description: Enter Description
- Hardware Version: Enter Hardware Version
- Manufacturer: Enter Manufacturer
- Device Class: Enter Device Class
- Firmware Version: Enter Firmware Version
- Descriptive Location: Enter Descriptive Location

There is an 'Add Metadata' button and 'Back' and 'Next' buttons at the bottom right.

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', 'Device Information', and 'Security' as completed steps. The page provides two options for selecting an 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' field displays the value '1997199520012005'. A note below states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored. Authentication tokens are encrypted before we store them.'

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 all previous steps as completed. The page displays a summary of the device information:

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

There is a 'View Metadata' button and 'Back' and 'Finish' buttons at the bottom right.

The device credentials will be displayed with all the details

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

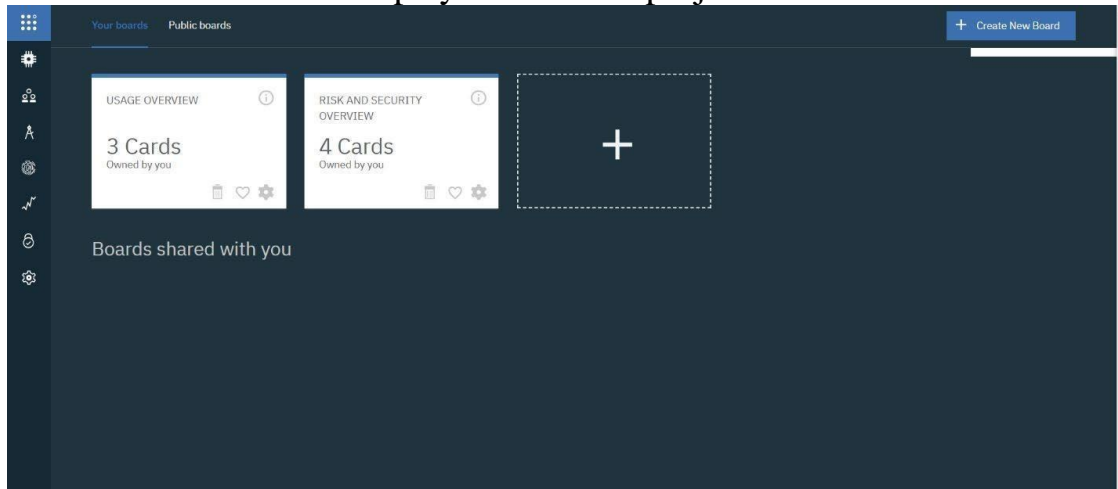


Clicking on the device tab we can now see the added device. Clicking on it will display the other details. It has different tabs like Identity, Device Information, State and login.

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