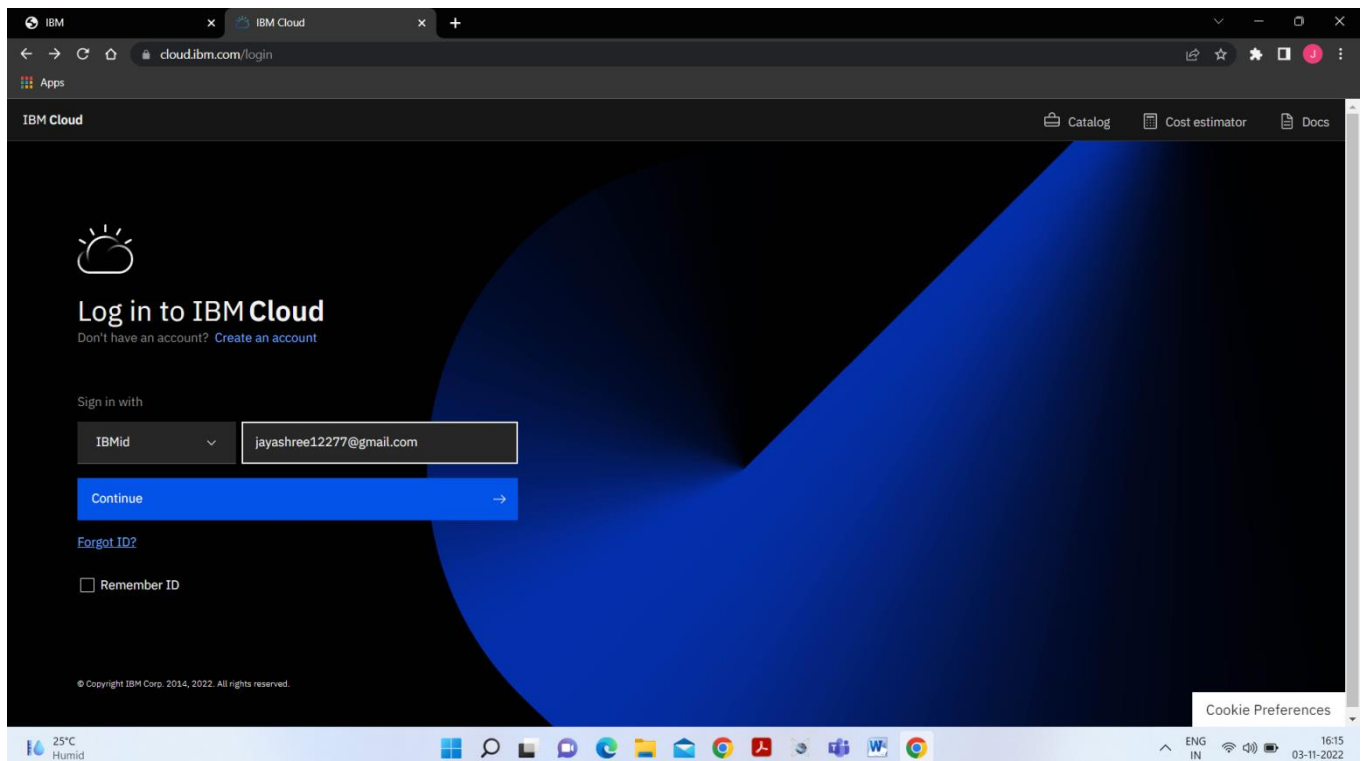


CREATE IBM WATSON IOT PLATFORM AND DEVICE

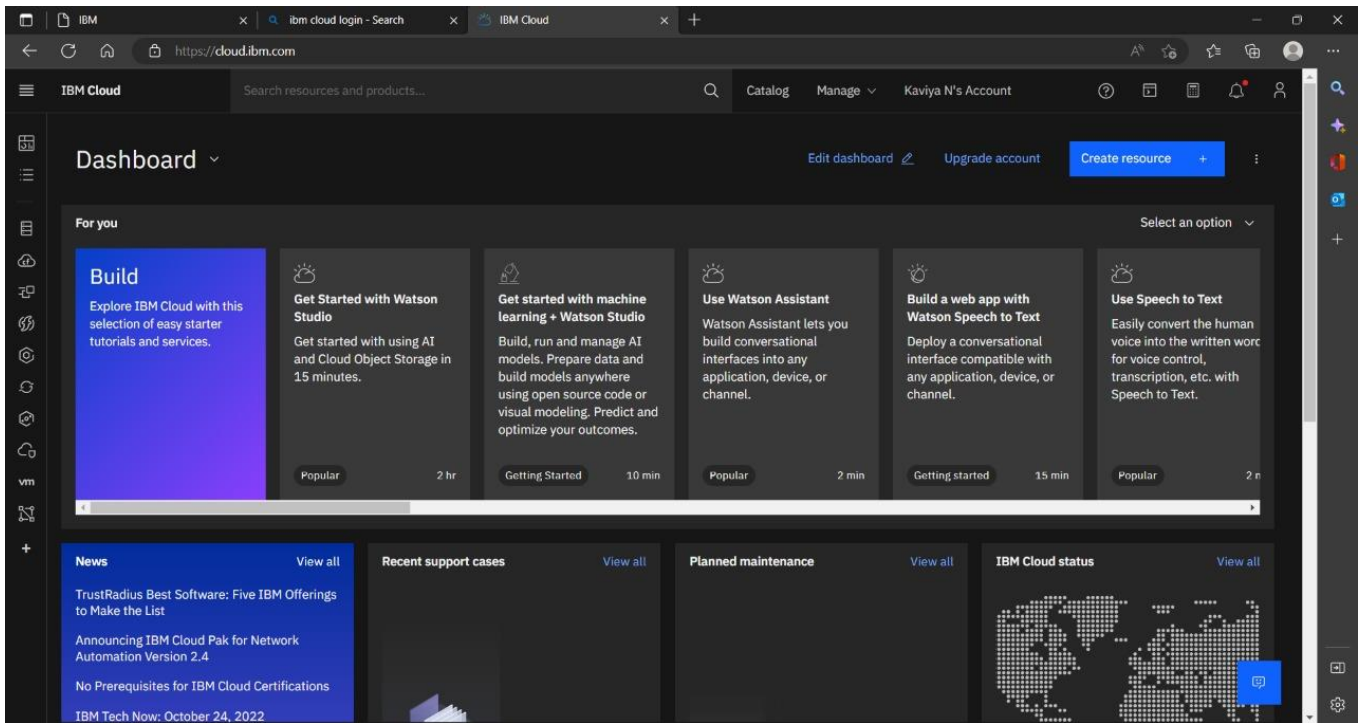
Date	3-11-2022
Team ID	PNT2022TMID01023
Project Name	IOT based safety gadget forChild safety monitoring and notification
Maximum Marks	4 Marks
Submitted By	JAYASHREE. S JAYASRI.M KAVIYA. N FAMITHA SUFFRIN.N

STEPS:

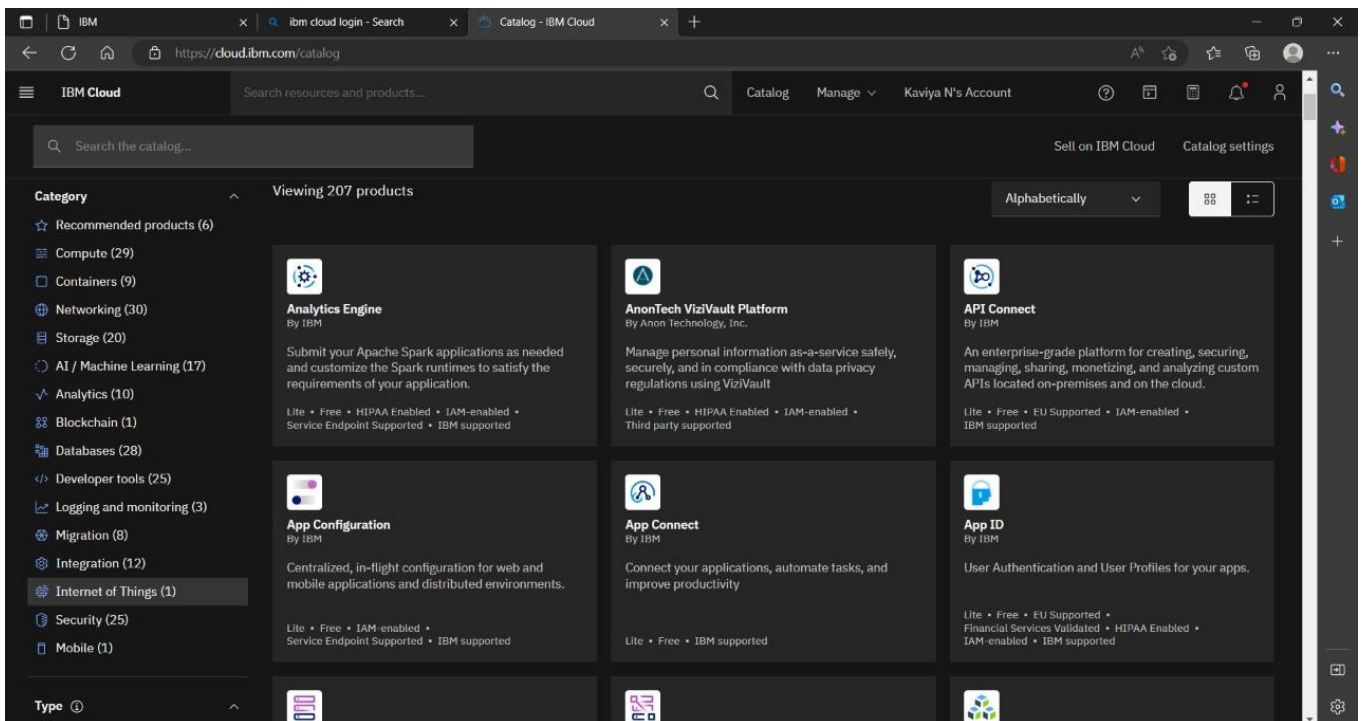
1. Firstly create an IBM cloud account with IBMid and password



2. Home page of IBM cloud



3. Click on the catalog on the top



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

Last updated 08/15/2022

Category Internet of Things

Compliance IAM-enabled

Location Frankfurt London Dallas Washington DC

Related links Docs Terms

Select a location

Frankfurt (eu-de)

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: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-kl

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

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

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-kl

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: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-kl

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

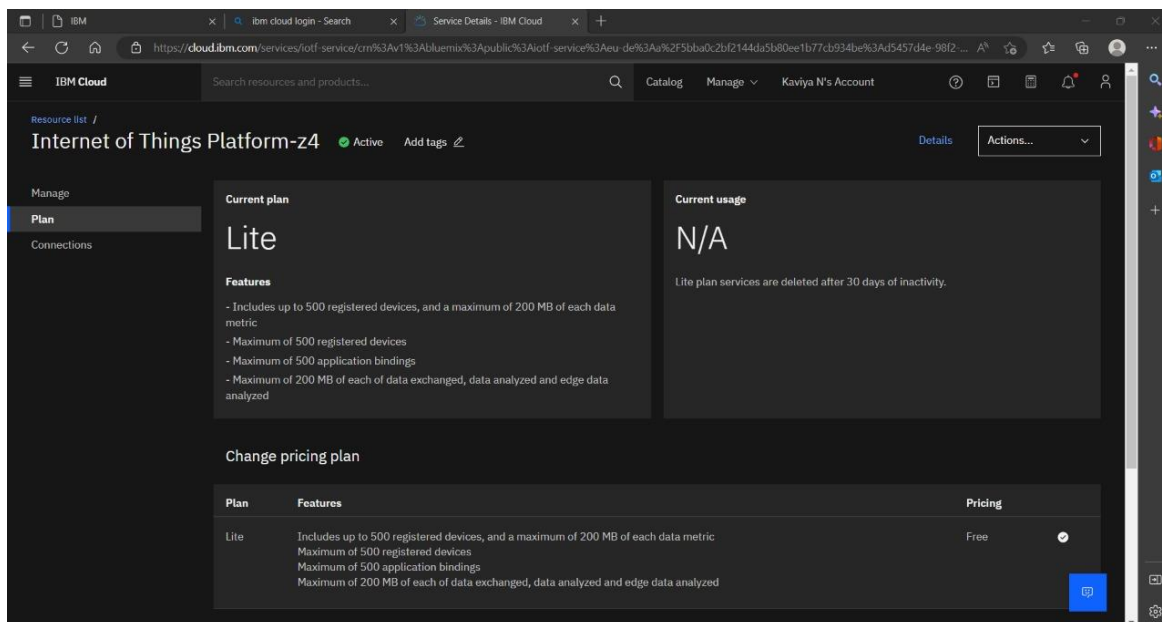
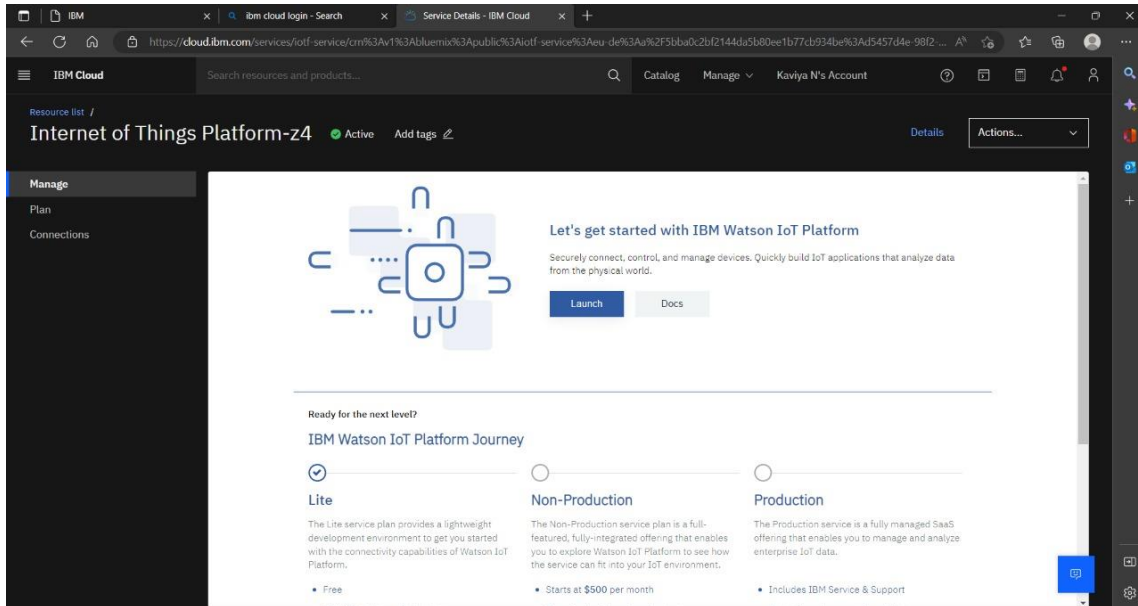
5. Enter the location and in the configure your resource type the service name and choose the plan, tick the agree with agreements and then click on create

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform. The 'Create' tab is active, displaying a 'Select a location' dropdown menu with 'Frankfurt (eu-de)' selected. Below this is a 'Select a pricing plan' section with a table of available plans. The 'Lite' plan is selected, showing features like up to 500 registered devices and 200 MB of data metric, and a price of 'Free'. A summary panel on the right shows the service name 'Internet of Things Platform', location 'Frankfurt', plan 'Lite', and resource group 'Default'. A warning message states: '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.' At the bottom, there is a checkbox for 'I have read and agree to the following license agreements:' and buttons for 'Create' and 'Add to estimate'.

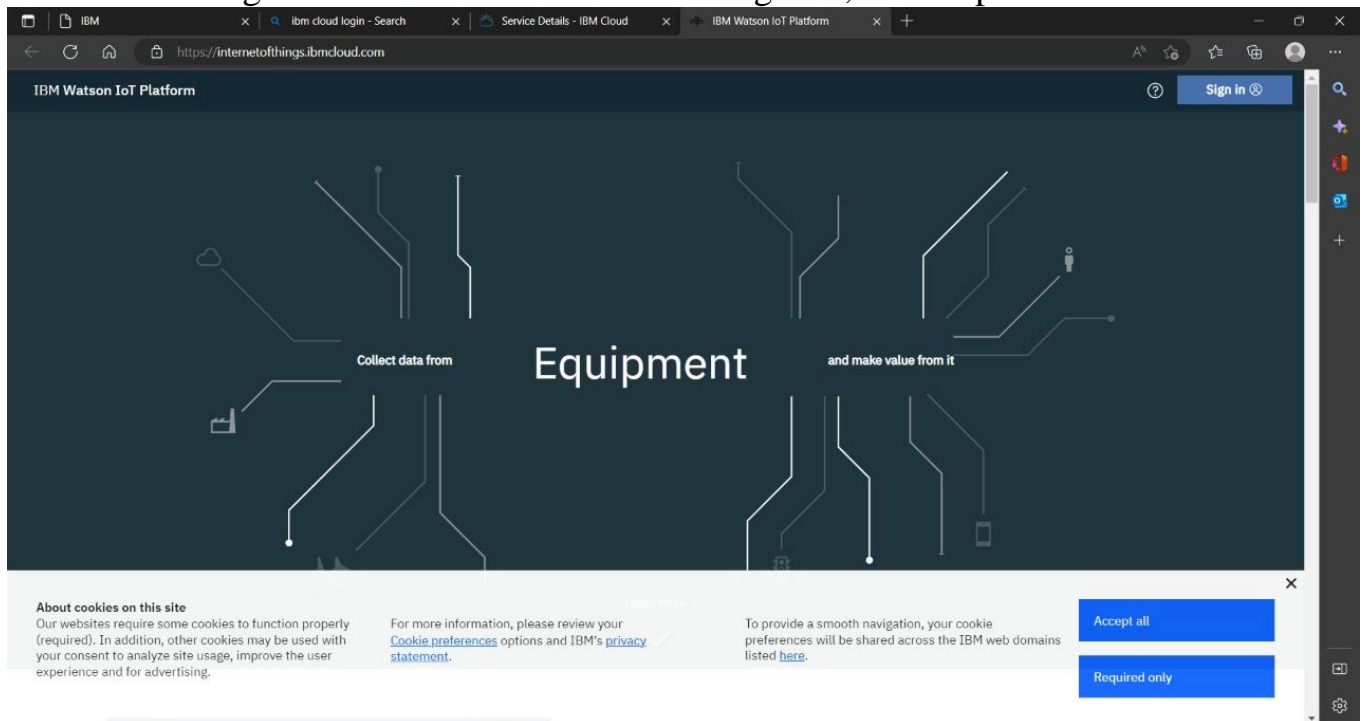
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric. Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free

The screenshot shows the 'Configure your resource' section of the IBM Cloud catalog page. The 'Lite' plan is still selected. The 'Service name' field is set to 'Internet of Things Platform-kl'. The 'Select a resource group' dropdown is set to 'Default'. The 'Tags' field is empty, with examples like 'env:dev, version-1'. The 'Access management tags' field is also empty, with examples like 'access:dev, proj:version-1'. The summary panel on the right remains the same, showing the service name, location, plan, and resource group. The warning message and the 'I have read and agree to the following license agreements:' checkbox are also present, along with the 'Create' and 'Add to estimate' buttons.

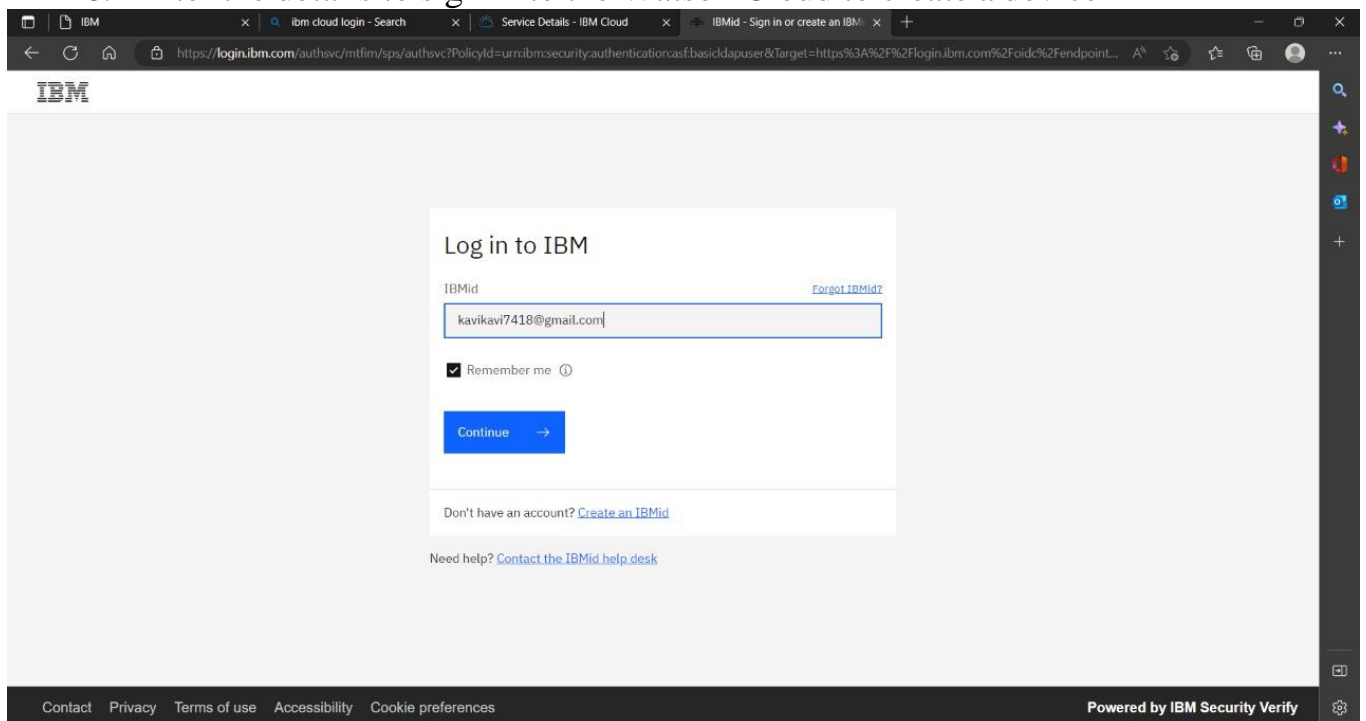
6. Internet of Things Platform Child_safety will be created, where there are different options like manage, plan, and connection (manage is for launch, Plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IoT with other servies)



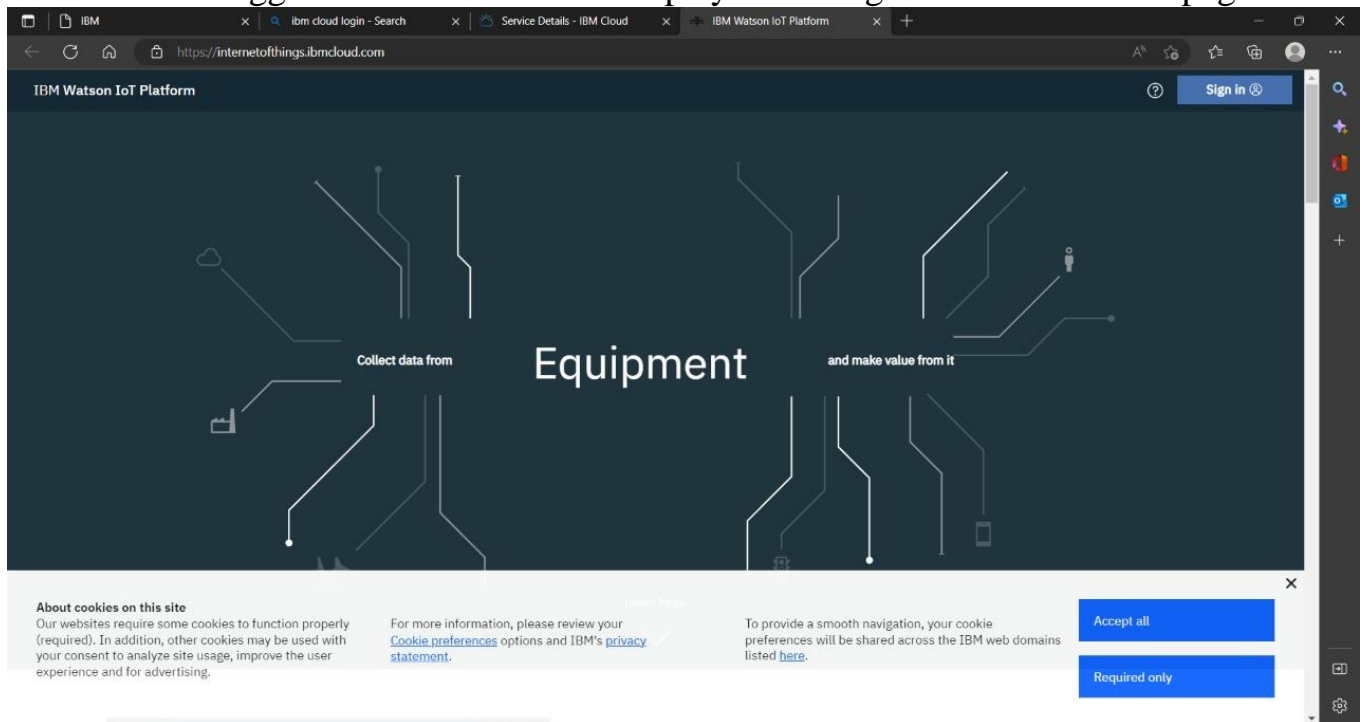
7. Clicking on the launch button in the manage tab, it will open to this



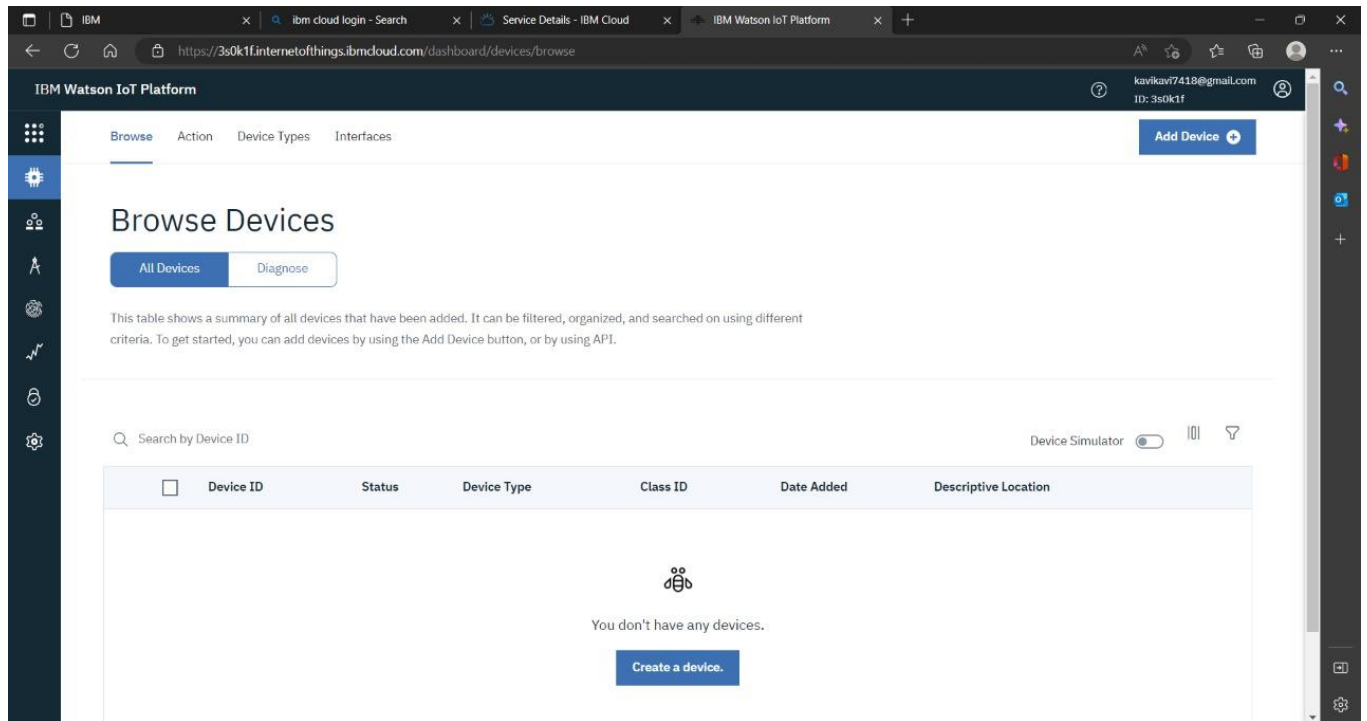
8. Enter the details to sign in to the Watson Cloud to create a device



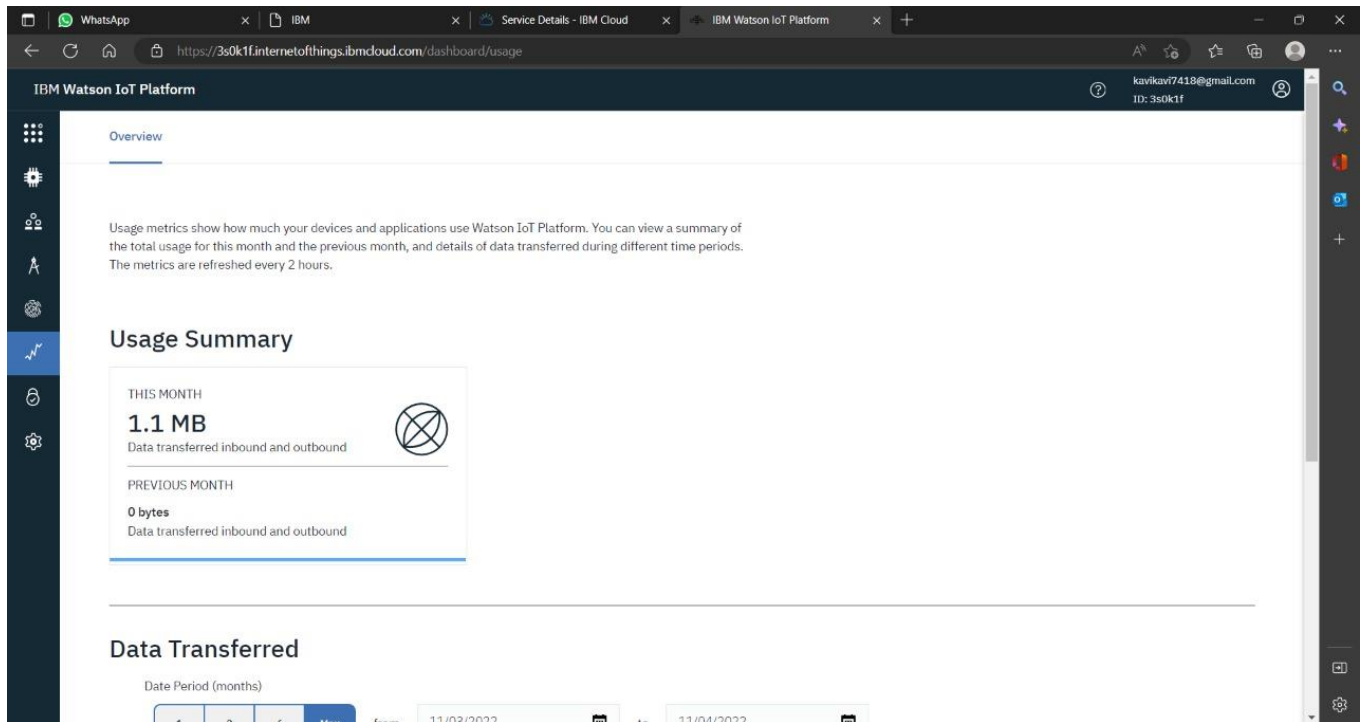
9. Once logged in the name will be displayed and it goes back to the first page



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.



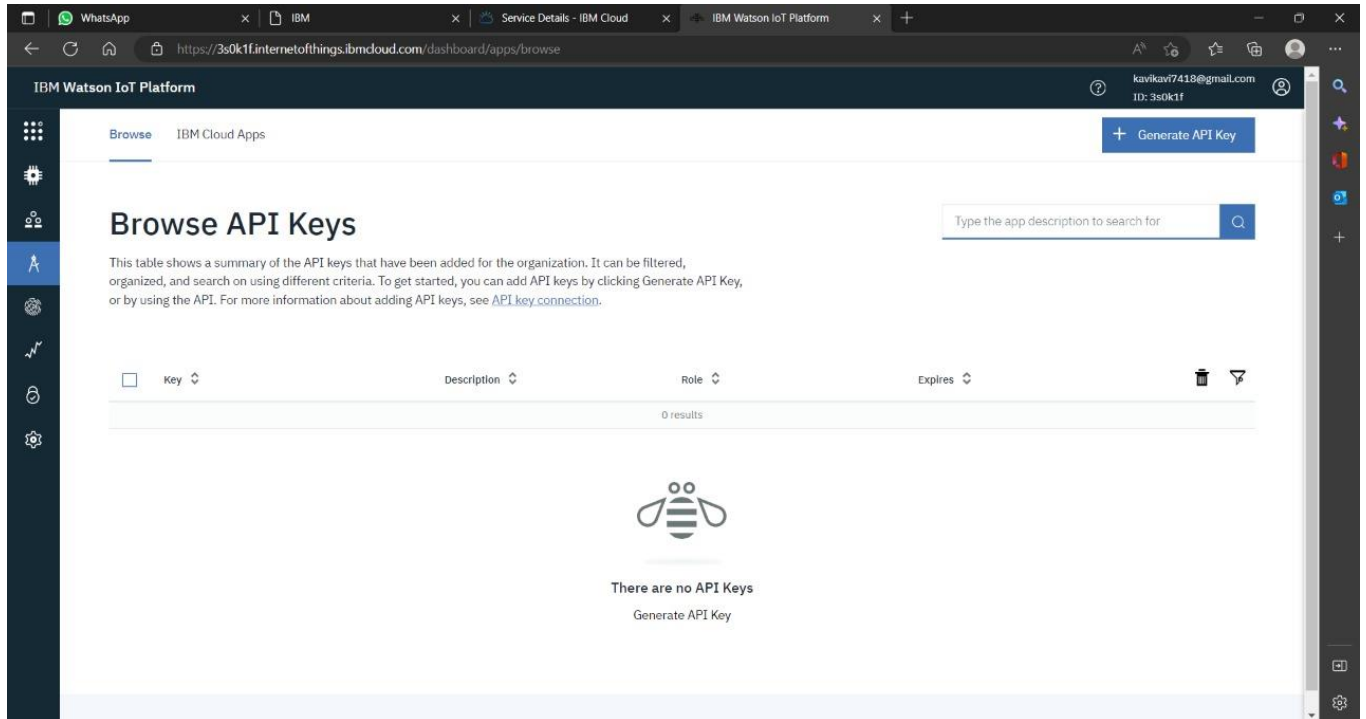
12. The member tab is add the teams members to work in the platform

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 description: '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](#).'

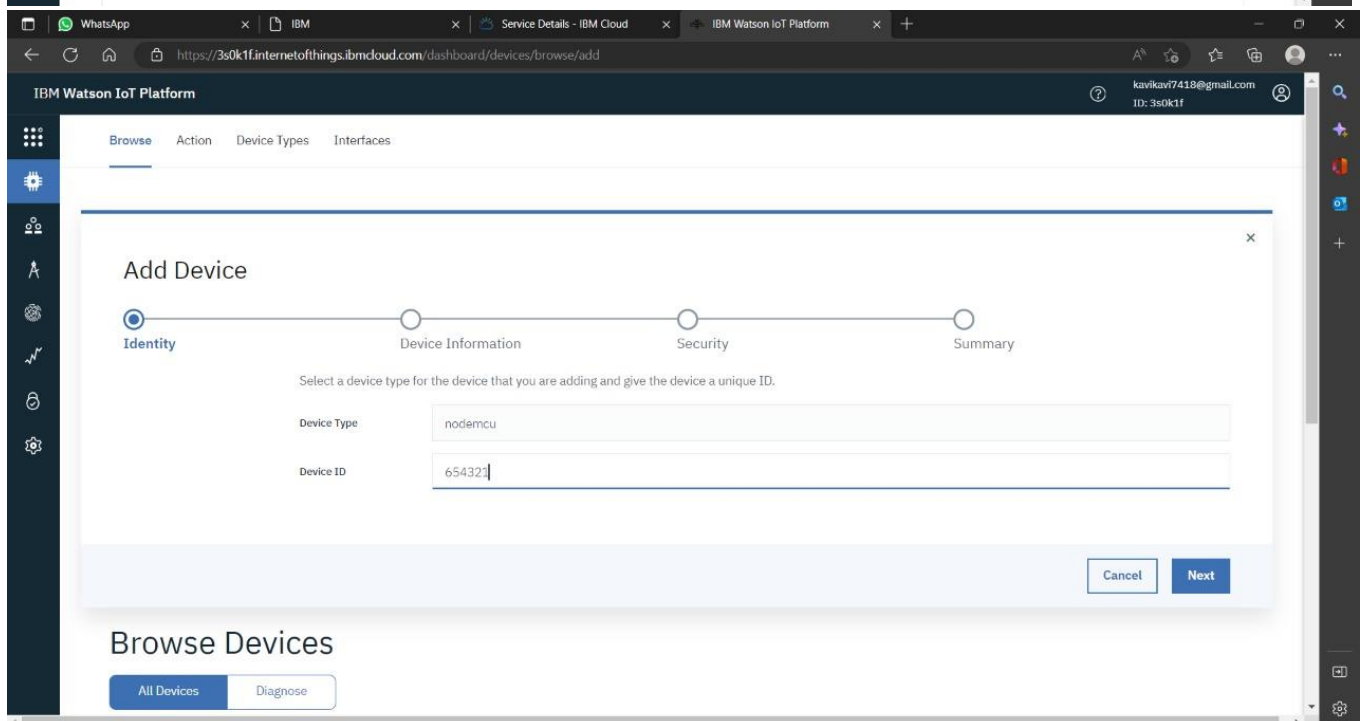
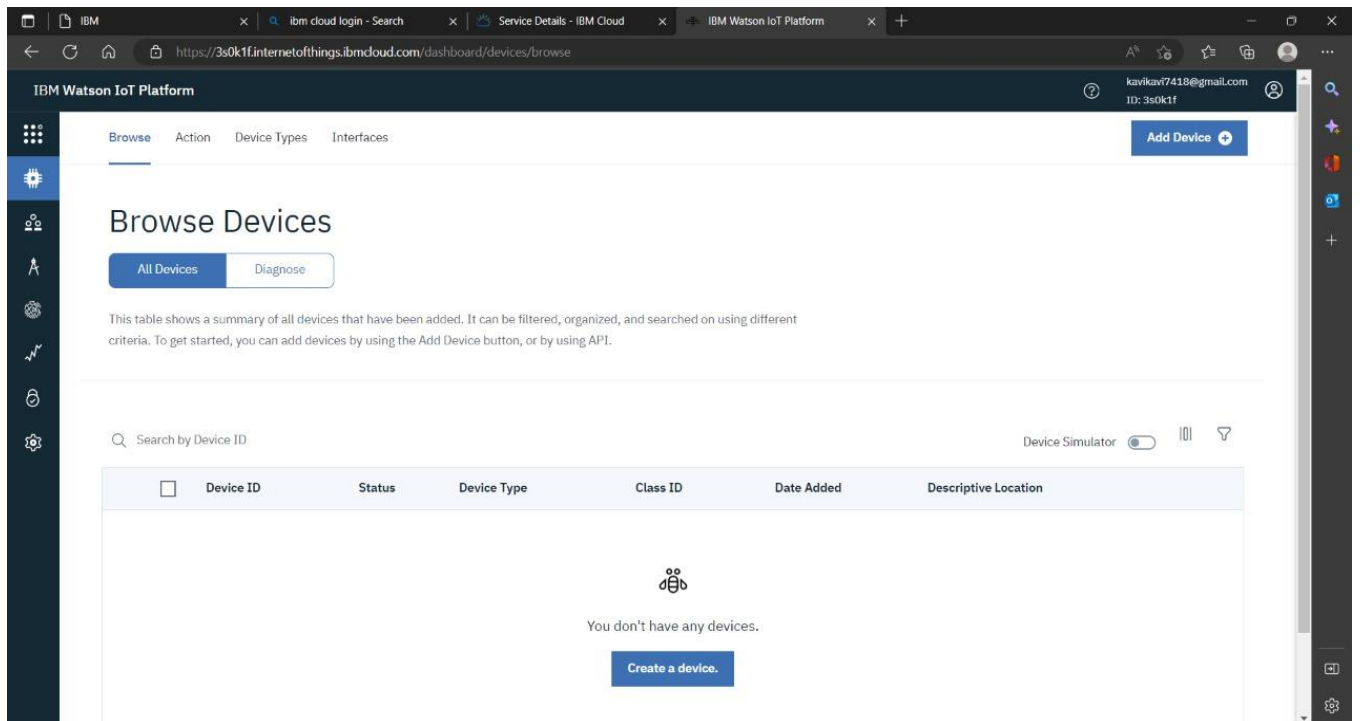
The table displays a list of members with the following columns: Email Address, Name, Role, Added By, Expires, and a toggle switch. There are 4 results shown.

<input type="checkbox"/>	Email Address	Name	Role	Added By	Expires	
<input type="checkbox"/>	famianz11@gmail.com	famitha suffrin n	Analyst	kaviya n	-	<input checked="" type="checkbox"/>
<input type="checkbox"/>	jayahree12277@gmail.com	jayashree s	Developer	kaviya n	-	<input checked="" type="checkbox"/>
<input type="checkbox"/>	jayasrimuralikrishnan07042002@g...	jayasri M	Operator	kaviya n	-	<input checked="" type="checkbox"/>
<input type="checkbox"/>	kavikavi7418@gmail.com	kaviya n	Administrator	-	-	<input type="checkbox"/>

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



The screenshot shows the 'Add Device' form in the IBM Watson IoT Platform. The form is titled 'Add Device' and has a progress bar with four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is currently active, indicated by a blue circle and the word 'Identity' below it. The instructions state: 'Select a device type for the device that you are adding and give the device a unique ID.' There are two input fields: 'Device Type' with the value 'nodemcu' and 'Device ID' with the value '654321'. At the bottom right of the form are 'Cancel' and 'Next' buttons. Below the form, there is a 'Browse Devices' section with 'All Devices' and 'Diagnose' buttons.

IBM Watson IoT Platform

3s0k1f.internetofthings.ibmcloud.com/dashboard/devices/browse/add

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 nodemcu

Device ID 654321

Cancel Next

Browse Devices

All Devices Diagnose

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

The screenshot shows the 'Add Device' form in the IBM Watson IoT Platform, now at the 'Device Information' step. The progress bar shows 'Identity' as completed (with a checkmark) and 'Device Information' as the current step (with a blue circle). The instructions state: 'You can modify the default device information and enter more information about the device for identification purposes.' There are eight input fields arranged in two columns. The left column contains: 'Serial Number' (Enter Serial Number), 'Model' (Enter Model), 'Description' (Enter Description), and 'Hardware Version' (Enter Hardware Version). The right column contains: 'Manufacturer' (Enter Manufacturer), 'Device Class' (Enter Device Class), 'Firmware Version' (Enter Firmware Version), and 'Descriptive Location' (Enter Descriptive Location). At the bottom left of the form is an 'Add Metadata' button with a plus icon. At the bottom right are 'Back' and 'Next' buttons.

IBM Watson IoT Platform

3s0k1f.internetofthings.ibmcloud.com/dashboard/devices/browse/add

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

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

Add Metadata

Back Next

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

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The wizard has four steps: Identity, Device Information (current), Security, and Summary. The 'Device Information' step contains several input fields for device metadata.

IBM Watson IoT Platform

URL: <https://3s0k1f.internetofthings.ibmcloud.com/dashboard/devices/browse/add>

User: kav/kav7418@gmail.com
ID: 3s0k1f

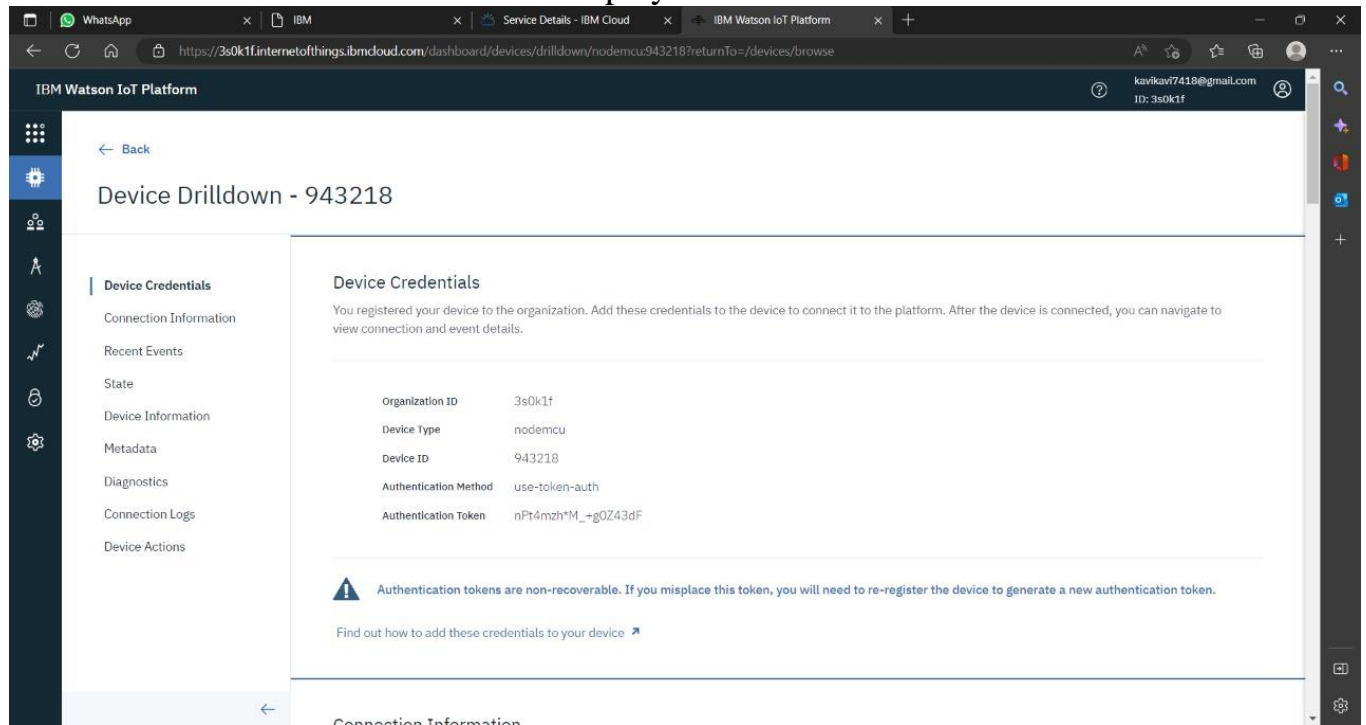
Add Device

Identity **Device Information** Security Summary

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

Serial Number	<input type="text" value="Enter Serial Number"/>	Manufacturer	<input type="text" value="Enter Manufacturer"/>
Model	<input type="text" value="Enter Model"/>	Device Class	<input type="text" value="Enter Device Class"/>
Description	<input type="text" value="Enter Description"/>	Firmware Version	<input type="text" value="Enter Firmware Version"/>
Hardware Version	<input type="text" value="Enter Hardware Version"/>	Descriptive Location	<input type="text" value="Enter Descriptive Location"/>

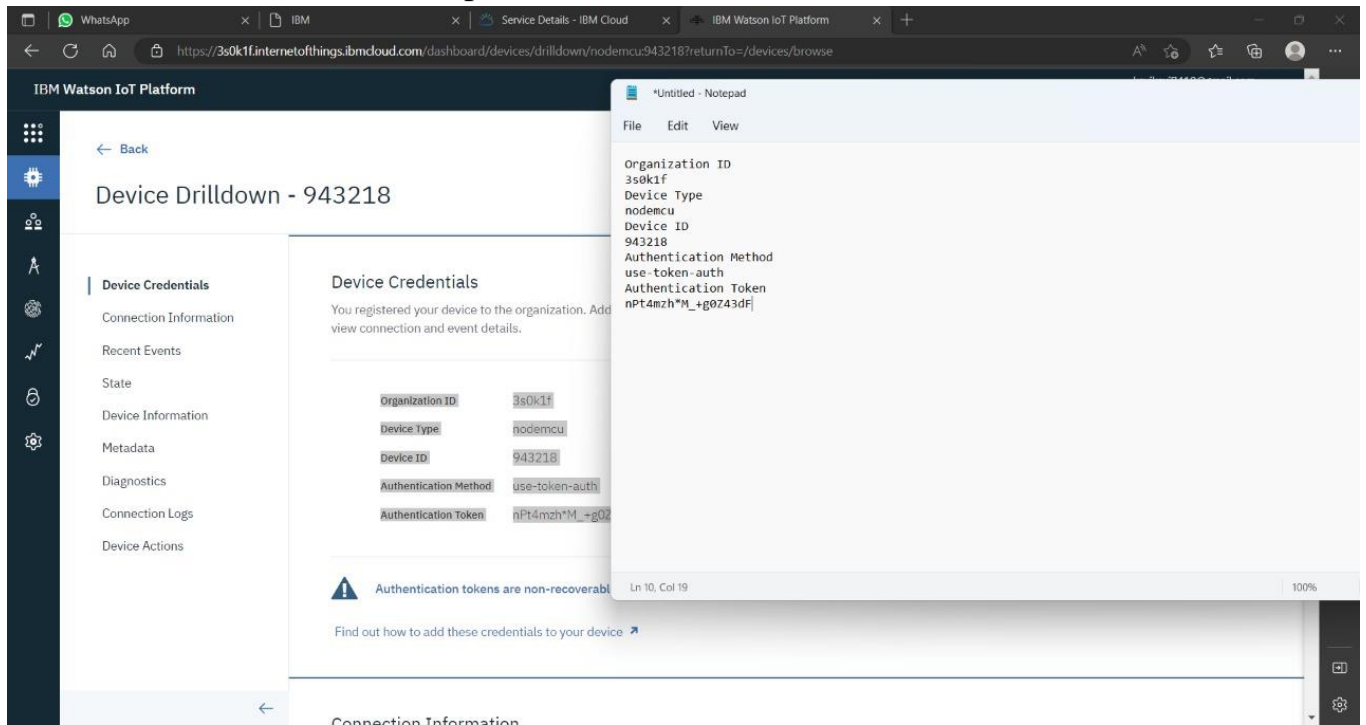
17. The device credentials will be displayed with all the details



The screenshot shows the IBM Watson IoT Platform interface. The left sidebar contains a navigation menu with options: Back, Device Credentials, Connection Information, Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The main content area is titled 'Device Drilldown - 943218' and displays the 'Device Credentials' section. This section includes a warning icon and text stating: 'Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.' Below this, a link says 'Find out how to add these credentials to your device'. A table lists the following details:

Organization ID	3s0k1f
Device Type	nodemcu
Device ID	943218
Authentication Method	use-token-auth
Authentication Token	nPt4mzh*M_-g0Z43dF

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



The screenshot shows the same IBM Watson IoT Platform interface as before, but with a Notepad window open in the foreground. The Notepad window contains the following text, which is a copy of the device credentials from the previous screenshot:

```
Organization ID
3s0k1f
Device Type
nodemcu
Device ID
943218
Authentication Method
use-token-auth
Authentication Token
nPt4mzh*M_-g0Z43dF
```

The Notepad window also shows the file name '*Untitled - Notepad' and the menu options 'File', 'Edit', and 'View'. The status bar at the bottom of the Notepad window indicates 'Ln 10, Col 19' and '100%' zoom.

19. 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.

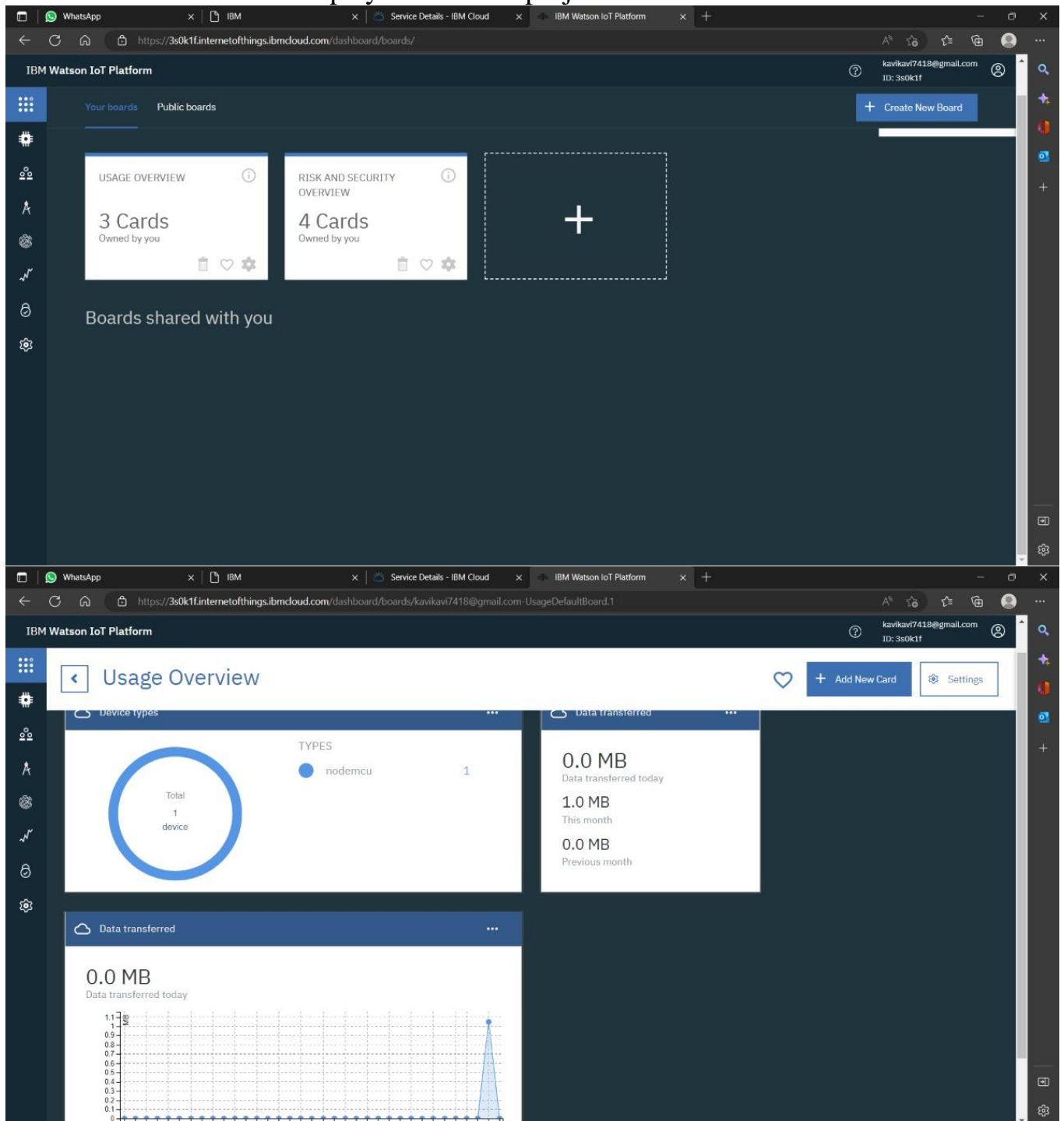
The top screenshot shows the 'Browse API Keys' page in the IBM Watson IoT Platform. The page has a search bar and a table with columns: Key, Description, Role, and Expires. The table is currently empty, showing '0 results'. Below the table, there is a message 'There are no API Keys' and a 'Generate API Key' button.

The bottom screenshot shows the 'Browse' page for devices in the IBM Watson IoT Platform. The page has a search bar and a table with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. The table contains one device with ID 943218, Status Disconnected, Device Type nodemcu, Class ID Device, and Date Added Nov 4, 2022 1:22 PM. Below the table, there are tabs for Identity, Device Information, Recent Events, State, and Logs. The 'Identity' tab is selected, showing details for the device.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
943218	Disconnected	nodemcu	Device	Nov 4, 2022 1:22 PM	

Device ID	Device Information
Device ID	943218
Device Type	nodemcu
Date Added	Nov 4, 2022 1:22 PM
Added By	kavikavi7418@gmail.com
Connection Status	Disconnected

20. The Boards will display card for the project.



RESULT:

An IBM Watson cloud for IoT and a device is created