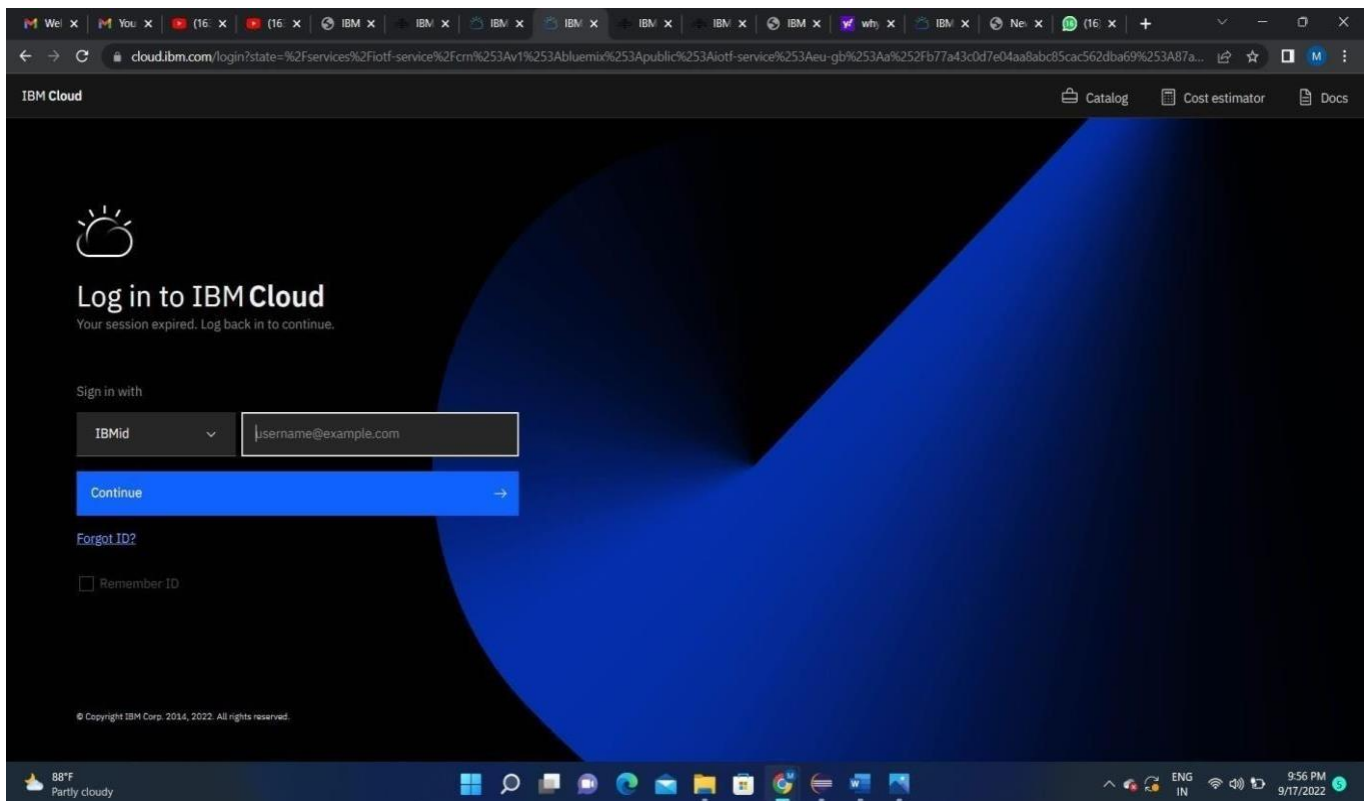


## CREATE IBM WATSON IOT PLATFORM AND DEVICE

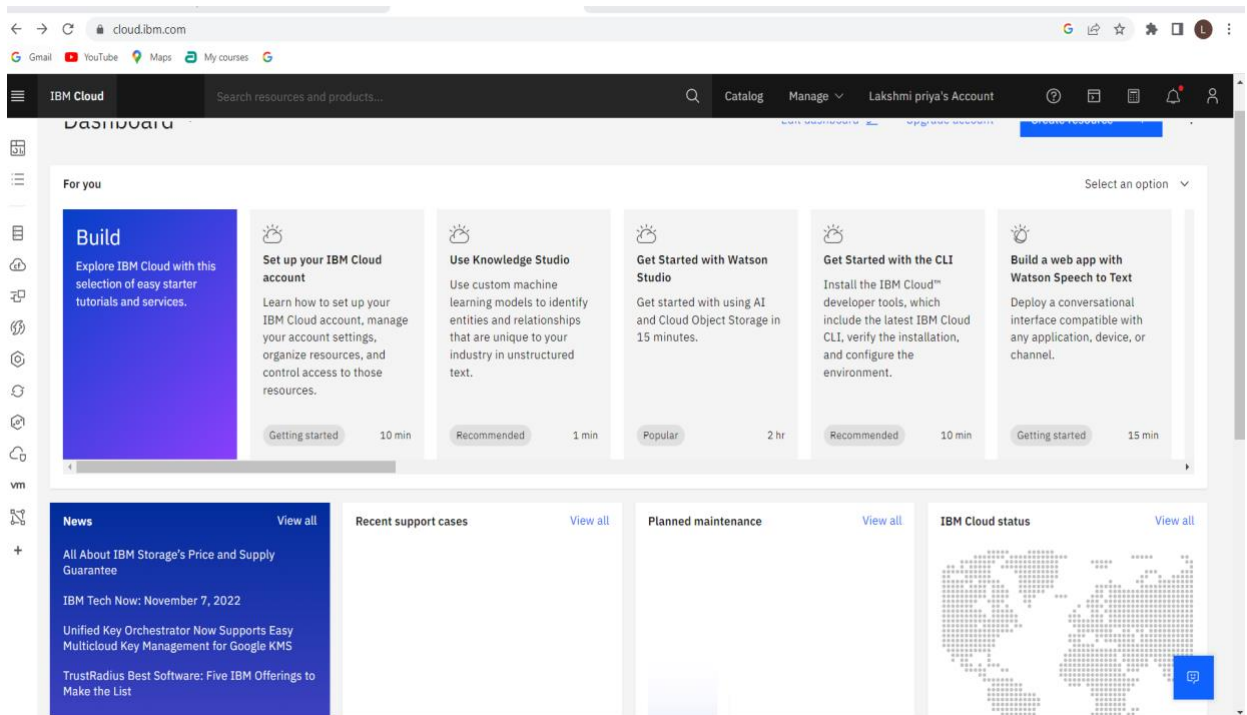
Date	26 October 2022
Team ID	PNT2022TMID18987
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

### STEPS:

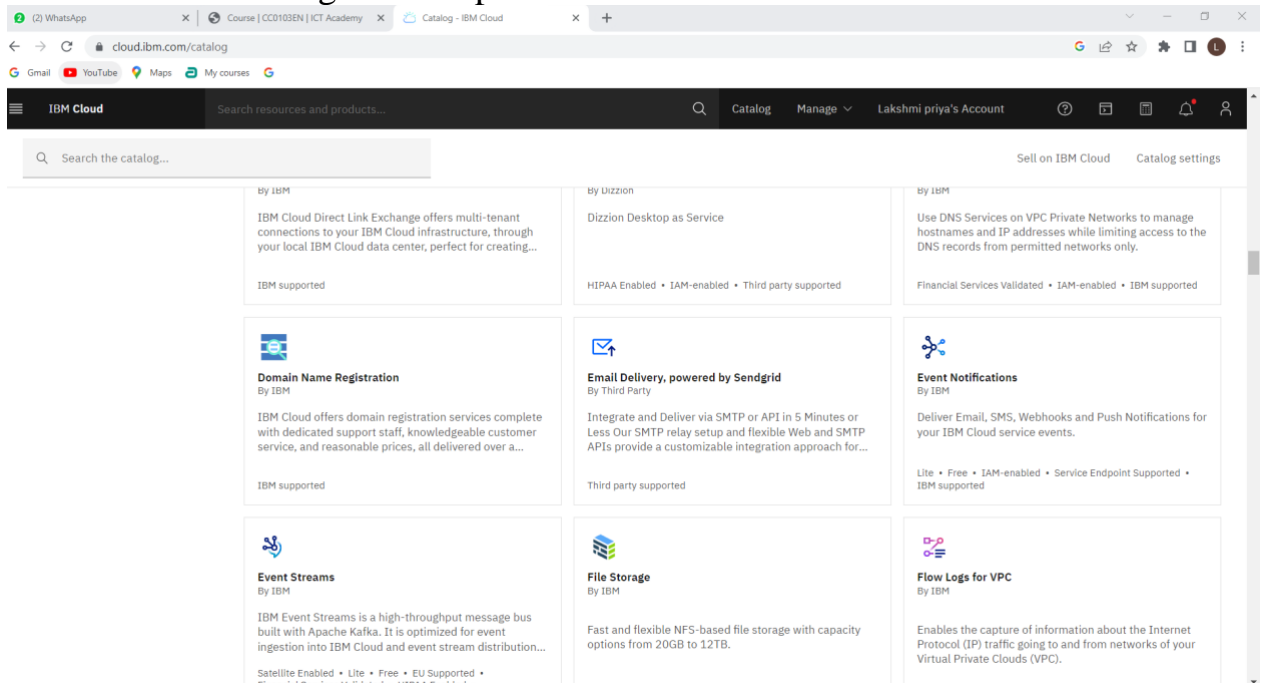
1. Firstly create an IBM cloud account with IBM id and password



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 "About" tab is also visible. The "Select a location" dropdown is set to "Frankfurt (eu-de)". 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 as "Internet of Things Platform-nt" and the resource group as "Default".

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 it is present delete it else u can't create another

The screenshot shows the IBM Cloud configuration page for the Internet of Things Platform. The "Create" button is disabled, and the "Add to estimate" button is visible. The "Summary" panel on the right shows the service name as "Internet of Things Platform-nt" and the resource group as "Default". The "Configure your resource" section includes fields for "Service name" (Internet of Things Platform-nt), "Tags" (Examples: env:dev, version-1), "Select a resource group" (Default), and "Access management tags" (Examples: access:dev, proj:version-1).

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

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

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	<b>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</b> 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.**

**Summary**

**Internet of Things Platform** Free

Location: Dallas

Plan: Lite

Service name: Internet of Things Platform-nt

Resource group: Default

☐ 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

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.**

**Summary**

**Internet of Things Platform** Free

Location: Dallas

Plan: Lite

Service name: Internet of Things Platform-nt

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-nt

Select a resource group

Default

Tags

Examples: env:dev, version-1

Access management tags

Examples: access:dev, proj:version-1

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)

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

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**

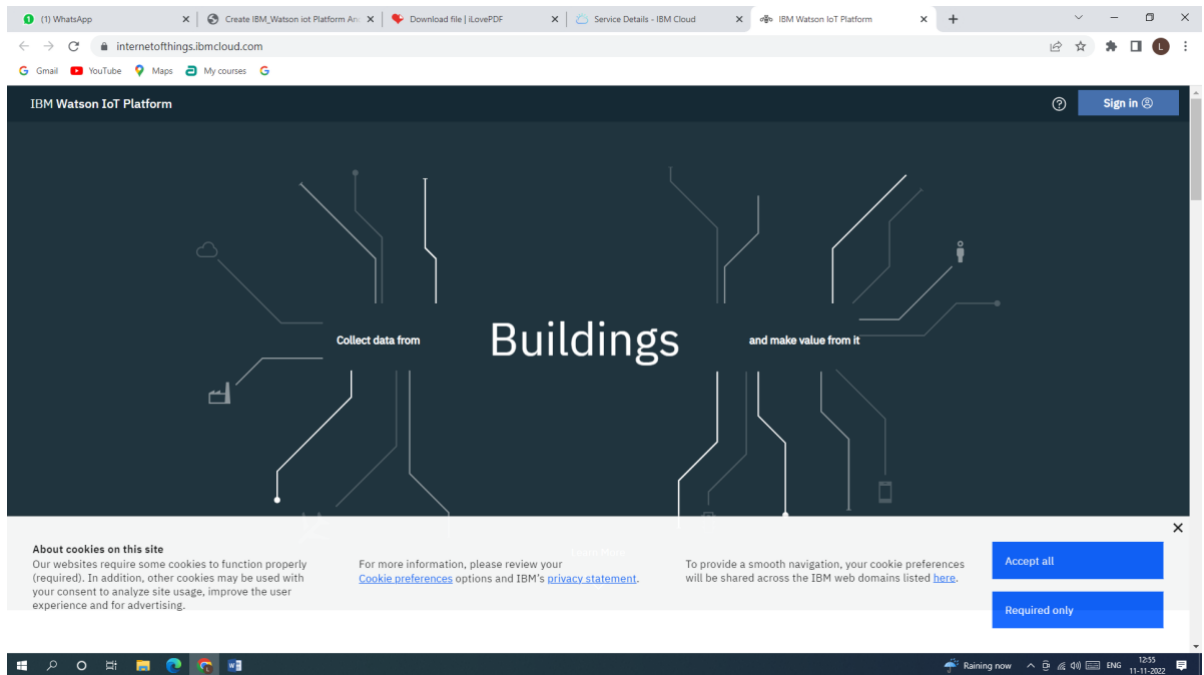
Lite plan services are deleted after 30 days of inactivity.

**Change pricing plan**

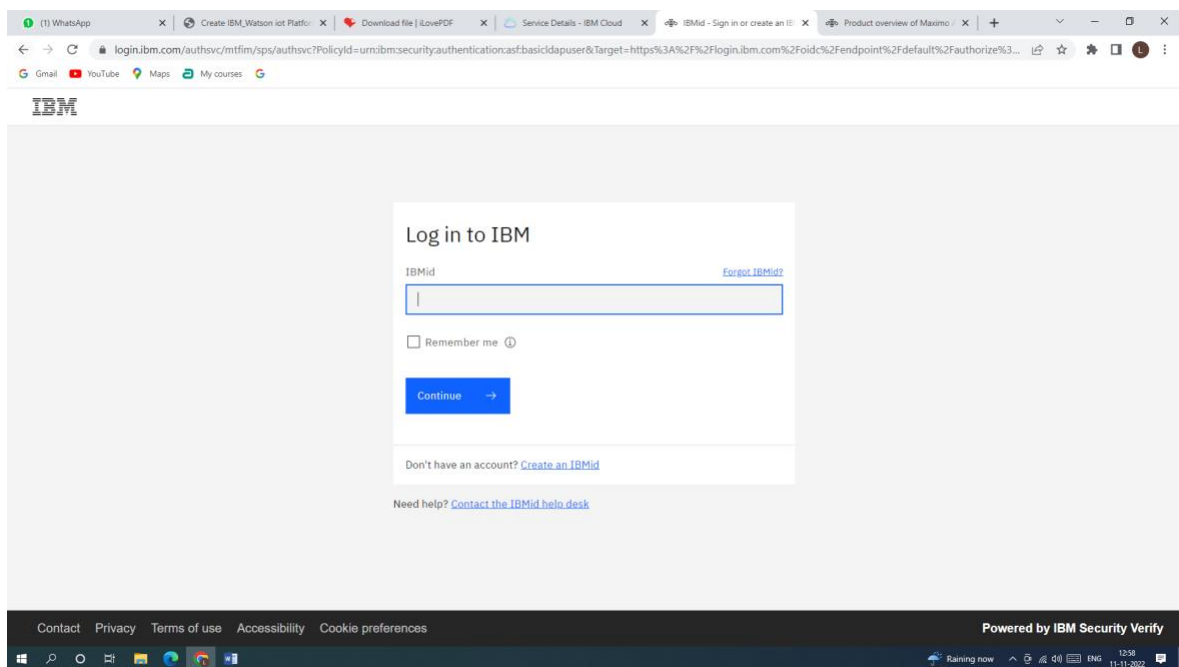
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free <span>●</span>

**Next Steps:**

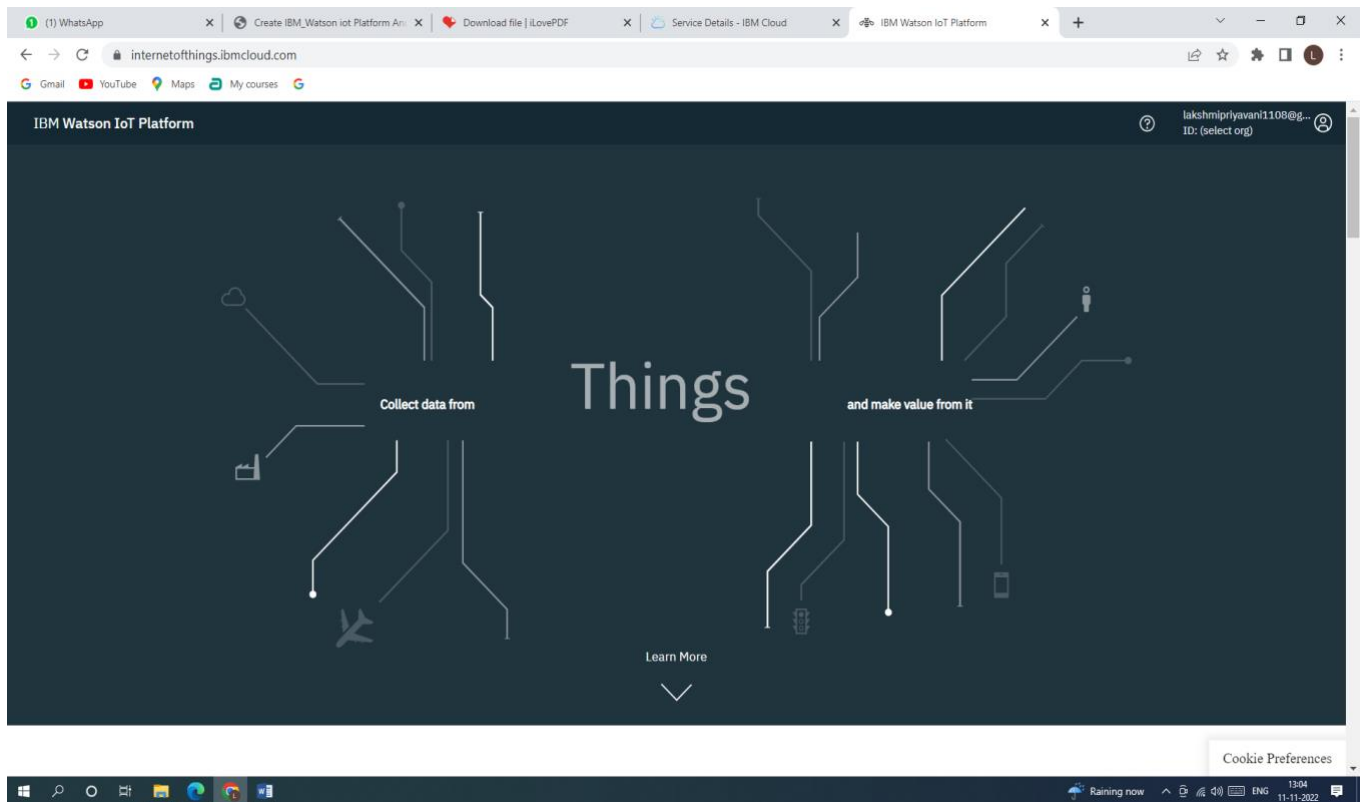
7. Clicking on the launch button in the manage tab, it will open to this



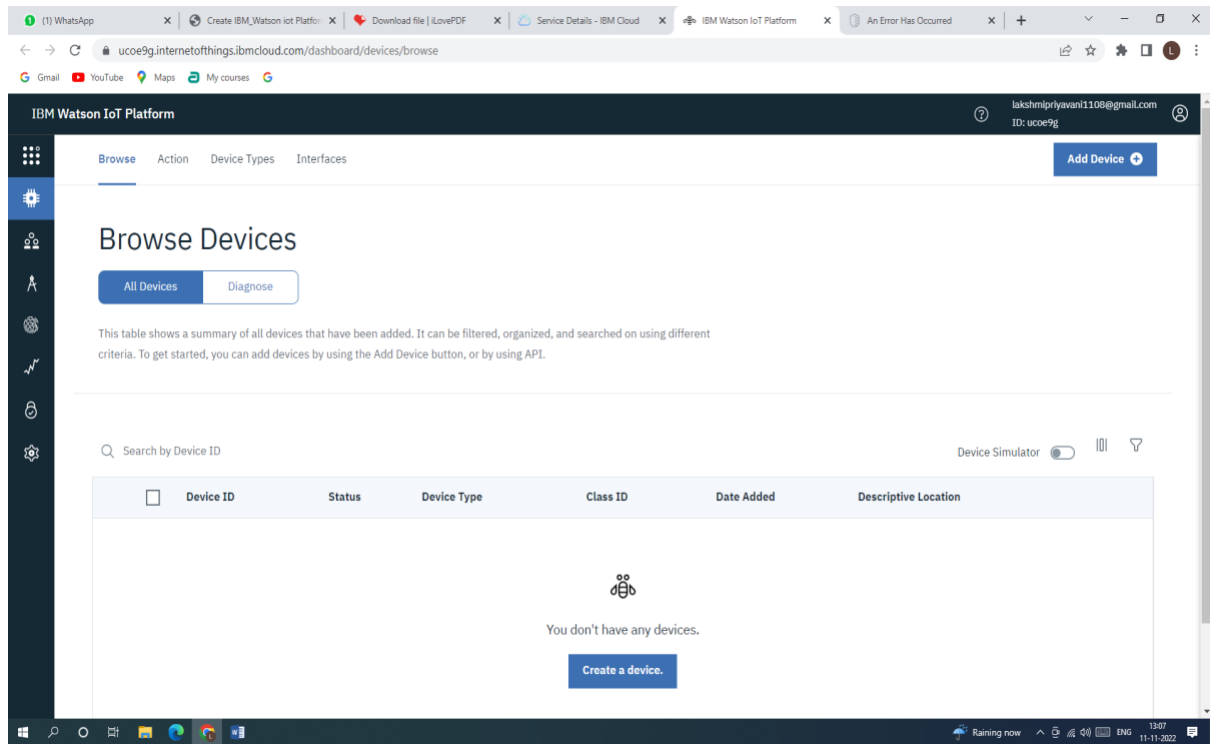
8. Enter the details to sign into the Watson Cloud to create a device



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.

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes the IBM logo and the user's email address, lakshmi priyavani1108@gmail.com, with the ID: uc0e9g. The left sidebar contains various icons for navigation. The main content area is titled "Usage Summary" and displays two cards: "THIS MONTH" and "PREVIOUS MONTH". Both cards show "0 bytes" of data transferred inbound and outbound. Below the cards, there is a section titled "Data Transferred" with a "Date Period (months)" dropdown menu. The bottom of the screen shows a Windows taskbar with various application icons and system tray information.

IBM Watson IoT Platform

Overview

Usage metrics show how much your devices and applications use Watson IoT Platform. You can view a summary of the total usage for this month and the previous month, and details of data transferred during different time periods. The metrics are refreshed every 2 hours.

**Usage Summary**

THIS MONTH  
**0 bytes**  
Data transferred inbound and outbound

PREVIOUS MONTH  
**0 bytes**  
Data transferred inbound and outbound

**Data Transferred**

Date Period (months)

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

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes the IBM logo and the user's email address, lakshmi priyavani1108@gmail.com, with the ID: uc0e9g. The left sidebar contains various icons for navigation. The main content area is titled "Browse Members" and features a search bar with the placeholder text "Type the member email to search for". Below the search bar, there is a table showing a list of members. The table has columns for "Email Address", "Name", "Role", "Added By", and "Expires". A single member is listed: lakshmi priyavani1108@gmail.com, lakshmi priyavani1108@gmail..., Administrator, -, -. The bottom of the screen shows a Windows taskbar with various application icons and system tray information.

IBM Watson IoT Platform

Browse

**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](#).

Email Address	Name	Role	Added By	Expires
lakshmi priyavani1108@gmail.com	lakshmi priyavani1108@gmail...	Administrator	-	-

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

The screenshot shows the IBM Watson IoT Platform interface. The browser's address bar displays the URL `uc0e9g.internetofthings.ibmcloud.com/dashboard/apps/browse`. The page header includes the user's email `lakshmiipriyavani1108@gmail.com` and ID `ID: uc0e9g`. A sidebar on the left contains navigation icons. The main content area is titled "Browse API Keys" and includes a search bar with the placeholder text "Type the app description to search for". Below the search bar, a paragraph explains that the table shows a summary of API keys and provides instructions on how to add them. A table with columns for "Key", "Description", "Role", and "Expires" is shown, but it contains "0 results". At the bottom of the page, there is a message "There are no API Keys" with a "Generate API Key" button. The Windows taskbar at the bottom shows the date as 11-11-2022 and the time as 13:13.

IBM Watson IoT Platform

lakhmiipriyavani1108@gmail.com  
ID: uc0e9g

Browse IBM Cloud Apps

+ Generate API Key

## Browse API Keys

Type the app description to search for

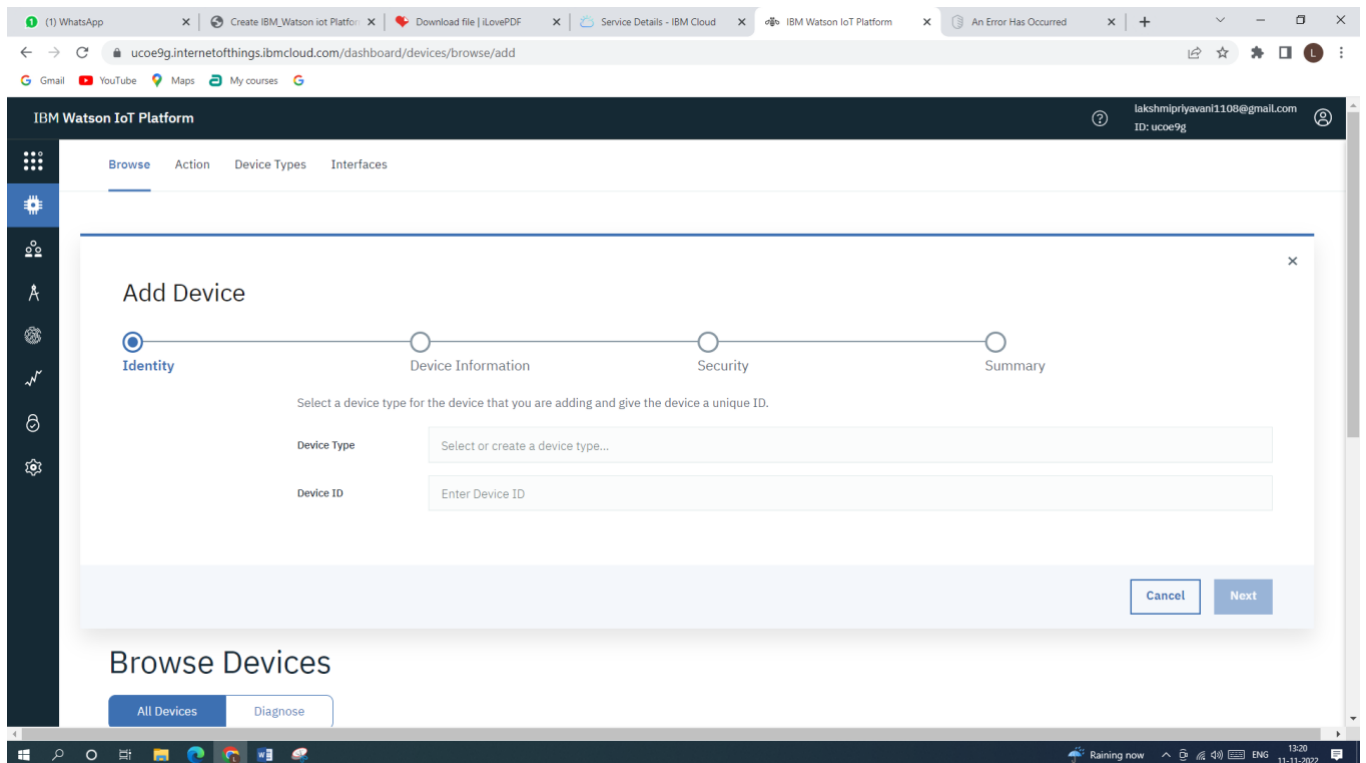
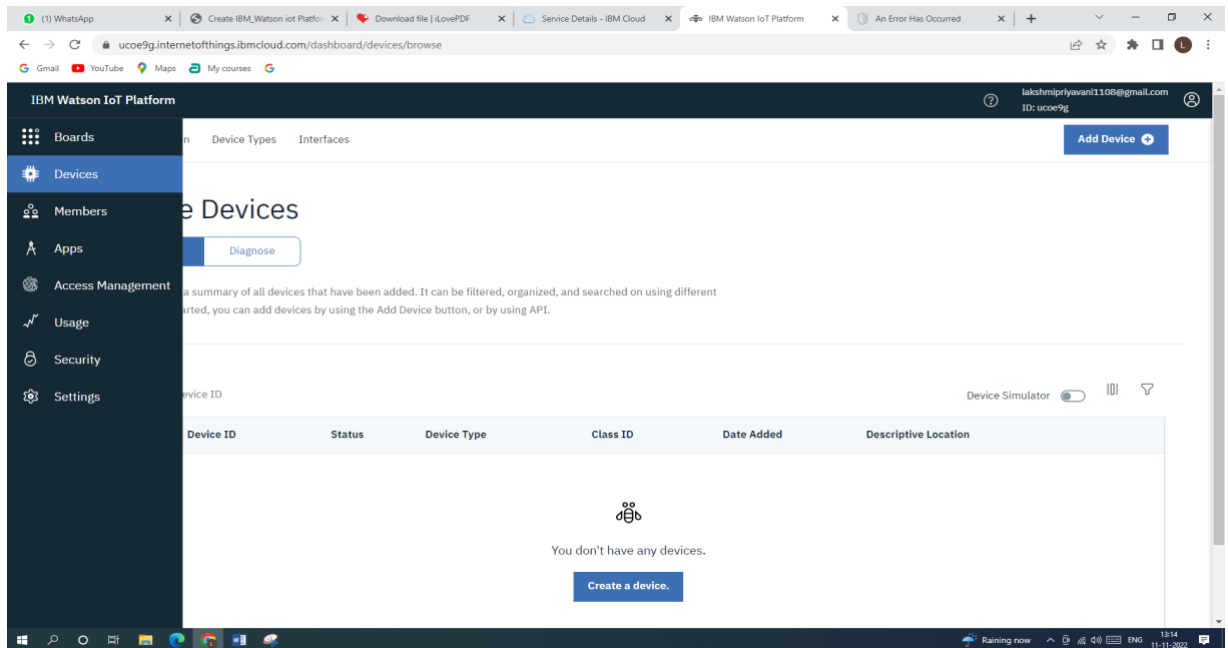
This table shows a summary of the API keys that have been added for the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add API keys by clicking Generate API Key, or by using the API. For more information about adding API keys, see [API key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

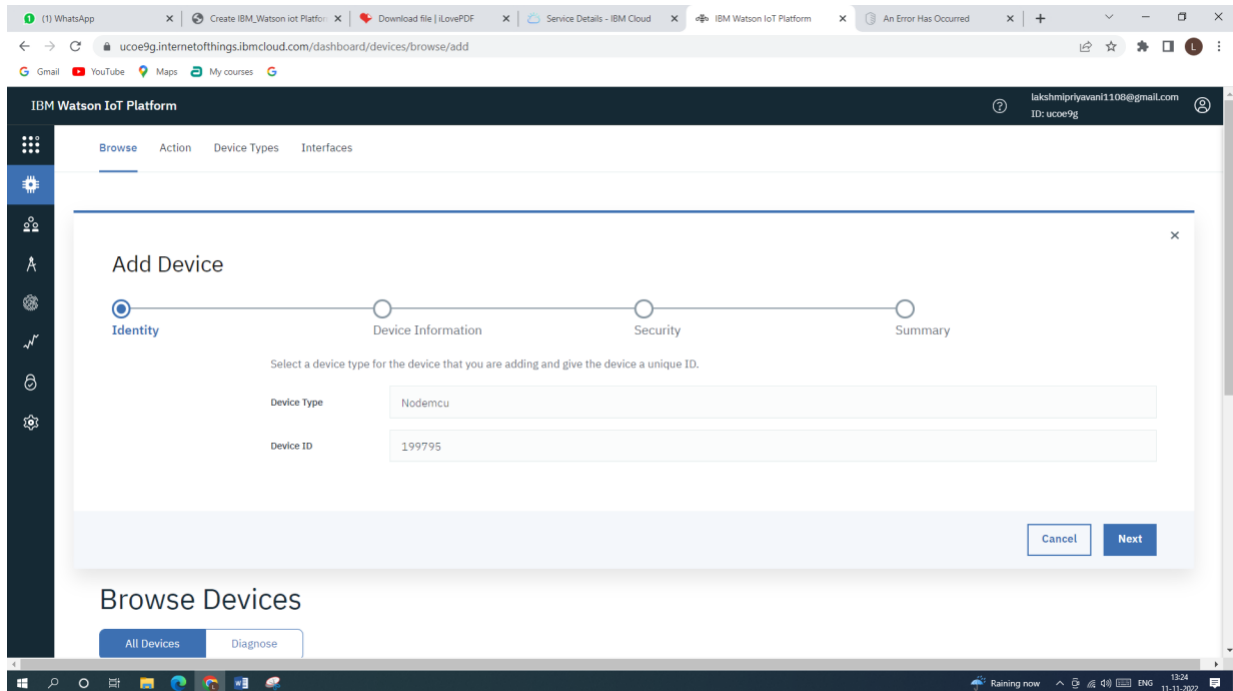
Key	Description	Role	Expires
0 results			

There are no API Keys

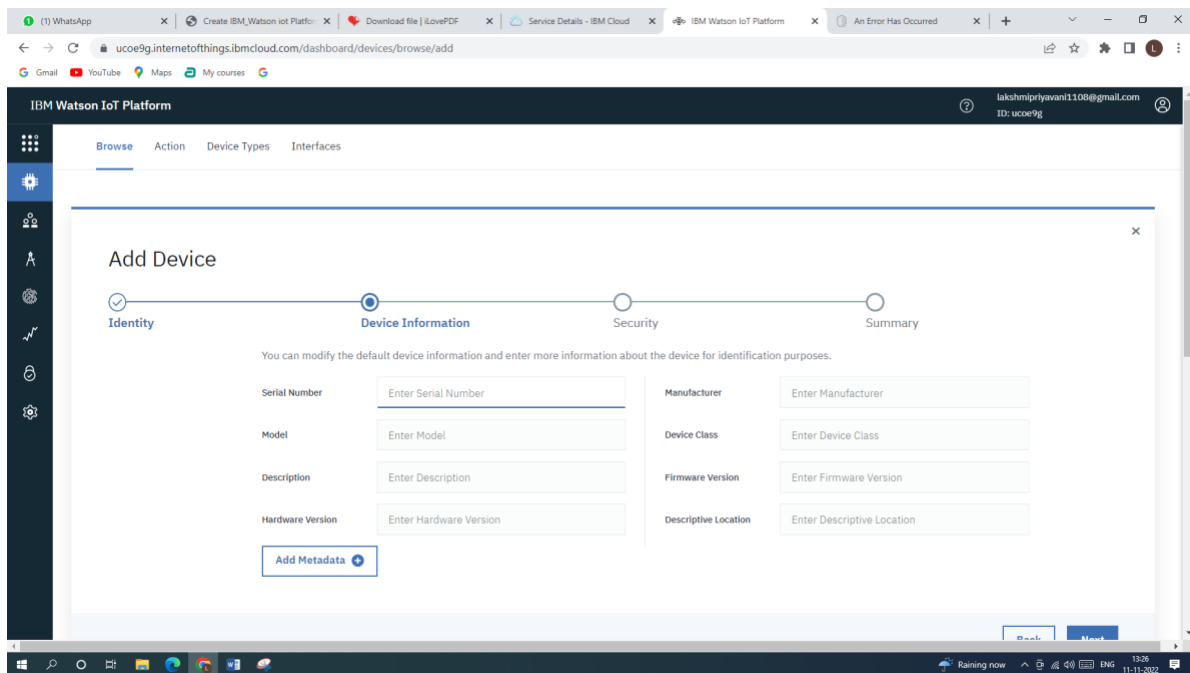
Generate API Key

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

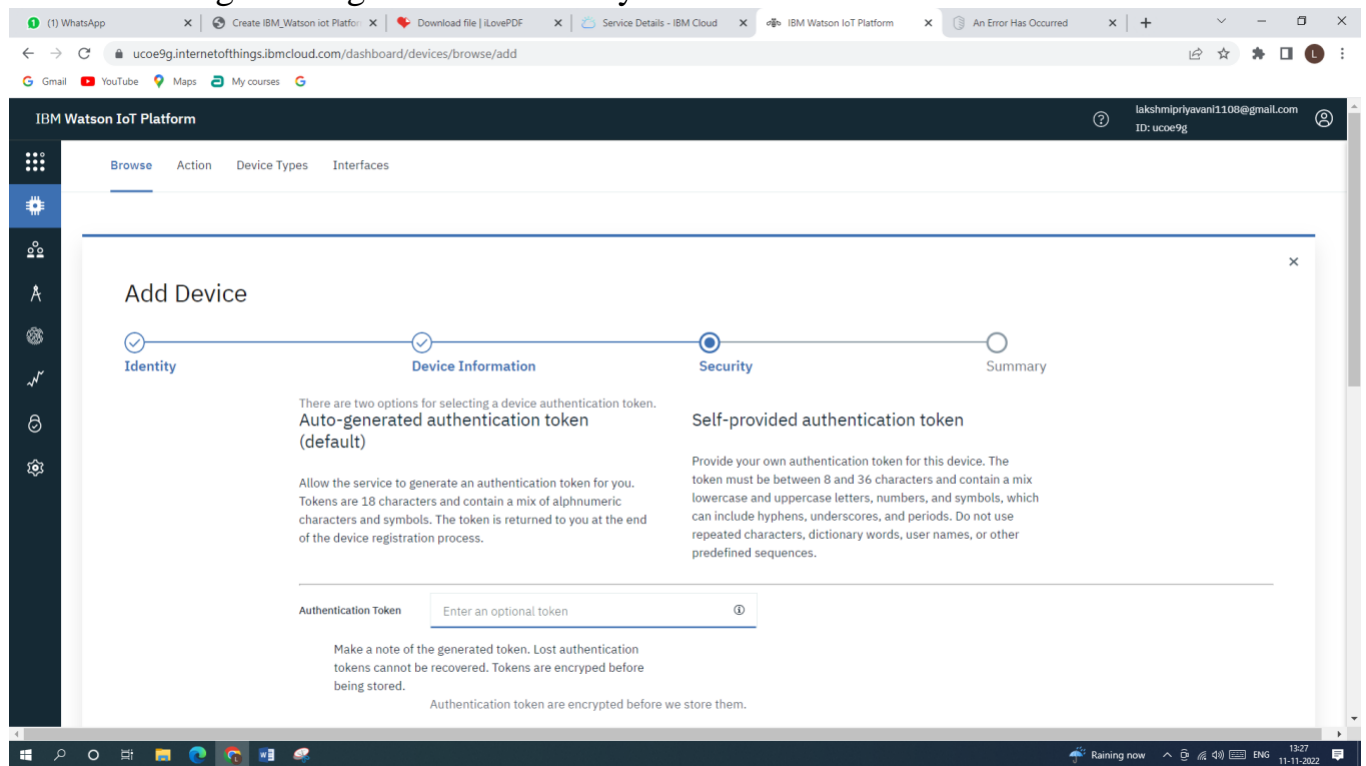




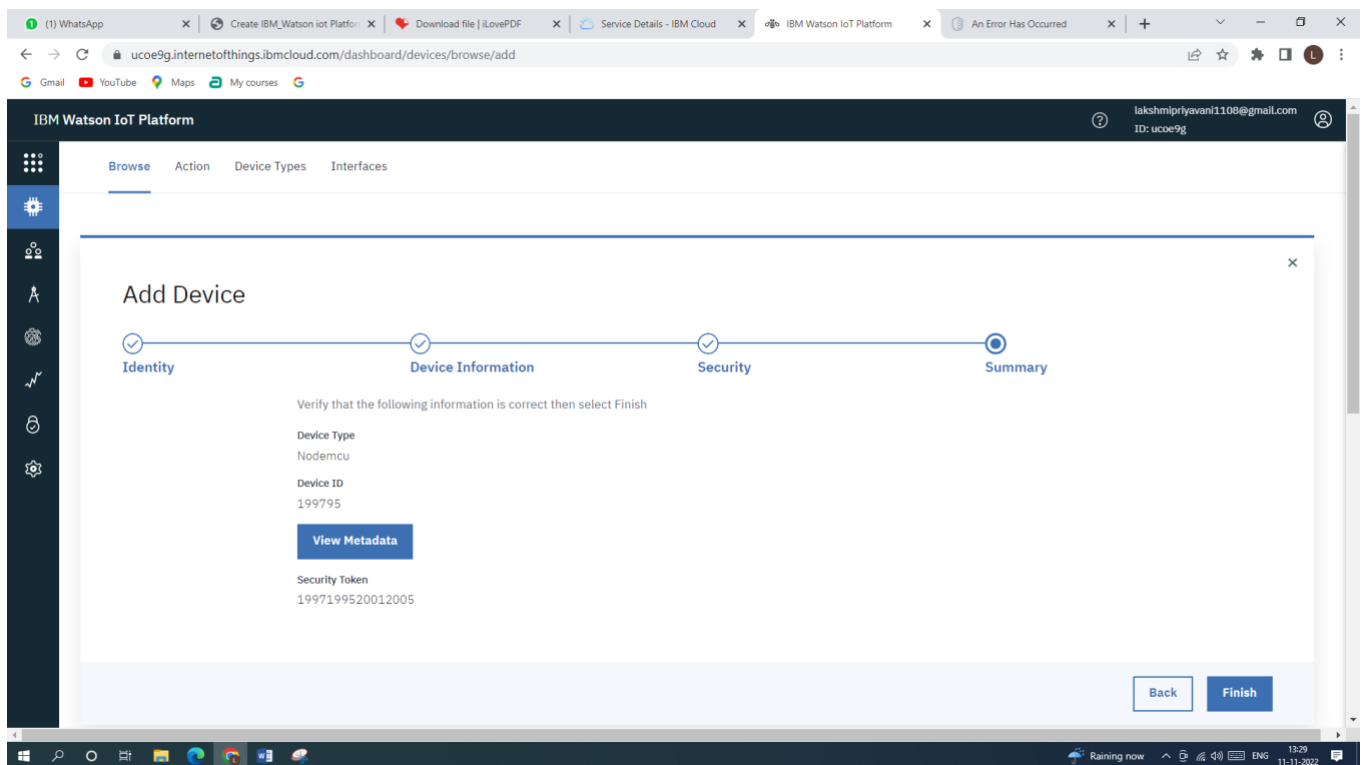
15. This page to enter extra details and of the hardware



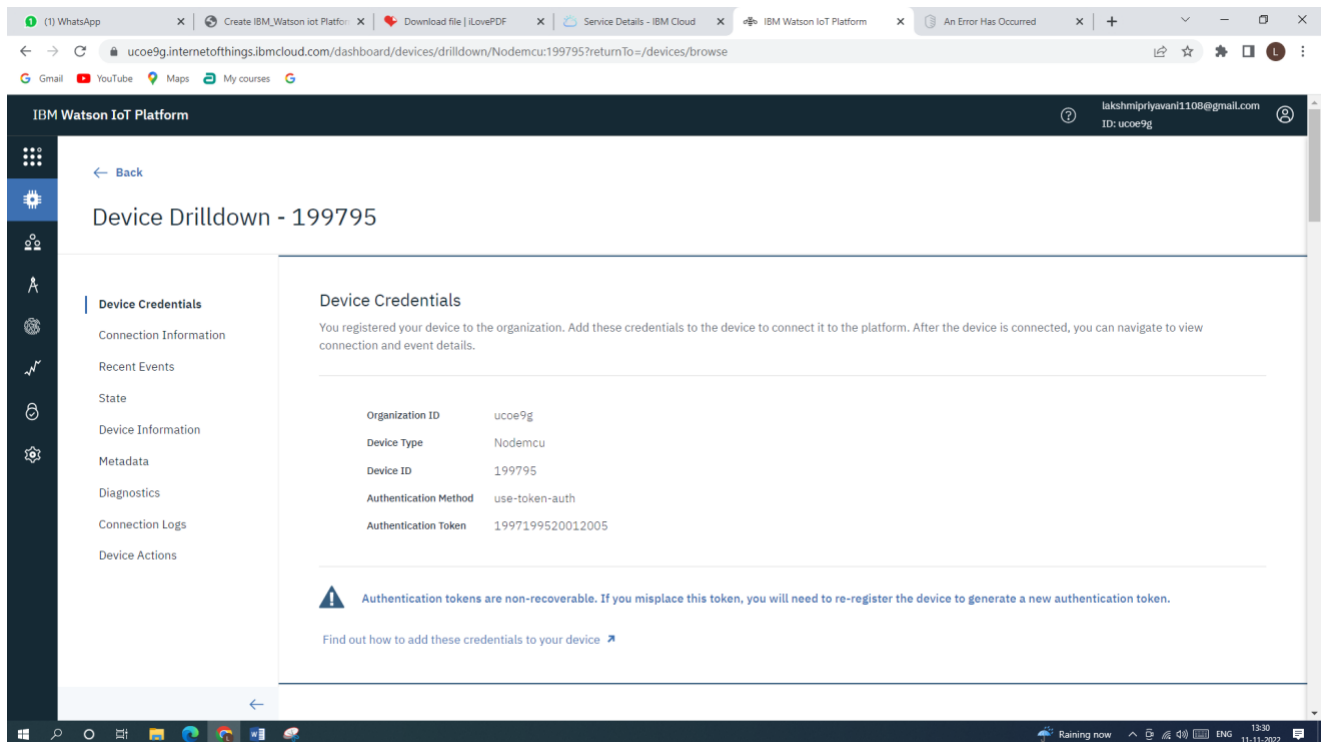
## 16. Clicking next it goes to the security where we do authentication .



## 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

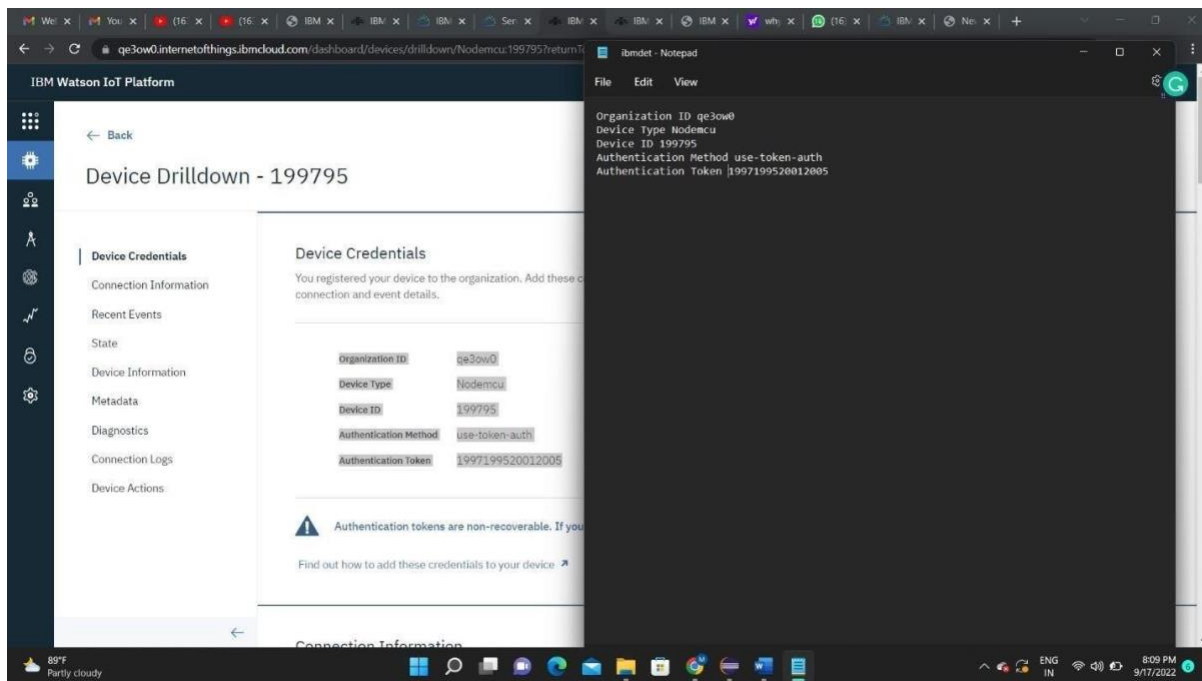


The screenshot shows the IBM Watson IoT Platform interface. The browser address bar displays the URL: `uc0e9g.internetofthings.ibmcloud.com/dashboard/devices/drilldown/NodeMCU:199795?returnTo=/devices/browse`. The page title is "Device Drilldown - 199795". On the left, a sidebar lists navigation options: Device Credentials, Connection Information, Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The "Device Credentials" section is active, displaying a table of credentials:

Organization ID	uc0e9g
Device Type	NodeMCU
Device ID	199795
Authentication Method	use-token-auth
Authentication Token	1997199520012005

Below the table, a warning message states: "Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token." A link "Find out how to add these credentials to your device" is provided.

## 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.



The screenshot shows the same IBM Watson IoT Platform interface as in the previous image. A Notepad window titled "ibmdet - Notepad" is open, displaying the device credentials extracted from the page:

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

The Notepad window is positioned over the "Device Credentials" section of the IBM Watson IoT Platform page, which shows the same table of credentials as before.

20. Clicking on the device tab we can now see the added device.  
Clicking on it will display the other details..

IBM Watson IoT Platform

lakhmipriyavani1108@gmail.com  
ID: uc0e9g

Browse Action Device Types Interfaces

**Browse Devices**

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
199795	Disconnected	Nodemcu	Device	Nov 11, 2022 1:30 PM	

Items per page 50 | 1-1 of 1 item

1 of 1 page

IBM Watson IoT Platform

lakhmipriyavani1108@gmail.com  
ID: uc0e9g

Browse Action Device Types Interfaces

**Browse Devices**

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
199795	Disconnected	Nodemcu	Device	Nov 11, 2022 1:30 PM	

Items per page 50 | 1-1 of 1 item

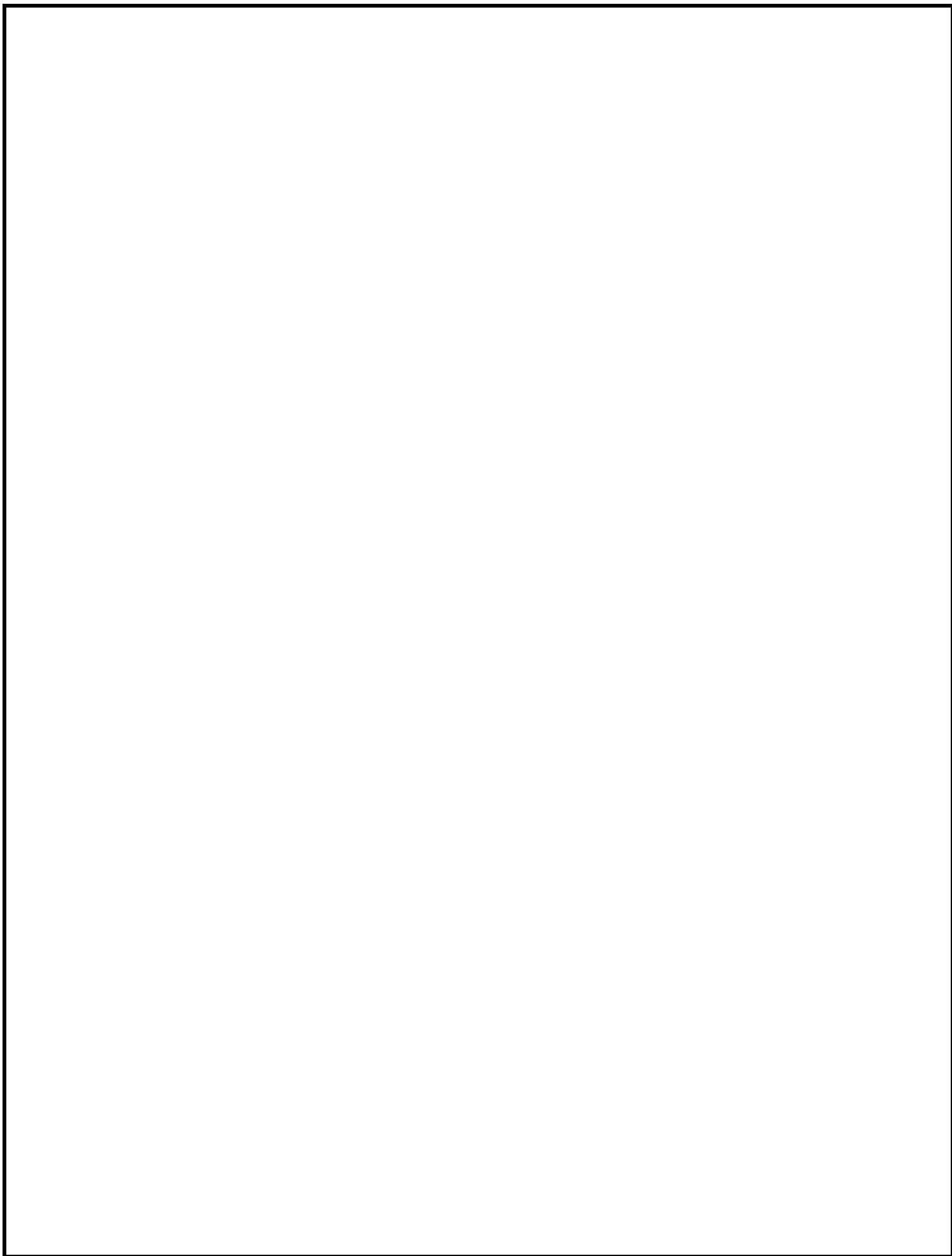
1 of 1 page

**Device Details**

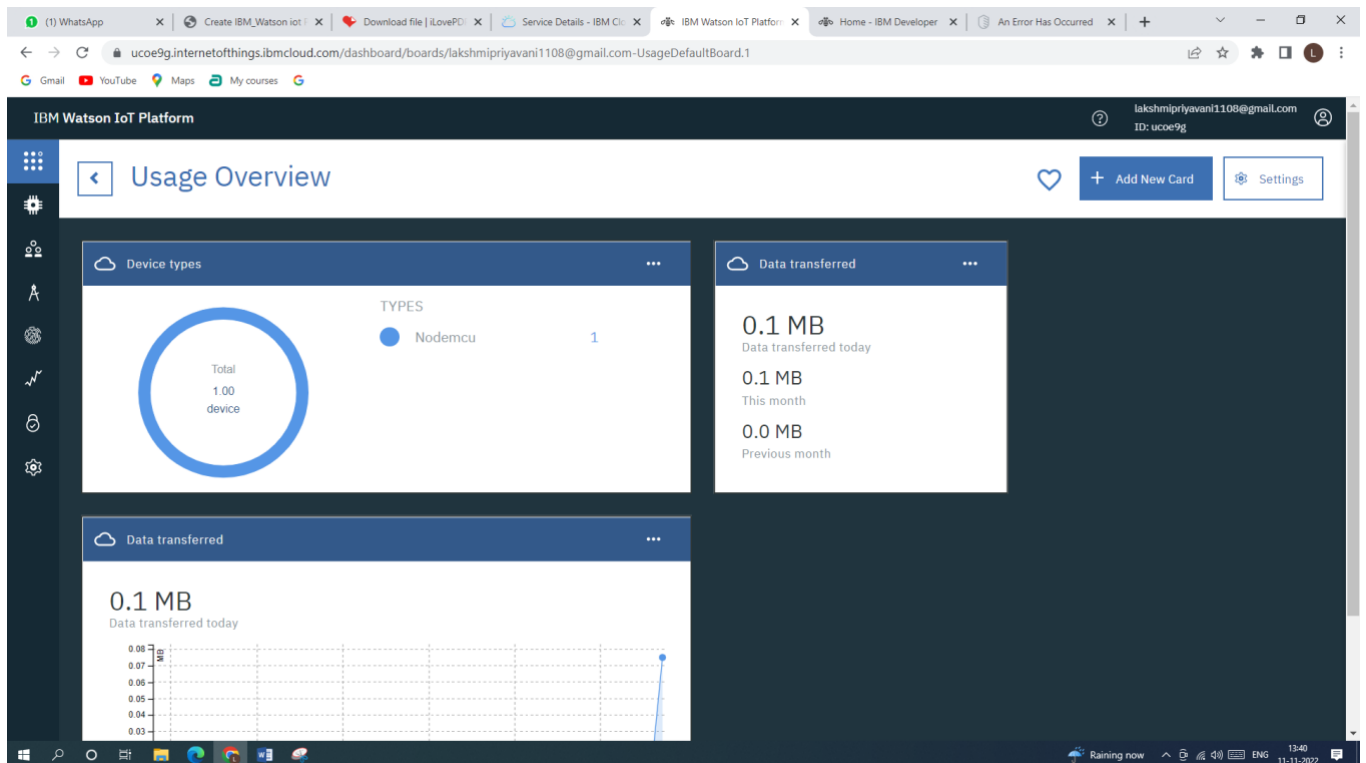
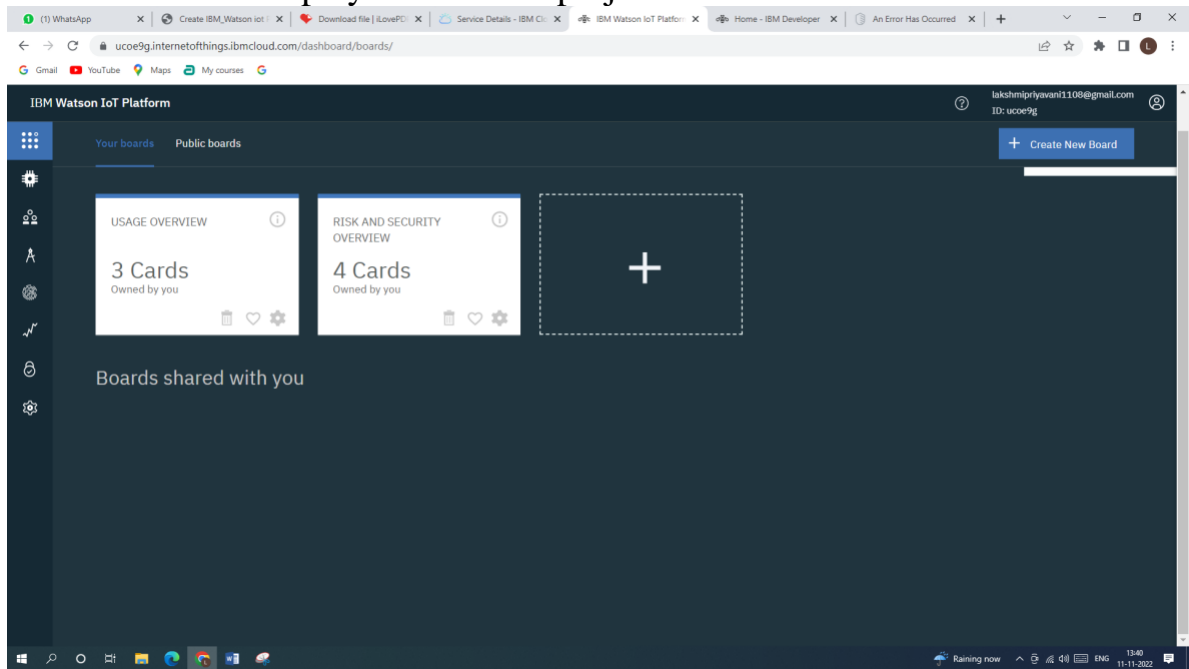
Identity	Device Information	Recent Events	State	Logs
Device ID	199795			
Device Type	Nodemcu			
Date Added	Nov 11, 2022 1:30 PM			
Added By	lakhmipriyavani1108@gmail.com			
Connection Status	Disconnected			

In a similar way ,we can create number of devices with a 50per 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 device is created