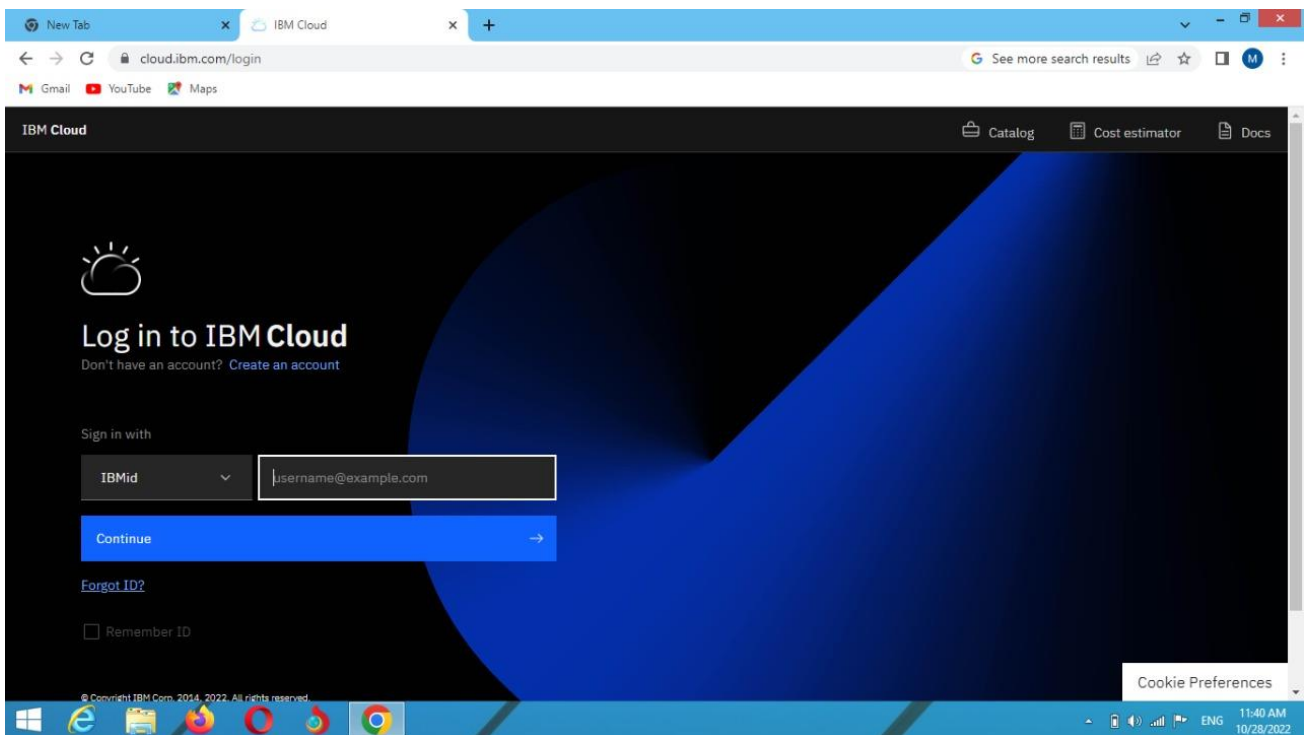


Create and configure IBM Cloud Service
Create IBM Watson IoT Platform and Device

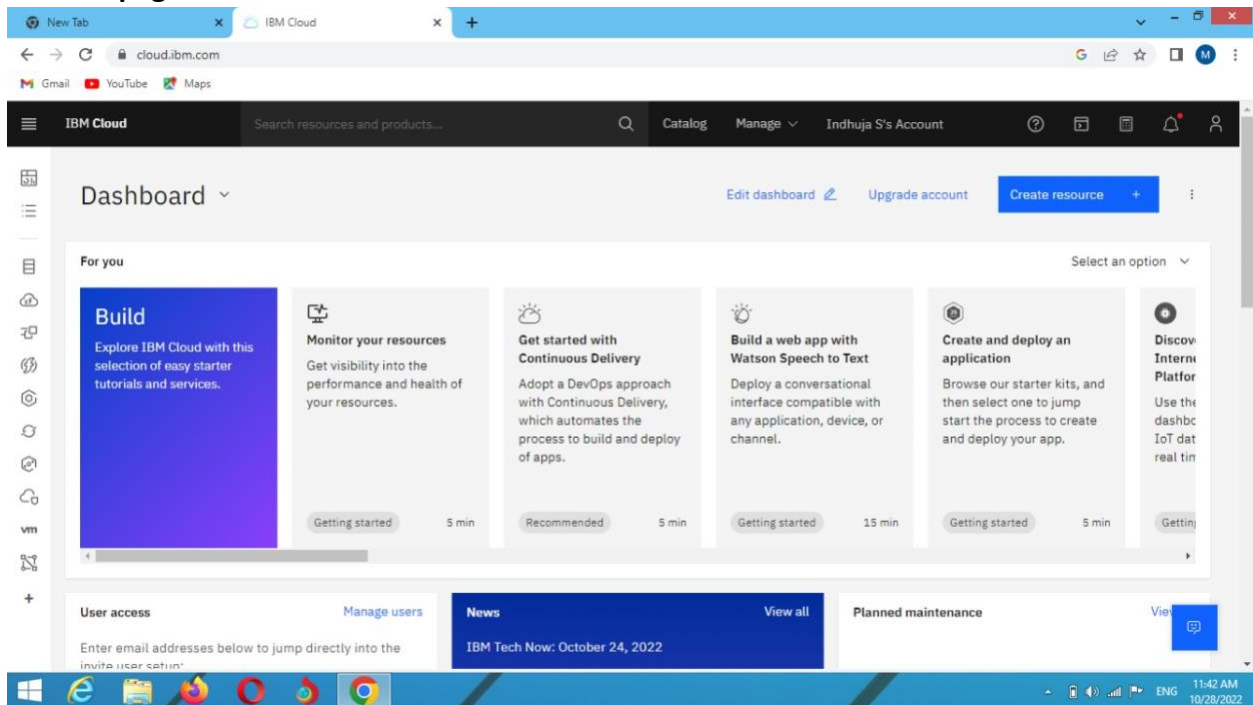
DATE	2 November 2022
TEAM ID	PNT2022TMID41116
PROJECT NAME	Project – IoT based Safety Gadgets for Child Safety Monitoring and Notification
Maximum Marks	4 marks

STEPS:

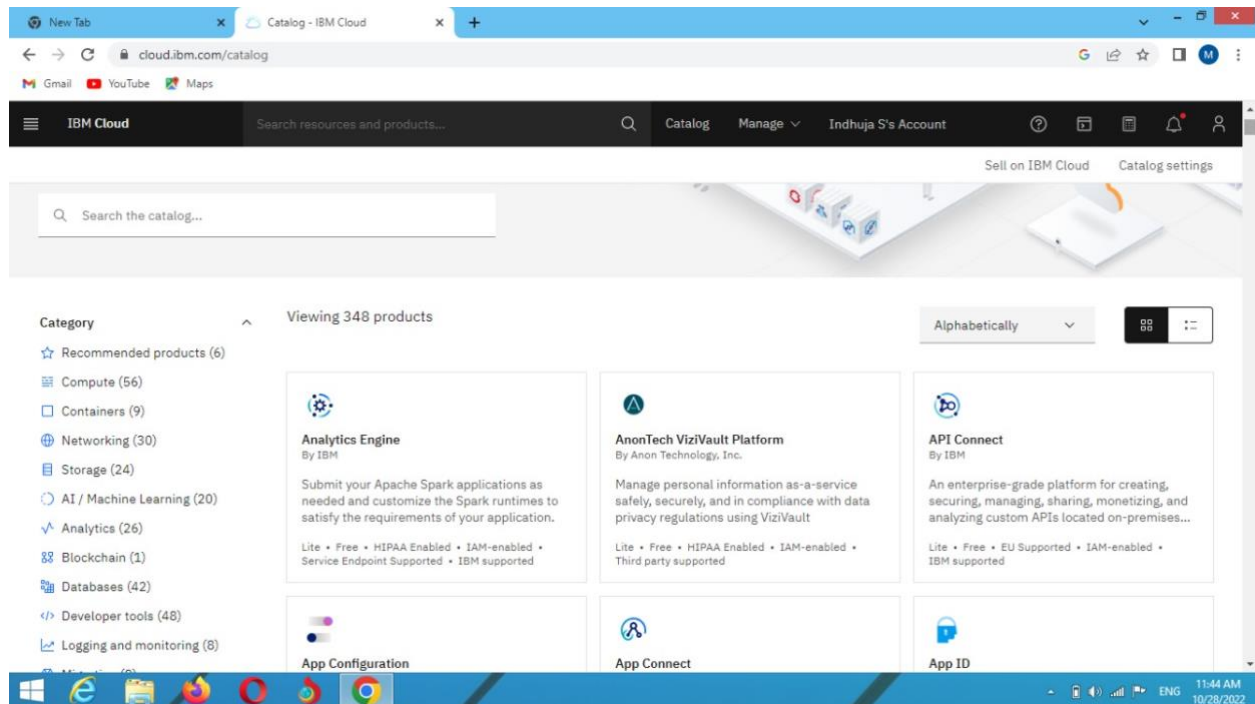
1.Firstly create an IBM Cloud account with IBMid and password



2.Home page of IBM Cloud



3.Click on the catalog on the top



4. 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 page has two tabs: "Create" and "About". The "Create" tab is active, showing a form to select a location and a pricing plan. The location is set to "London (eu-gb)". The pricing plan is set to "Lite", which includes up to 500 registered devices and a maximum of 200 MB of each data metric. The pricing is "Free". The page also includes a "Summary" section on the right, which lists the service name, location, plan, and resource group. The "Create" button is highlighted in blue.

IBM Cloud

Search resources and products...

Catalog Manage Indhuja S's Account

Catalog /

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

Select a location

London (eu-gb)

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	Free

Summary

Internet of Things Platform Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-19

Resource group: Default

☒ 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

The screenshot shows the IBM Cloud service details page for the Internet of Things Platform. The page is titled "Internet of Things Platform-19" 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 page has two tabs: "Plan" and "Connections". The "Plan" tab is active, showing the current plan and usage. The current plan is "Lite", which includes up to 500 registered devices and a maximum of 200 MB of each data metric. The current usage is "N/A". The page also includes a "Change pricing plan" section at the bottom, which shows a table with the plan, features, and pricing. The "Plan" button is highlighted in blue.

IBM Cloud

Search resources and products...

Catalog Manage Indhuja S's Account

Resource list /

Internet of Things Platform-19 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

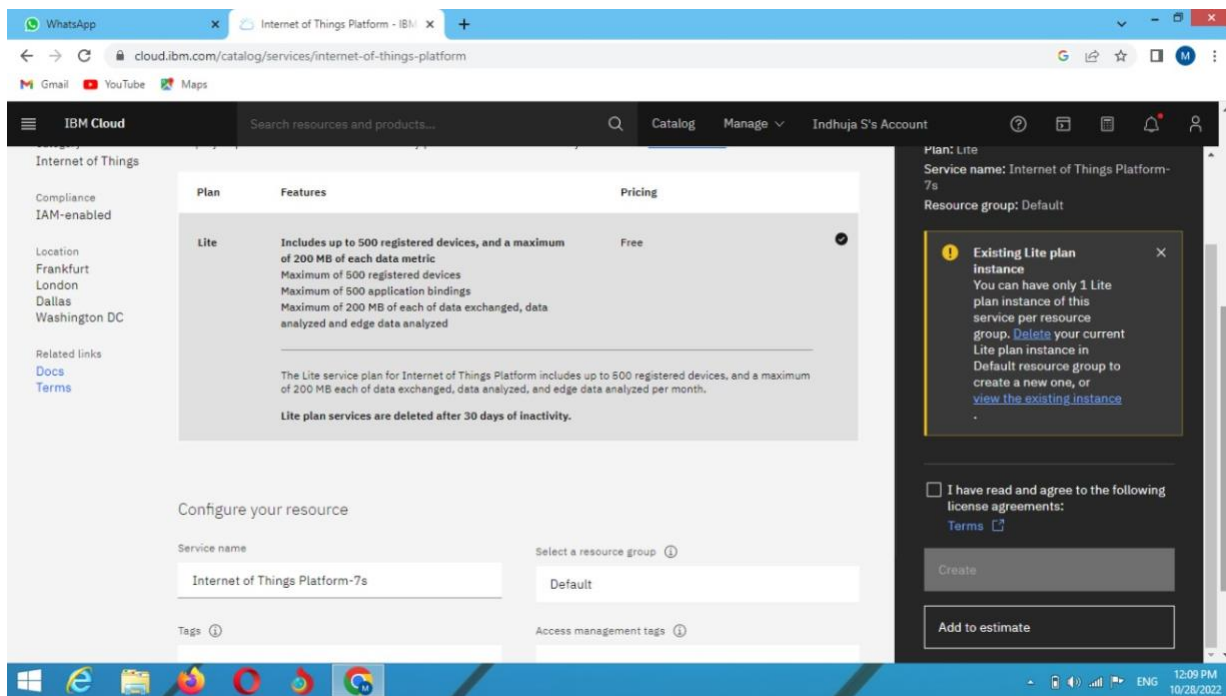
N/A

Lite plan services are deleted after 30 days of inactivity.

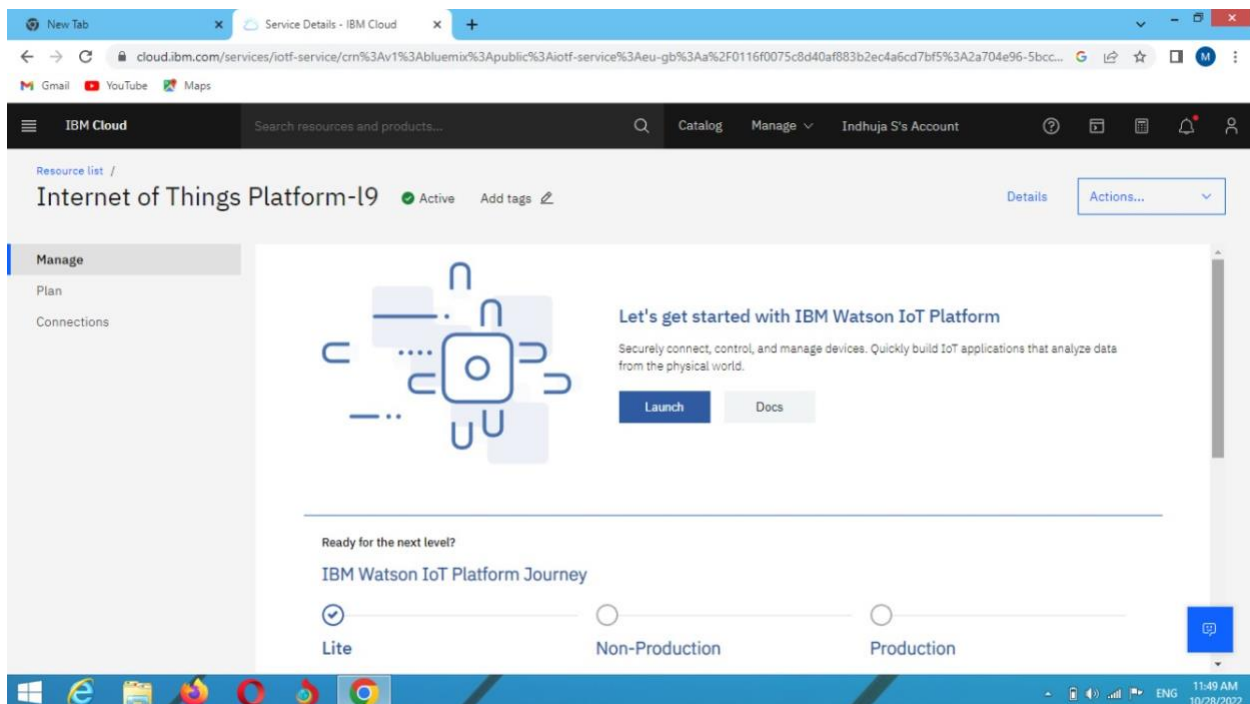
Change pricing plan

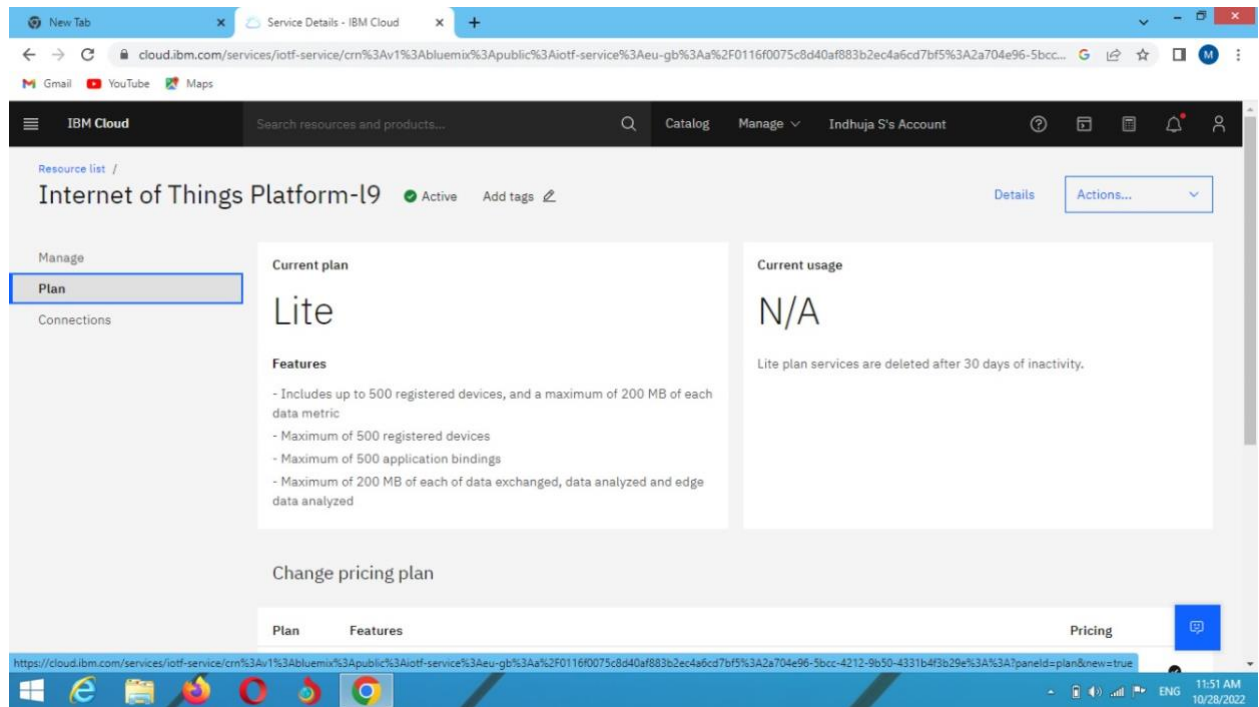
Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices	Free

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

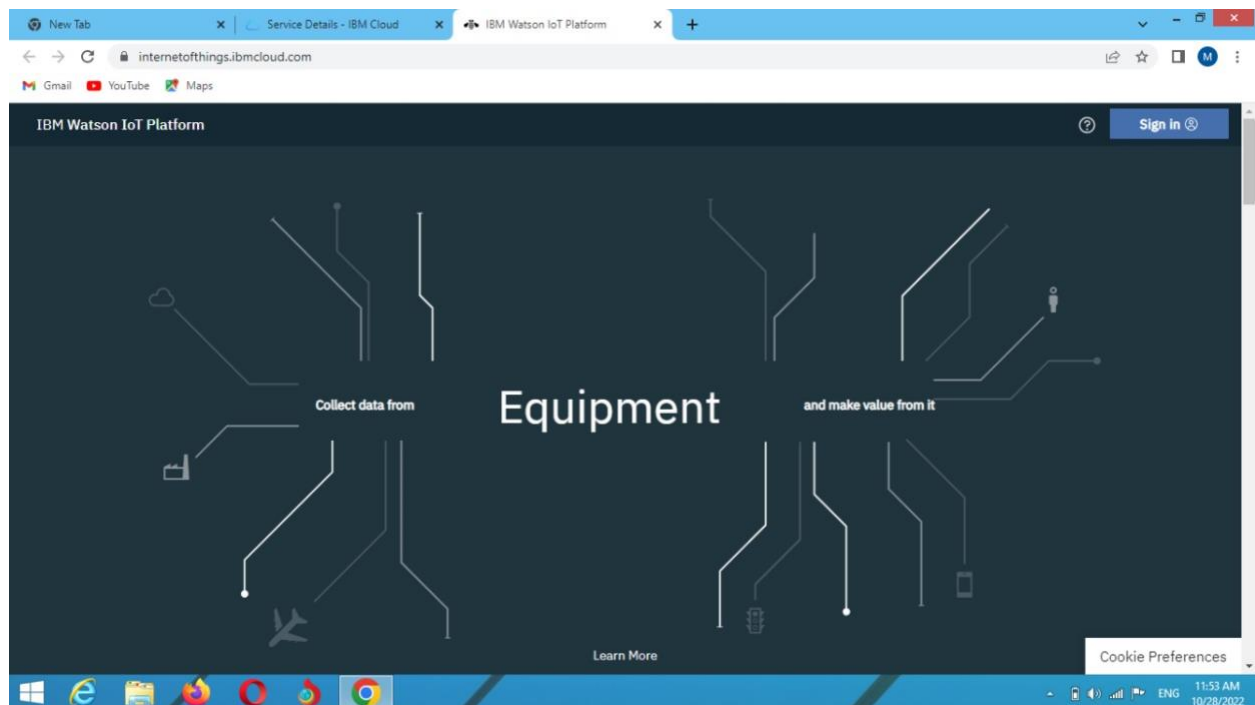


7. Internet of Things Platform Child_safety will be created, where there are
Different options like manage, plan, and connection (manage is for launch,
Plan gives us the idea about the payment package and its upgrades, and
Lastly the connection is for to connect IoT with other services)

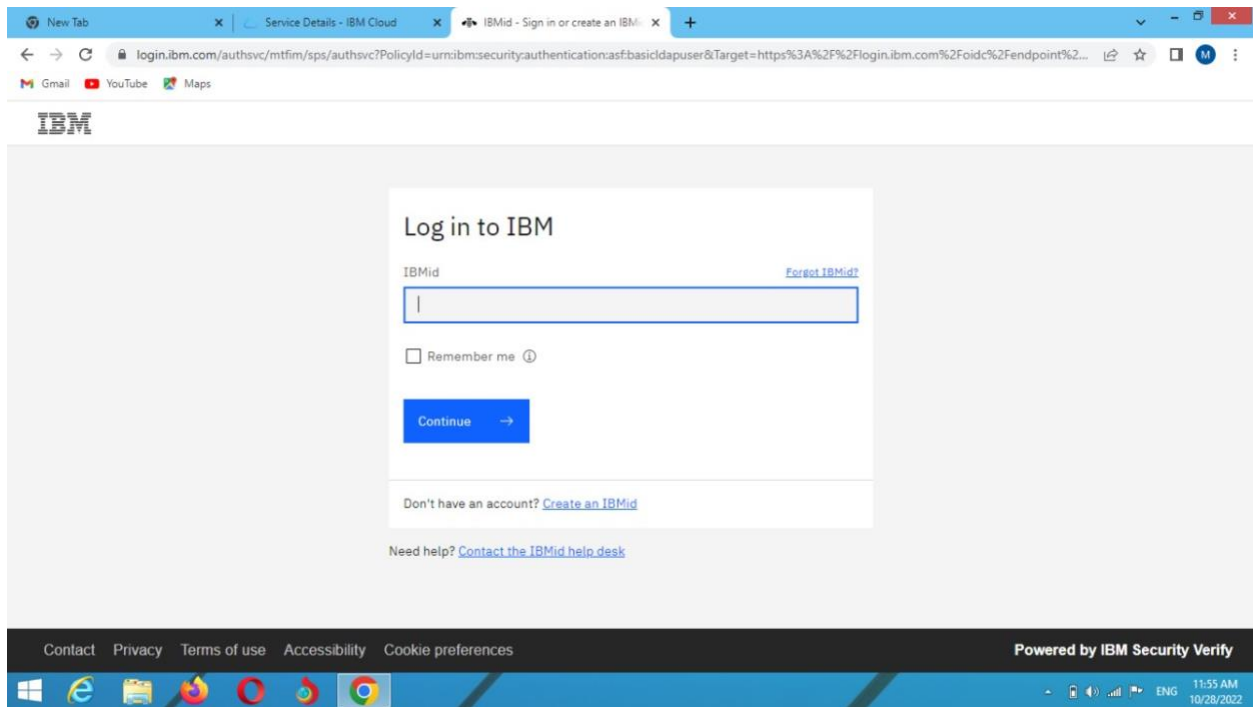




8. Clicking on the launch button in the manage tab, it will open to this



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



The screenshot shows a web browser window with the URL `login.ibm.com/authsvc/mtfim/sps/authsvc?PolicyId=urn:ibmsecurity:authentication:asf:basicdapuser&Target=https%3A%2F%2Flogin.ibm.com%2Foidc%2Fendpoint%2...`. The page features the IBM logo at the top left. The main content area is titled "Log in to IBM" and contains a form with an "IBMid" input field, a "Remember me" checkbox, and a "Continue" button. Below the form, there is a link to "Create an IBMid" for new users and a link to "Contact the IBMid help desk" for assistance. The footer includes links for "Contact", "Privacy", "Terms of use", "Accessibility", and "Cookie preferences", along with the text "Powered by IBM Security Verify". The system tray at the bottom shows the time as 11:55 AM on 10/28/2022.

Log in to IBM

IBMid [Forgot IBMid?](#)

☐ Remember me ⓘ

[Continue](#) →

Don't have an account? [Create an IBMid](#)

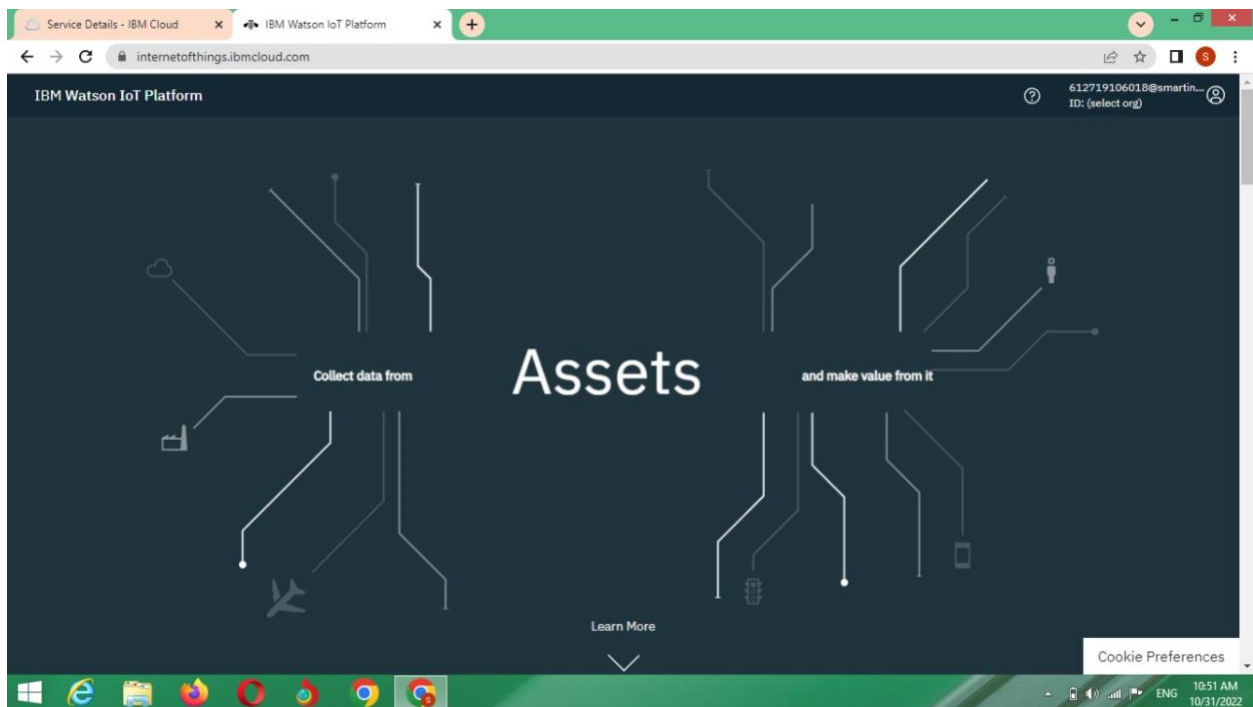
Need help? [Contact the IBMid help desk](#)

Contact Privacy Terms of use Accessibility Cookie preferences

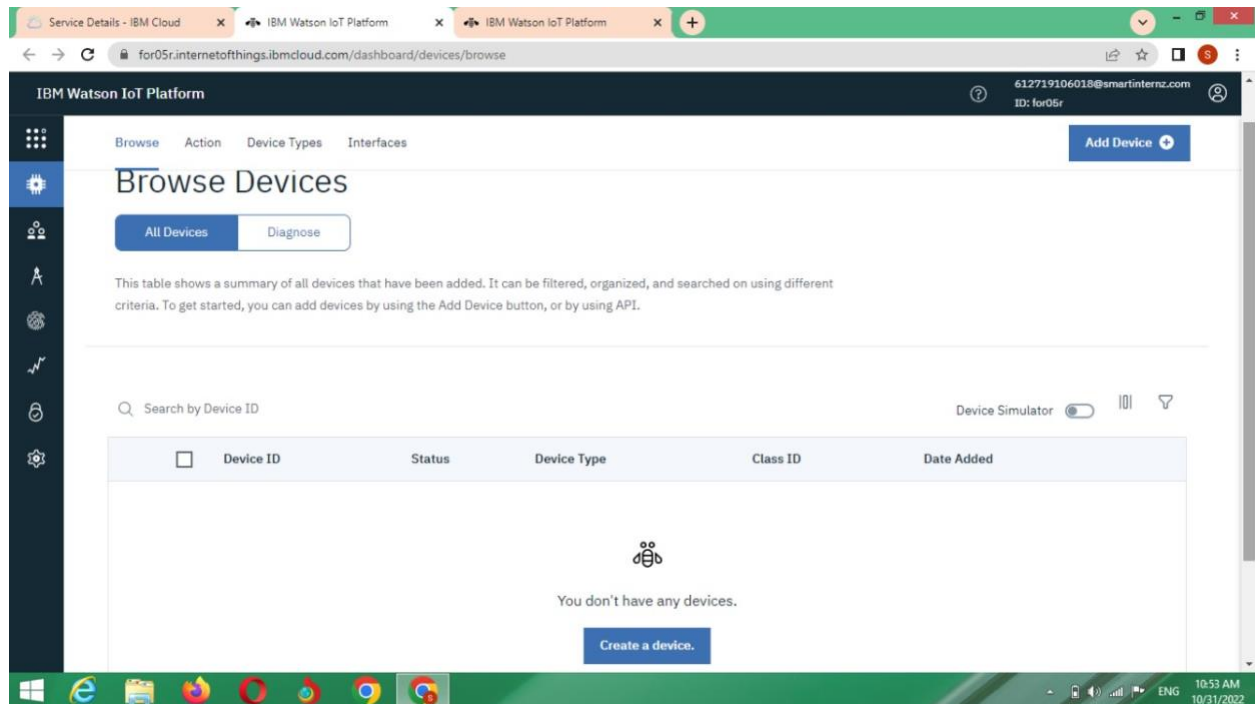
Powered by IBM Security Verify

11:55 AM 10/28/2022

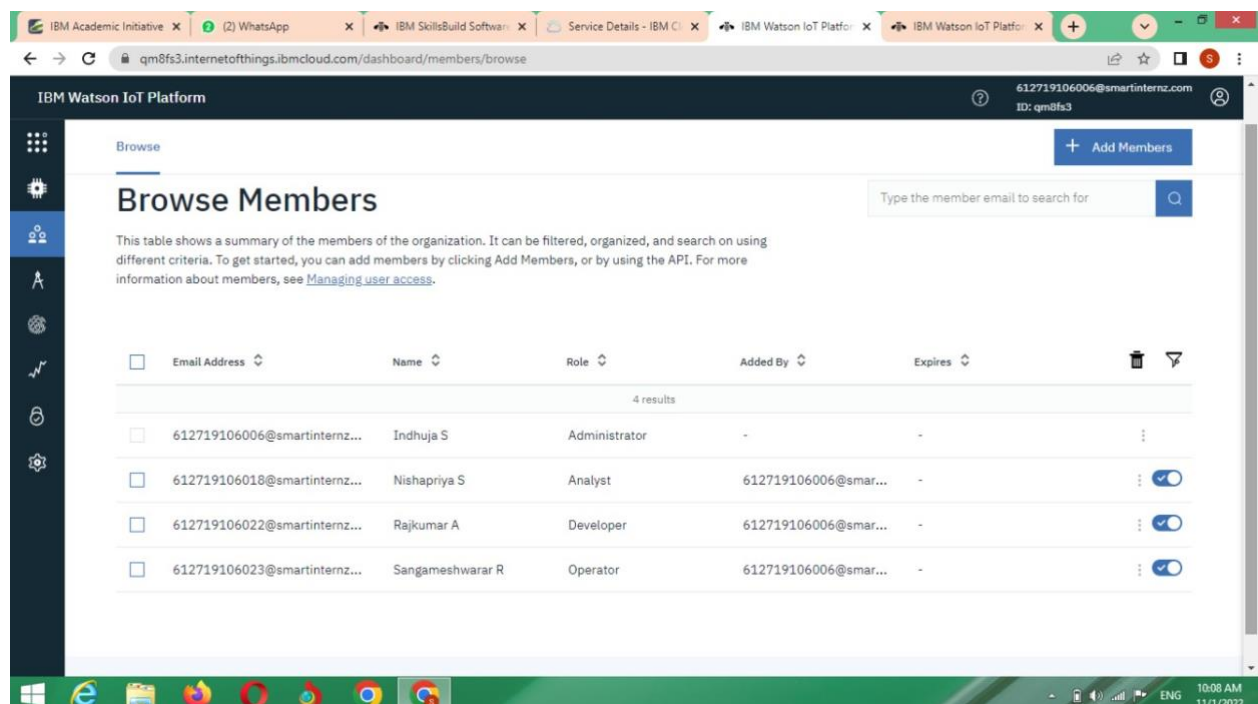
10. Once logged in the name will be displayed and it goes back to the first page



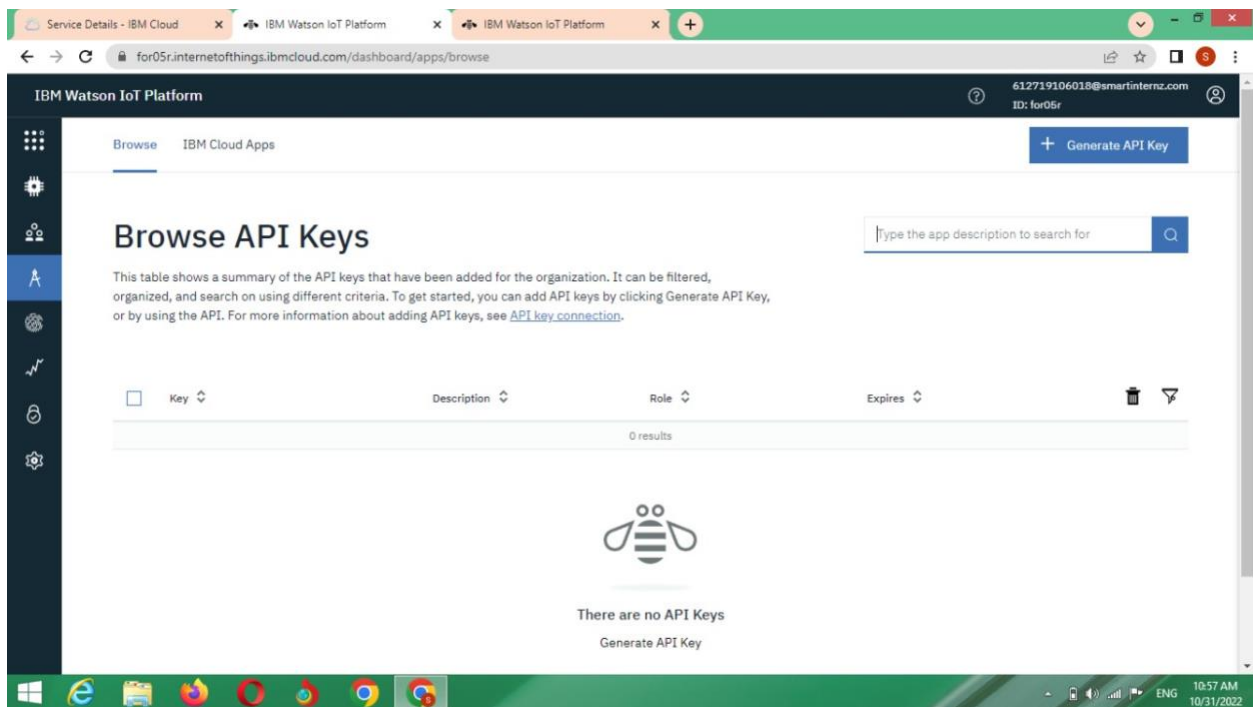
11. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices



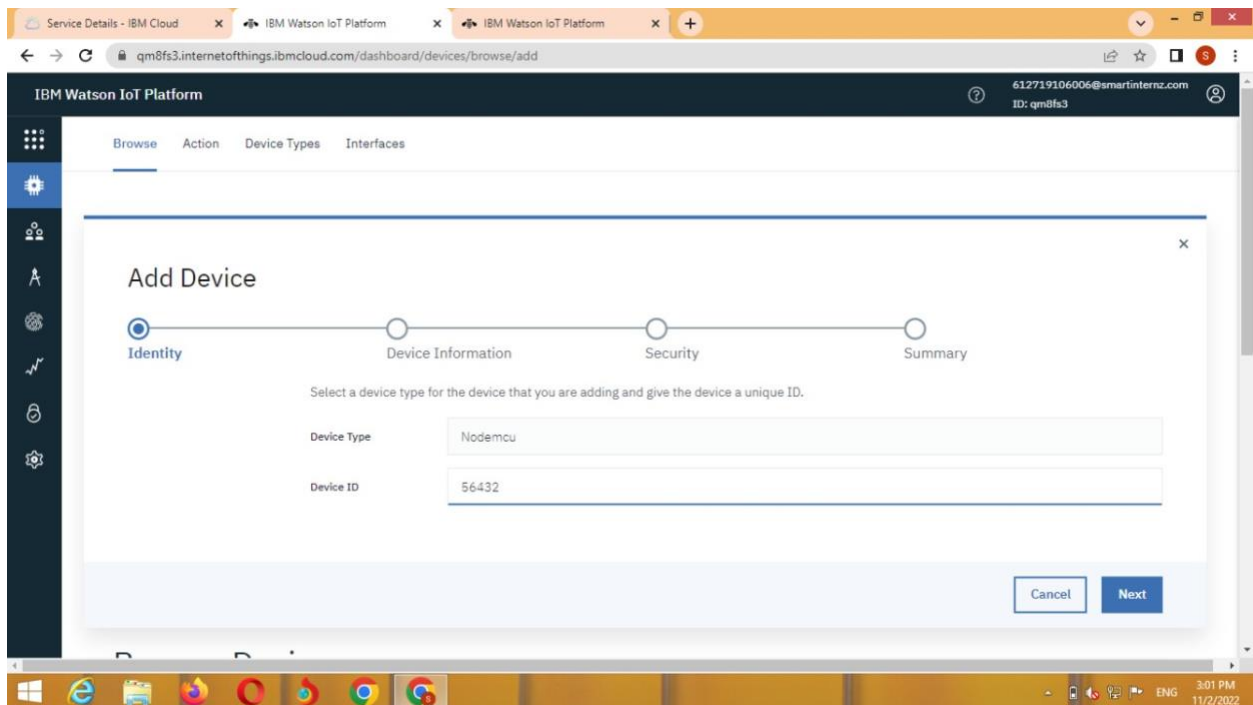
12. The member tab is add the teams members to work in the platform



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



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

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

Field	Input
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

Below the input fields is an 'Add Metadata' button with a plus icon. At the bottom right are 'Back' and 'Next' buttons. The browser's address bar shows the URL: `qm8fs3.internetofthings.ibmcloud.com/dashboard/devices/browse/add`. The taskbar at the bottom shows the Windows operating system with various application icons.

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

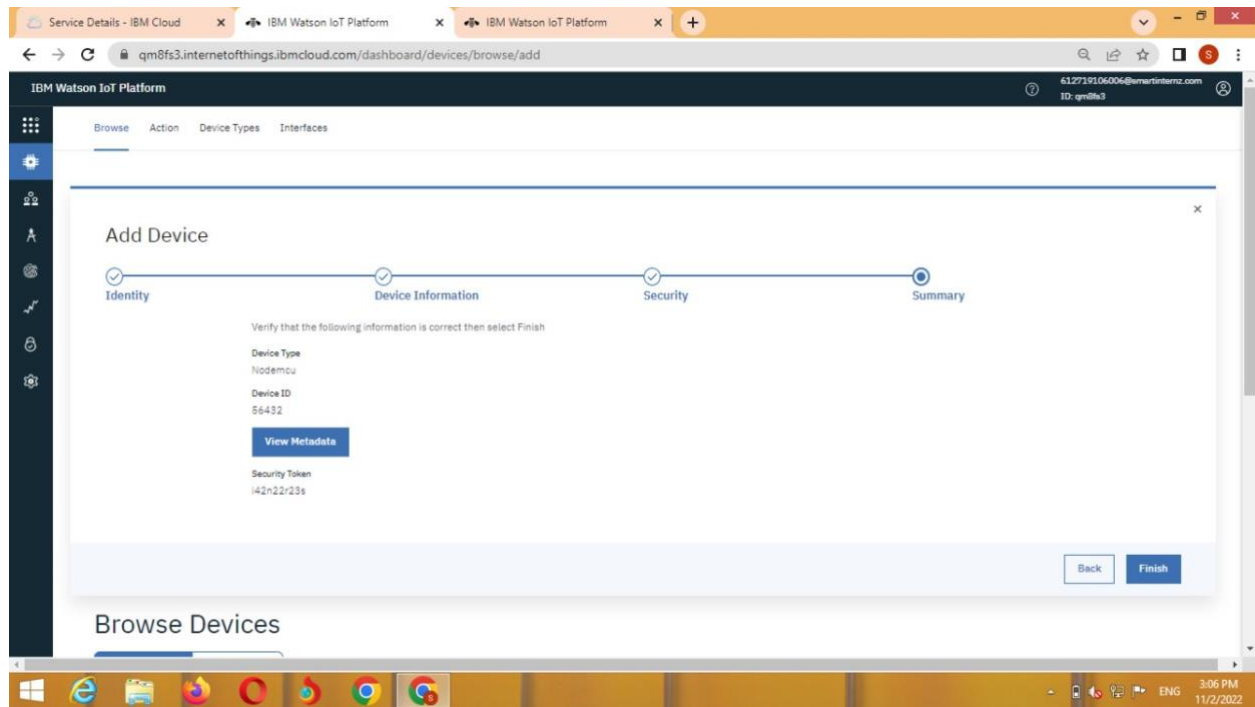
The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Security' step. The progress bar shows 'Identity' and 'Device Information' as completed steps. The 'Security' step presents two options for selecting a device authentication token:

- Auto-generated authentication token (default):** Allows the service to generate an authentication token for you. Tokens are 10 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.

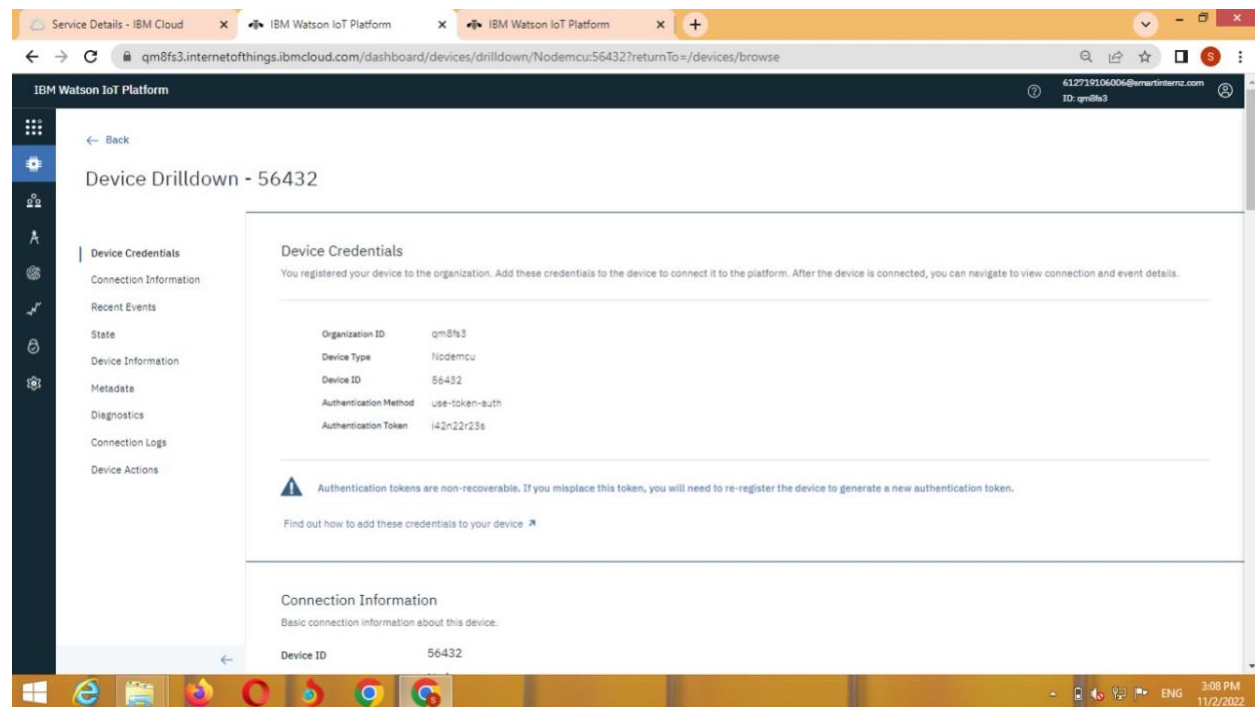
Under the 'Auto-generated authentication token' option, there is an input field for the 'Authentication Token' containing the value `i42n22r234`. Below this field, a note states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' Another note below that says: 'Authentication token are encrypted before we store them.'

At the bottom right are 'Back' and 'Next' buttons. The browser's address bar shows the same URL: `qm8fs3.internetofthings.ibmcloud.com/dashboard/devices/browse/add`. The taskbar at the bottom shows the Windows operating system with various application icons.

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



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

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

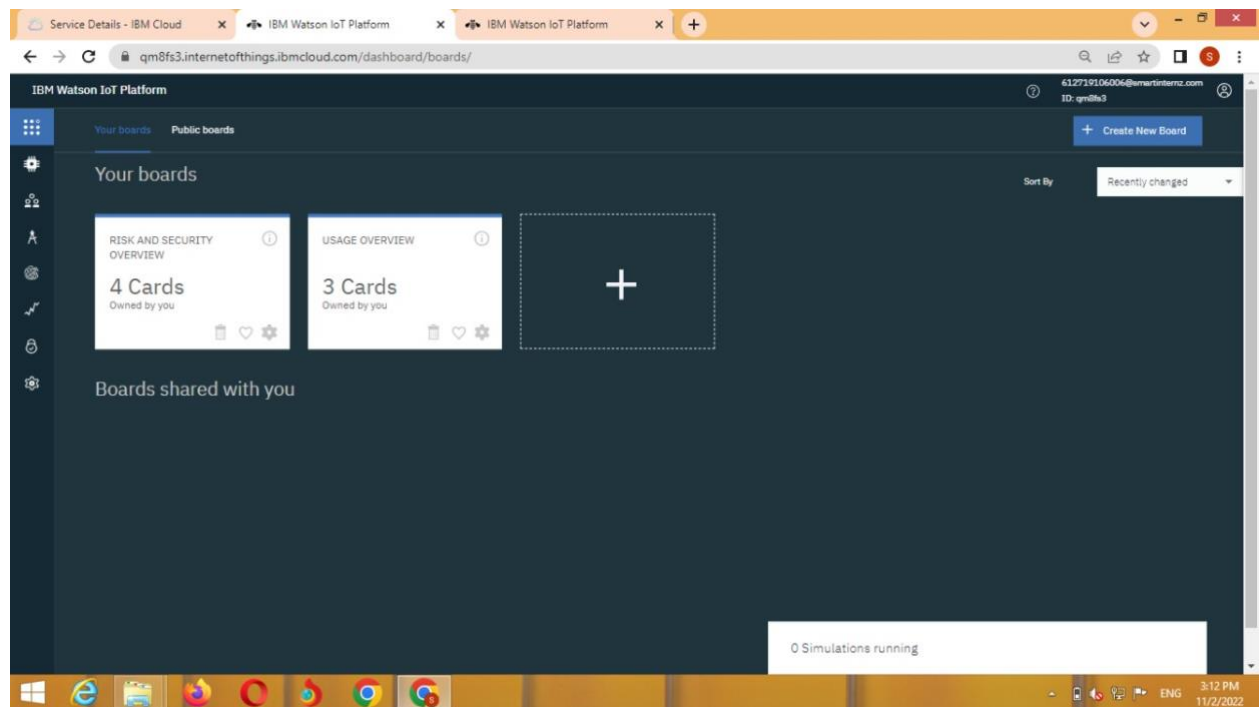
It has different tabs like Identity, Device Information, State and login

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Service Details - IBM Cloud', 'IBM Watson IoT Platform', and a new tab. The main header shows the user's email '612719106006@emartentamz.com' and ID 'qm8fs3'. The left sidebar contains icons for various functions. The main content area is titled 'Browse Devices' and includes a 'Diagnose' button. Below this, a table lists the added devices. The table has columns for Device ID, Status, Device Type, Class ID, and Date Added. A single device is listed with ID 56432, Status Disconnected, Device Type NodeMCU, Class ID Device, and Date Added Nov 2, 2022 3:07 PM. The page also features a search bar for Device ID, a 'Device Simulator' toggle, and a status bar at the bottom indicating '0 Simulations running'.

Device ID	Status	Device Type	Class ID	Date Added
56432	Disconnected	NodeMCU	Device	Nov 2, 2022 3:07 PM

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

20.The Boards will display card for the project



RESULT:

An IBM Watson cloud for IoT and a device is created

TEAM ID : PNT2022TMID41116

TEAM LEADER : INDHUJA S

TEAM MEMBER 1 : NISHAPRIYA S

TEAM MEMBER 2 : RAJKUMAR A

TEAM MEMBER 3 : SANGAMESHWARAR R

TEAM SIZE : 4

MENTOR : DHANASRKARAN P