

## CREATE IBM WATSON IOT PLATFORM AND DEVICE

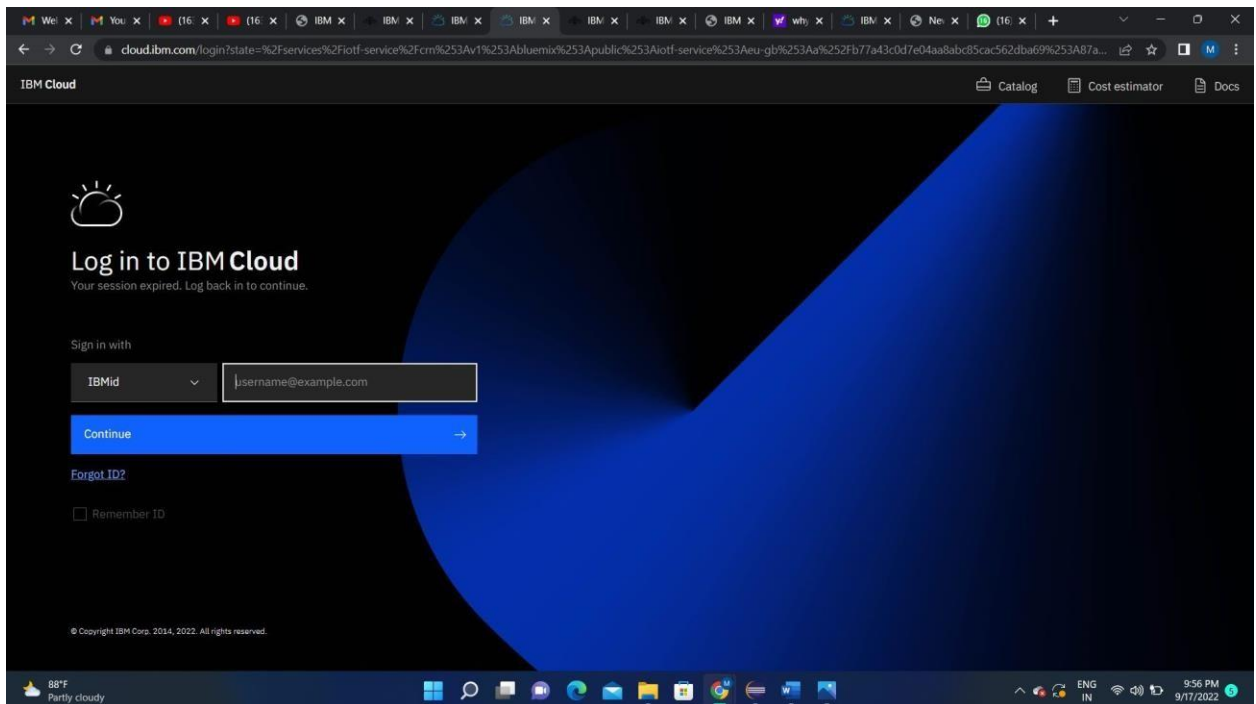
TEAM ID	PNT2022TMID48583
Project Name	IOT based safety gadget for child safety monitoring and notification

### AIM:

To create the IBM Watson IoT platform and device

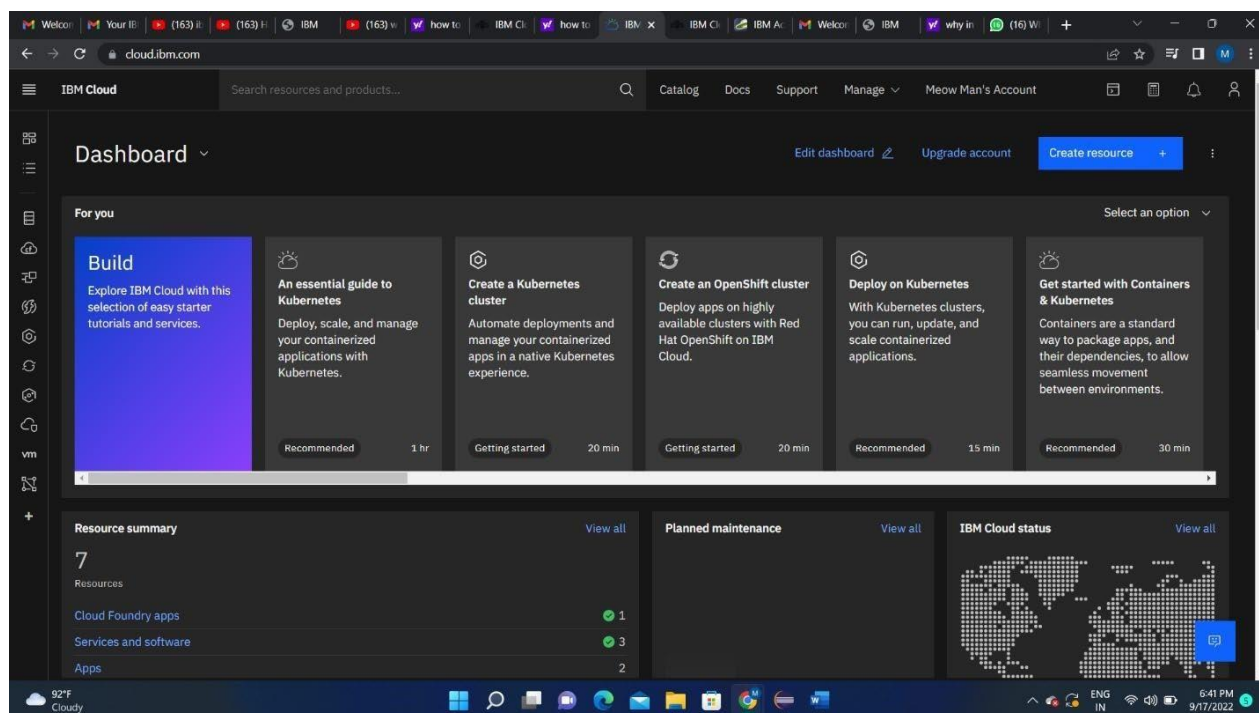
### STEPS:

Firstly create an IBM cloud account with IBMid and password

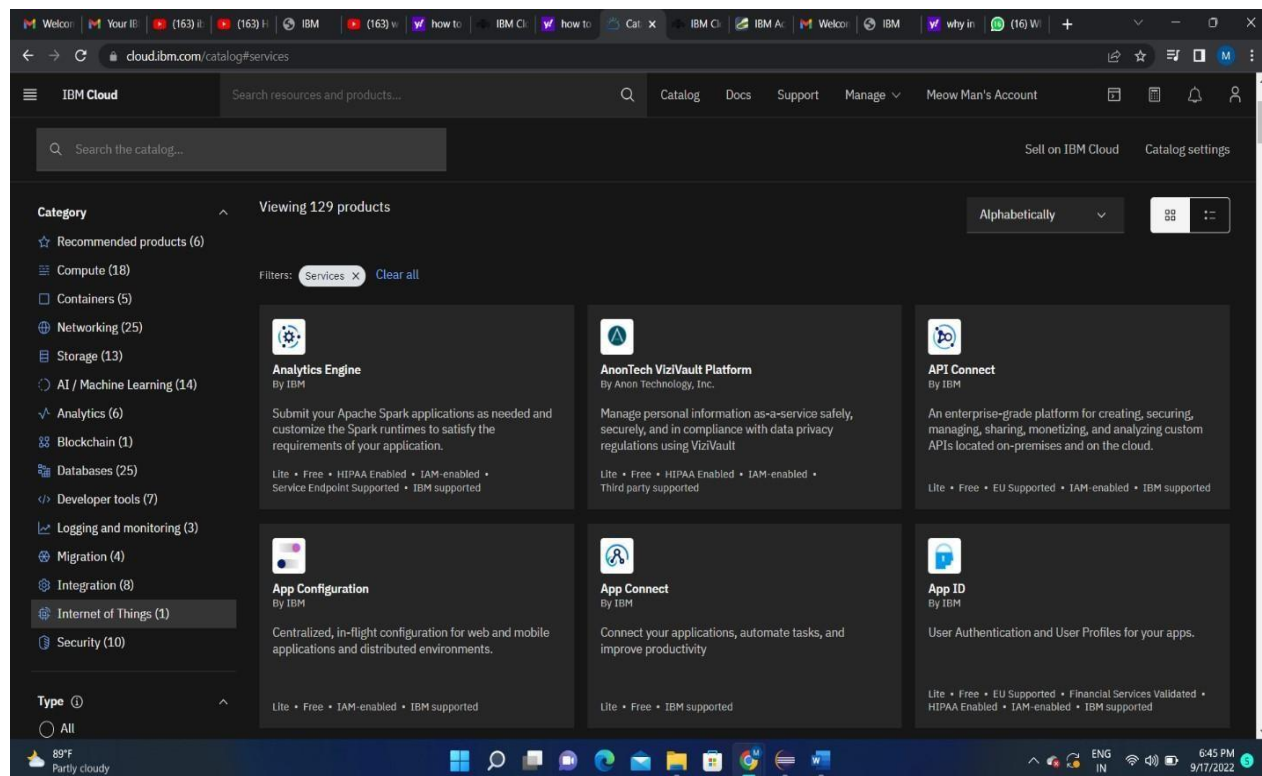


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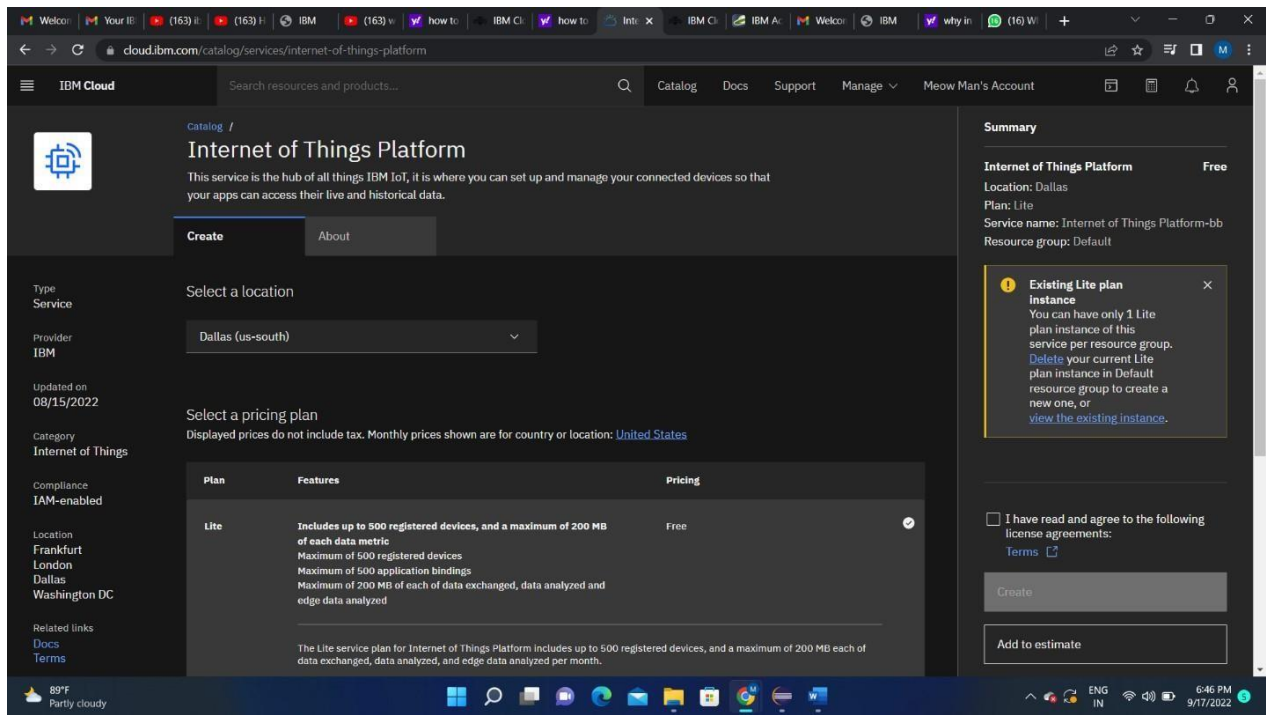
## Home page of IBM cloud



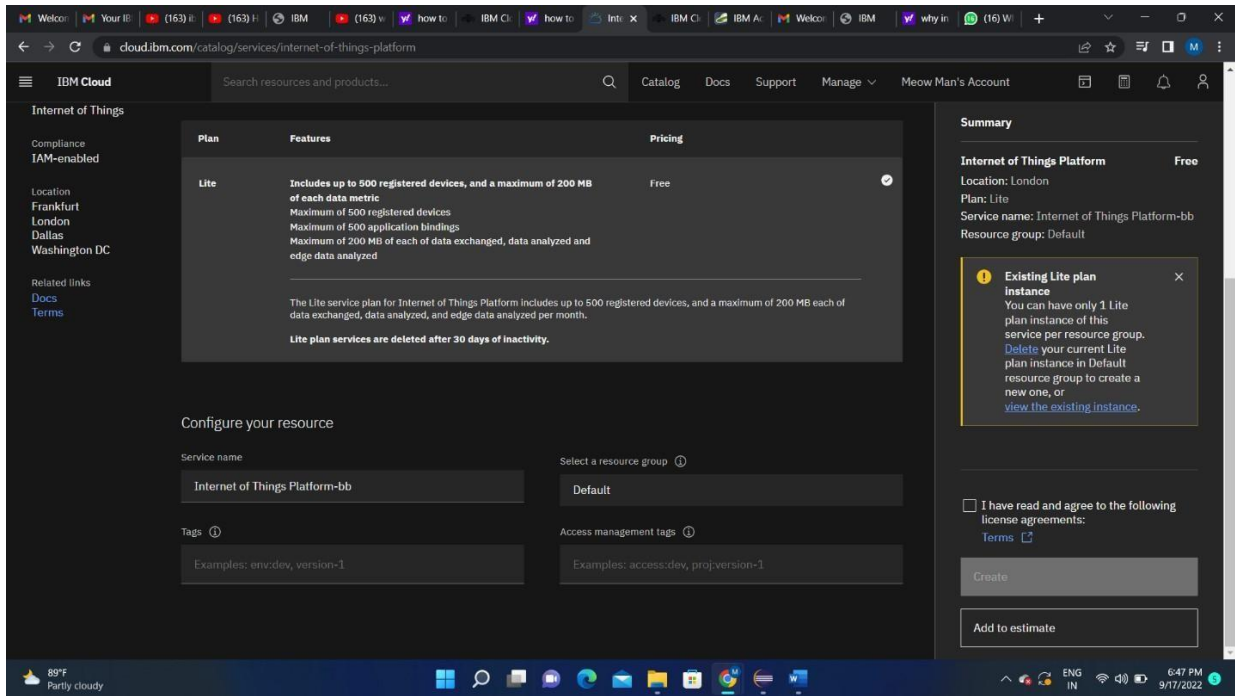
## Click on the catalog on the top



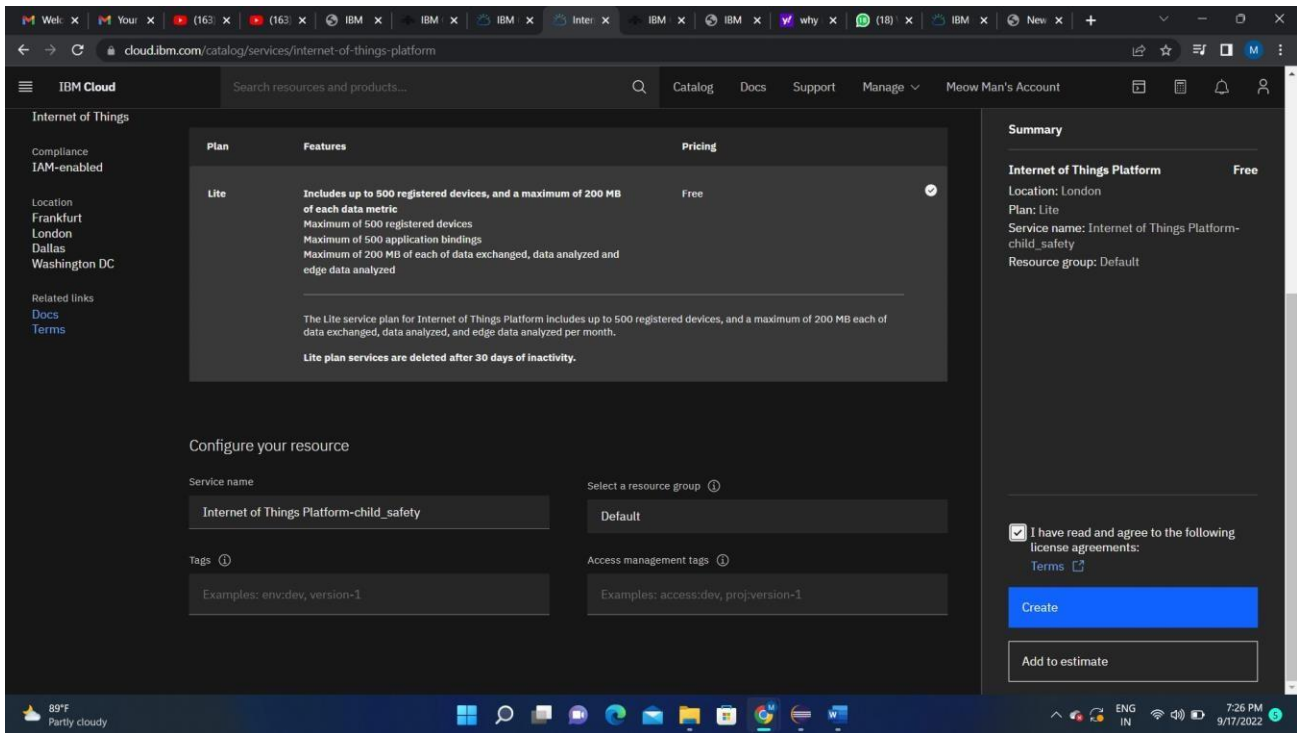
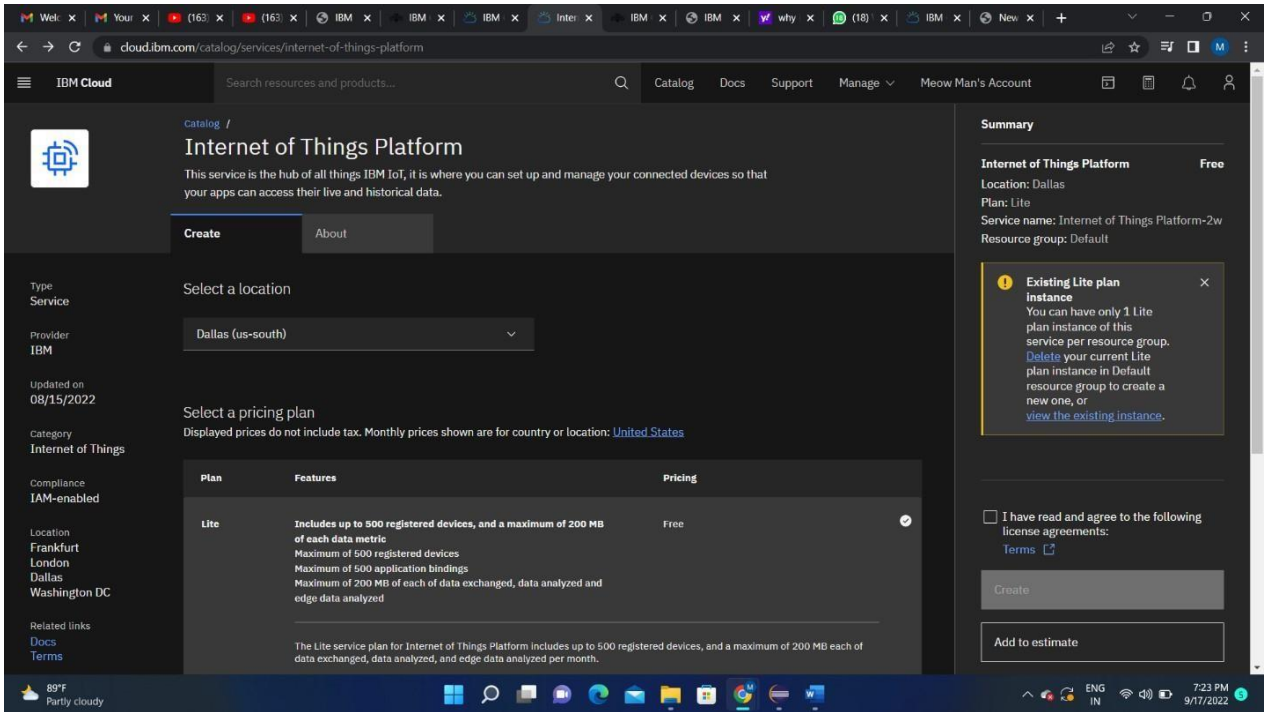
Click on IoT in the category mentioned



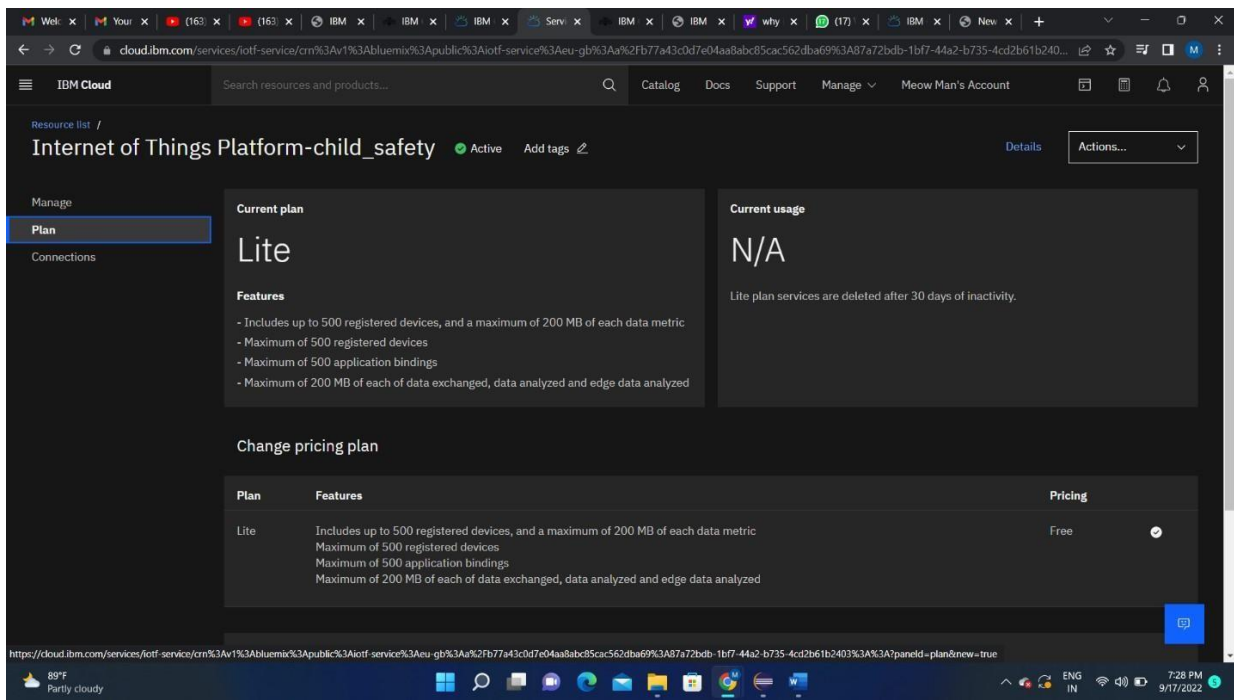
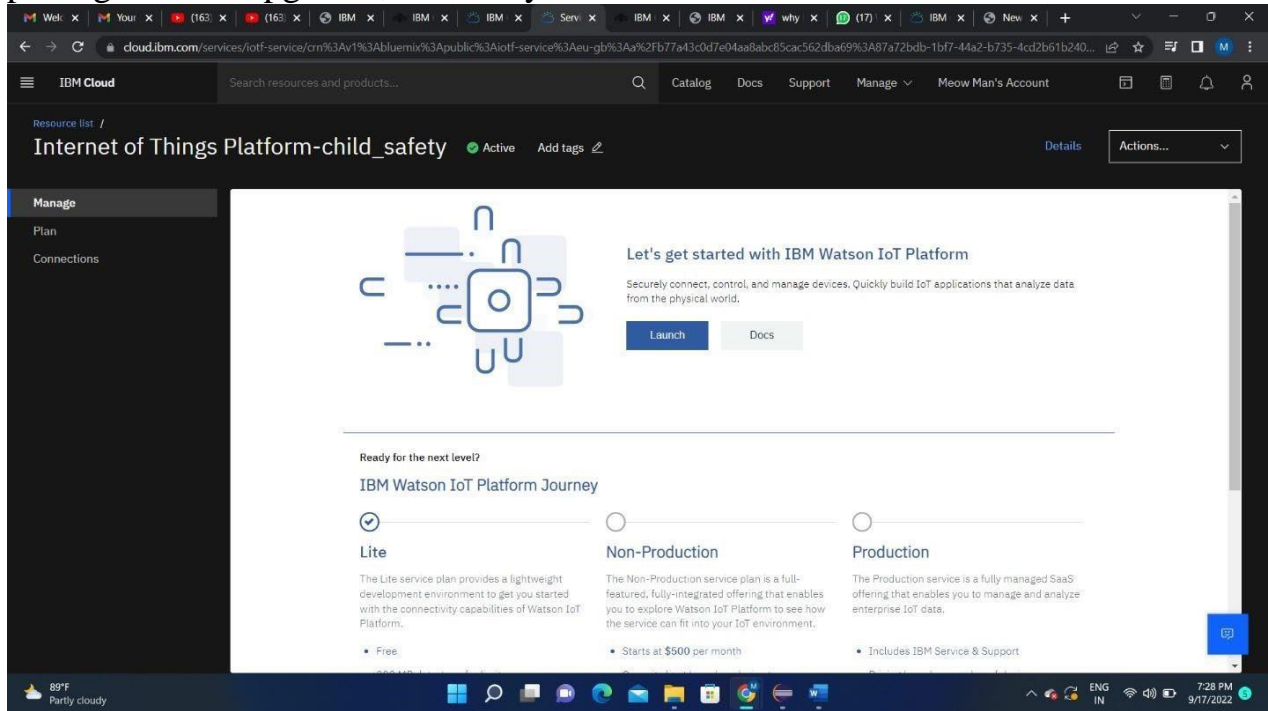
If already a lite is present delete it else u can't create another



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

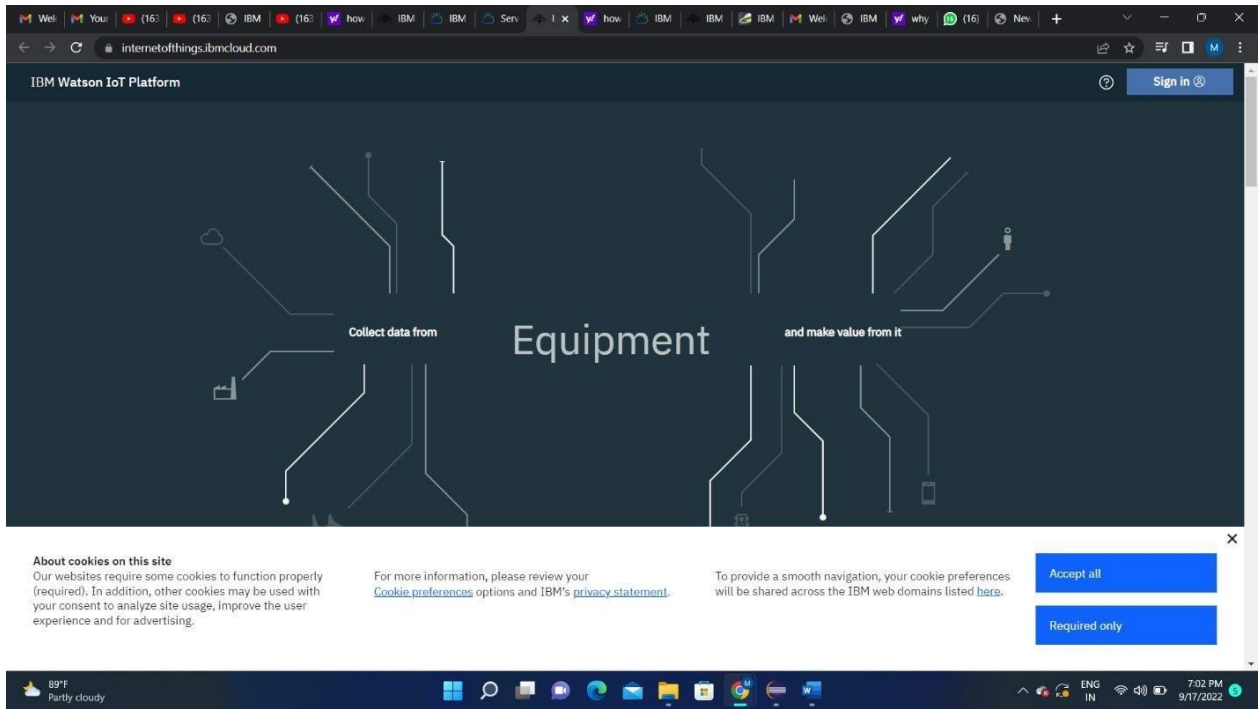


Internet of Things Platform Child\_safety will be created, where there are different options like manage, plan, and connection ( manage is for launch, Plangives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IoT with other servies)

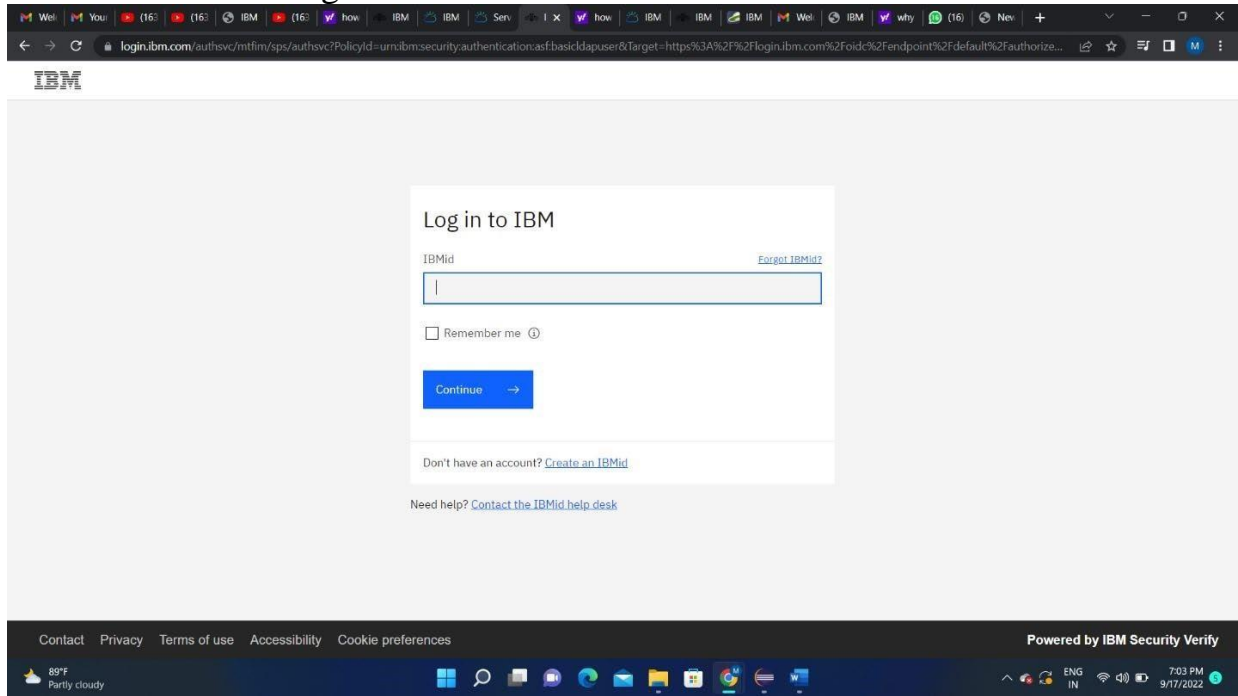


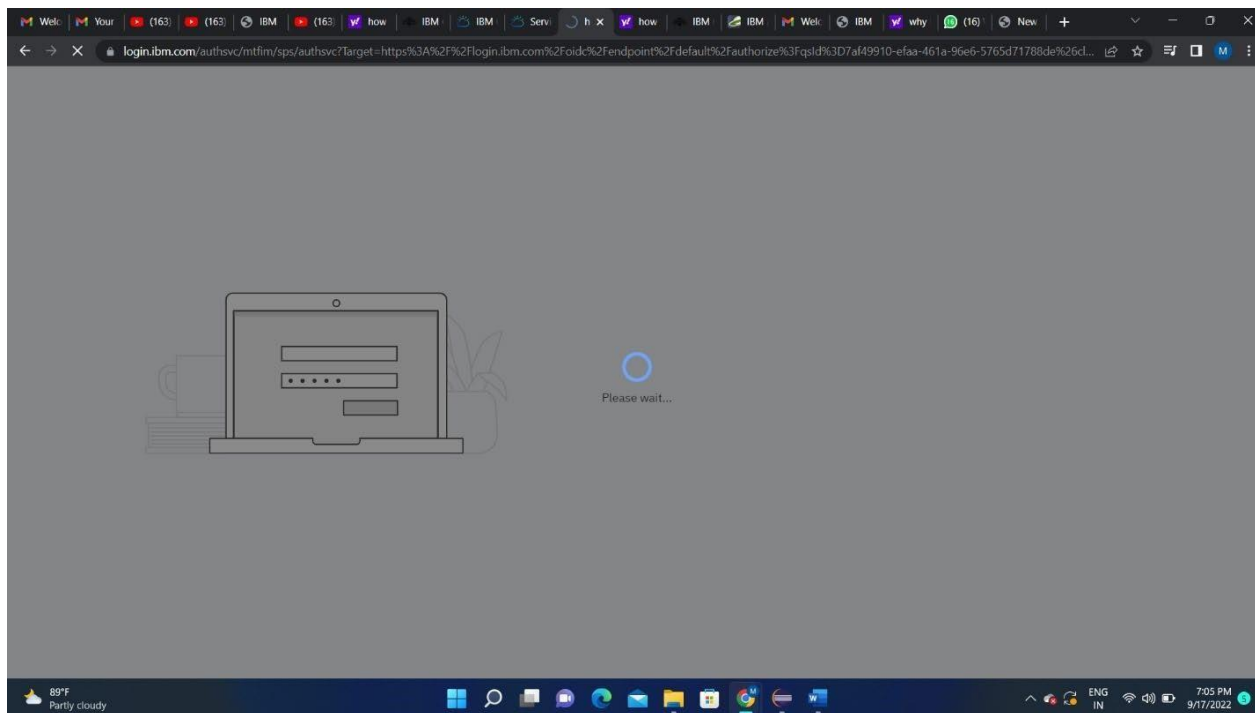


Clicking on the launch button in the manage tab, it will open to this

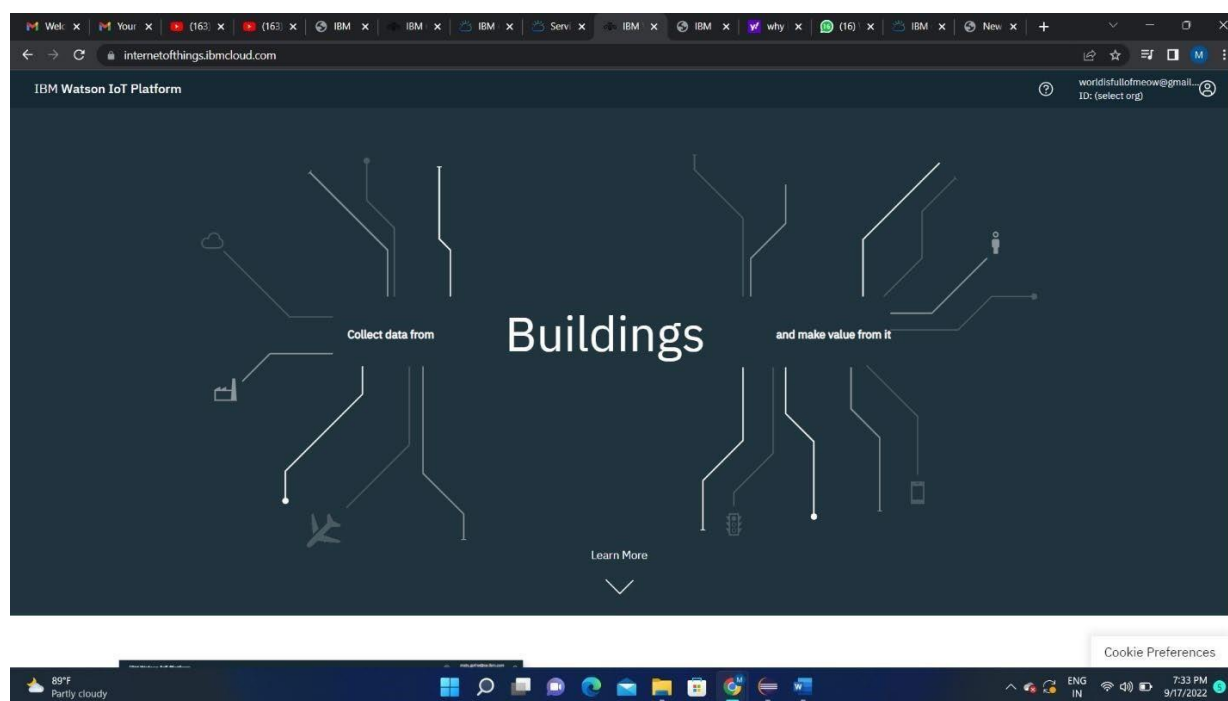


Enter the details to sign in to the Watson Cloud to create a device

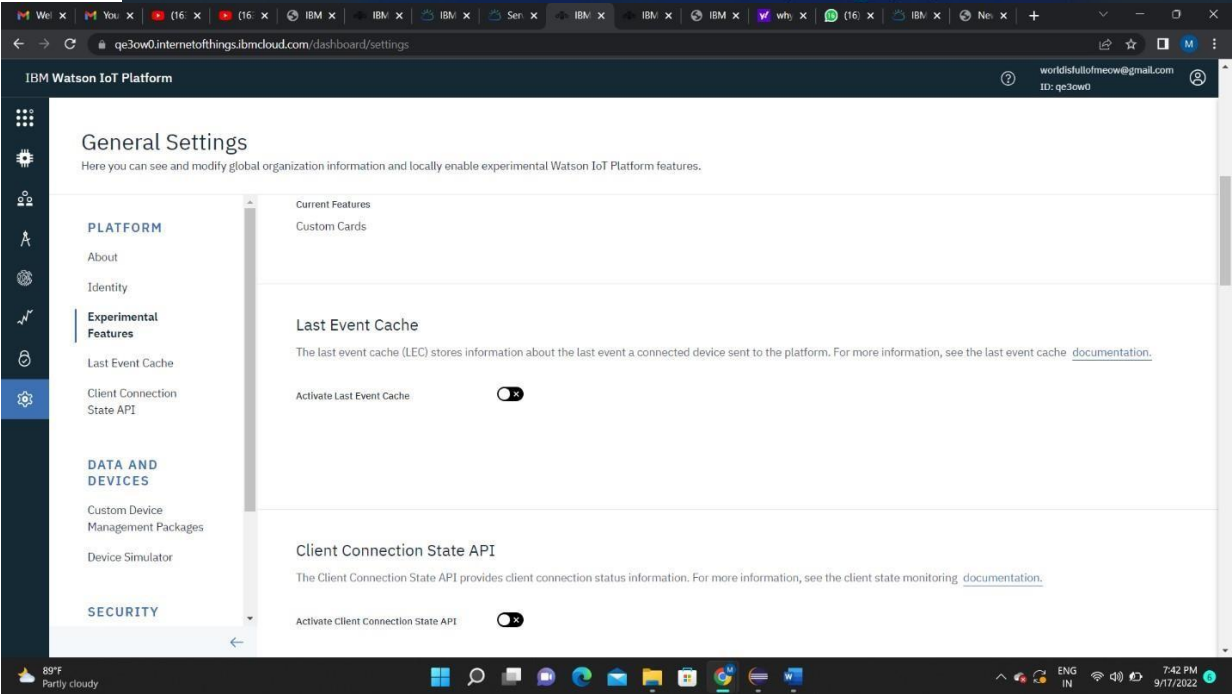
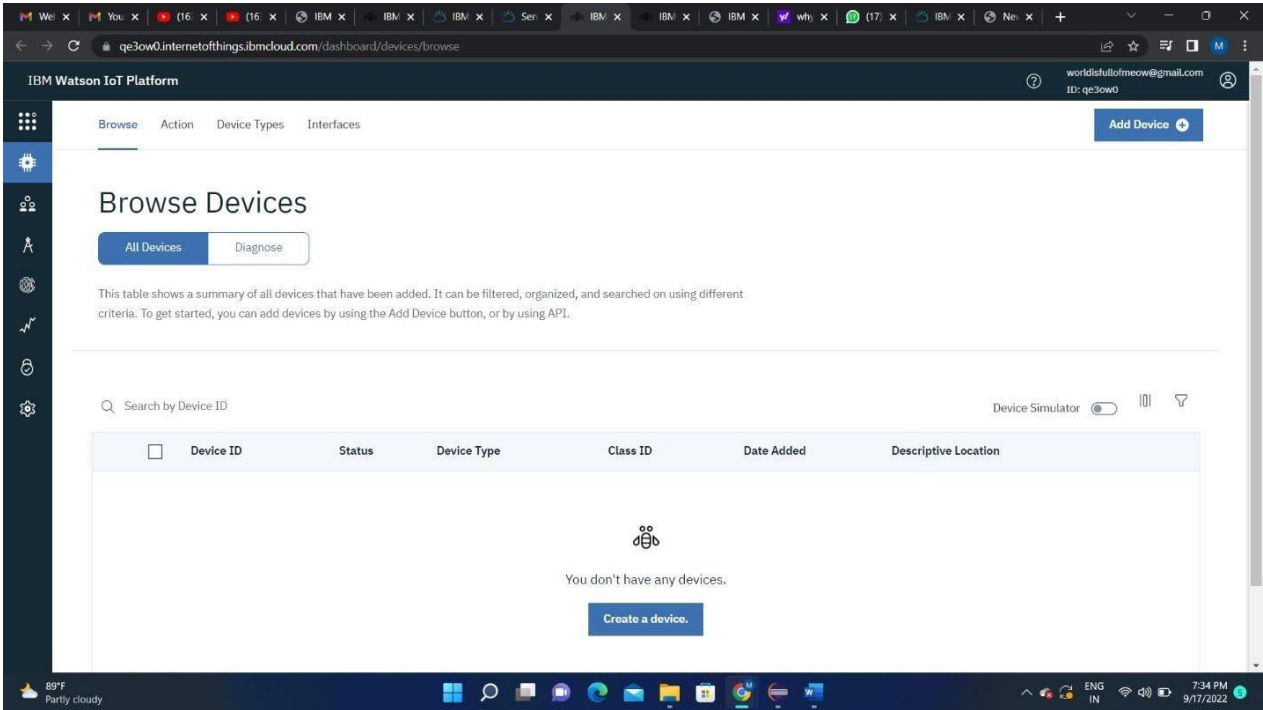




Once logged in the name will be displayed and it goes back to the first page

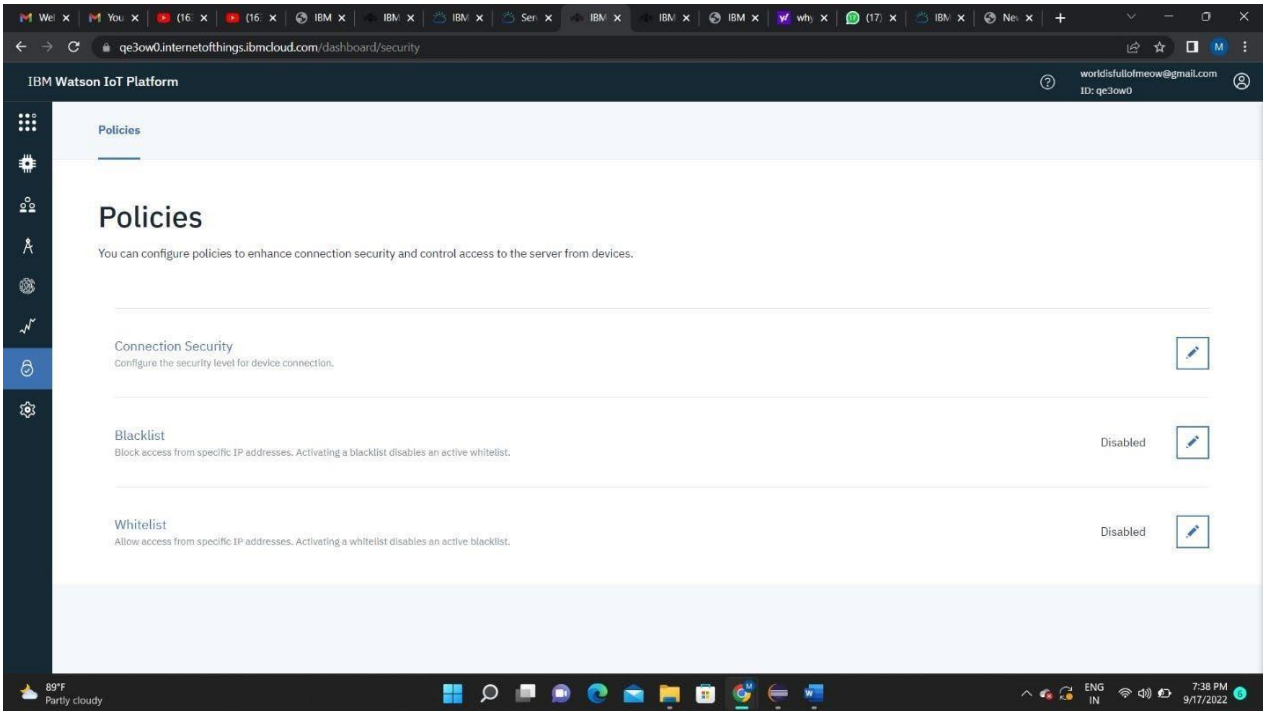


And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of the devices. The setting tab is used to change the general setting if needed for the project.

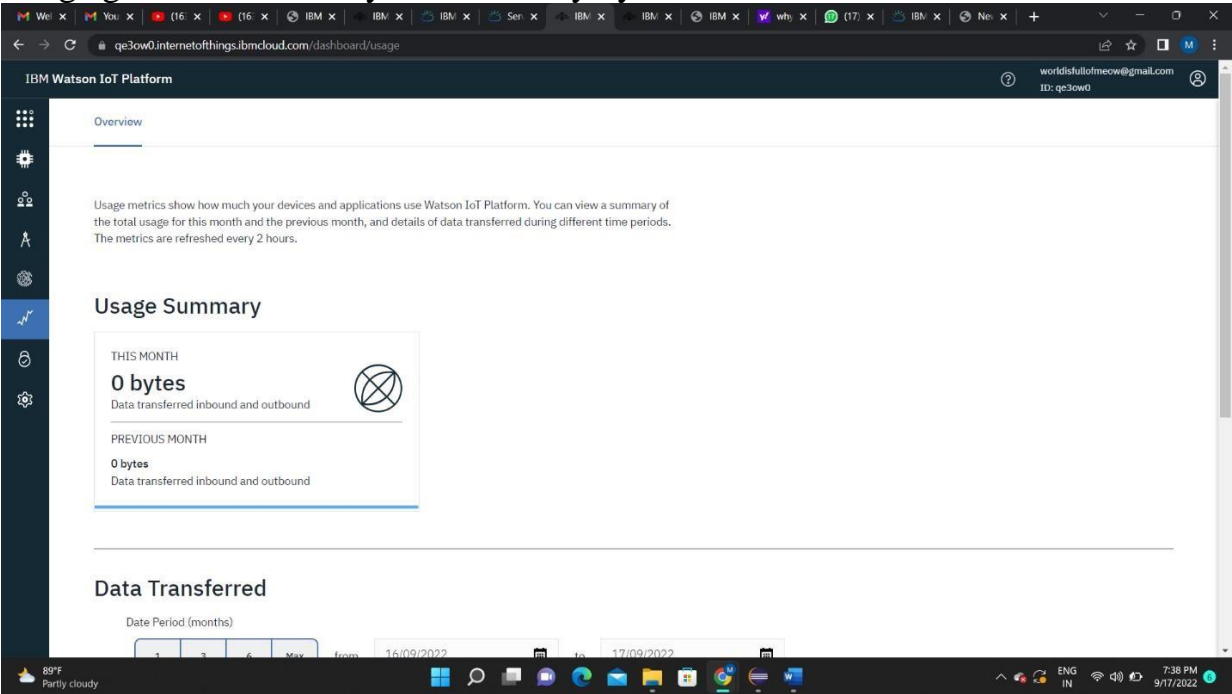




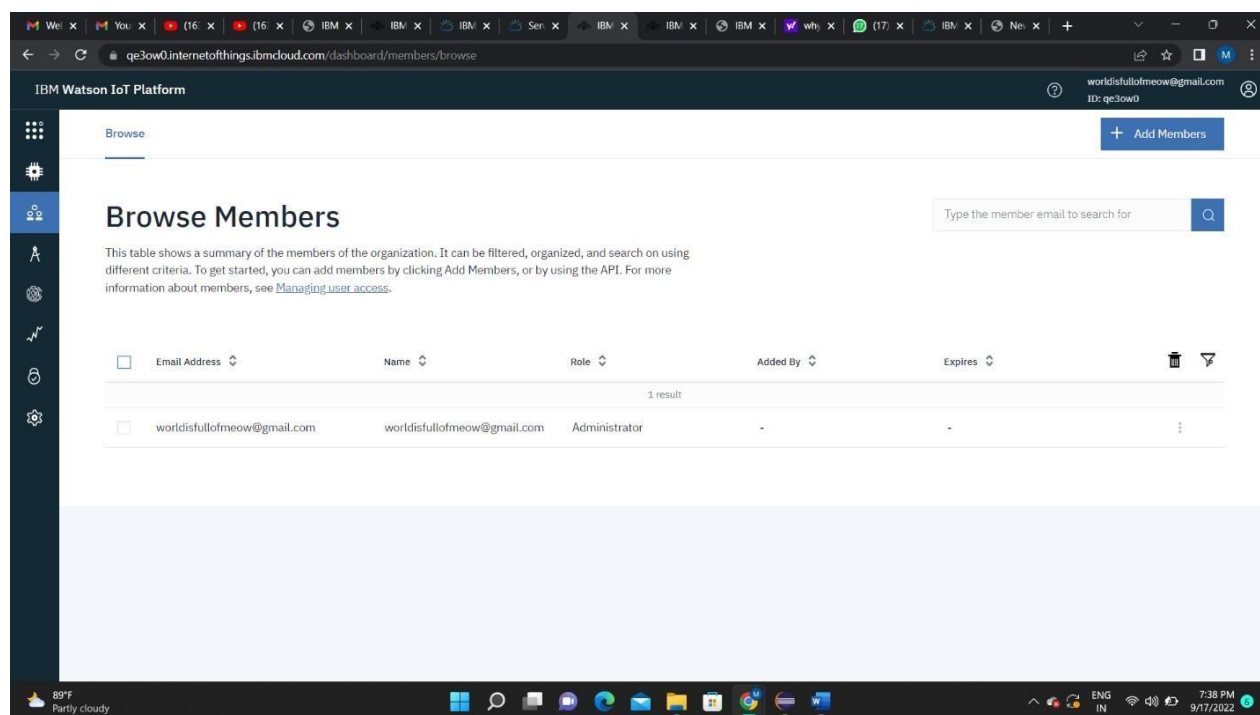
In the security tab we can choose the type of security connection and canchange according to specification



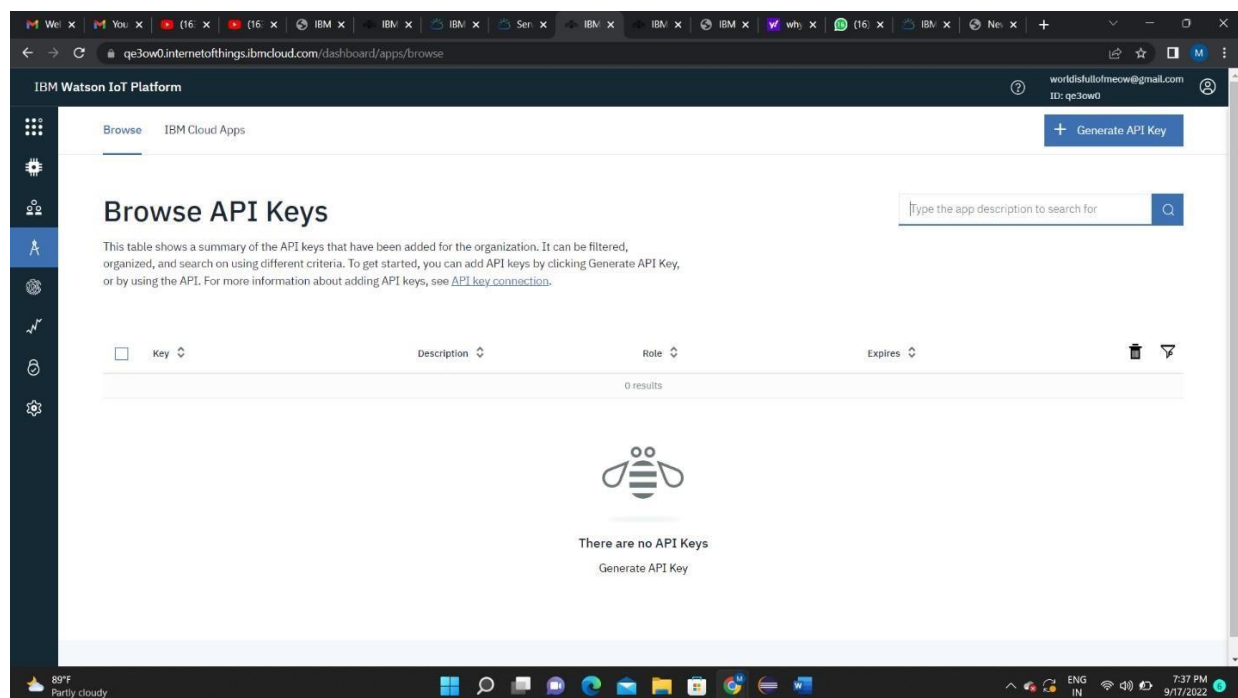
Usage gives the summary of how many bytes are used between the devicesand the IBM cloud.



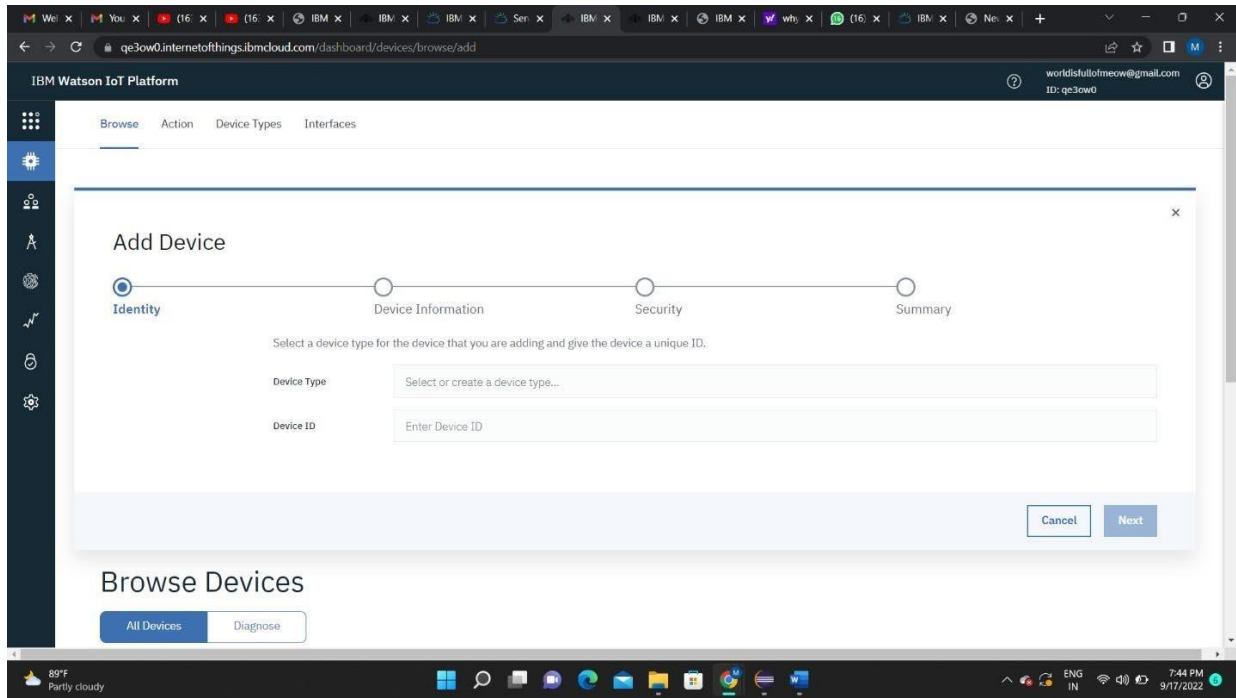
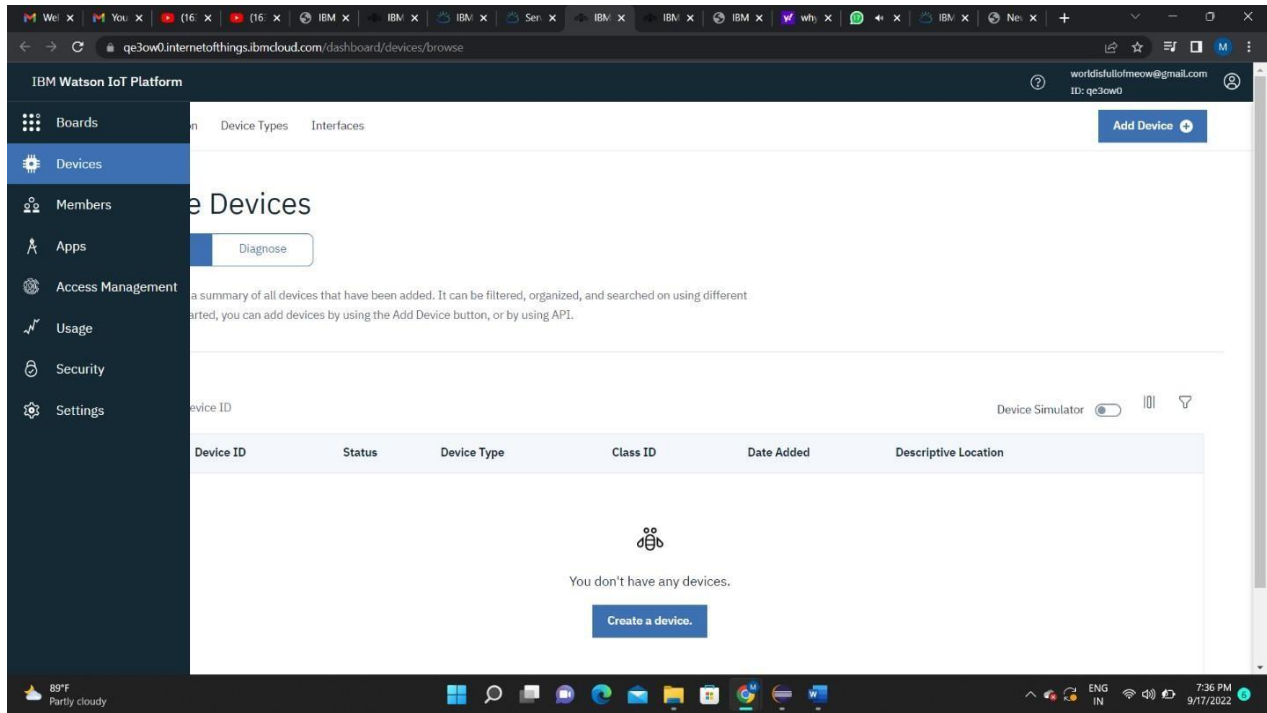
The member tab is add the teams members to work in the platform



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



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 a checkmark. Below the progress bar, there is a text prompt: '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 '199795'. At the bottom right of the form, there are 'Cancel' and 'Next' buttons. Below the form, there is a section titled 'Browse Devices' with two buttons: 'All Devices' and 'Diagnose'.

IBM Watson IoT Platform

worldisfullofmeow@gmail.com  
ID: qe3ow0

Browse Action Device Types Interfaces

Add Device

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 199795

Cancel Next

Browse Devices

All Devices Diagnose

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 and 'Device Information' as the current step. Below the progress bar, there is a text prompt: 'You can modify the default device information and enter more information about the device for identification purposes.' There are two columns of input fields. The left column contains: 'Serial Number' (placeholder: Enter Serial Number), 'Model' (placeholder: Enter Model), 'Description' (placeholder: Enter Description), and 'Hardware Version' (placeholder: Enter Hardware Version). The right column contains: 'Manufacturer' (placeholder: Enter Manufacturer), 'Device Class' (placeholder: Enter Device Class), 'Firmware Version' (placeholder: Enter Firmware Version), and 'Descriptive Location' (placeholder: Enter Descriptive Location). At the bottom left of the form, there is an 'Add Metadata' button. At the bottom right, there are 'Back' and 'Next' buttons.

IBM Watson IoT Platform

worldisfullofmeow@gmail.com  
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Browse Action Device Types Interfaces

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 Enter Serial Number

Model Enter Model

Description Enter Description

Hardware Version Enter Hardware Version

Manufacturer Enter Manufacturer

Device Class Enter Device Class

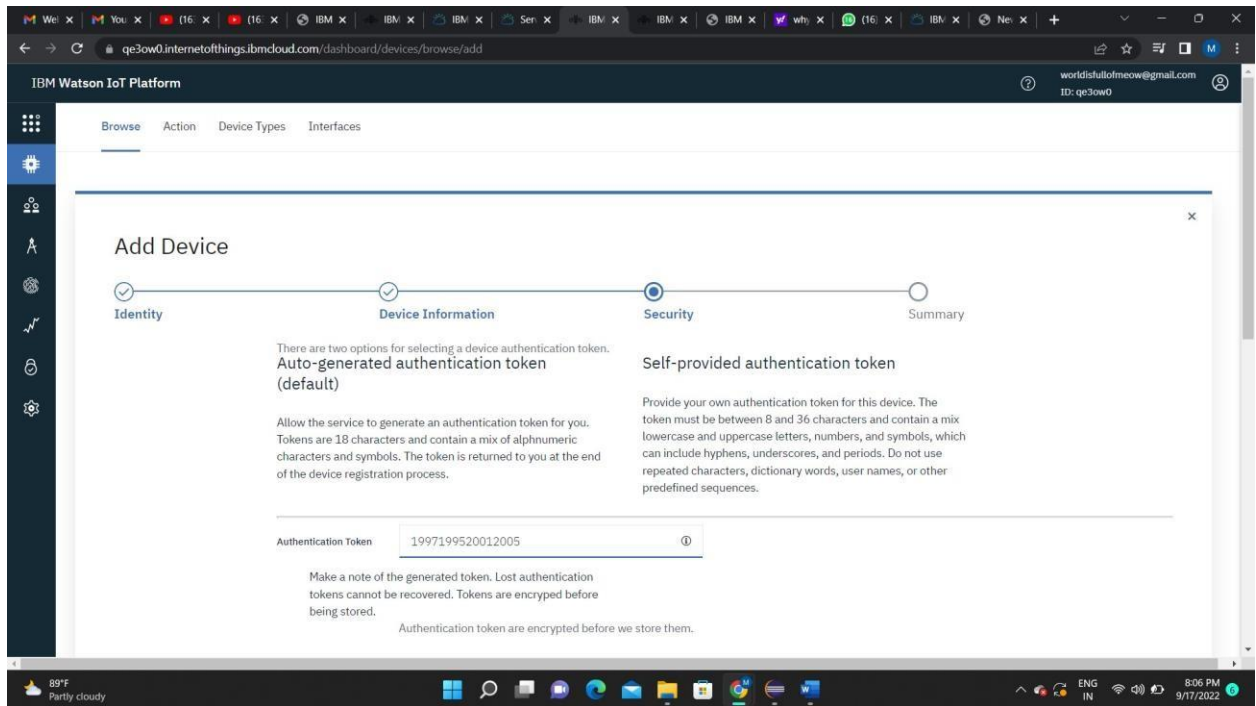
Firmware Version Enter Firmware Version

Descriptive Location Enter Descriptive Location

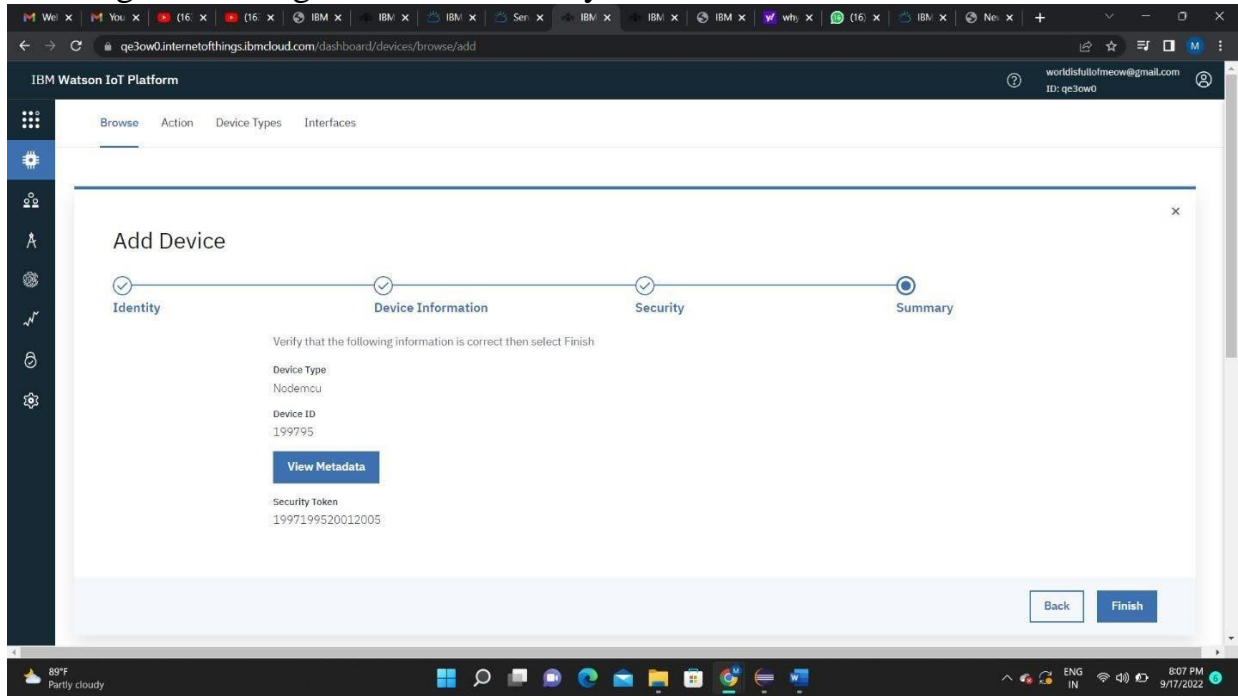
Add Metadata

Back Next

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



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





## The device credentials will be displayed with all the details

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various functions. The main content area displays a table with one device entry: '210102', 'Disconnected', 'Nodemcu', 'Device', and 'Oct 30, 2022 2:15 PM'. Below the table, a modal window titled 'Device Details' is open, showing the following information:

Identity	Device Information	Recent Events	State	Logs
Device ID	210102			
Device Type	Nodemcu			
Date Added	Oct 30, 2022 2:15 PM			
Added By	sethukannanm143@gmail.com			
Connection Status	Disconnected			

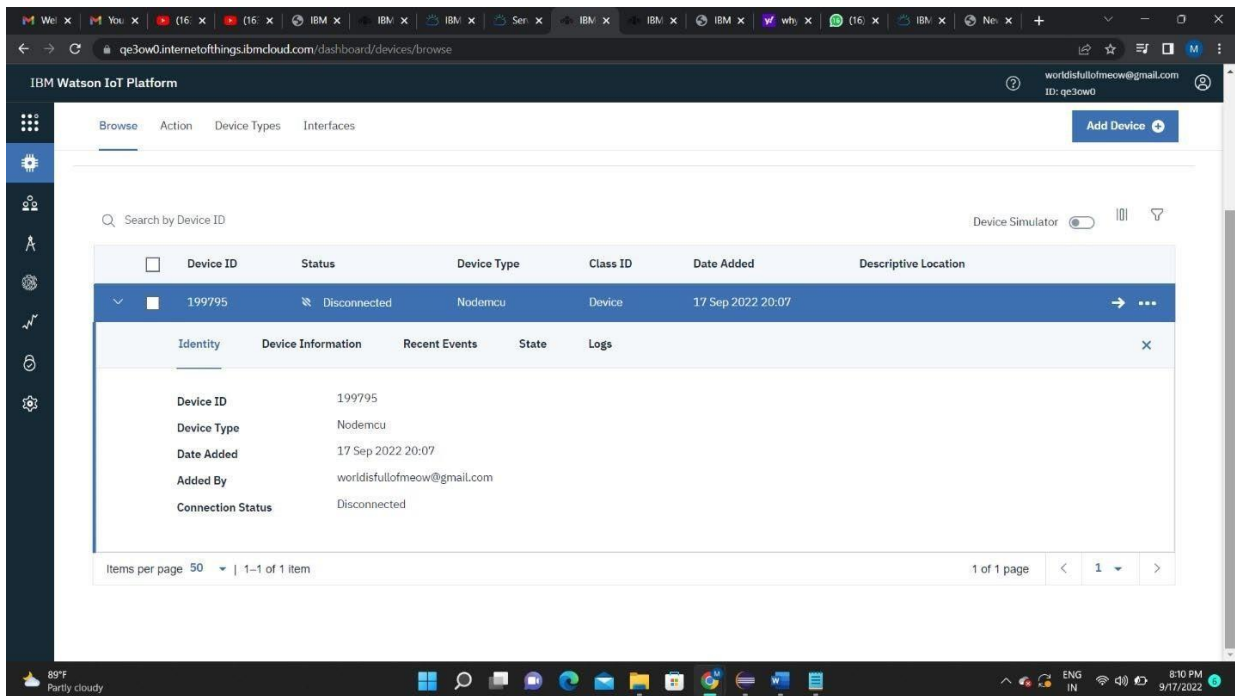
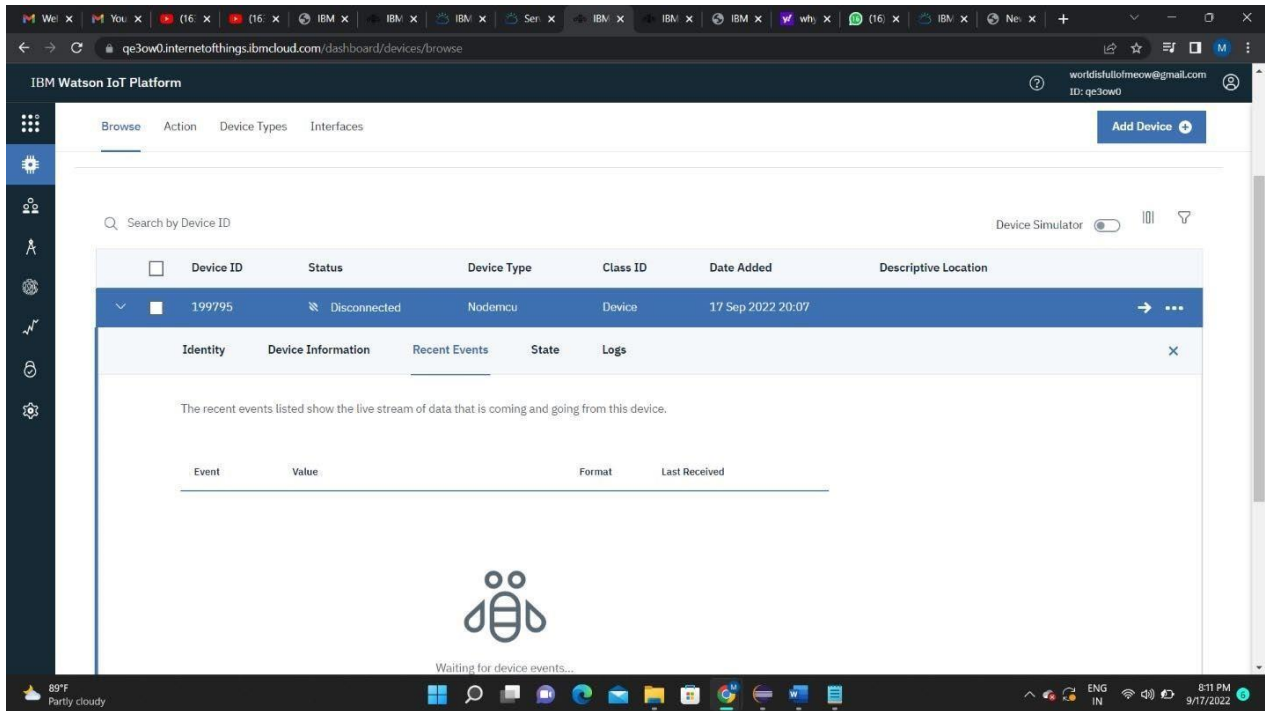
At the bottom of the modal, it indicates 'Items per page 50' and '1 of 1 page'.

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

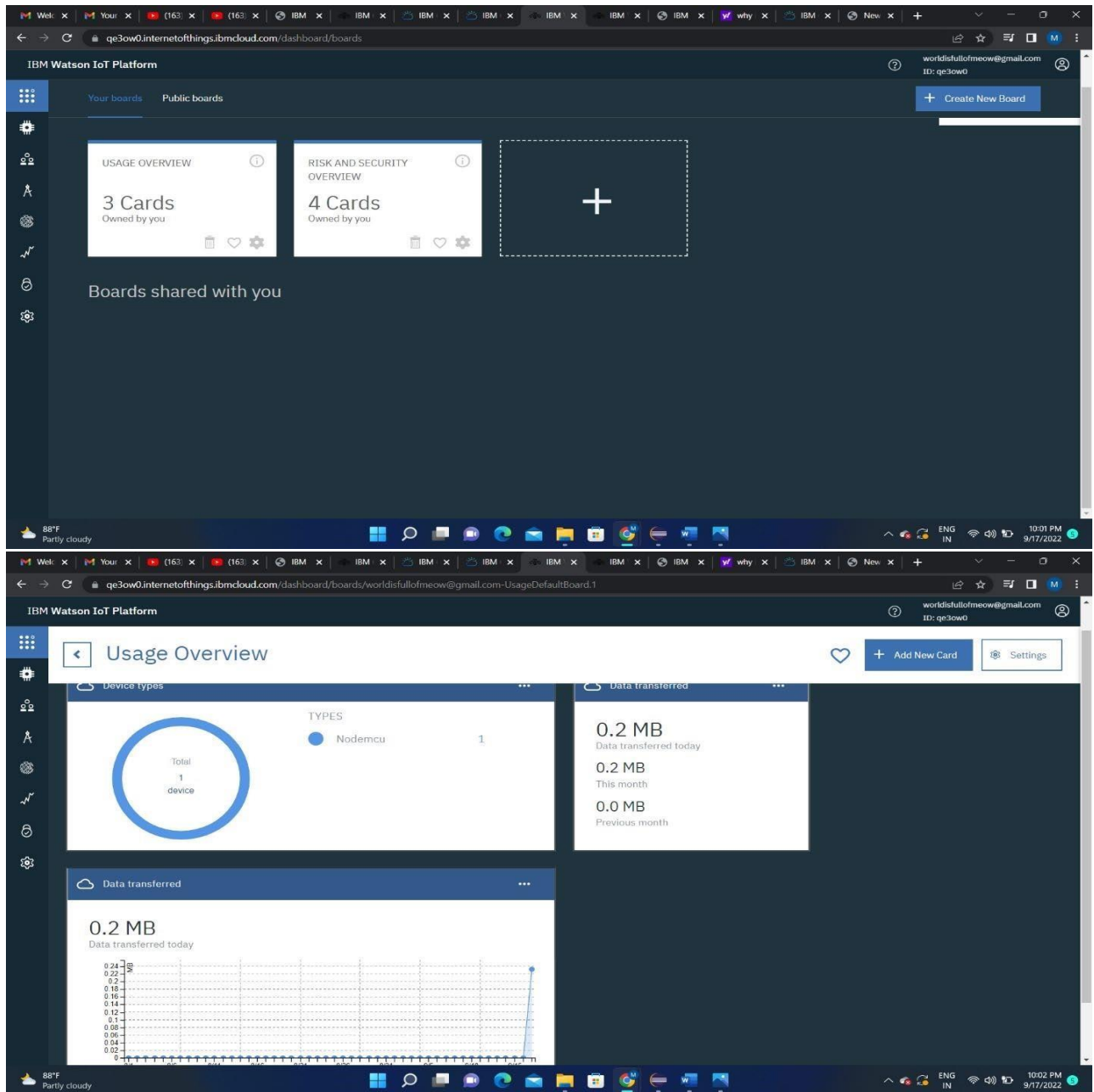
The screenshot shows the IBM Watson IoT Platform dashboard with the 'Device Drilldown - 199795' page. The left sidebar lists various sections: 'Device Credentials', 'Connection Information', 'Recent Events', 'State', 'Device Information', 'Metadata', 'Diagnostics', 'Connection Logs', and 'Device Actions'. The main content area displays the 'Device Credentials' section, which includes a warning: 'Authentication tokens are non-recoverable. If you find out how to add these credentials to your device'. A Notepad window titled 'ibmdet - Notepad' is open, displaying the following information:

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

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. The Boards will display card for the project.



**RESULT:**

An IBM Watson cloud for IoT and a device is created .