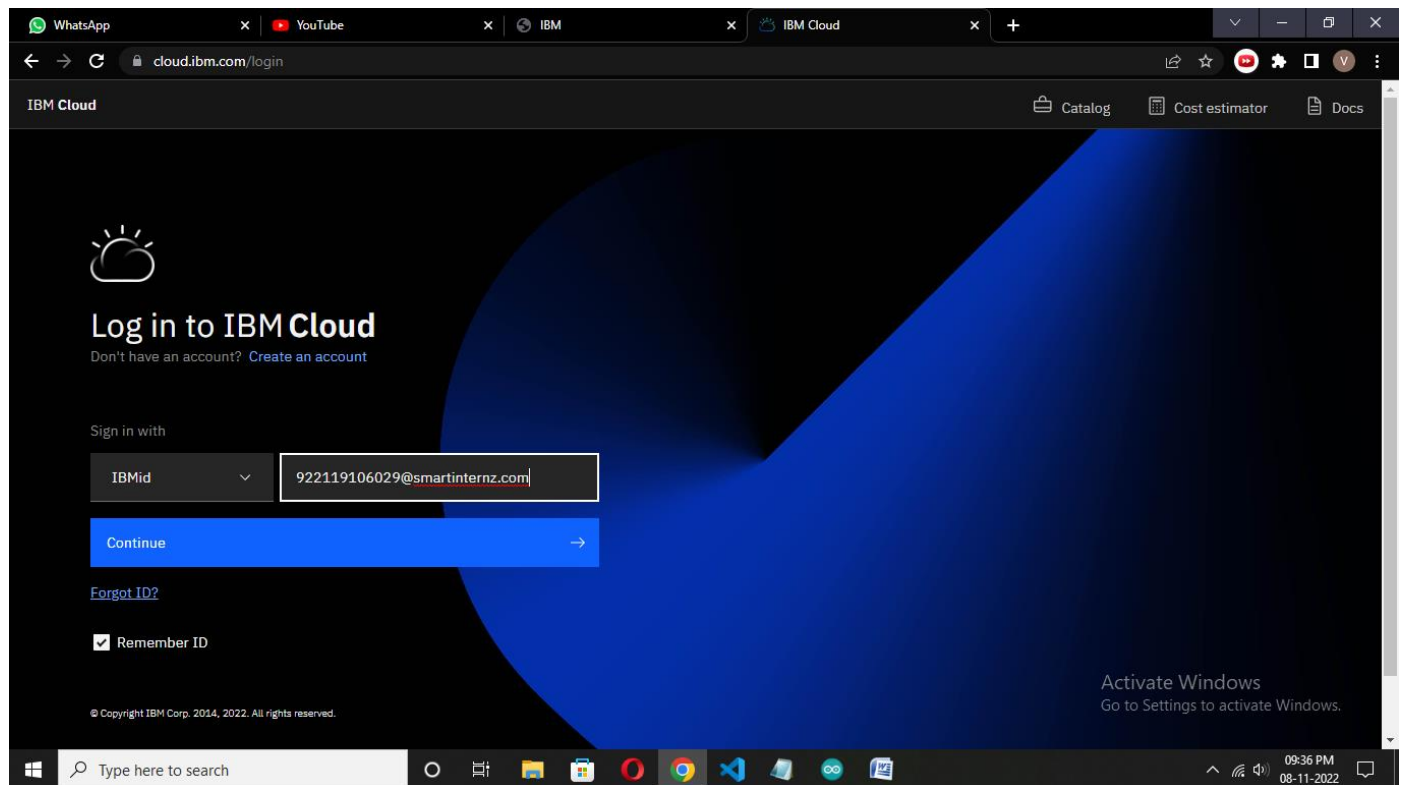


Create And Configure IBM Cloud Service Create IBM Watson IoT Platform And Device

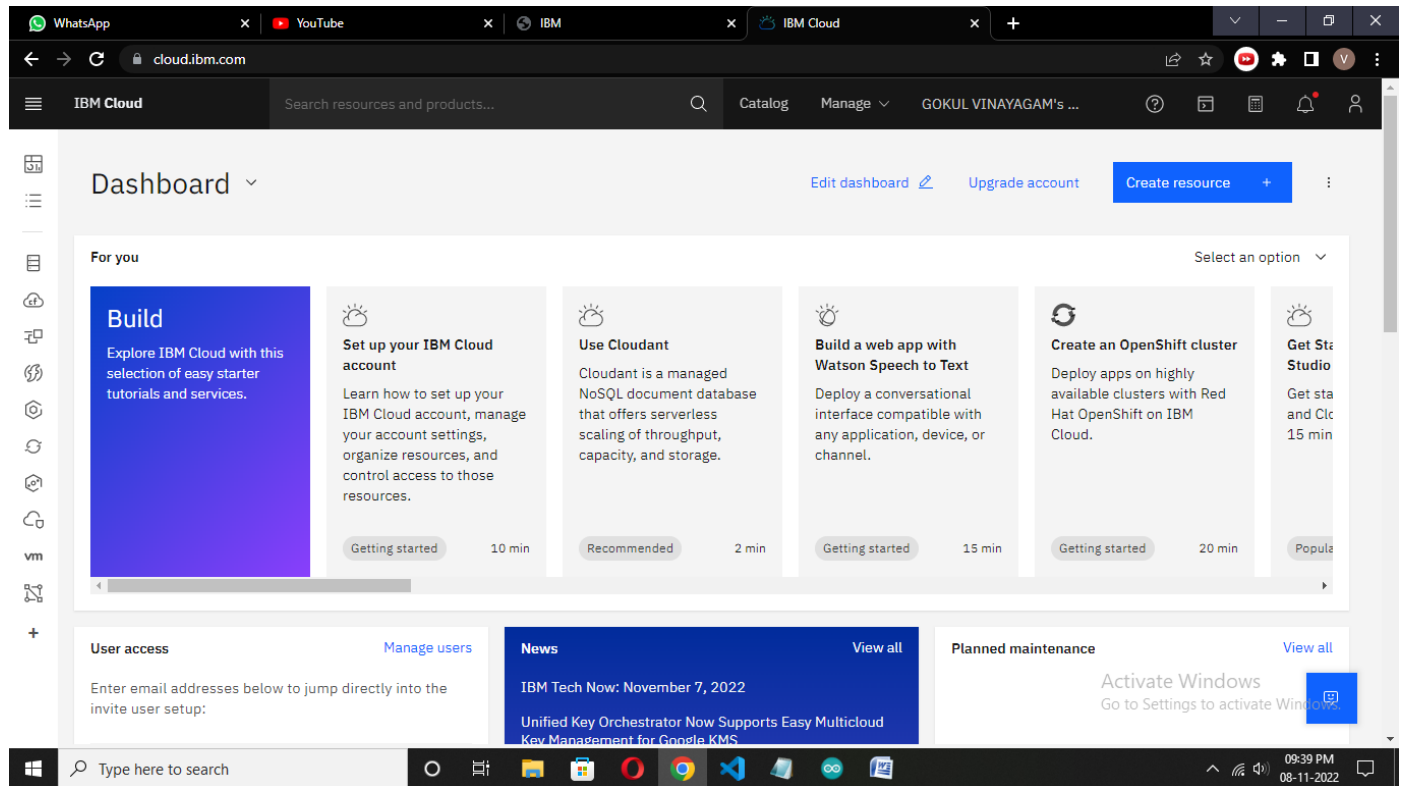
Date	08 November2022
Team ID	PNT2022TMID33201
Project Name	IoT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	4 Marks

STEPS

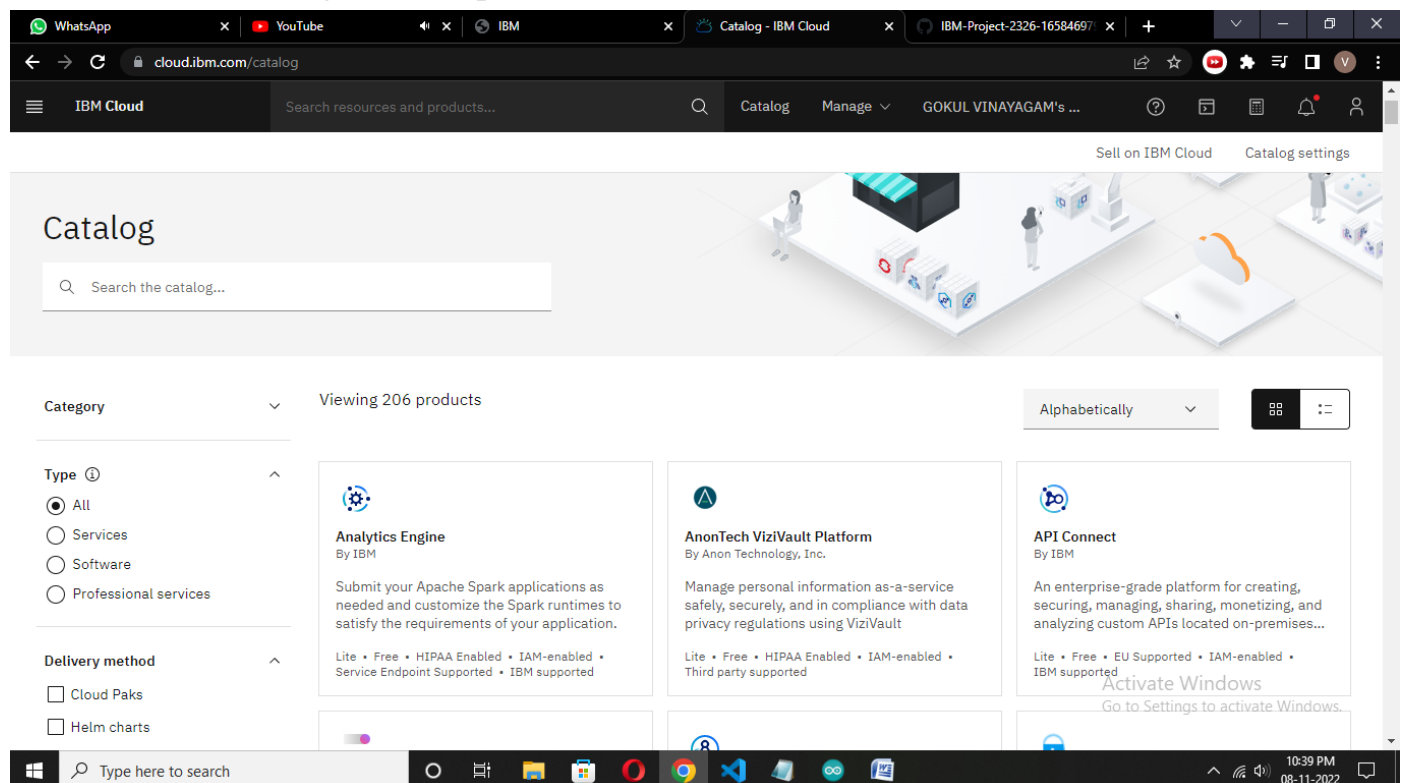
1. Firstly create an IBM cloud account with IBMid and password



2. Home page of IBM cloud



3. Click on the catalog on the top



4. Click on IoT in the category mentioned

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

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 Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free

Summary

Internet of Things Platform **Free**

Location: London
Plan: Lite
Service name: Internet of Things Platform-hq
Resource group: Default

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

Create

Activate Windows
Go to Settings to activate Windows.

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

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

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Select a location: London (eu-gb)

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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

Summary

Internet of Things Platform **Free**

Location: London
Plan: Lite
Service name: Internet of Things Platform-jy
Resource group: Default

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

Create

Activate Windows
Go to Settings to activate Windows.

Configure your resource

Service name: Internet of Things Platform-jy

Select a resource group: Default

Tags: Examples: env:dev, version-1

Access management tags: Examples: access:dev, proj:version-1

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.

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform. The page is divided into several sections:

- Internet of Things**: A sidebar menu with options like Compliance, IAM-enabled, Location (Frankfurt, London, Dallas, Washington DC), and Related links (Docs, Terms).
- Plan**: A table with columns for Plan, Features, and Pricing. The 'Lite' plan is selected, showing features like up to 500 registered devices and 200 MB of data metric. The pricing is 'Free'.
- Configure your resource**: A section with input fields for 'Service name' (Internet of Things Platform-jy), 'Select a resource group' (Default), 'Tags' (Examples: env:dev, version-1), and 'Access management tags' (Examples: access:dev, proj:version-1).
- Summary**: A section on the right showing the service name, location, plan, and resource group. It includes a checkbox for 'I have read and agree to the following license agreements:' and a 'Create' button.

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform, specifically the 'Create' step. The page is divided into several sections:

- Internet of Things Platform**: A header section with 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.'
- Create**: A section with a 'Select a location' dropdown (London (eu-gb)) and a 'Select a pricing plan' dropdown (Lite). Below this is a table with columns for Plan, Features, and Pricing. The 'Lite' plan is selected, showing features like up to 500 registered devices and 200 MB of data metric. The pricing is 'Free'.
- Summary**: A section on the right showing the service name, location, plan, and resource group. It includes a checkbox for 'I have read and agree to the following license agreements:' and a 'Creating...' button.

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)

Resource list / Internet of Things Platform-jy 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

Non-Production

The Non-Production service plan is a full-featured, fully-integrated offering that enables

Production

The Production service is a fully managed SaaS offering that enables you to manage and analyze

Resource list / Internet of Things Platform-jy 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

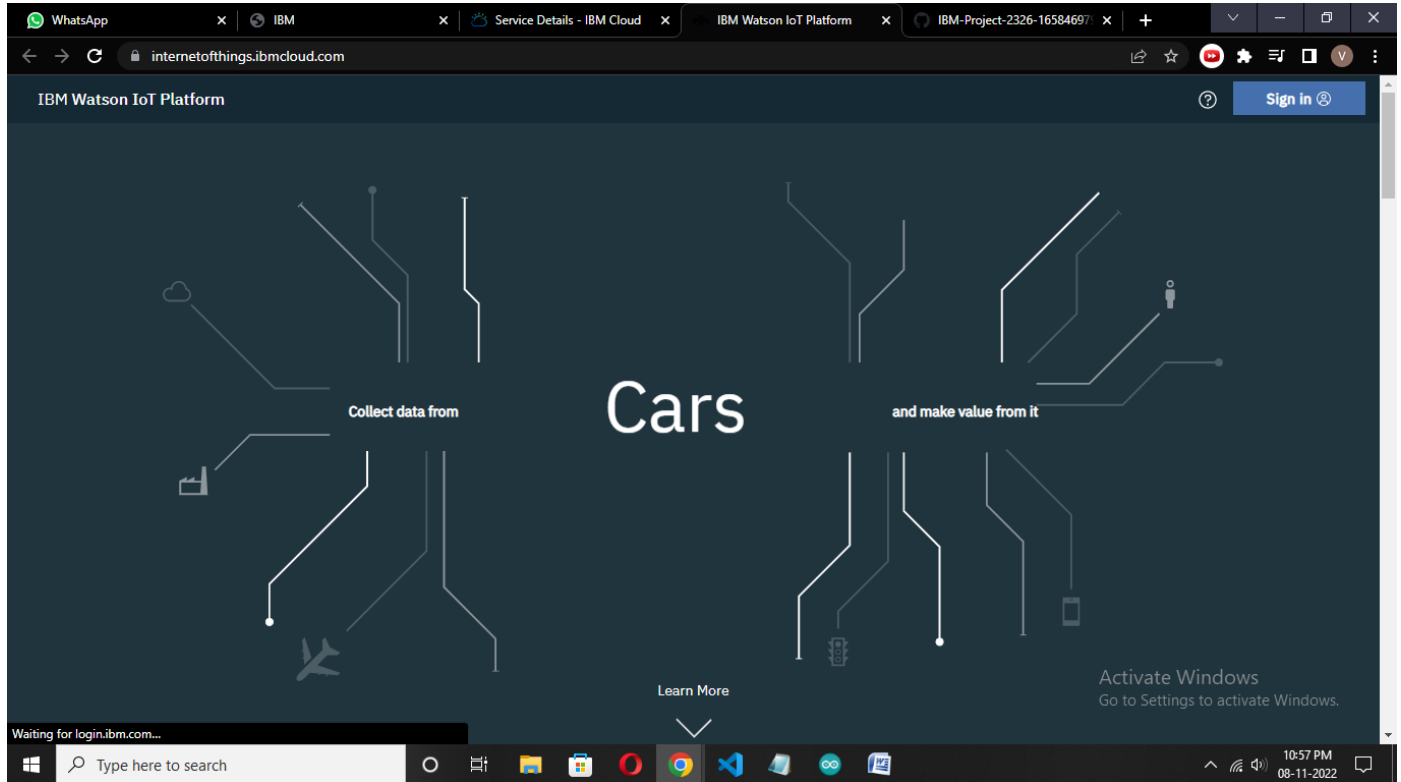
N/A

Lite plan services are deleted after 30 days of inactivity.

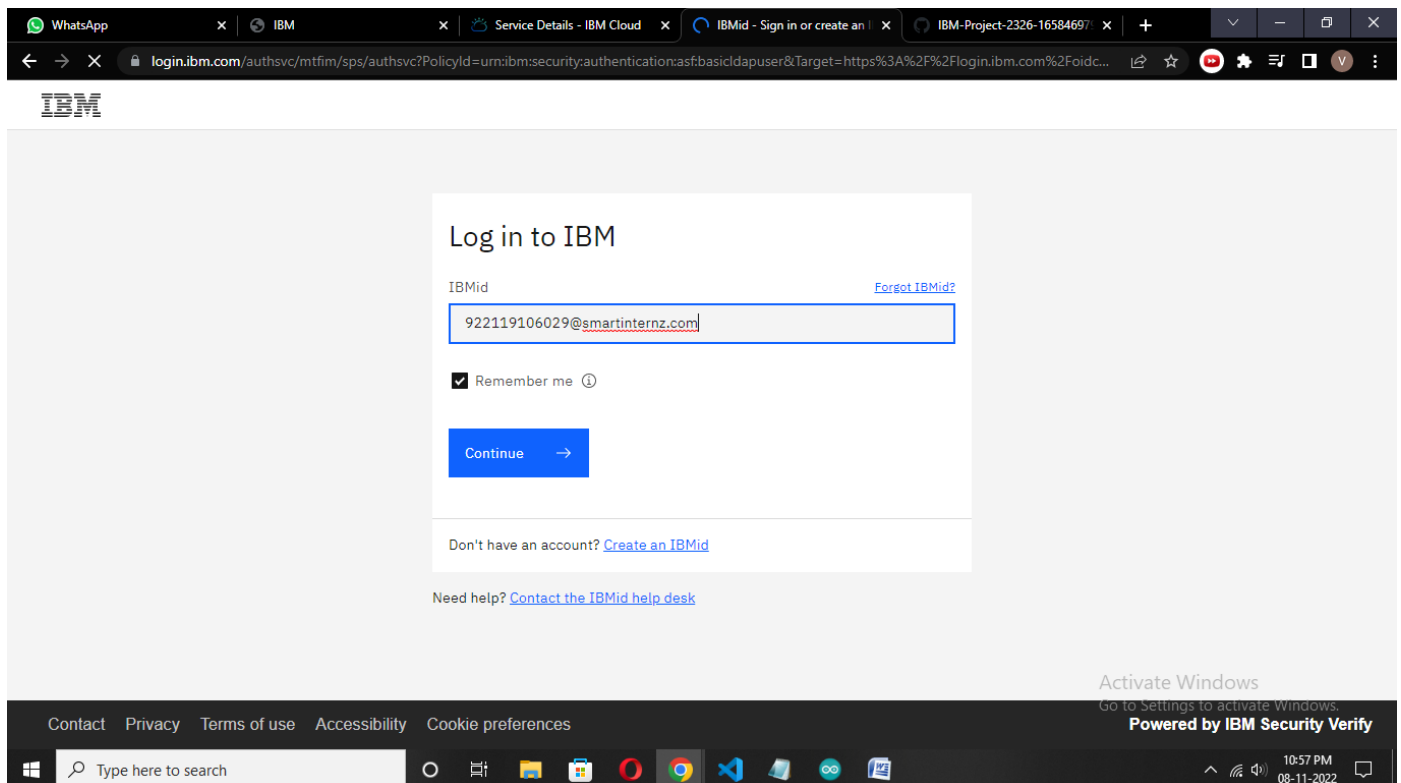
Change pricing plan

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

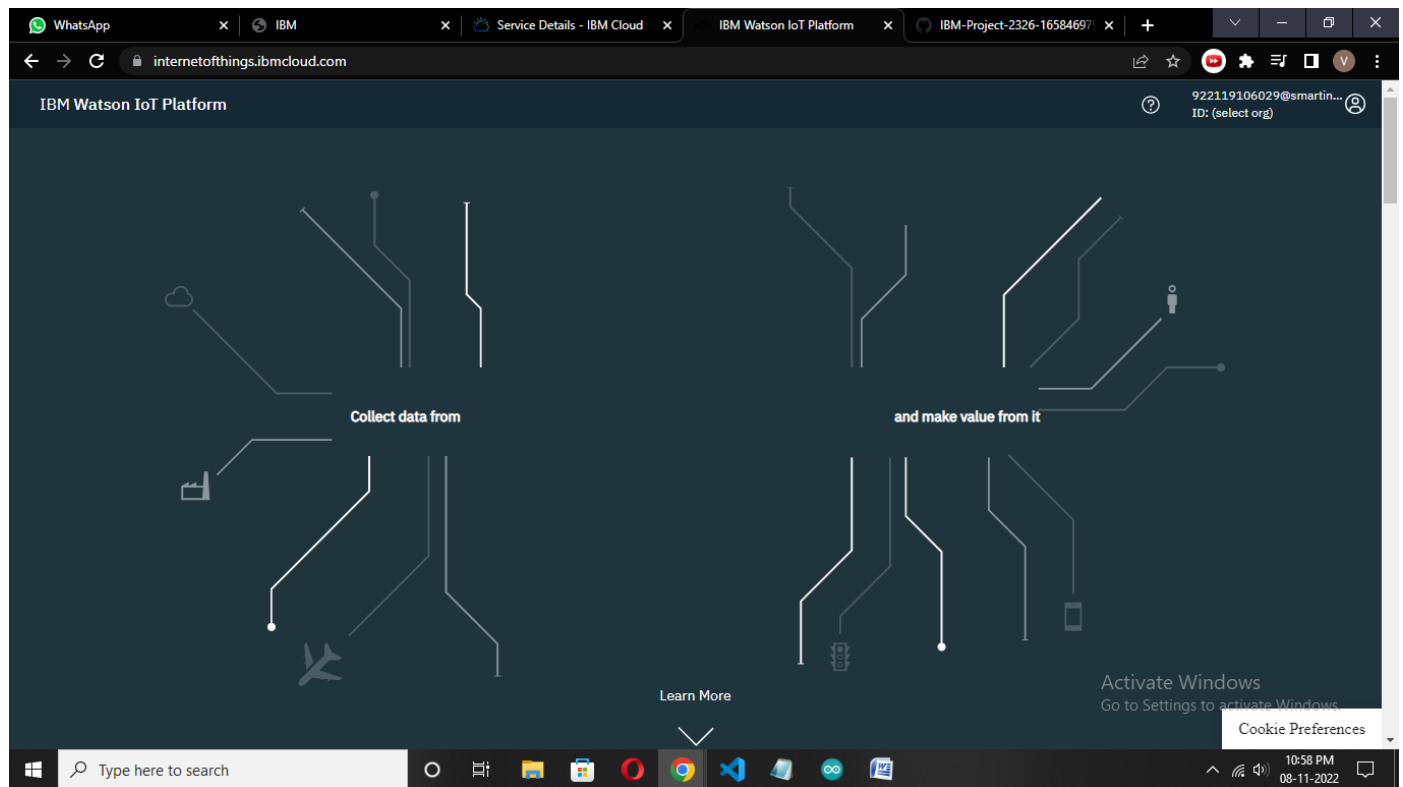
8. Clicking on the launch button in the manage tab, it will open to this



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



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

IBM Watson IoT Platform

Browse

+ Add 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	
4 results						
<input type="checkbox"/>	922119106029@smartinternz...	GOKUL VINAYAGAM	Operator	-	-	
<input type="checkbox"/>	922119106031@smartinternz...	HARI PRAKASH	Developer	GOKUL VINAYAGAM	-	
<input type="checkbox"/>	922119106033@smartinternz...	IJASH MOHAMED	Reader	GOKUL VINAYAGAM	-	
<input type="checkbox"/>	922119106035@smartinternz...	JEYAKANTHAN	Administrator	GOKUL VINAYAGAM	-	

Activate Windows
Go to Settings to activate Windows.

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

IBM Watson IoT Platform

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](#).

<input type="checkbox"/>	Key	Description	Role	Expires	
0 results					

There are no API Keys

Generate API Key

Activate Windows
Go to Settings to activate Windows.

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

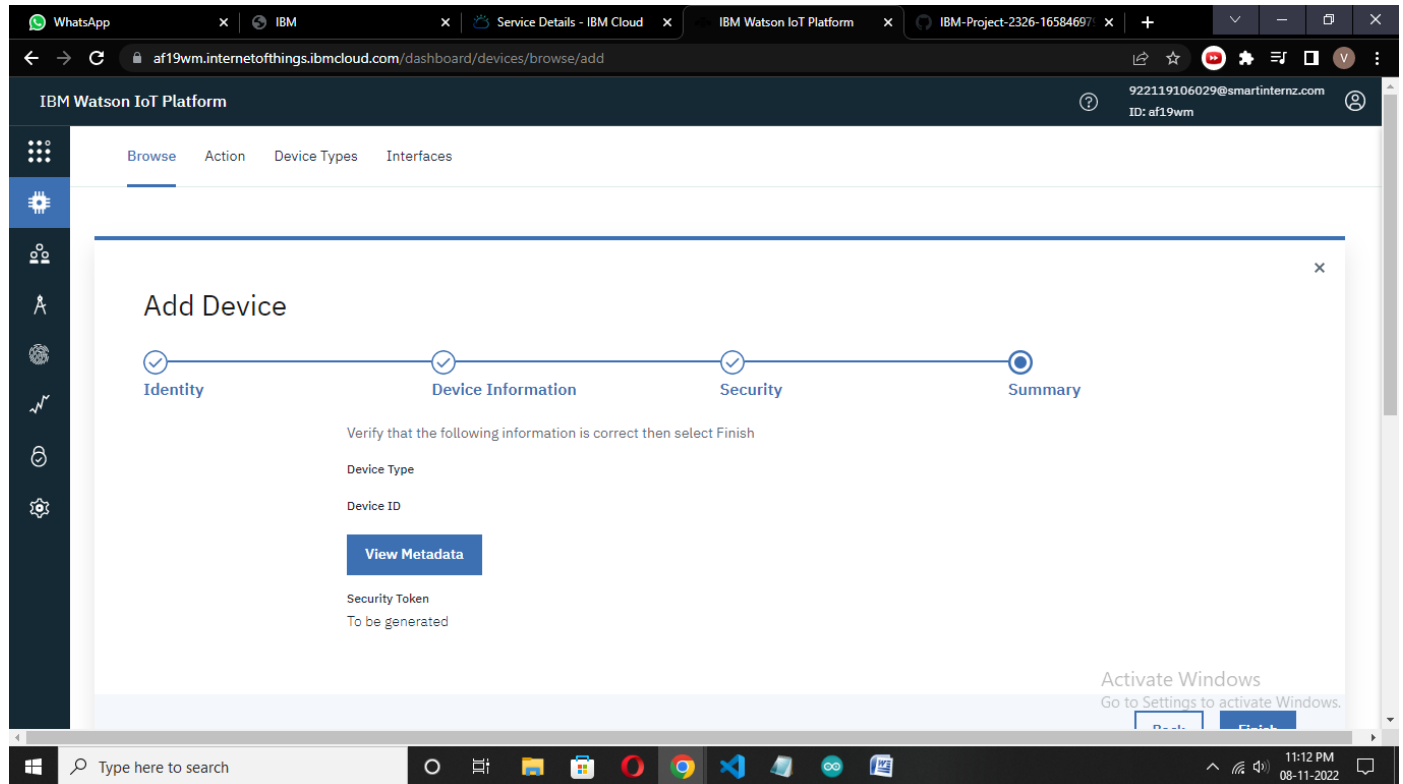
The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The wizard is a multi-step process with four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is currently active, indicated by a blue circle and a checkmark. Below the step indicator, there is 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 a dropdown menu showing 'Select or create a device type...' and 'Device ID' with a text input field showing 'Enter Device ID'. At the bottom right of the wizard, there are 'Cancel' and 'Next' buttons. The background shows the 'Browse Devices' page with a sidebar containing various icons. The browser's address bar shows the URL 'af19wm.internetofthings.ibmcloud.com/dashboard/devices/browse/add'. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The user's profile information is visible in the top right corner, showing the email '922119106029@smartinternz.com' and the ID 'af19wm'.

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

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, specifically the 'Device Information' step. The 'Device Information' step is now active, indicated by a blue circle and a checkmark. Below the step indicator, there is a text prompt: 'You can modify the default device information and enter more information about the device for identification purposes.' There are several input fields for device metadata, arranged in two columns. The left column includes 'Serial Number', 'Model', 'Description', and 'Hardware Version'. The right column includes 'Manufacturer', 'Device Class', 'Firmware Version', and 'Descriptive Location'. Each field has a text input box with a placeholder text like 'Enter Serial Number'. At the bottom left of the wizard, there is an 'Add Metadata +' button. The background shows the 'Add Device' page with a sidebar containing various icons. The browser's address bar shows the URL 'af19wm.internetofthings.ibmcloud.com/dashboard/devices/browse/add'. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The user's profile information is visible in the top right corner, showing the email '922119106029@smartinternz.com' and the ID 'af19wm'.

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

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 non-recoverable 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.

IBM Watson IoT Platform

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
12345	Disconnected	1	Device	8 Nov 2022 23:14

Items per page 50 | 1-1 of 1 item

1 of 1 page

Activate Windows
Go to Settings to activate Windows.

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

IBM Watson IoT Platform

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.

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Device Simulator

Device ID	Status	Device Type	Class ID	Date Added
12345	Disconnected	1	Device	8 Nov 2022 23:14

Items per page 50 | 1-1 of 1 item

1 of 1 page

Activate Windows
Go to Settings to activate Windows.

Identity Device Information Recent Events State Logs

Device ID 12345

Device Type 1

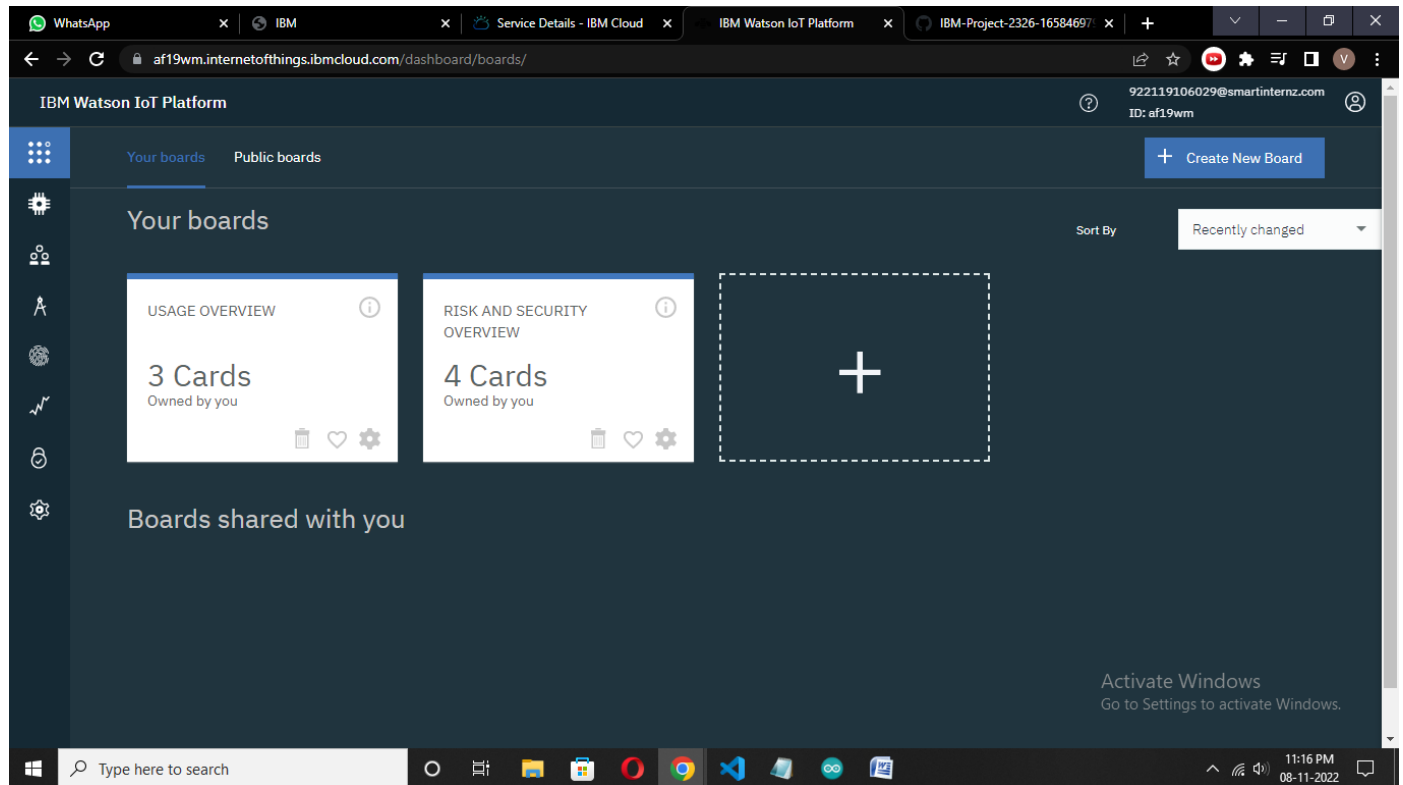
Date Added 8 Nov 2022 23:14

Added By 922119106029@smartinternz.com

Connection Status Disconnected

In a similar way, we can create n 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 : PNT2022TMID33201

TEAM LEADER : M.JEYAKANTHAN

TEAM MEMBER 1: M.GOKUL VINAYAGAM

TEAM MEMBER 2: M.HARI PRAKASH

TEAM MEMBER 3: I.IJASH MOHAMED

TEAM SIZE :4

INDUSTRY MENTOR : Mr.I.L.BARADWAJ

FACULTY MENTOR: Mr.K.VINOTH KUMAR