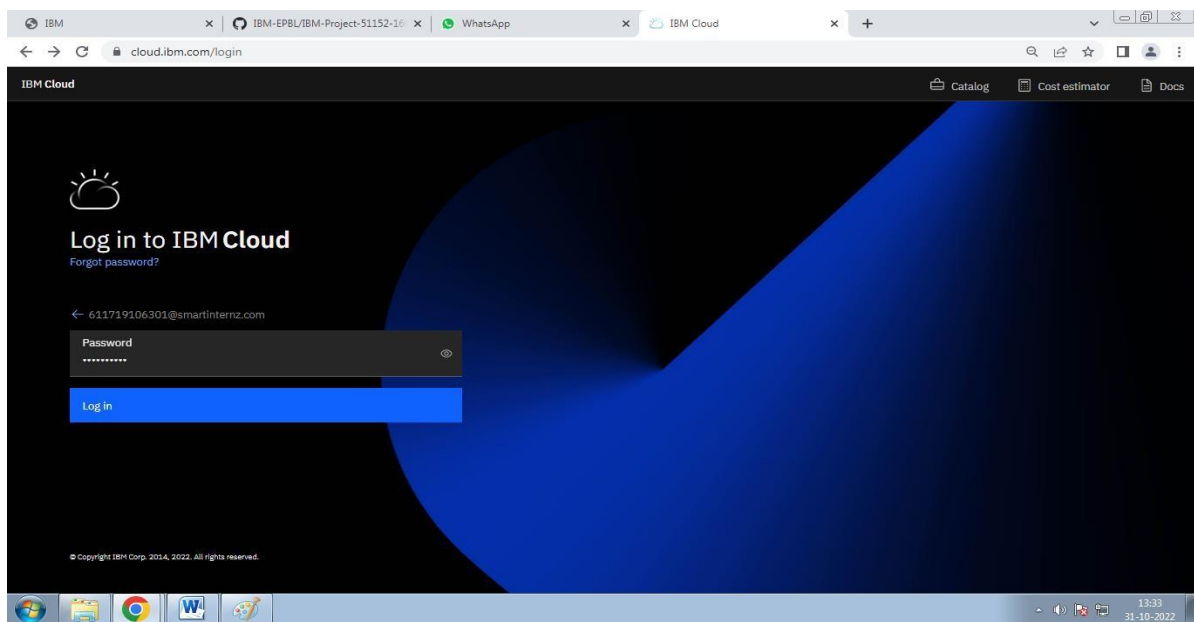


# Create IBM Watson IOT Platform and Device

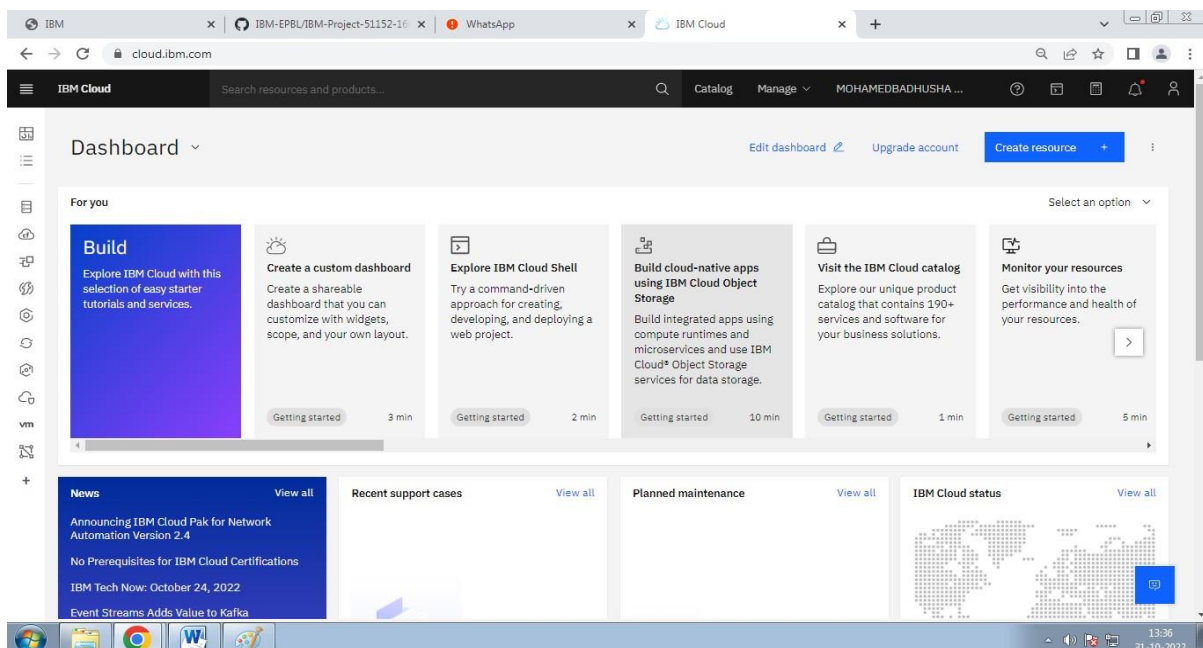
Date	22-10-2022
Team ID	PNT2022TMID38953
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

## STEPS:

### 1. First log-in to IBM cloud account with IBM ID and Password



### 2. Home page of IBM cloud



### 3. Click on the catalog and search Internet of Things

The screenshot shows the IBM Cloud Catalog interface. The main heading is "Internet of Things Platform". Below it, a description states: "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, showing a "Select a location" dropdown menu with "Frankfurt (eu-de)" selected. Below this, a "Select a pricing plan" section displays a table of plans.

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

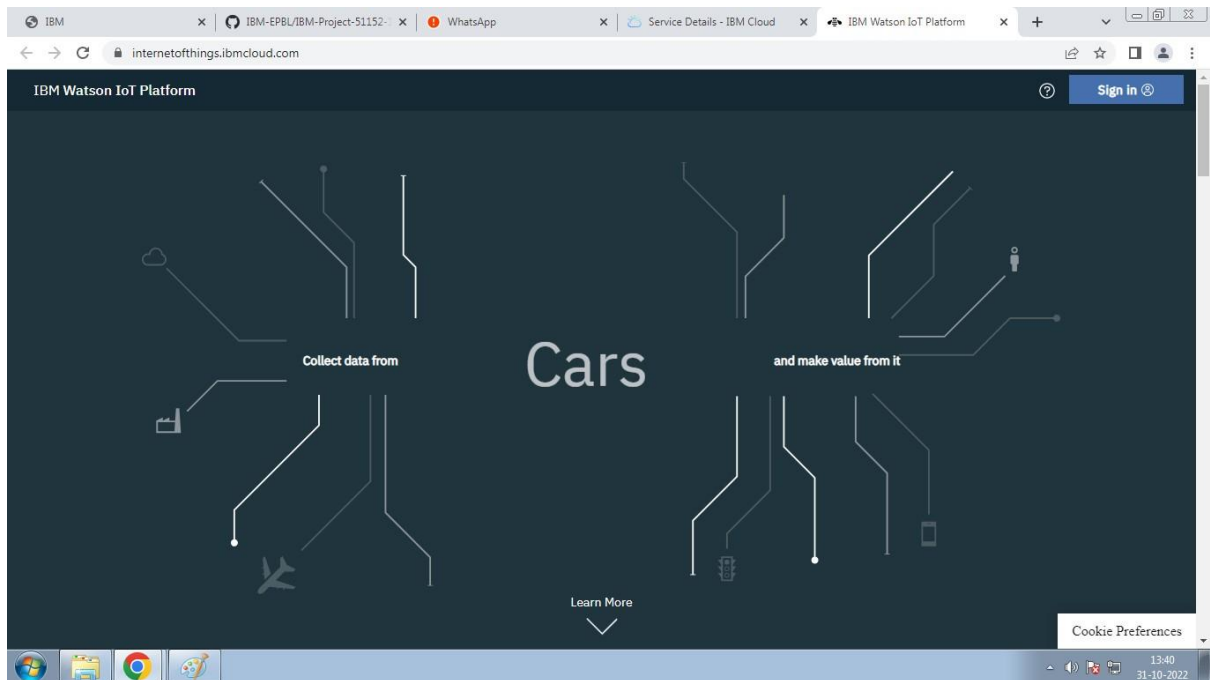
On the right side, a "Summary" panel shows the service details: "Internet of Things Platform", "Free", "Location: Frankfurt", "Plan: Lite", "Service name: Internet of Things Platform-fh", and "Resource group: Default". A warning message states: "Existing Lite plan instance. You can have only 1 Lite plan 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." Below this, there is a checkbox for "I have read and agree to the following license agreements:" with a "Terms" link, and buttons for "Create" and "Add to estimate".

### 4. Next click on the Launch Button

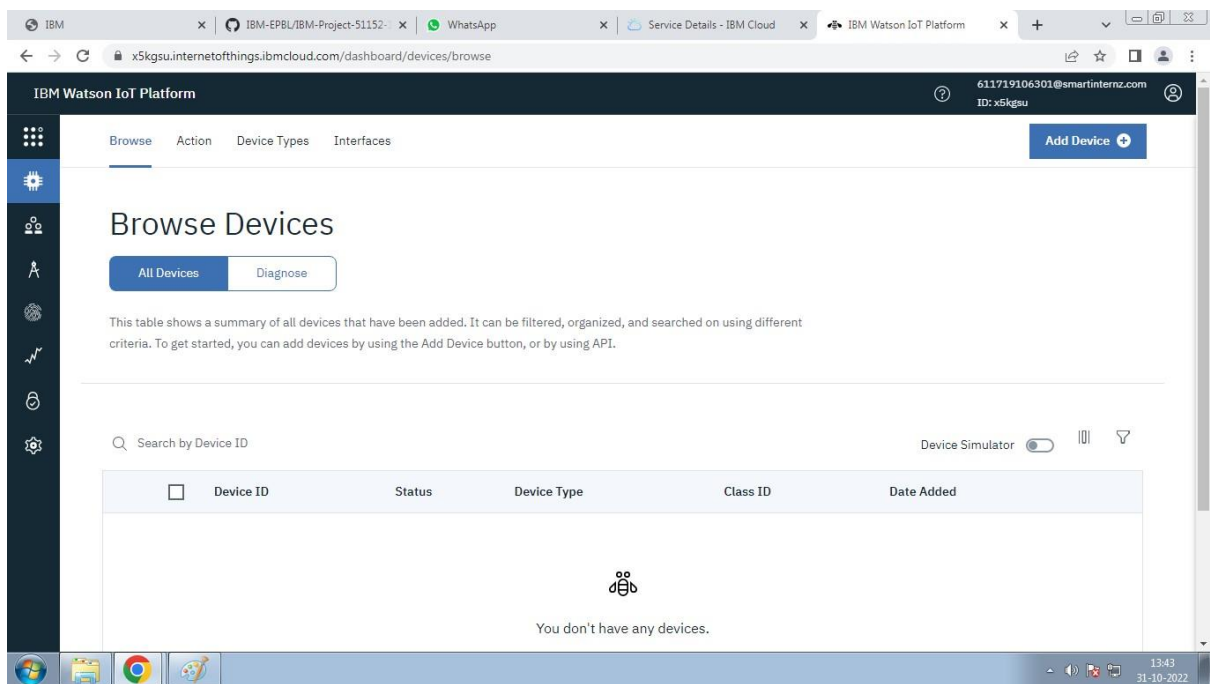
The screenshot shows the IBM Cloud Service Details page for the "Internet of Things Platform-4g". The page is titled "Let's get started with IBM Watson IoT Platform" and includes a "Launch" button. Below this, a section titled "Ready for the next level?" introduces the "IBM Watson IoT Platform Journey". The journey is divided into three stages: "Lite", "Non-Production", and "Production".

- Lite**: The Lite service plan provides a lightweight development environment to get you started with the connectivity capabilities of Watson IoT Platform. It is 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. It 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. It includes IBM Service & Support.

## 5. Sign in IBM Watson IoT Platform



## 6. Home page of IBM Watson IoT Platform



## 7. Usage of Summary IBM Watson IoT Platform

The screenshot shows the 'Usage Summary' page in the IBM Watson IoT Platform. The page header includes the IBM logo and navigation tabs for 'IBM-EPBL/IBM-Project-51152', 'WhatsApp', 'Service Details - IBM Cloud', and 'IBM Watson IoT Platform'. The user's email '611719106301@smartinternz.com' and ID 'x5kgsu' are displayed in the top right. The main content area features a 'Usage Summary' section with two cards: 'THIS MONTH' and 'PREVIOUS MONTH', both showing '0 bytes' of data transferred. Below this is a 'Data Transferred' section with a date range selector set to '27/10/2022' and a status box indicating '0 Simulations running'. The left sidebar contains various icons for navigation, and the bottom of the screen shows a Windows taskbar with the time '13:47' and date '31-10-2022'.

## 8. Browse Members of IBM Watson IoT Platform

The screenshot shows the 'Browse Members' page in the IBM Watson IoT Platform. The page header is similar to the previous screenshot, with the user's email and ID displayed. The main content area features a 'Browse Members' section with a search bar labeled 'Type the member email to search for'. Below the search bar is a table with columns: 'Email Address', 'Name', 'Role', 'Added By', and 'Expires'. The table shows one result for the user '611719106301@smartinternz.com' with the role 'Administrator'. The bottom of the screen shows a Windows taskbar with the time '13:47' and date '31-10-2022'.

Email Address	Name	Role	Added By	Expires
611719106301@smartinternz.com	611719106301@smar...	Administrator	-	-

## 9. Browse API Keys of IBM Watson IoT Platform

IBM Watson IoT Platform

611719106301@smartinternz.com  
ID: x5kgsu

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](#).

<input type="checkbox"/>	Key	Description	Role	Expires	
1 result					
<input type="checkbox"/>	a-x5kgsu-0uempmbswg	API Key for the device simulator	Standard Application	-	

0 Simulations running

## 10. Browse Device of IBM Watson IoT Platform

IBM Watson IoT Platform

611719106301@smartinternz.com  
ID: x5kgsu

Add Device

### 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

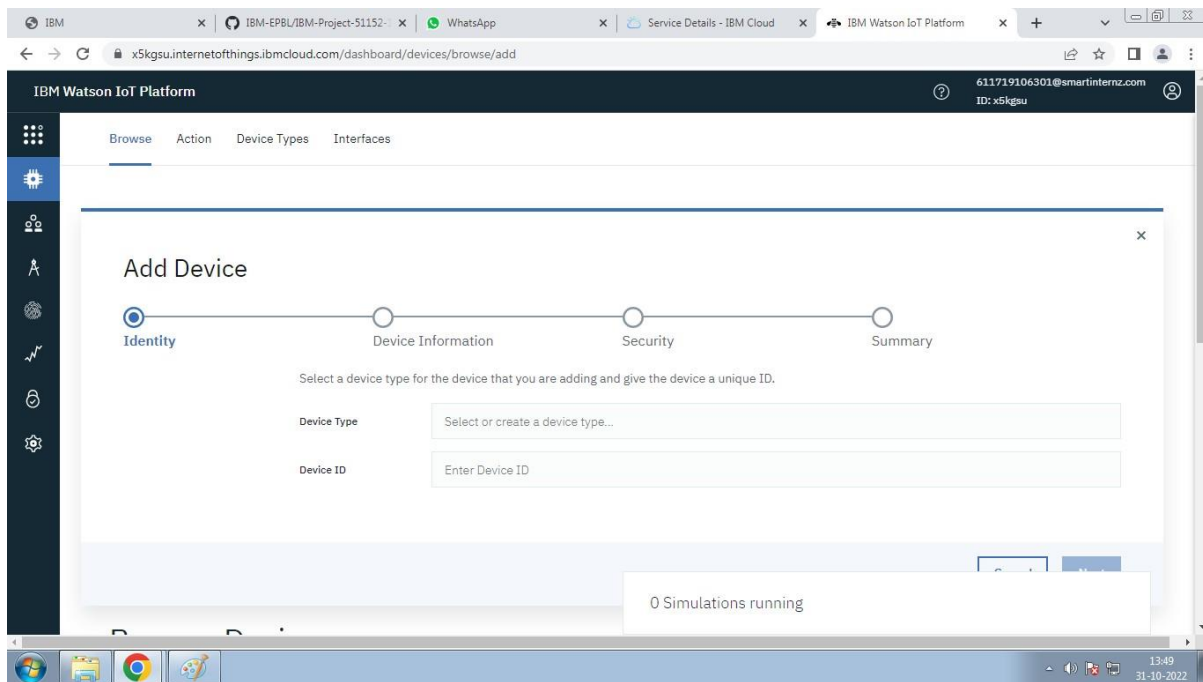
Device Simulator ☒

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added
--------------------------	-----------	--------	-------------	----------	------------

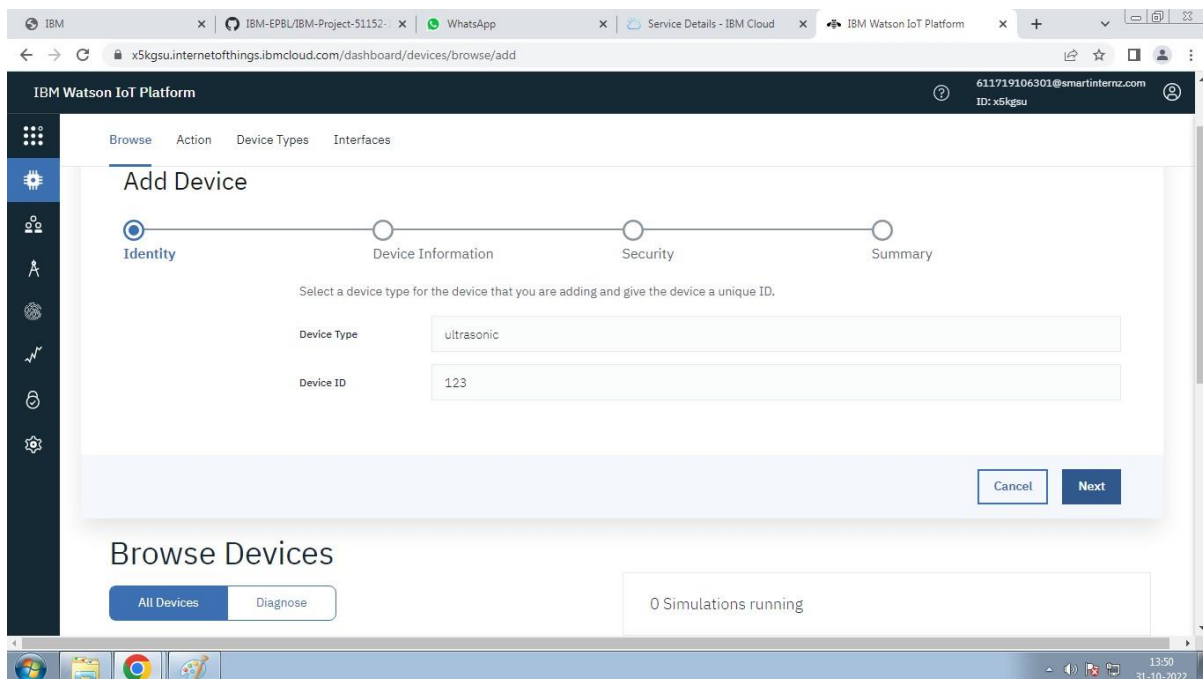
You don't have any devices yet

0 Simulations running

## 11. Click on Add Device Button



## 12. Enter the Device Type and Device ID



### 13. Can't Change the Device Information and Click Next Button

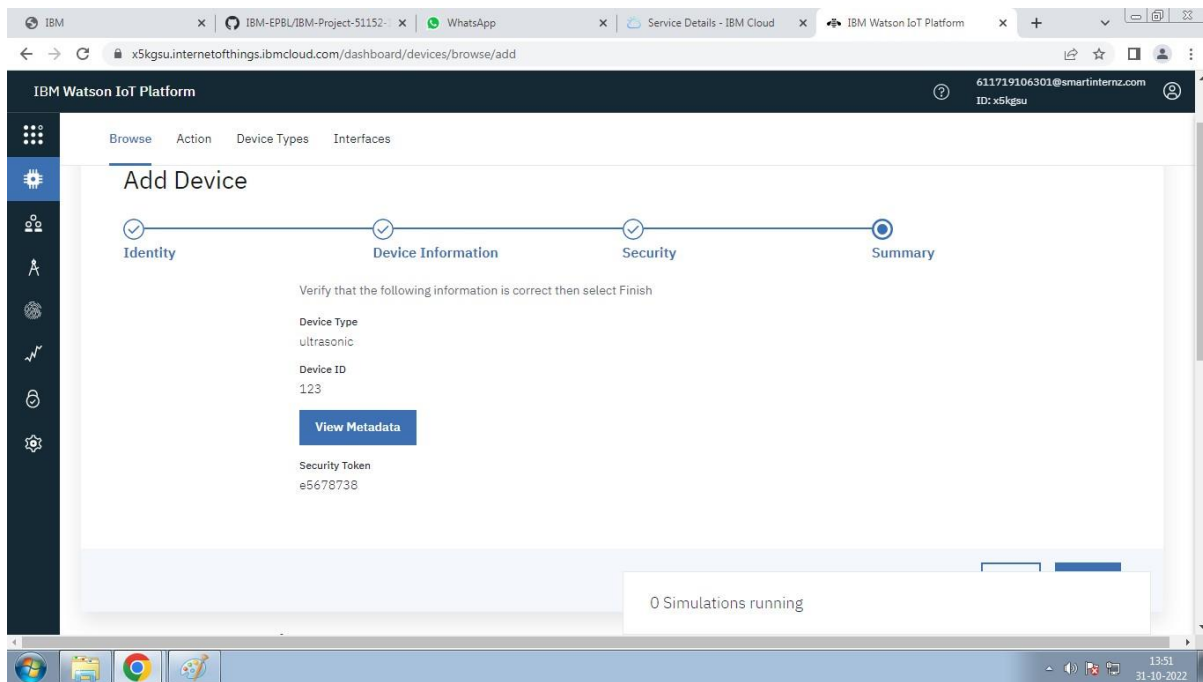
The screenshot shows the 'Add Device' page in the IBM Watson IoT Platform. The page has a dark blue header with the IBM logo and user information. A sidebar on the left contains icons for various functions. The main content area is titled 'Add Device' and features a progress bar with four steps: Identity, Device Information (current), Security, and Summary. Below the progress bar, a message states: 'You can modify the default device information and enter more information about the device for identification purposes.' The form contains several input fields: Serial Number, Model, Description, Hardware Version, Manufacturer, Device Class, Firmware Version, and Descriptive Location. Each field has a placeholder text 'Enter [field name]'. There is an 'Add Metadata' button with a plus icon. At the bottom right, it says '0 Simulations running'.

### 14. Enter the Authentication Code and Click Next Button

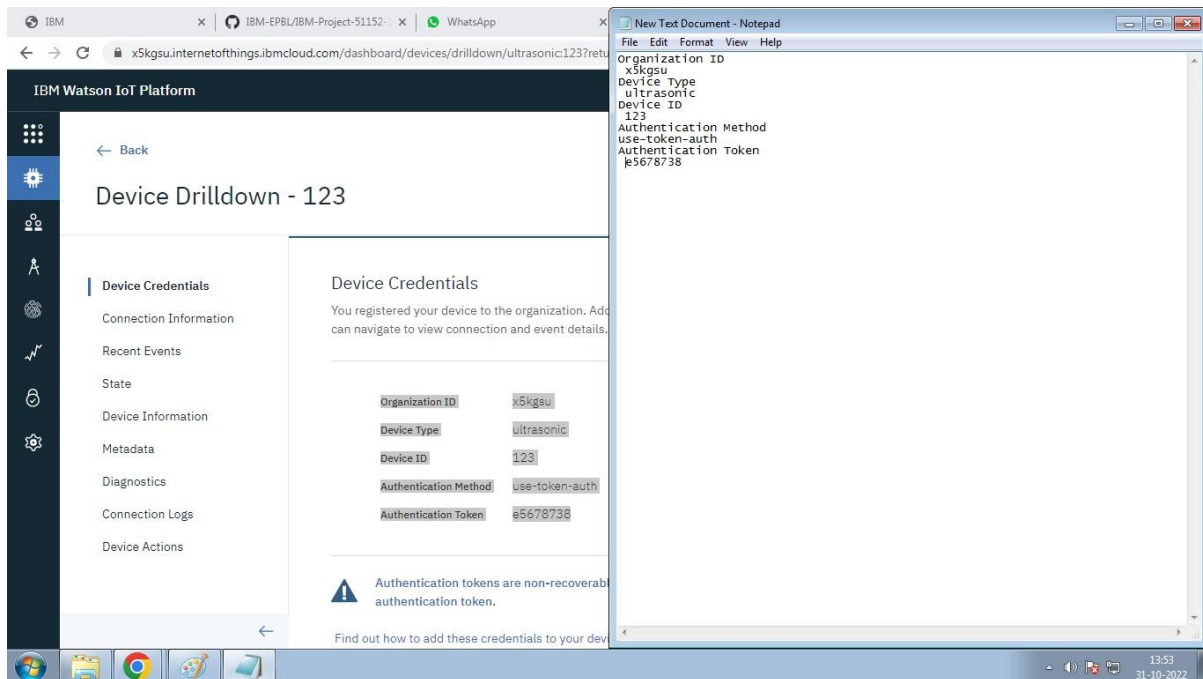
The screenshot shows the 'Add Device' page in the IBM Watson IoT Platform, specifically the authentication step. The progress bar indicates the current step is 'Authentication'. The main content area contains two columns of text. The left column says: 'Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphanumeric characters and symbols. The token is returned to you at the end of the device registration process.' The right column says: '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.' Below the text, there is an 'Authentication Token' input field with the value 'e5678738'. A tooltip is visible over the input field, stating: 'Make a note of the Authentication Token. Tokens cannot be recovered. Tokens are encrypted before being stored. Authentication token are encrypted before we store them.' At the bottom right, there are 'Back' and 'Next' buttons. The 'Browse Devices' link is visible at the bottom left, and '0 Simulations running' is at the bottom right.



## 15. View Summary



## 16. Save the Device information(Note Pad)





## 17. Successfully Created Device and Turn ON the Simulation Device

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Add Device

### 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
123	Disconnected	ultrasonic	Device	31 Oct 2022 13:52

Items per page 50 | 1-1 of 1 item

1 of 1 page

0 Simulations running

## 18. Click New Cards

IBM Watson IoT Platform

Your boards Public boards

Create New Board

USAGE OVERVIEW

3 Cards

Owned by you

RISK AND SECURITY OVERVIEW

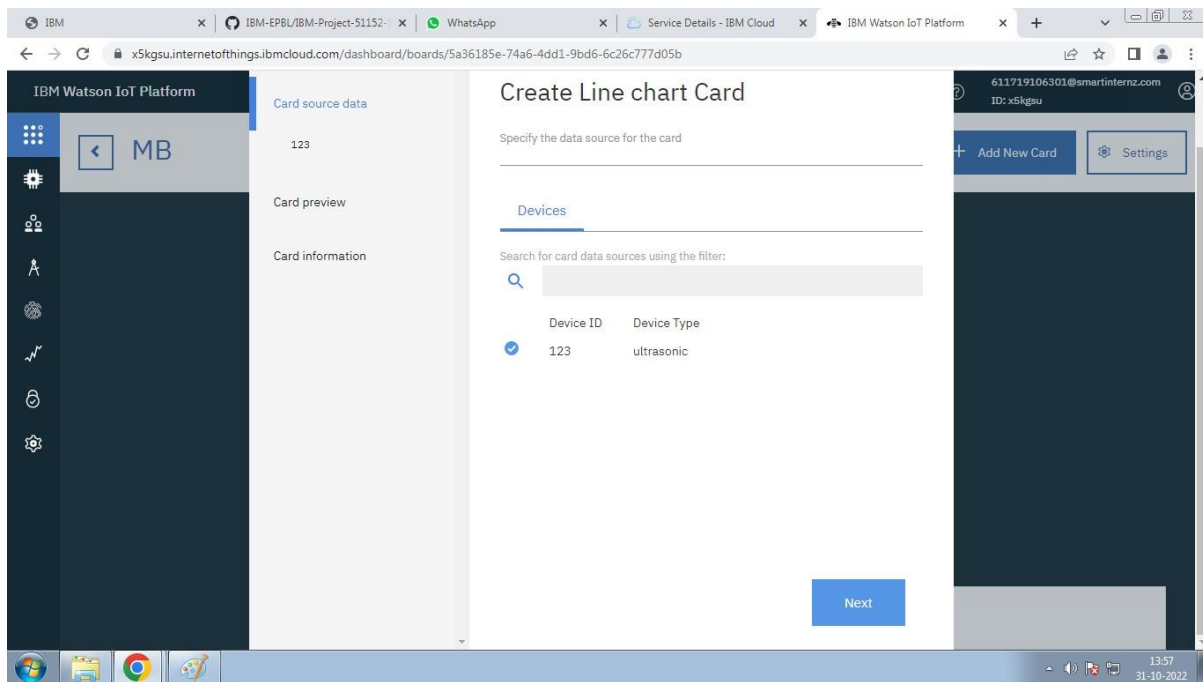
4 Cards

Owned by you

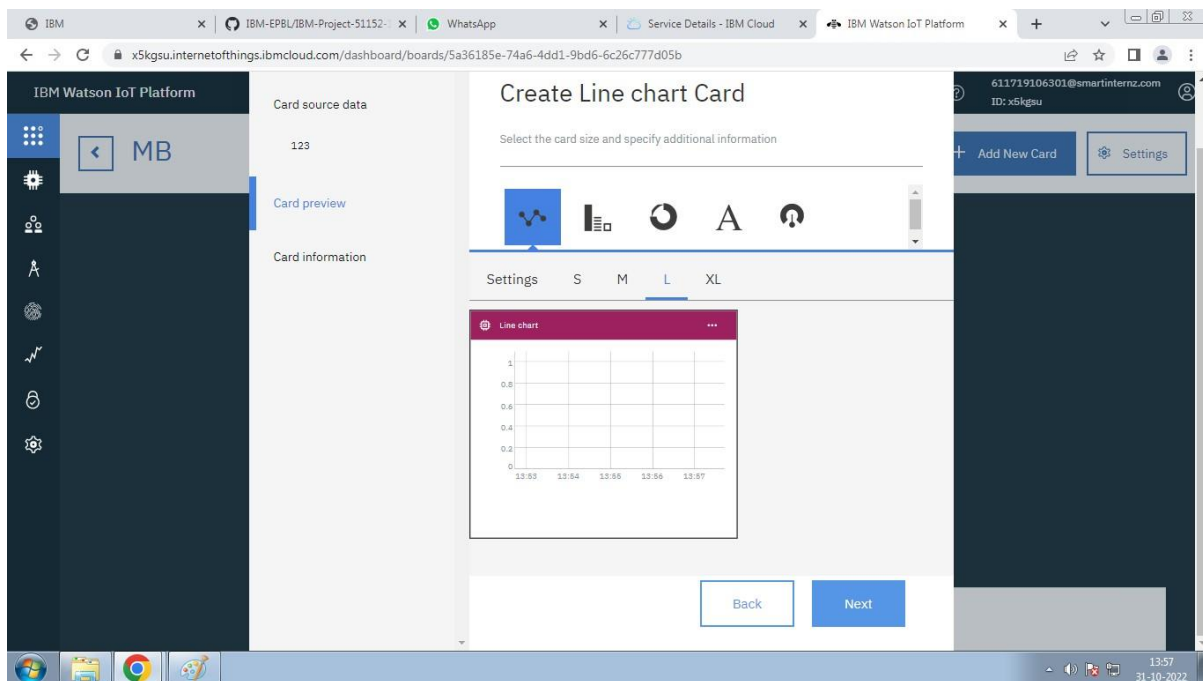
Boards shared with you

0 Simulations running

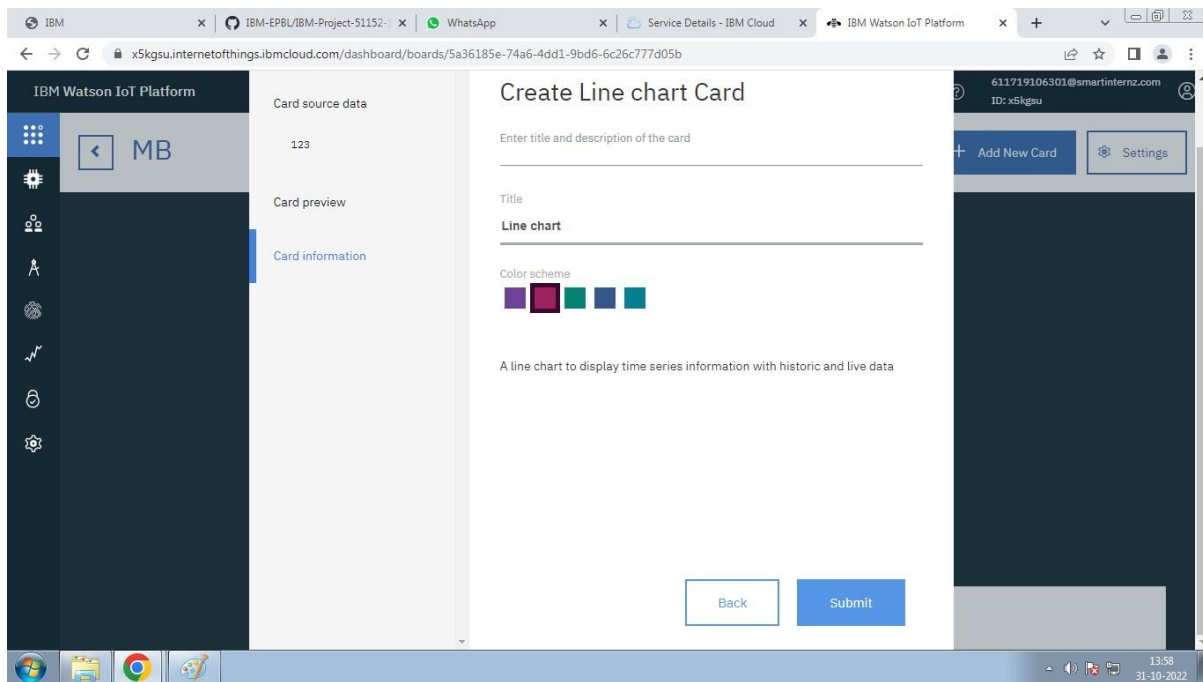
## 19. Create Line Chart Card and Select Device ID



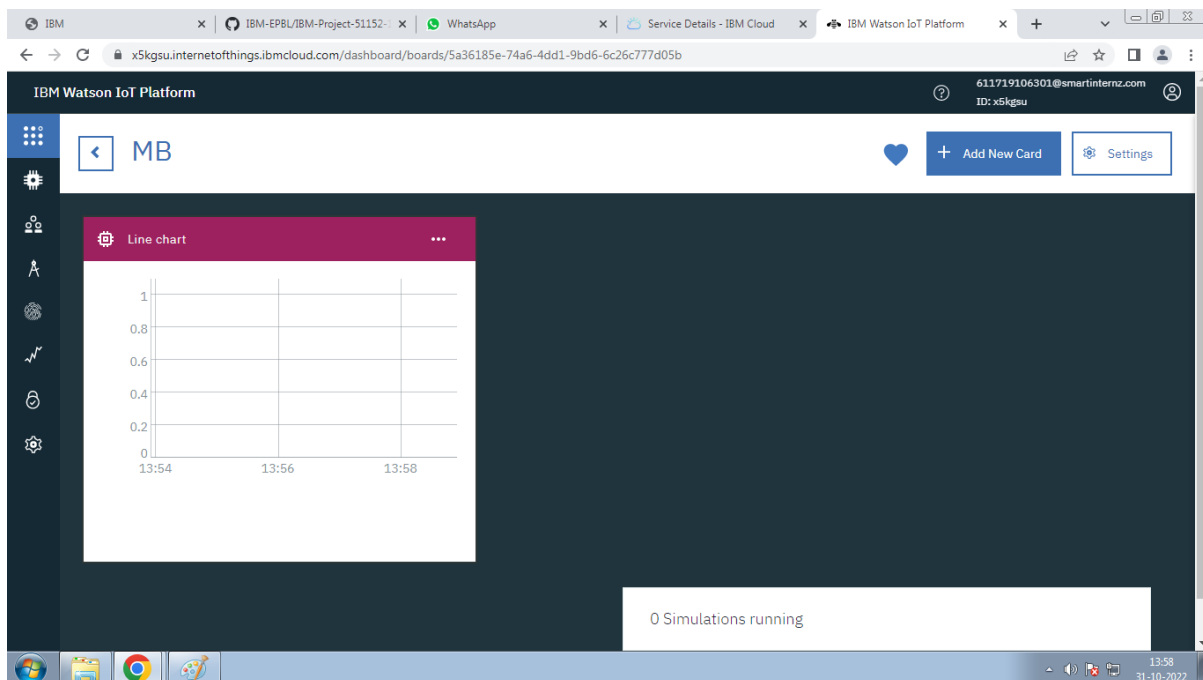
## 20. Click Card Design and Select the Size of Chart



## 21. Select the Colour



## 22. Successfully Created the Line Chart



## Result:

An IBM Watson Cloud for IoT and a Line Chart