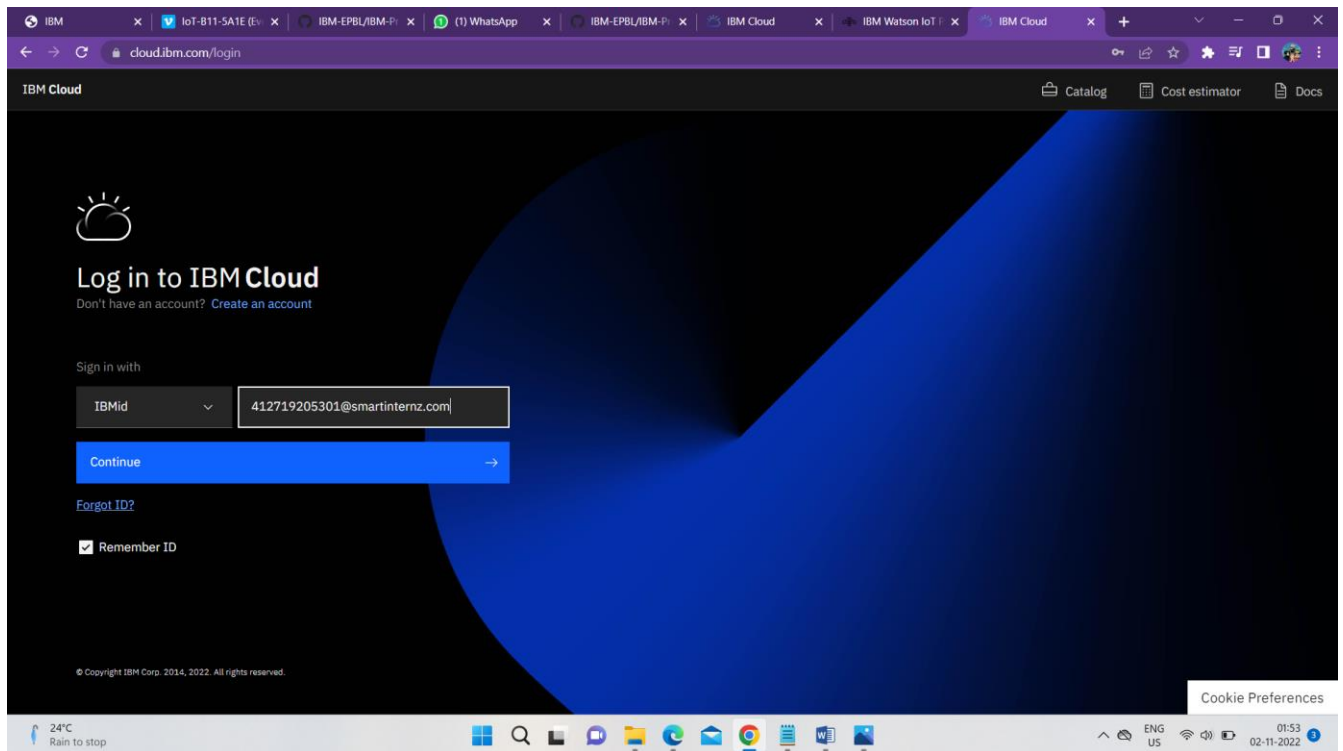


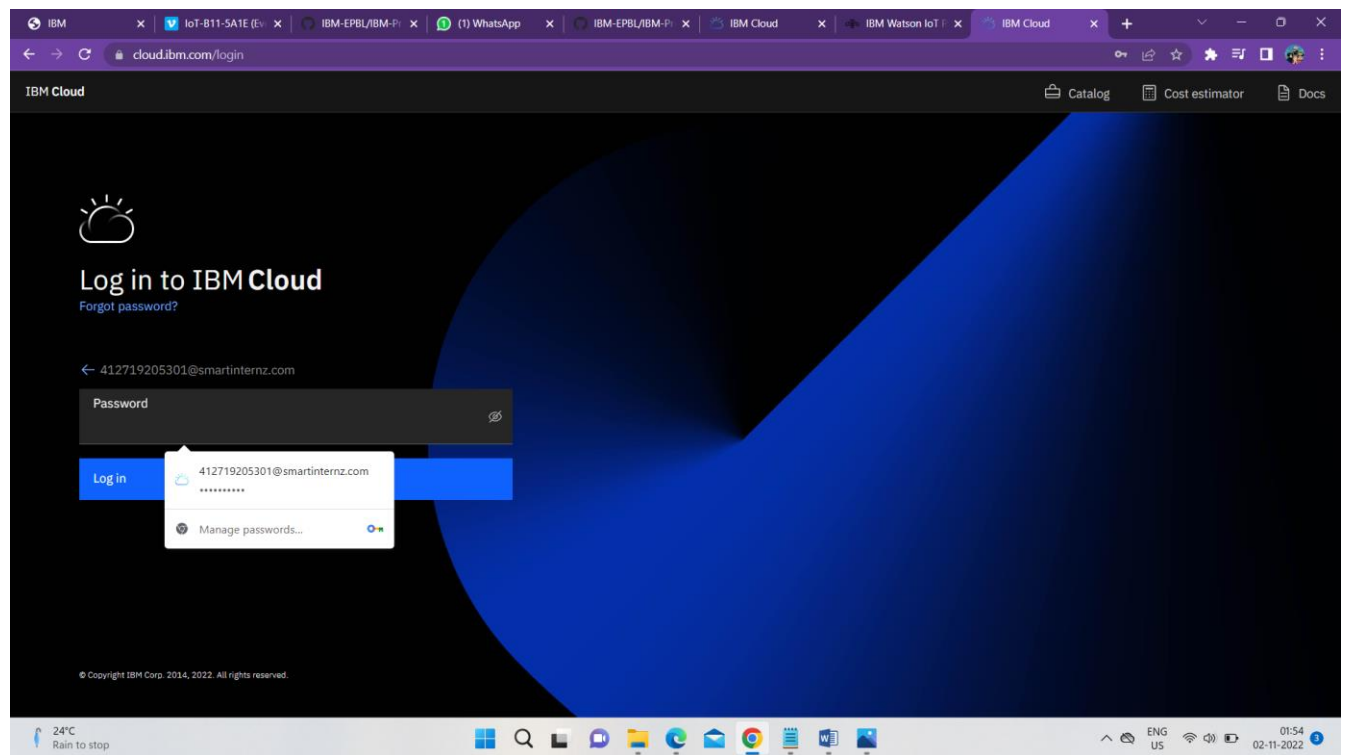
CREATE IBM WATSON IOT PLATFORM AND DEVICE

Date	02-11-2022
Team ID	PNT2022TMID38406
Project Name	Project - IOT based safety gadget for child safety monitoring and notification
Maximum Marks	4 Marks

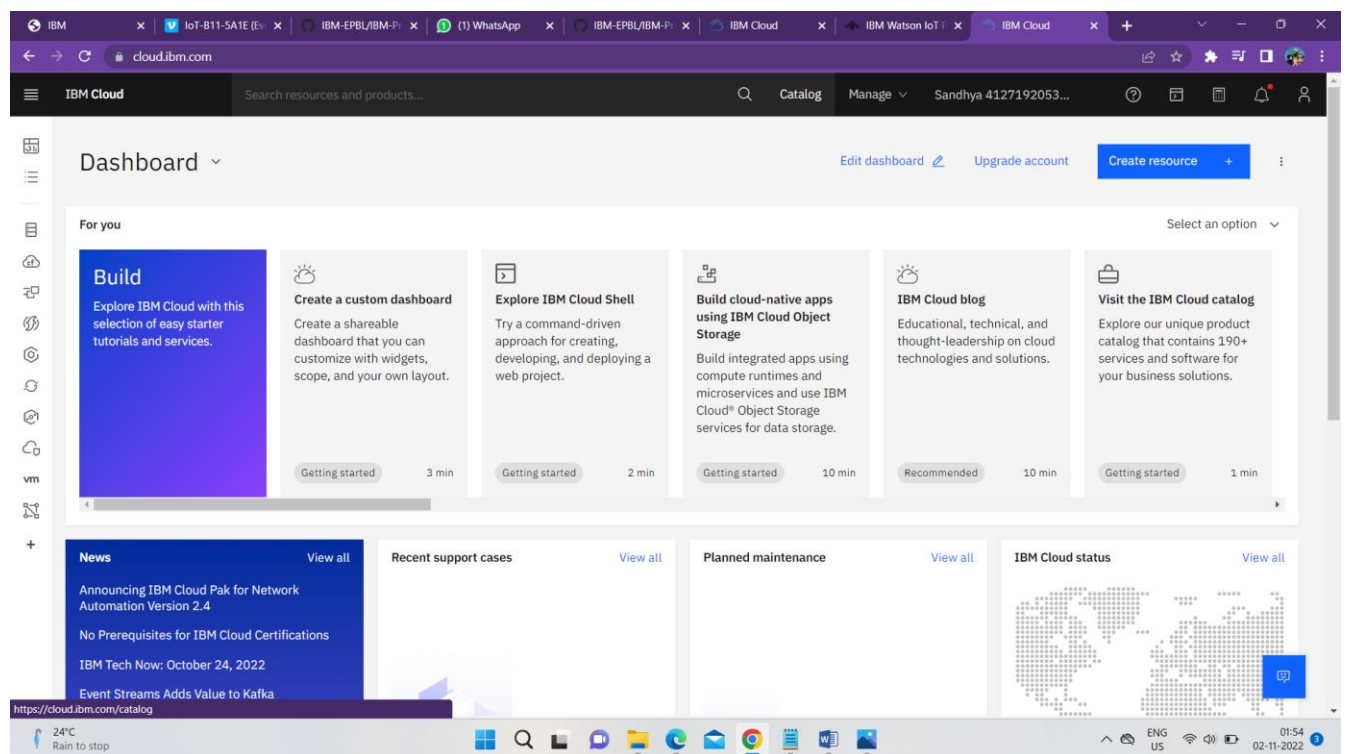
STEPS:

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

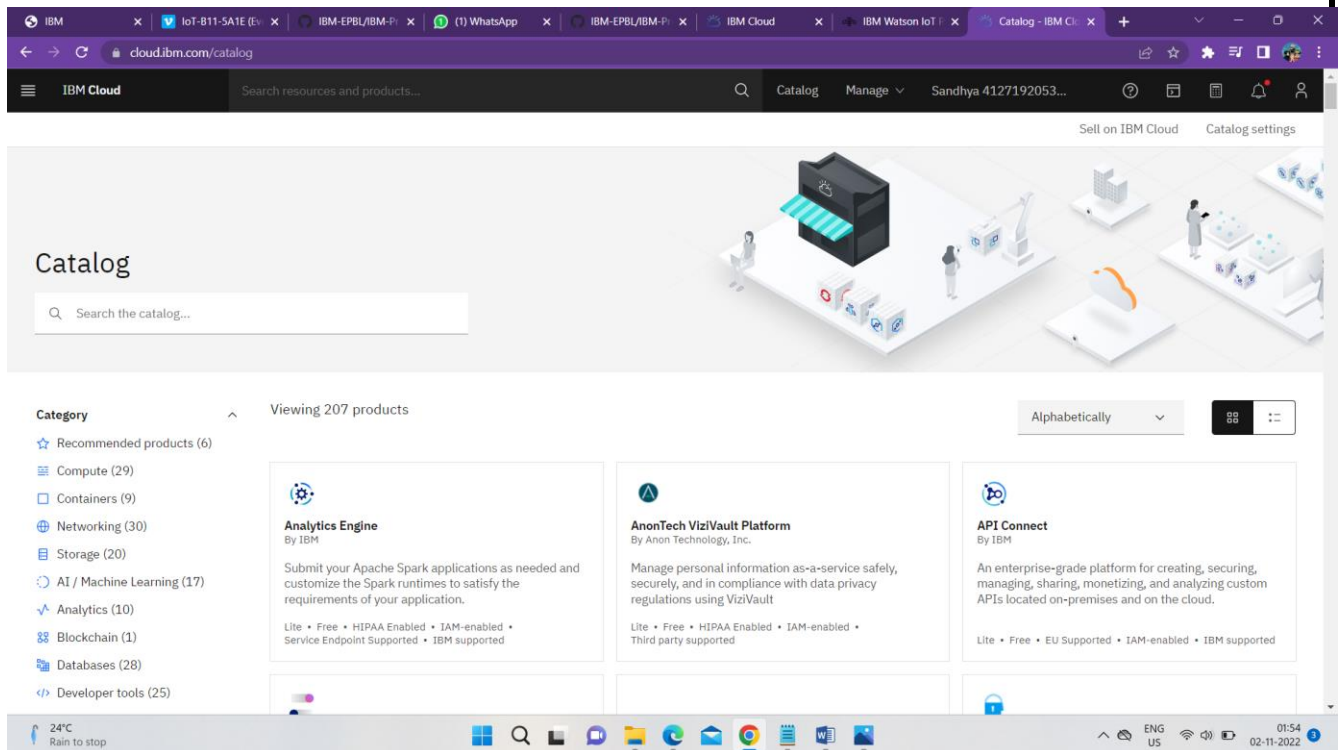




2. Home page of IBM cloud



3. Click on the catalog on the top



Click on IoT in the category mentioned in it

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

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

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.

Summary

Internet of Things Platform Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-t4

Resource group: Default

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](#).

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

Create

Add to estimate

4. If already a lite is present delete it else you can't create another

Internet of Things Platform

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Create About

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

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.

Configure your resource

Service name: Internet of Things Platform-bb

Select a resource group: Default

Tags: Examples: env:dev, version=1

Access management tags: Examples: access:dev, prop:version=1

Summary

Internet of Things Platform Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-bb

Resource group: Default

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](#).

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

Create

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

IBM Cloud

Search resources and products...

Catalog Docs Support Manage Meow Man's Account

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 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	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

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.

Summary

Internet of Things Platform Free

Location: Dallas

Plan: Lite

Service name: Internet of Things Platform-2w

Resource group: Default

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](#).

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

Create

Add to estimate

IBM Cloud

Search resources and products...

Catalog Docs Support Manage Meow Man's Account

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	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.

Configure your resource

Service name

Internet of Things Platform-child_safety

Select a resource group

Default

Tags

Examples: env:dev, version-1

Access management tags

Examples: access:dev, proj:version-1

Summary

Internet of Things Platform Free

Location: London

Plan: Lite

Service name: Internet of Things Platform-child_safety

Resource group: Default

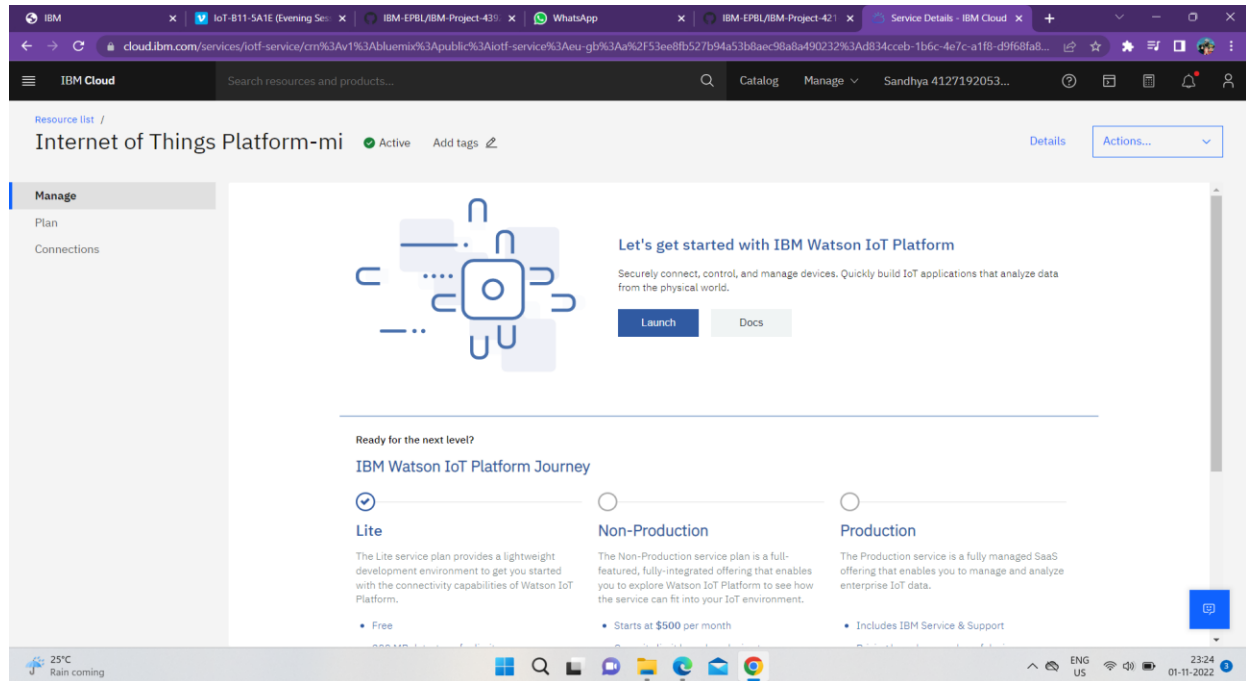
☒ I have read and agree to the following license agreements: [Terms](#)

Create

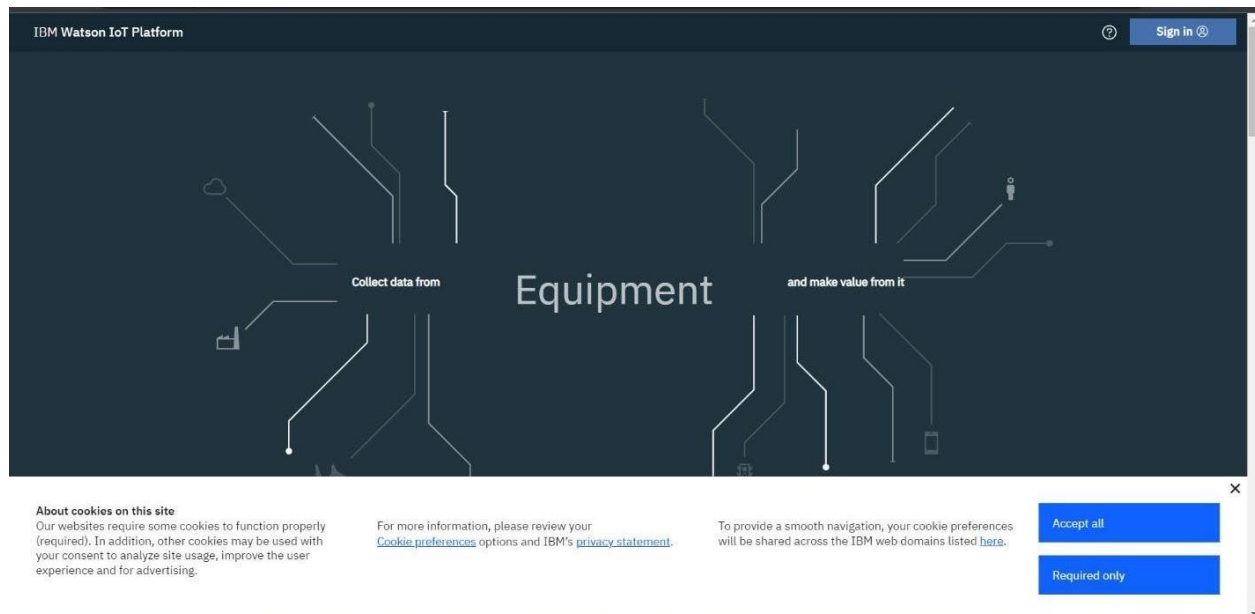
Add to estimate

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)



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



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



Log in to IBM

IBMid

[Forgot IBMid?](#)

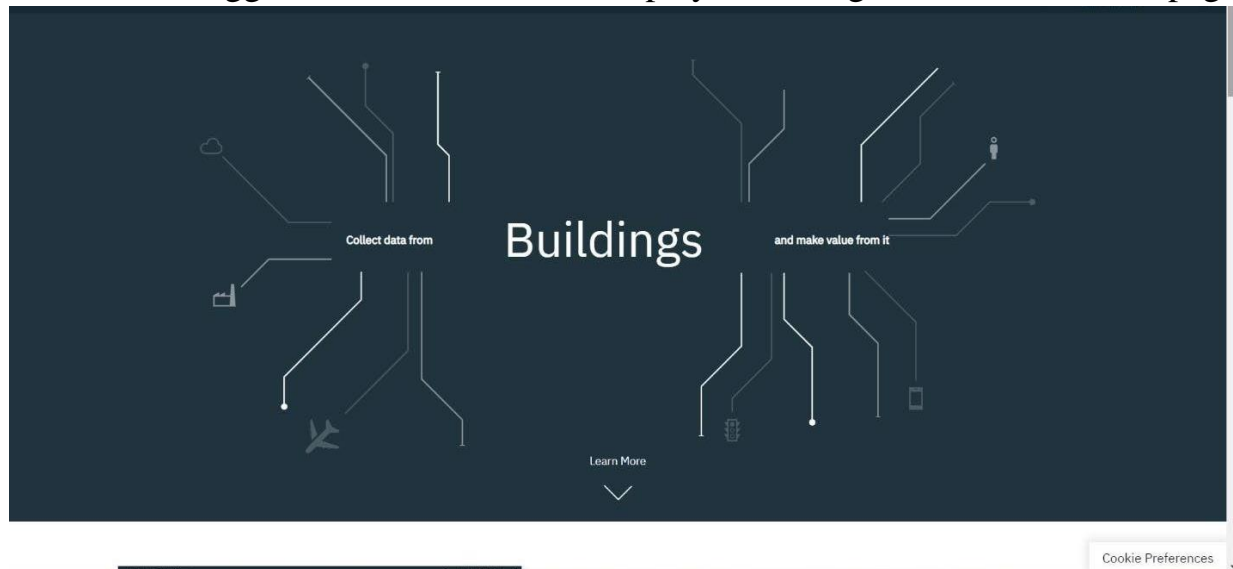
☐ Remember me ⓘ

Continue →

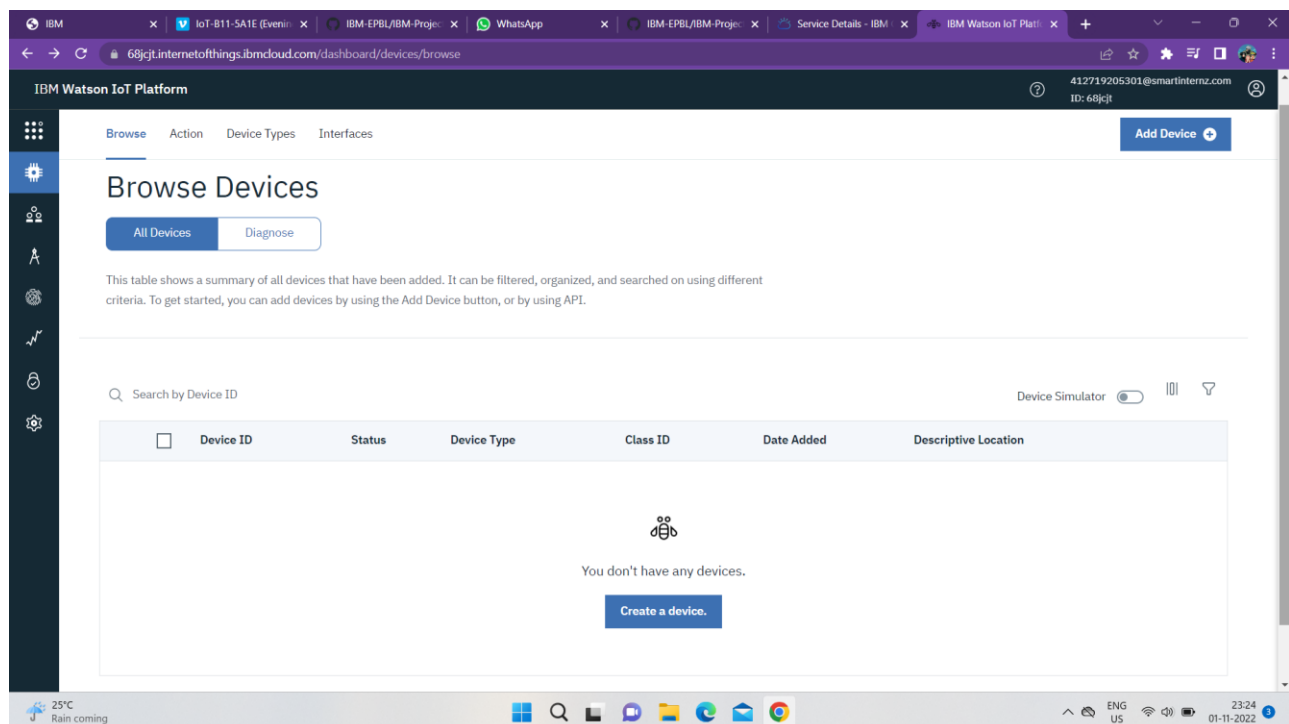
Don't have an account? [Create an IBMid](#)

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

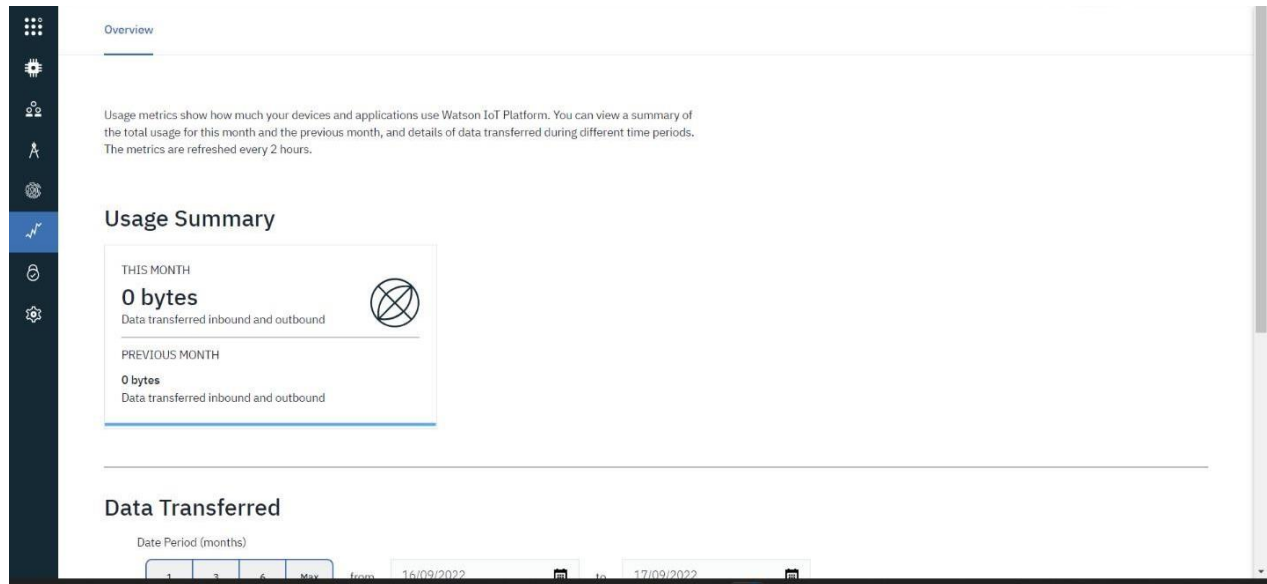
9. Once logged in the name will be displayed and it goes back to the first page



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.



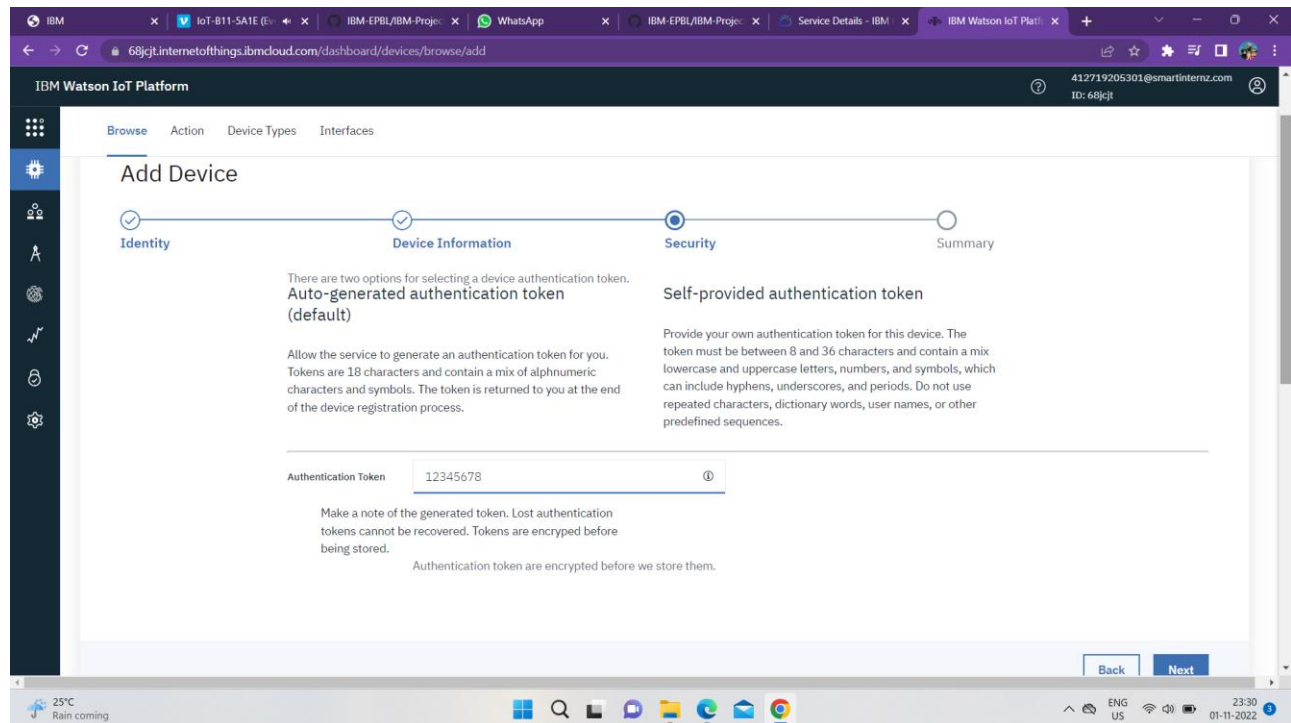
12. Click on the device tab and click on the add device button, then give the device type and device id and click next

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

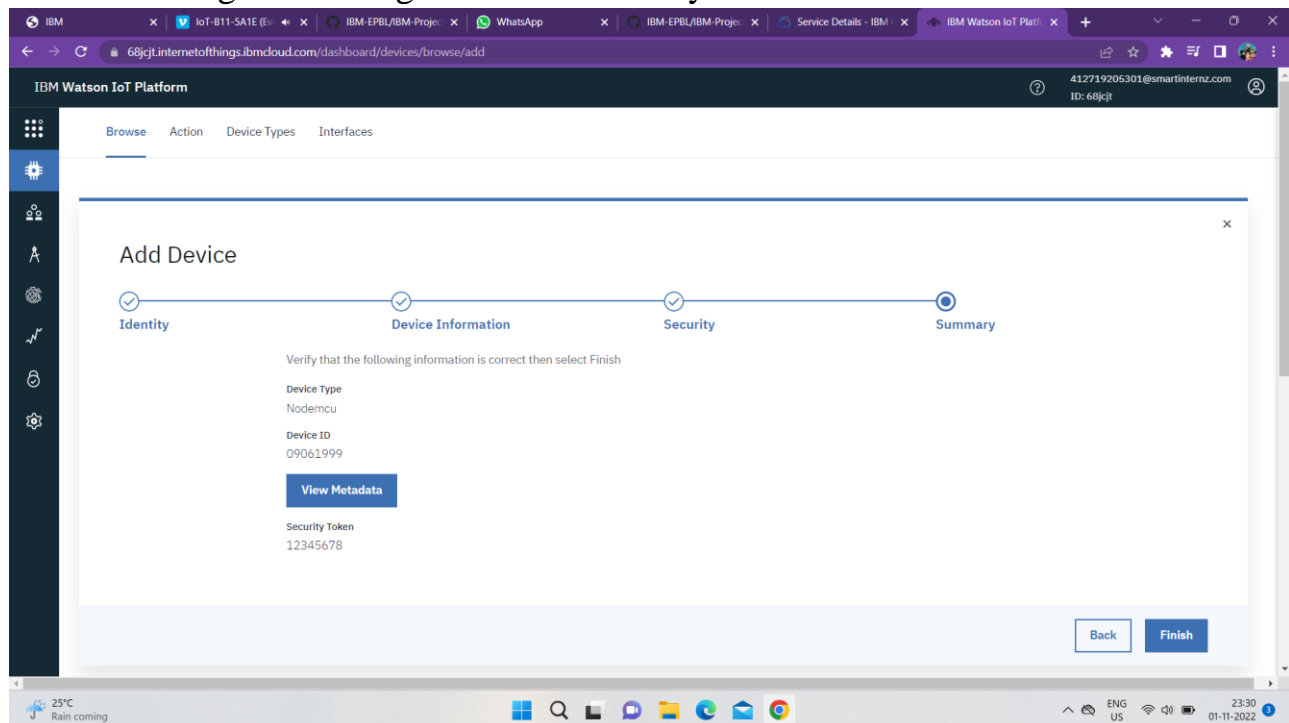
The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes the IBM logo and several open browser tabs. The main header shows the user's profile and ID. The left sidebar contains various system icons. The central area is titled 'Add Device' and features a progress bar 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 is divided into two columns. The left column contains fields for 'Serial Number', 'Model', 'Description', and 'Hardware Version'. The right column contains fields for 'Manufacturer', 'Device Class', 'Firmware Version', and 'Descriptive Location'. Each field has a placeholder text 'Enter [field name]'. At the bottom left of the form is a button labeled 'Add Metadata' with a plus icon. At the bottom right are 'Back' and 'Next' buttons. The Windows taskbar at the bottom shows the date and time as 01-11-2022, 23:29.

Field	Placeholder
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

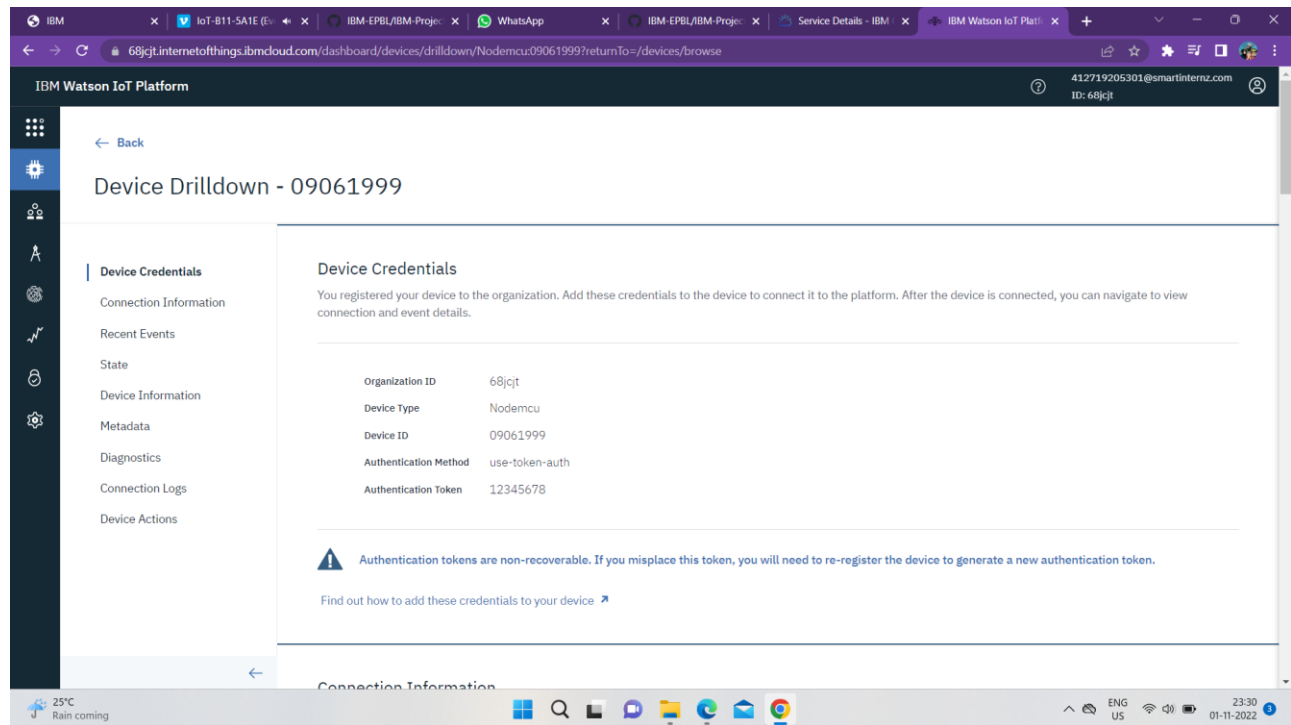
14. Clicking next it goes to the security where we do authentication token id.



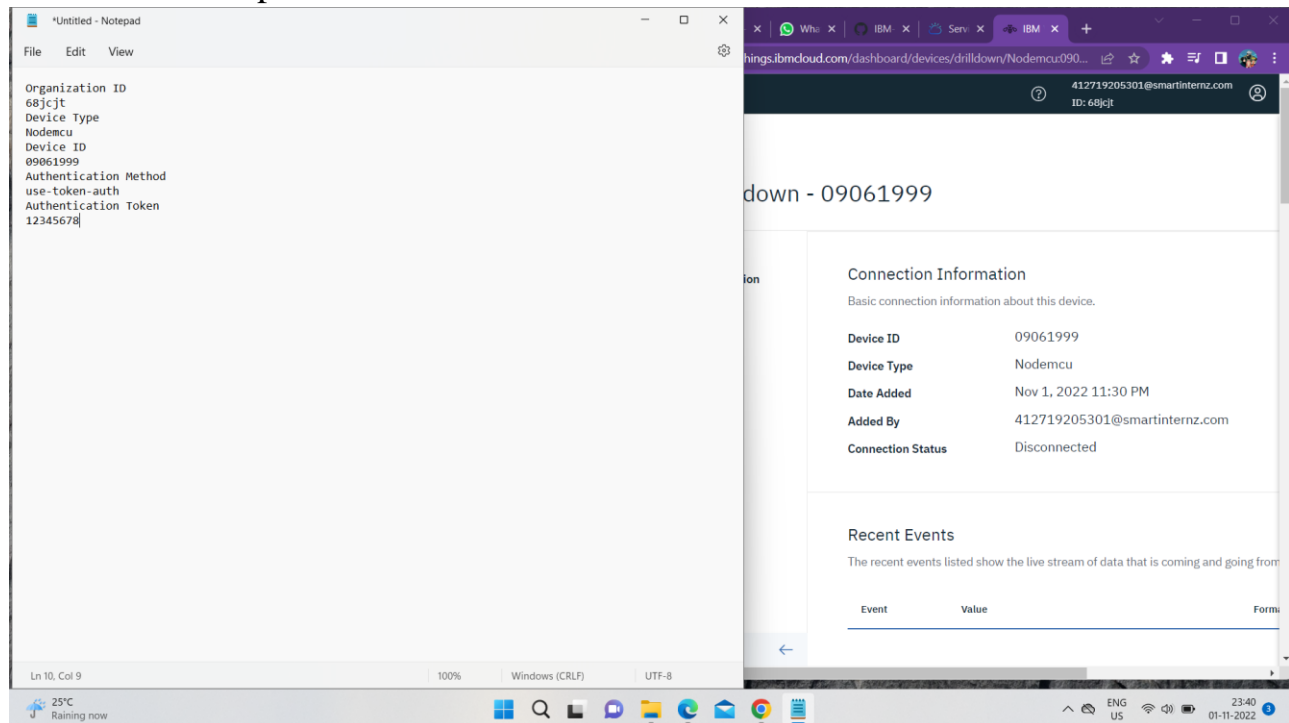
15. Clicking on next it goes to the summary of the device then click finish



16. The device credentials will be displayed with all the details



17. Save the details of the device as the authentication tokens are non-recoverable and if misplaced then we have to create a new one.



18. 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 shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. Below the navigation bar, there is a table listing devices. The first device is 09061999, with status 'Disconnected', device type 'Nodemcu', class ID 'Device', and date added 'Nov 1, 2022 11:30 PM'. The 'Recent Events' tab is selected, showing a message: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table with columns: Event, Value, Format, and Last Received. The table is currently empty. At the bottom of the dashboard, there is a status bar showing '25°C Raining now' and a taskbar with various application icons.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
09061999	Disconnected	Nodemcu	Device	Nov 1, 2022 11:30 PM	

Event	Value	Format	Last Received
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The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. Below the navigation bar, there is a table listing devices. The first device is 09061999, with status 'Disconnected', device type 'Nodemcu', class ID 'Device', and date added 'Nov 1, 2022 11:30 PM'. The 'Device Information' tab is selected, showing details for the device. The details include: Device ID (09061999), Device Type (Nodemcu), Date Added (Nov 1, 2022 11:30 PM), Added By (412719205301@smartinternz.com), and Connection Status (Disconnected). At the bottom of the dashboard, there is a status bar showing '25°C Raining now' and a taskbar with various application icons.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
09061999	Disconnected	Nodemcu	Device	Nov 1, 2022 11:30 PM	

Device ID	Value
Device ID	09061999
Device Type	Nodemcu
Date Added	Nov 1, 2022 11:30 PM
Added By	412719205301@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.

18. The Boards will display card for the project.

The screenshot shows the 'Your boards' page in the IBM Watson IoT Platform. The page has a dark blue header with the IBM logo and user information. Below the header, there are tabs for 'Your boards' and 'Public boards'. A '+ Create New Board' button is in the top right. The main area displays three boards: 'TESTBATCH11' (No cards), 'USAGE OVERVIEW' (3 Cards), and 'RISK AND SECURITY OVERVIEW' (4 Cards). Each board has a '+' icon and a settings gear. A dashed box with a '+' icon is also present. Below the boards, there is a section for 'Boards shared with you'. A status bar at the bottom indicates '1 Simulation running'.

The screenshot shows the 'testbatch11' board in the IBM Watson IoT Platform. The board has a dark blue header with the board name and a '+ Add New Card' button. The main area displays three cards: a 'Donut chart' showing humidity and temperature data, a 'Line chart' showing temperature data over time, and a 'Gauge' showing temperature data. The 'Donut chart' shows a total of 252 °C. The 'Line chart' shows a temperature range from 00:56 to 01:00. The 'Gauge' shows a temperature of 74.0 °C. A status bar at the bottom indicates '1 Simulation running'.

RESULT:

An IBM Watson cloud for IoT and a device is created