

CREATE IBM WATSON IOT PLATFORM AND DEVICE CREATE IBM WATSON IOT PLATFORM AND DEVICE

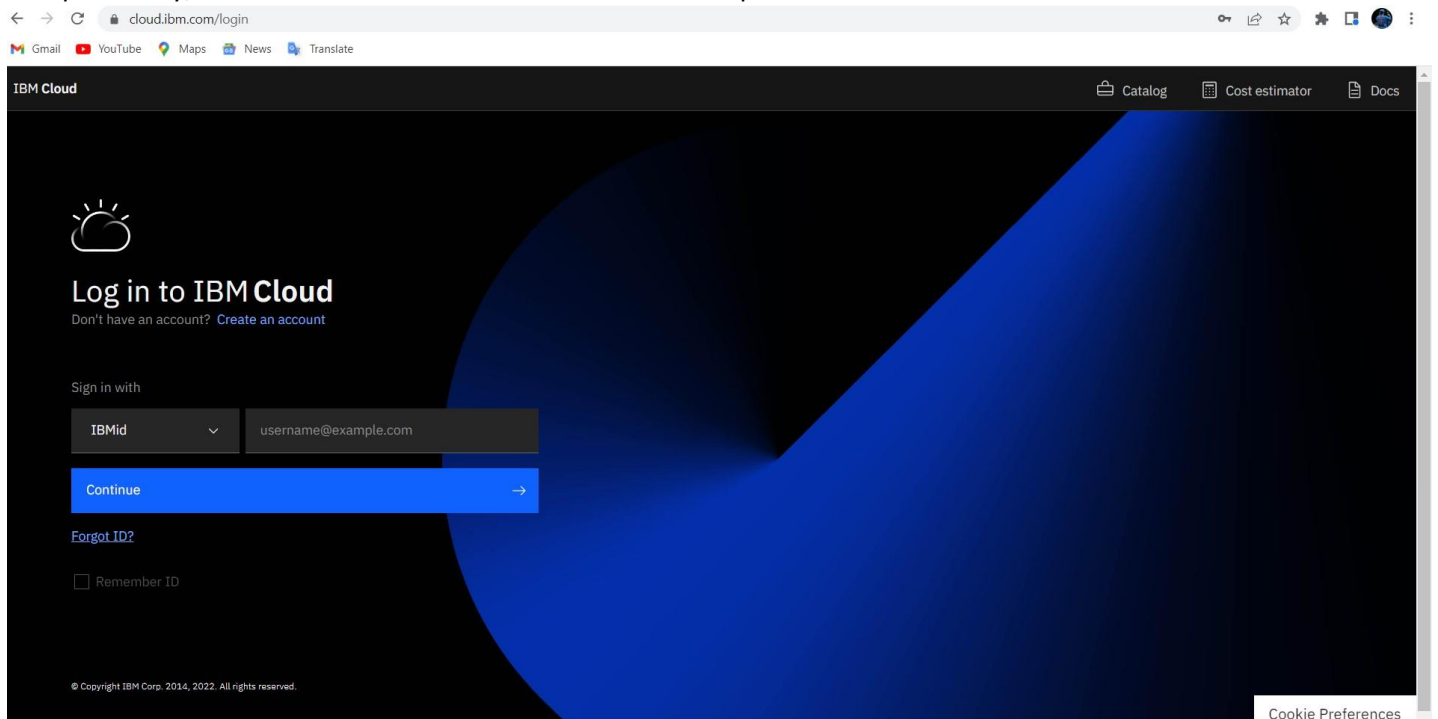
Date	25 October 2022
Team ID	PNT2022TMID27080
Project Name	Gas leakage monitoring and alerting system for industries

AIM:

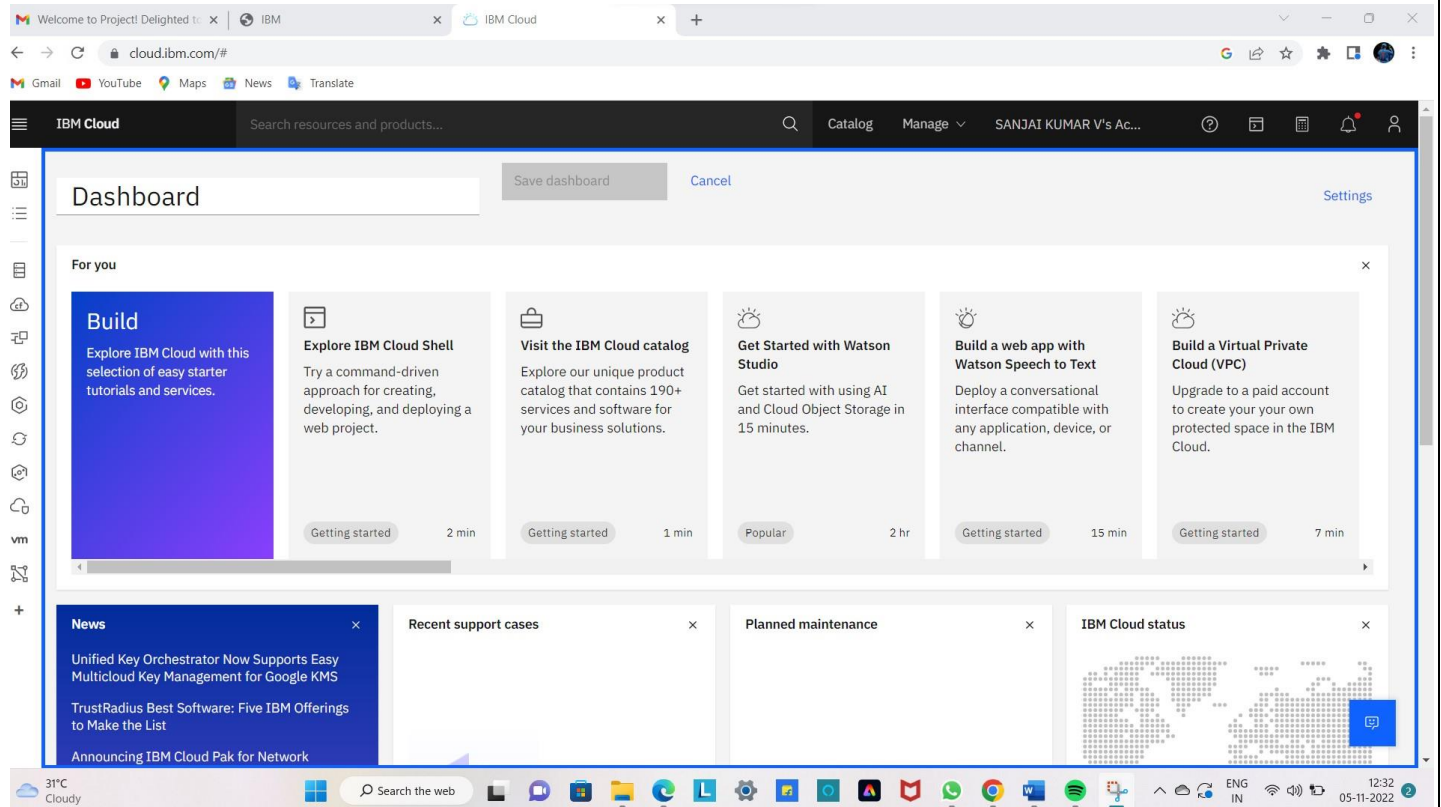
To create the IBM Watson IoT platform and device.

Steps to be followed

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

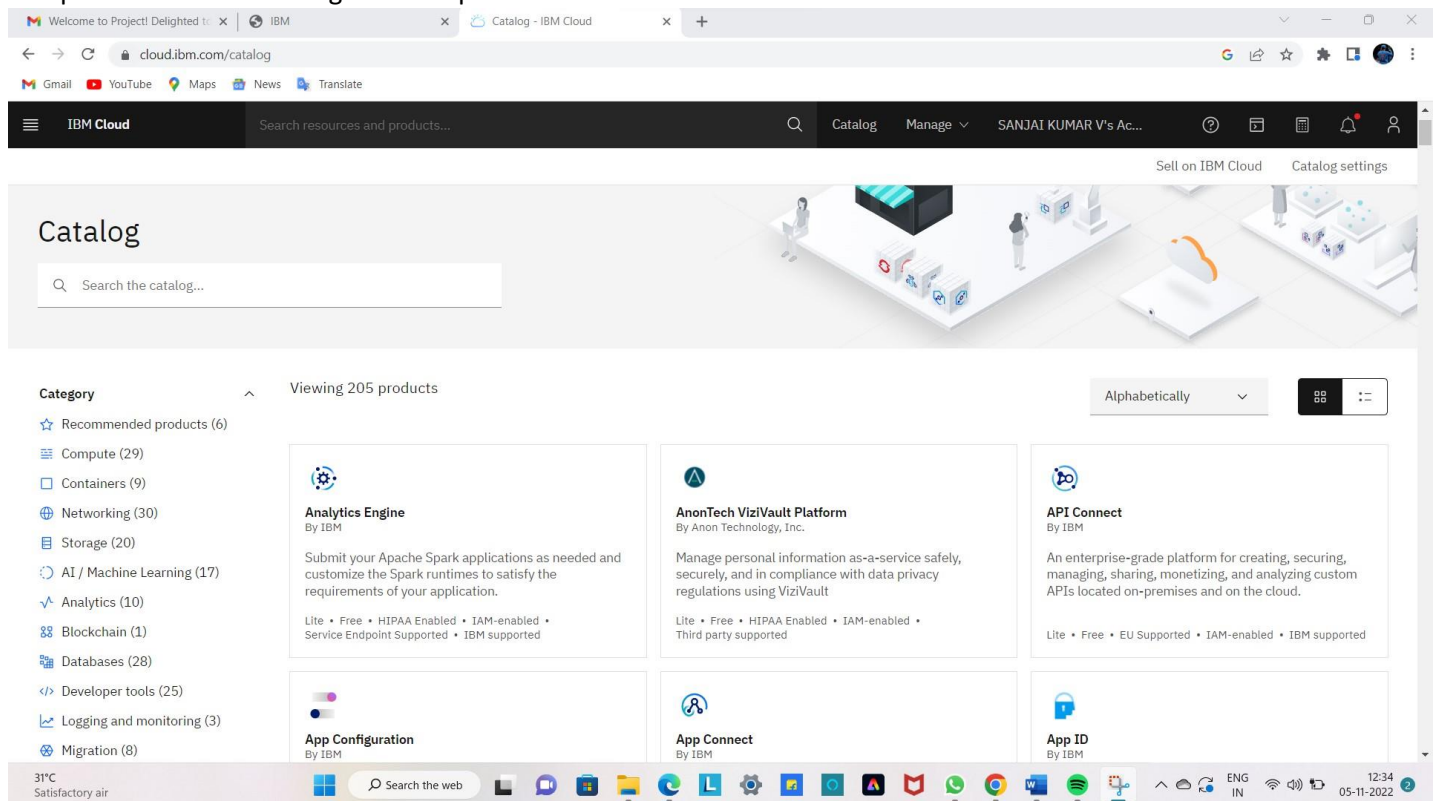


Step 2: Home page of IBM cloud.



The screenshot shows the IBM Cloud Dashboard. The top navigation bar includes the IBM Cloud logo, a search bar, and links to Catalog, Manage, and the user profile (SANJAI KUMAR V's Ac...). The main content area is titled "Dashboard" and features a "For you" section with several cards: "Build" (Explore IBM Cloud with this selection of easy starter tutorials and services.), "Explore IBM Cloud Shell" (Try a command-driven approach for creating, developing, and deploying a web project.), "Visit the IBM Cloud catalog" (Explore our unique product catalog that contains 190+ services and software for your business solutions.), "Get Started with Watson Studio" (Get started with using AI and Cloud Object Storage in 15 minutes.), "Build a web app with Watson Speech to Text" (Deploy a conversational interface compatible with any application, device, or channel.), and "Build a Virtual Private Cloud (VPC)" (Upgrade to a paid account to create your own protected space in the IBM Cloud.). Below the "For you" section, there are four more cards: "News" (Unified Key Orchestrator Now Supports Easy Multicloud Key Management for Google KMS, TrustRadius Best Software: Five IBM Offerings to Make the List, Announcing IBM Cloud Pak for Network), "Recent support cases", "Planned maintenance", and "IBM Cloud status". The bottom of the dashboard shows a weather widget (31°C Cloudy) and a taskbar with various application icons.

Step 3: Click on the catalog on the top.



The screenshot shows the IBM Cloud Catalog. The top navigation bar is the same as the dashboard. The main content area is titled "Catalog" and features a search bar. Below the search bar, there is a "Category" section with a list of categories: Recommended products (6), Compute (29), Containers (9), Networking (30), Storage (20), AI / Machine Learning (17), Analytics (10), Blockchain (1), Databases (28), Developer tools (25), Logging and monitoring (3), and Migration (8). The "Viewing 205 products" section shows a grid of product cards. The first row includes "Analytics Engine" (By IBM), "AnonTech ViziVault Platform" (By Anon Technology, Inc.), and "API Connect" (By IBM). The second row includes "App Configuration" (By IBM), "App Connect" (By IBM), and "App ID" (By IBM). Each card provides a brief description and a list of features. The bottom of the catalog shows a weather widget (31°C Satisfactory air) and a taskbar with various application icons.

Step 4: Click on IoT in the category mentioned.

Welcome to Project! Delighted to... x IBM x Catalog - IBM Cloud x +

cloud.ibm.com/catalog

IBM Cloud Search resources and products...

Search the catalog...

Sell on IBM Cloud Catalog settings

Compute (29)
Containers (9)
Networking (30)
Storage (20)
AI / Machine Learning (17)
Analytics (10)
Blockchain (1)
Databases (28)
Developer tools (25)
Logging and monitoring (3)
Migration (8)
Integration (10)
Internet of Things (1)
Security (25)
Mobile (1)

Type ⓘ
All
Services

Analytics Engine
By IBM
Submit your Apache Spark applications as needed and customize the Spark runtimes to satisfy the requirements of your application.
Lite • Free • HIPAA Enabled • IAM-enabled • Service Endpoint Supported • IBM supported

AnonTech ViziVault Platform
By Anon Technology, Inc.
Manage personal information as-a-service safely, securely, and in compliance with data privacy regulations using ViziVault
Lite • Free • HIPAA Enabled • IAM-enabled • Third party supported

API Connect
By IBM
An enterprise-grade platform for creating, securing, managing, sharing, monetizing, and analyzing custom APIs located on-premises and on the cloud.
Lite • Free • EU Supported • IAM-enabled • IBM supported

App Configuration
By IBM
Centralized, in-flight configuration for web and mobile applications and distributed environments.
Lite • Free • IAM-enabled • Service Endpoint Supported • IBM supported

App Connect
By IBM
Connect your applications, automate tasks, and improve productivity
Lite • Free • IBM supported

App ID
By IBM
User Authentication and User Profiles for your apps.
Lite • Free • EU Supported • Financial Services Validated • HIPAA Enabled • IAM-enabled • IBM supported

Bare Metal Servers for Classic
By IBM

Bare Metal Servers for VPC
By IBM

Block Storage
By IBM

31°C
AQI 93.53

Search the web

12:35
05-11-2022

Step 5: Click on Internet of Things Platform.

Welcome to Project! Delighted to... x IBM x Catalog - IBM Cloud x +

cloud.ibm.com/catalog?category=iot

IBM Cloud Search resources and products...

Search the catalog...

Sell on IBM Cloud Catalog settings

Type ⓘ
All
Services
Software
Professional services

Provider ⓘ
IBM (1)

Pricing plan ⓘ
Lite
Free

Compliance ⓘ
IAM-enabled
[Learn more](#)

Location ⓘ
31°C
Cloudy

Viewing 1 product

Filters: Internet of Things x Clear all

Internet of Things Platform
By IBM
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.
Lite • Free • IAM-enabled • IBM supported

Search the web

12:36
05-11-2022

Step 6: If already a lite is present delete it else u can't create another.

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform. The 'Lite' plan is selected, which includes up to 500 registered devices and a maximum of 200 MB of each data metric. The pricing is free. 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.' The 'Configure your resource' section shows the service name as 'Internet of Things Platform-gm' and the resource group as 'Default'. The 'Summary' panel on the right confirms the plan and location (Frankfurt).

Welcome to Project! Delighted to... x IBM x Internet of Things Platform - IBM x +

cloud.ibm.com/catalog/services/internet-of-things-platform

IBM Cloud Search resources and products...

Last updated: 08/15/2022

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

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-gm

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: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-gm

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

Step 7: Tick agreements and then click on create.

This screenshot is identical to the one above, showing the IBM Cloud catalog page for the Internet of Things Platform. The 'Lite' plan is selected, and 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.' The 'Configure your resource' section shows the service name as 'Internet of Things Platform-gm' and the resource group as 'Default'. The 'Summary' panel on the right confirms the plan and location (Frankfurt).

Welcome to Project! Delighted to... x IBM x Internet of Things Platform - IBM x +

cloud.ibm.com/catalog/services/internet-of-things-platform

IBM Cloud Search resources and products...

Last updated: 08/15/2022

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

Select a pricing plan

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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

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-gm

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: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-gm

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

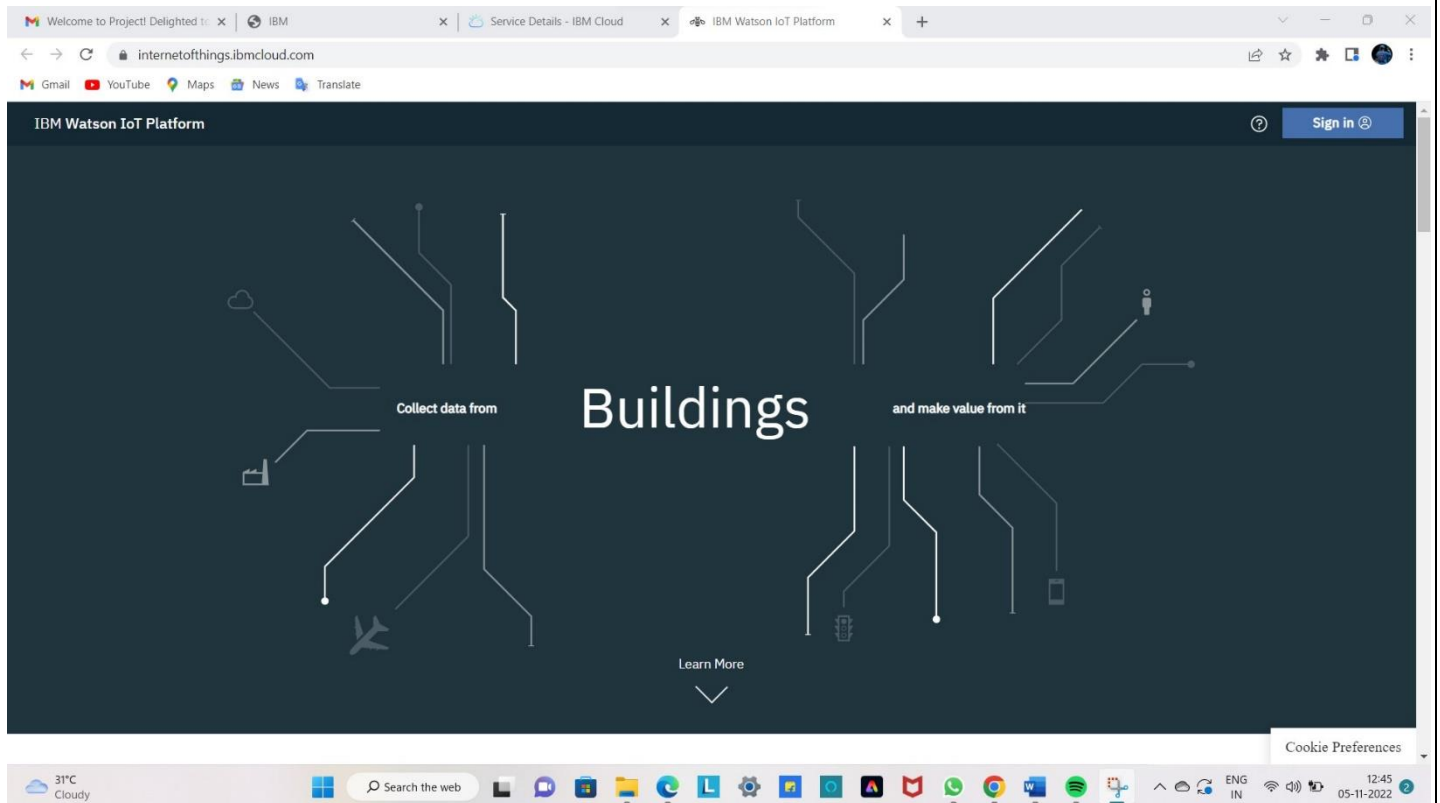
Step 8: Click on the launch button.

The screenshot shows the IBM Cloud console interface. At the top, there's a navigation bar with the IBM Cloud logo, a search bar, and user information. Below this, the page title is "Internet of Things Platform-gb" with a green "Active" status and an "Add tags" link. On the left, there's a "Manage" sidebar with options like "Plan" and "Connections". The main content area features a large graphic of a central square with four lines extending outwards, each ending in a small circle. To the right of this graphic, the text reads "Let's get started with IBM Watson IoT Platform" followed by a description: "Securely connect, control, and manage devices. Quickly build IoT applications that analyze data from the physical world." Below this text are two buttons: "Launch" (in blue) and "Docs" (in grey). Further down, there's a section titled "Ready for the next level?" with the heading "IBM Watson IoT Platform Journey". This section contains three cards: "Lite" (with a checkmark icon), "Non-Production" (with a circle icon), and "Production" (with a circle icon). Each card has a brief description of the service plan. At the bottom of the page, there's a Windows taskbar showing the system clock as 12:43 on 05-11-2022.

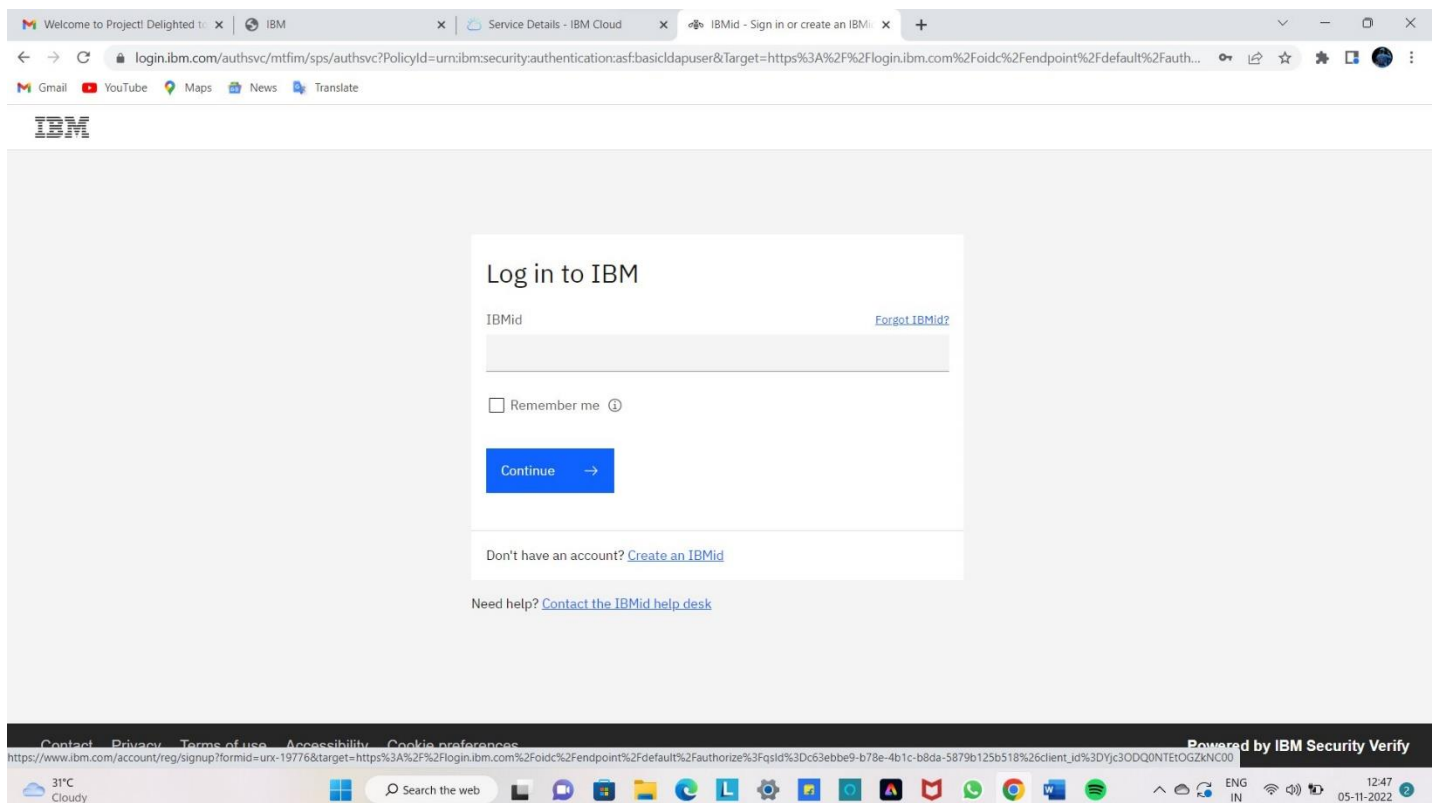
Step 9: After clicking on the launch button this tab will open.

The screenshot shows the IBM Watson IoT Platform landing page. The page has a dark blue background with a stylized circuit-like pattern. In the center, the word "Buildings" is prominently displayed in white. To the left of "Buildings", the text "Collect data from" is followed by an icon of a building. To the right, the text "and make value from it" is followed by an icon of a person. Below the main heading, there's a "Learn More" link with a downward arrow. In the top right corner, there's a "Sign in" button. The page is framed by a dark blue header with the "IBM Watson IoT Platform" logo and a "Sign in" button. At the bottom, there's a Windows taskbar showing the system clock as 12:45 on 05-11-2022.

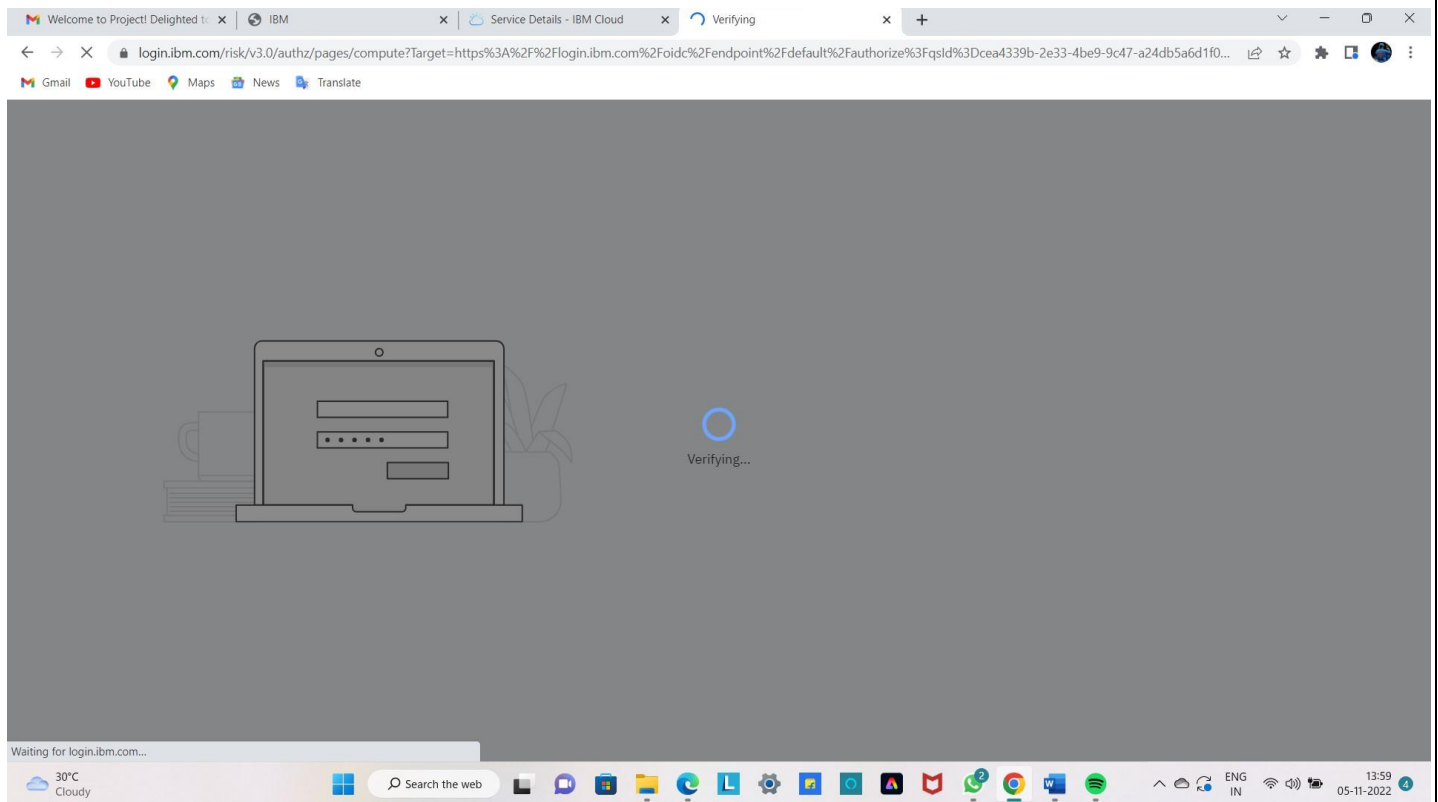
Step 10: Click on Sign in.



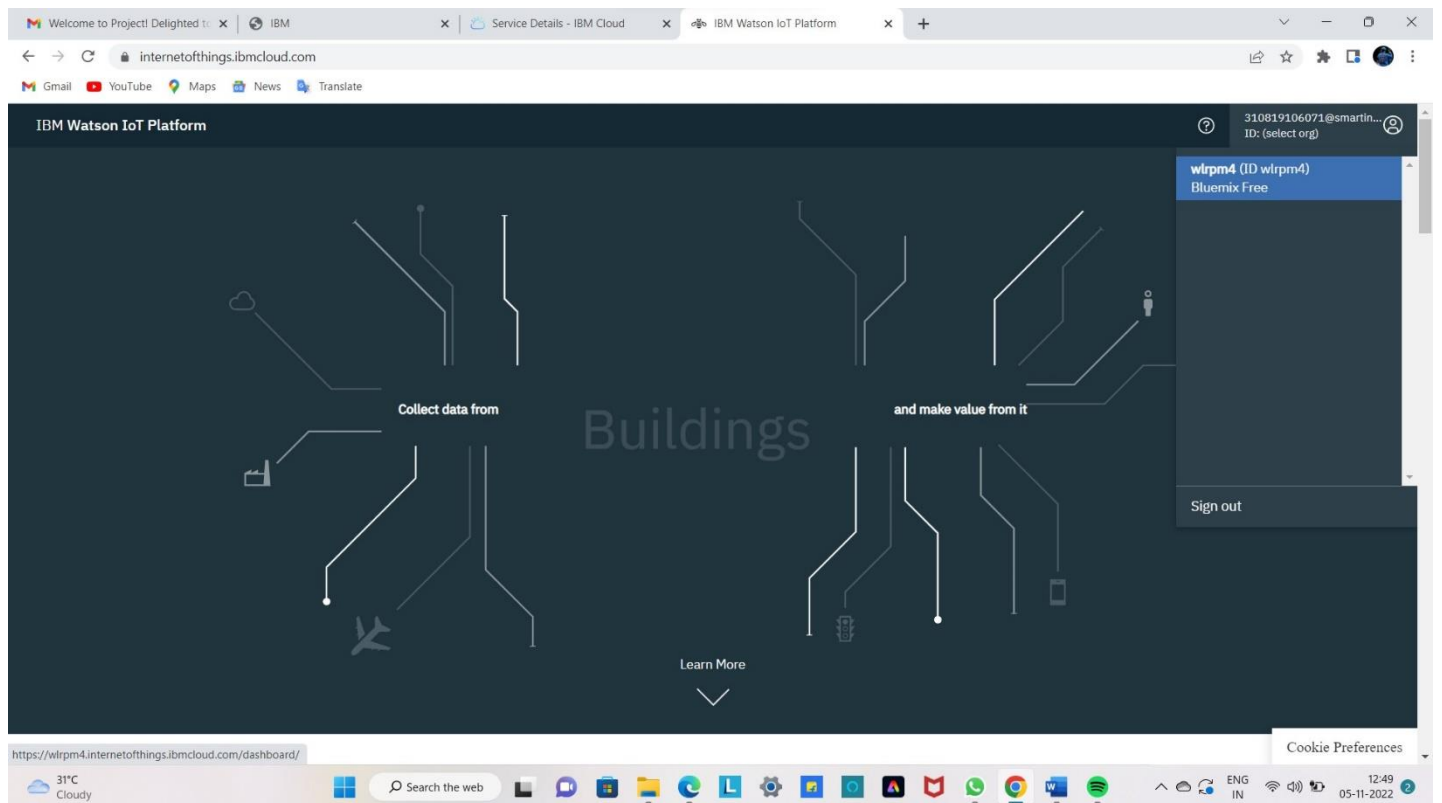
Step 11: Fill the login details.



Step 12: Sign in on progress.



Step 13: Once it is logged in, the name will be displayed click on it and then click on Bluemix Free.



Step 14: This is the IBM Watson platform.

Welcome to Project! Delighted to... IBM Service Details - IBM Cloud IBM Watson IoT Platform

wlrpm4.internetofthings.ibmcloud.com/dashboard/devices/browse

Gmail YouTube Maps News Translate

IBM Watson IoT Platform 310819106071@smartinternz.com ID: wlrpm4

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 101

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
14325	Disconnected	Testdevicetype	Device	Nov 5, 2022 5:33 AM	

Items per page 50 | 1-1 of 1 item 1 of 1 page

Microsoft Store 0 Simulations running

31°C Cloudy Search the web 12:49 05-11-2022

Step 15: Click on Add Device.

Welcome to Project! Delighted to... IBM Service Details - IBM Cloud IBM Watson IoT Platform

wlrpm4.internetofthings.ibmcloud.com/dashboard/devices/browse

Gmail YouTube Maps News Translate

IBM Watson IoT Platform 310819106071@smartinternz.com ID: wlrpm4

Browse Action Device Types Interfaces Add Device +

Browse Devices

All Devices Diagnose

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Search by Device ID Device Simulator 101

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
14325	Disconnected	Testdevicetype	Device	Nov 5, 2022 5:33 AM	

Items per page 50 | 1-1 of 1 item 1 of 1 page

0 Simulations running

31°C Cloudy Search the web 12:52 05-11-2022

Step 16: Click on Device Type.

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Device' dialog box is open, displaying a progress bar with four steps: 'Identity' (selected), 'Device Information', 'Security', and 'Summary'. Below the progress bar, a message states: '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 containing 'Enter Device ID'. At the bottom right of the dialog are 'Cancel' and 'Next' buttons. The background shows the 'Browse Devices' section with a status indicator '0 Simulations running'.

Step 17: Fill the details.

The screenshot shows the IBM Watson IoT Platform interface with the 'Add Type' dialog box open. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Type' dialog box has a progress bar with two steps: 'Identity' (selected) and 'Device Information'. A message states: 'Device types group devices that have similar characteristics, such as model number, firmware version, or location. Give the device type a unique name and a description that identifies characteristics that are shared by devices of this type.' There are three input fields: 'Type' with a dropdown menu showing 'Device' and 'Gateway' separated by 'Or', 'Name' with a text input field containing '12345', and 'Description' with a text input field. A note below the 'Name' field states: 'The device type name is used to identify the device type uniquely and uses a restricted set of characters to make it suitable for API use.' At the bottom right of the dialog is a 'Next' button. The background shows the 'Add Type' section with a status indicator '0 Simulations running'.

Step 18: Click on Register Devices.

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Device Types' tab is active. A message at the top states 'You added the new device type: 12345'. Below this, there are two tabs: 'Register Device' (selected) and 'Advanced Flow'. The 'Register Device' tab contains the heading 'Optional Register Devices, Define Interfaces' and the text 'Now that you added a device type, you can register and connect devices for this type.' A blue button labeled 'Register Devices' is visible. The background shows a large gear icon and a status bar indicating '0 Simulations running'. The bottom of the screen shows a Windows taskbar with various application icons and system information like '31°C Cloudy' and the date '05-11-2022'.

Step 19: Give the device name which you have created and give Device ID.

The screenshot shows the 'Add Device' dialog box in the IBM Watson IoT Platform. The dialog has a progress bar with four steps: 'Identity' (selected), 'Device Information', 'Security', and 'Summary'. 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 'Testdevicetype' and 'Device ID' with the value '12345'. At the bottom right of the dialog, there are 'Cancel' and 'Next' buttons. The background shows the 'Browse Devices' section with a status bar indicating '0 Simulations running'. The bottom of the screen shows a Windows taskbar with various application icons and system information like '31°C Cloudy' and the date '05-11-2022'.

Step 20: After giving all the data, Click on Finish.

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The progress bar indicates four steps: Identity, Device Information, Security, and Summary. The 'Summary' step is currently active. Below the progress bar, a message states: 'Verify that the following information is correct then select Finish'. The information displayed is: Device Type: Testdevicetype, Device ID: 12345, and Security Token: To be generated. A 'View Metadata' button is located below the Device ID. At the bottom right, there are 'Back' and 'Finish' buttons. Below the wizard, the 'Browse Devices' section shows 'All Devices' and 'Diagnose' buttons, and a status bar indicates '0 Simulations running'.

Step 21: After creating the device, Copy the Device Credentials.

The screenshot shows the 'Device Drilldown' page for device 12345 in the IBM Watson IoT Platform. The left sidebar contains a navigation menu with options: Device Credentials, Connection Information, Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The main content area is titled 'Device Credentials' and contains a message: 'You registered your device to the organization. Add these credentials to the device to connect it to the platform. After the device is connected, you can navigate to view connection and event details.' Below this message is a table of credentials:

Organization ID	wlrpm4
Device Type	testdevicetype
Device ID	12345
Authentication Method	use-token-auth
Authentication Token	Fp-JK*sGer1(WMSs*B

Below the table, a warning icon and message state: 'Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.' A link 'Find out how to add these credentials to your device' is provided. At the bottom right, a status bar indicates '0 Simulations running'.

Step 22: Go to Setting, click on Data and Devices.

The screenshot shows the IBM Watson IoT Platform dashboard at the URL `wlprm4.internetofthings.ibmcloud.com/dashboard/settings`. The left sidebar contains a navigation menu with categories: **DATA AND DEVICES** (highlighted) and **SECURITY**. Under **DATA AND DEVICES**, the **Device Simulator** option is selected. The main content area is titled "General Settings" and includes sections for "Device Simulator", "Connection Security", and "CA Certificates". The "Device Simulator" section has a toggle switch labeled "Activate Device Simulator" which is turned on. The "Connection Security" section has a button "Open Connection Security Policy". The "CA Certificates" section has a button "Open Connection Security policy". At the bottom right of the main content area, a status bar indicates "0 Simulations running". The top right of the dashboard shows the user ID "310819106071@smartinternz.com" and "ID: wlprm4". The bottom of the image shows a Windows taskbar with various application icons and a system tray displaying "31°C Cloudy" and the date "05-11-2022".

Step 23: Then click on Device Simulator and Activate Device Simulator.

This screenshot is identical to the one above, showing the IBM Watson IoT Platform dashboard settings page. It displays the "General Settings" section with the "Device Simulator" toggle activated. The navigation menu on the left highlights "Device Simulator" under the "DATA AND DEVICES" category. The main content area shows options for "Connection Security" and "CA Certificates". The status bar at the bottom right indicates "0 Simulations running". The top right corner shows the user ID "310819106071@smartinternz.com" and "ID: wlprm4". The bottom of the image shows a Windows taskbar with various application icons and a system tray displaying "31°C Cloudy" and the date "05-11-2022".

Step 24: Click on the pop-up screen on the right side.

The screenshot shows the IBM Watson IoT Platform dashboard. The left sidebar contains navigation links for 'General Settings', 'DATA AND DEVICES', and 'SECURITY'. The main content area is titled 'General Settings' and includes sections for 'Device Simulator', 'Connection Security', and 'CA Certificates'. A blue box highlights the text '0 Simulations running' in the bottom right corner of the main content area.

Step 25: Click on Create Simulation.

The screenshot shows the IBM Watson IoT Platform dashboard with a 'Simulations' pop-up screen open. The pop-up screen contains the following text:

Simulations

[Import/Export simulation](#)

You can use the simulated event data to learn about, test, and demonstrate fully functioning Watson IoT Platform features. You can simulate a device and its data or simulate only data for a device that is already registered.

To create a device simulation:

1. Select a device type.
2. Configure the event and payload.
3. Add devices.

[+ Create simulation](#)

Step 26: Choose the Device.

The screenshot shows the IBM Watson IoT Platform 'General Settings' page. The left sidebar contains navigation links for 'General Settings', 'DATA AND DEVICES', and 'SECURITY'. The main content area is titled 'General Settings' and includes sections for 'Client Connection State API', 'CA Certificates', and 'Connection Security'. A 'Simulations' modal is open on the right, providing instructions on how to create a device simulation. The modal lists three steps: 1. Select a device type, 2. Configure the event and payload, and 3. Add devices. Below the steps is a text input field labeled 'Select or create a device type...'. The browser's address bar shows the URL 'wlrpm4.internetofthings.ibmcloud.com/dashboard/settings'.

IBM Watson IoT Platform

General Settings

Here you can see and modify global organization information and locally enable experimental Watson IoT Platform features

Client Connection State API

Open Connection Security Policy

DATA AND DEVICES

Custom Device Management Packages

Device Simulator

SECURITY

Connection Security

CA Certificates

Upload a CA certificate which is used to authenticate the signature of client-side

[Connection Security policy](#)

+ Add Certificate

Common Name Issued By

Simulations

[Import/Export simulation](#)

You can use the simulated event data to learn about, test, and demonstrate fully functioning Watson IoT Platform features. You can simulate a device and its data or simulate only data for a device that is already registered.

To create a device simulation:

1. Select a device type.
2. Configure the event and payload.
3. Add devices.

Select or create a device type...

Step 27: Type the code.

The screenshot shows the IBM Watson IoT Platform 'Browse Devices' page. The left sidebar contains navigation links for 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area is titled 'Browse Devices' and includes a table of devices. A modal is open on the right, allowing configuration of a device event. The modal shows the event type name 'event_1', frequency '20 x Every Minute', and a payload editor. The payload editor contains a JSON object with 'temperature' and 'humidity' fields, each set to a random value between 0 and 100. The browser's address bar shows the URL 'wlrpm4.internetofthings.ibmcloud.com/dashboard/devices/browse'.

IBM Watson IoT Platform

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 ID	Status	Device Type	Class ID	Da
12345	Disconnected	Testdevicetype	Device	No
14325	Disconnected	Testdevicetype	Device	No

Items per page 50 | 1-2 of 2 items

Testdevicetype 12345

Events 1

Event type name event_1 Frequency 20 x Every Minute Send

Payload

You can override field values in the event payload that is sent by this device. Specify the override values in the editor window.

```
0 {
1   "temperature": random(0, 100)
2   "humidity": random(0, 100)
3 }
4
```

[What functions can I apply?](#)

Cancel Save

Step 28: Click on Use Registered Device and choose the device and run it.

The screenshot shows the IBM Watson IoT Platform 'General Settings' page. The left sidebar contains navigation links for 'Client Connection State API', 'DATA AND DEVICES' (with sub-links for 'Custom Device Management Packages' and 'Device Simulator'), and 'SECURITY' (with sub-links for 'Connection Security', 'CA Certificates', 'Messaging Server Certificates', and 'Group Access beta'). The main content area is titled 'General Settings' and includes sections for 'Connection Security Policy' and 'CA Certificates'. A 'Simulations' modal is open on the right, showing '1/50 Simulations Running' and a list of devices. The modal has buttons for 'New Simulation', 'Create Simulated Device', and 'Use Registered Device'. The 'Use Registered Device' button is highlighted. The bottom of the screen shows a Windows taskbar with various application icons and a system tray with weather and time information.

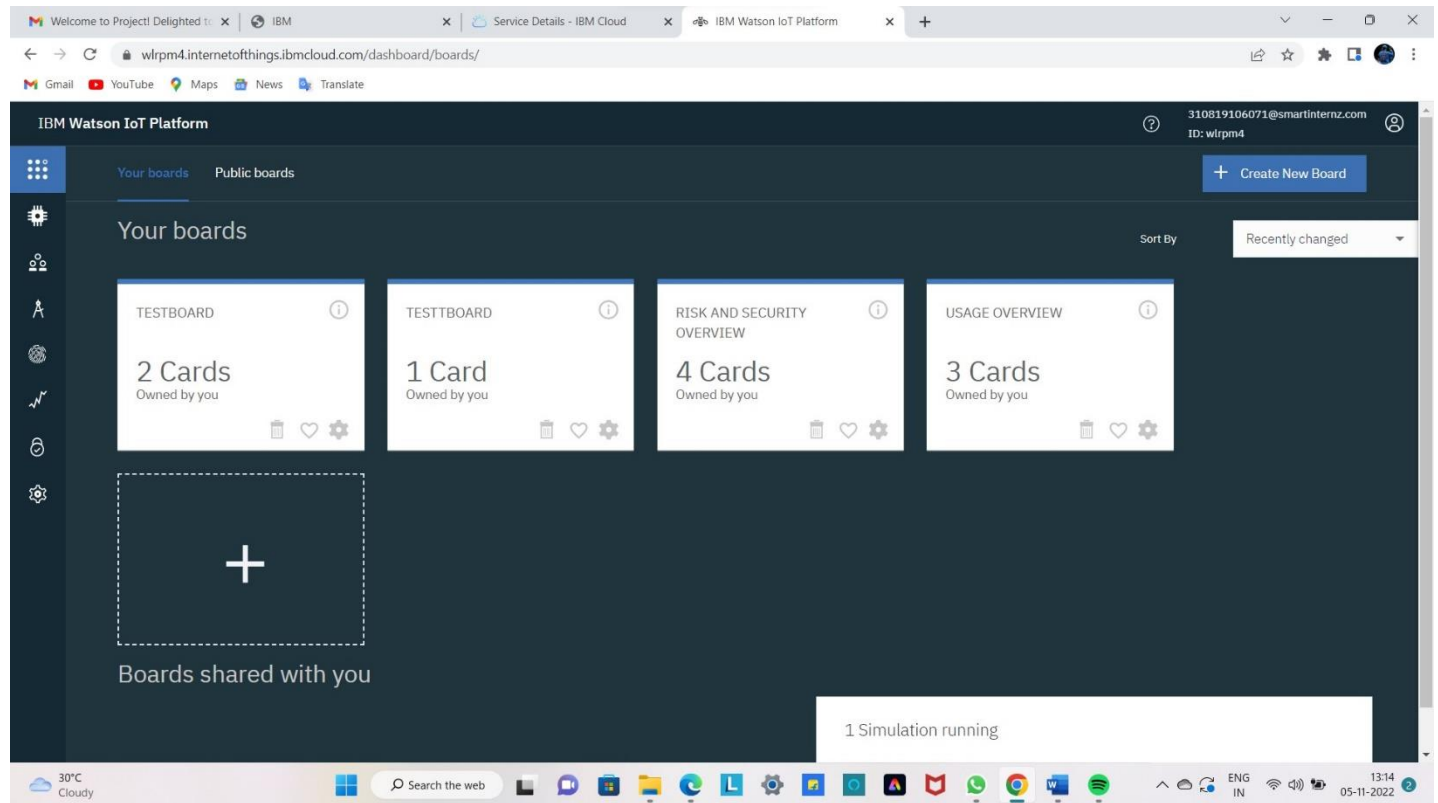
Step 29: Go to devices then click on devices and check the recent events whether the code is running or not.

The screenshot shows the IBM Watson IoT Platform 'Devices' page. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area is titled 'Devices' and includes a search bar and a table of devices. The table has columns for 'Device ID', 'Status', 'Device Type', 'Class ID', 'Date Added', and 'Descriptive Location'. A device with ID '12345' is selected, and its details are shown in a modal. The modal has tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a list of events. The events are listed in a table with columns for 'Event', 'Value', 'Format', and 'Last Received'. The events are as follows:

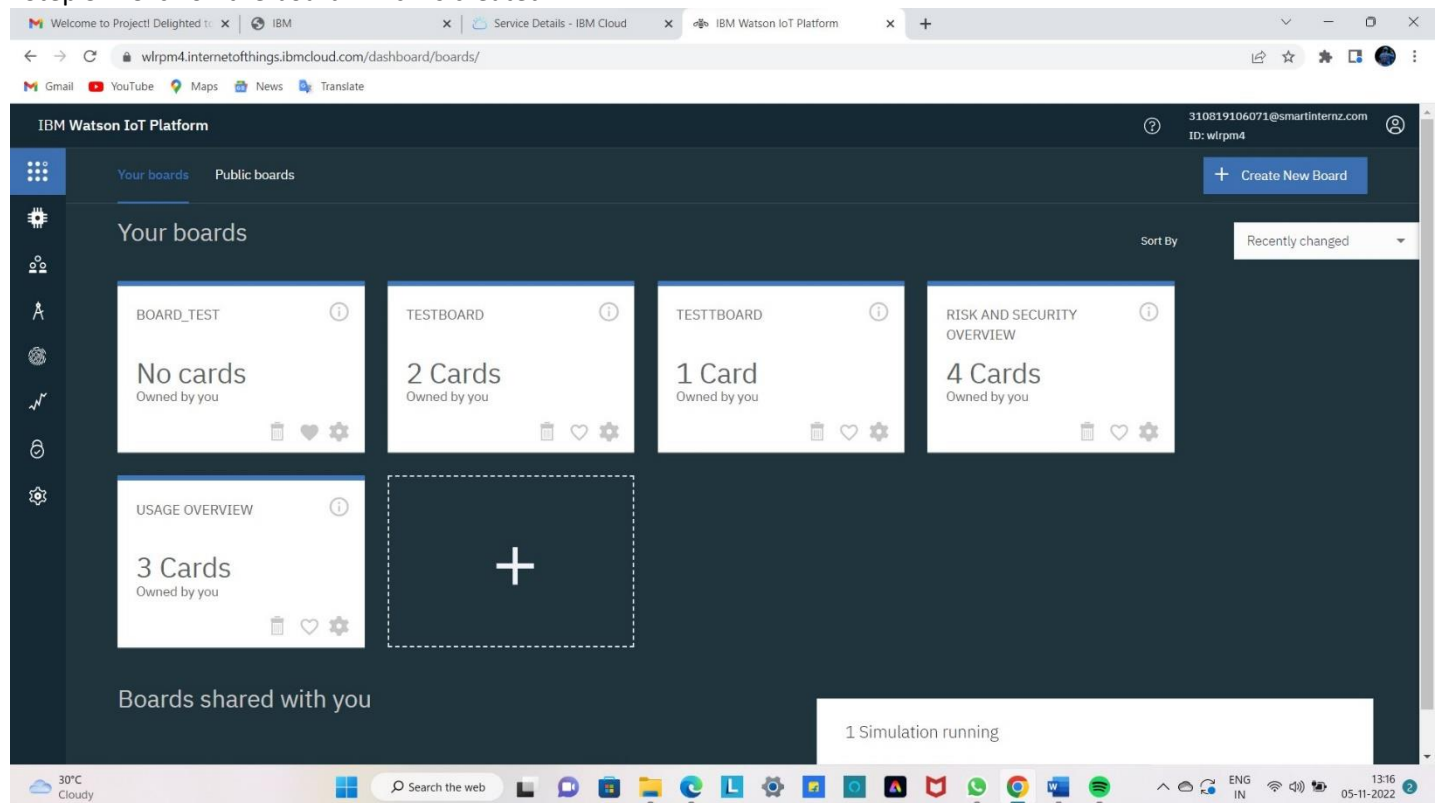
Event	Value	Format	Last Received
event_1	{"temperature":63,"humidity":8}	json	a few seconds ago
event_1	{"temperature":56,"humidity":9}	json	a few seconds ago
event_1	{"temperature":40,"humidity":76}	json	a few seconds ago
event_1	{"temperature":61,"humidity":36}	json	a few seconds ago

The bottom of the screen shows a Windows taskbar with various application icons and a system tray with weather and time information.

Step 30: Go to Board and click on + Create New Board, fill the details and create a board.



Step 31: Click on the board which is created.



Step 32: Go Add New Card.

The screenshot shows the IBM Watson IoT Platform dashboard. The browser address bar displays the URL: `wlrpm4.internetofthings.ibmcloud.com/dashboard/boards/d3782066-a262-4a76-aba5-8a3b998b7414`. The dashboard header includes the IBM Watson IoT Platform logo, a user profile icon, and the text "310819106071@smartinternz.com ID: wlrpm4". The main content area shows a dark blue background with a white icon of a person and the text "You currently have an empty board". Below this text is a blue button labeled "+ Add New Card". In the bottom right corner, a white box indicates "1 Simulation running". The bottom status bar shows the temperature "30°C Cloudy", a search bar, and various system icons.

Step 33: Choose the Card Type.

The screenshot shows the IBM Watson IoT Platform dashboard with the "Create Card" dialog open. The dialog has a title "Create Card" and a subtitle "Card type Select card type". It displays a grid of card types under the heading "Devices". The card types are: Generic visualisation, Line chart, Bar chart, Donut chart, Value, Gauge, Semaphore, Device Properties, All device properties, Device list, Device info, and Device map. Below the grid, there is a section for "Usage" with two empty slots. The background dashboard shows the "board_test" board and the "+ Add New Card" button.

Step 34: Choose the device.

IBM Watson IoT Platform

board_test

Card source data

12345

Card preview

Card information

Create Line chart Card

Specify the data source for the card

Devices

Search for card data sources using the filter:

Device ID	Device Type
<input checked="" type="radio"/> 12345	Testdevicetype
<input type="radio"/> 14325	Testdevicetype

Next

Step 35: Click on Connect new data set.

IBM Watson IoT Platform

Your boards Public boards

Your boards

BOARD_TEST

No cards

Owned by you

USAGE OVERVIEW

3 Cards

Owned by you

Boards shared with you

Create Line chart Card

Connect data set

[Connect new data set](#)

Back Next

Step 36: Fill the details to get Temperature graph.

The screenshot shows the 'Create Line chart Card' dialog in the IBM Watson IoT Platform. The dialog is open over a dashboard titled 'board_test'. The dialog has a sidebar with 'Card source data', 'Card preview', and 'Card information'. The main area contains the following fields:

- Connect data set:** A dropdown menu showing 'temperature'.
- Event:** A text field containing 'event_1'.
- Property:** A text field containing 'temperature'.
- Name:** A text field containing 'temperature'.
- Type:** A dropdown menu showing 'Number'.
- Unit:** A text field containing '°C'.
- Min:** A text field containing '0'.
- Max:** A text field containing '100'.

At the bottom of the dialog are 'Back' and 'Next' buttons. The background dashboard shows a 'board_test' with a 'No cards' message and a '3 Cards' message. The top right corner shows the user's email '310819106071@smartinternz.com' and ID 'wlrpm4'.

Step 37: Choose the Colour.

The screenshot shows the 'Create Line chart Card' dialog in the IBM Watson IoT Platform. The dialog is open over a dashboard titled 'Your boards'. The dialog has a sidebar with 'Card source data', 'Card preview', and 'Card information'. The main area contains the following fields:

- Enter title and description of the card:** A text field.
- Title:** A text field containing 'Line chart'.
- Color scheme:** A row of five color swatches: purple, red, green, blue, and teal.
- Description:** A text field containing 'A line chart to display time series information with historic and live data'.

At the bottom of the dialog are 'Back' and 'Submit' buttons. The background dashboard shows 'Your boards' with a 'BOARD_TEST' card and a '3 Cards' message. The top right corner shows the user's email '310819106071@smartinternz.com' and ID 'wlrpm4'.

Step 38: Repeat the same process again to get the Humidity graph.

The screenshot shows the IBM Watson IoT Platform interface. A modal window titled 'Create Gauge Card' is open, prompting the user to 'Specify the data source for the card'. Under the 'Devices' tab, a table lists available data sources:

Device ID	Device Type
<input checked="" type="radio"/> 12345	Testdevicetype
<input type="radio"/> 14325	Testdevicetype

A 'Next' button is visible at the bottom right of the modal. In the background, a 'board_test' dashboard is visible with a line chart showing temperature data over time.

Step 39: Here is the Final graph.

The screenshot shows the final dashboard configuration. The 'board_test' dashboard now contains two cards:

- A 'Gauge' card displaying a value of 80.0 %.
- A 'Line chart' card showing a fluctuating line graph for 'temperature' data over time (from 13:21 to 13:25).

A status bar at the bottom of the dashboard indicates '1 Simulation running'. The interface includes standard navigation elements like a sidebar, top bar with user information, and a bottom taskbar.

Result:

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