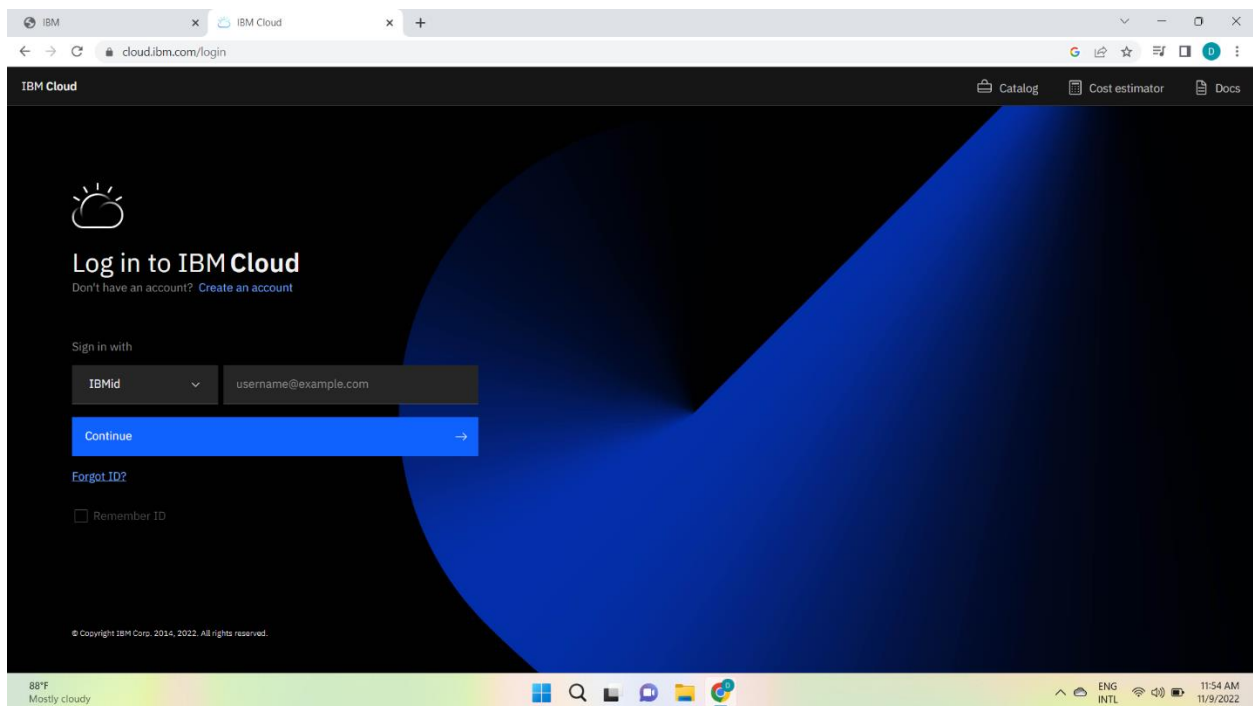


Create IBM Watson IOT Platform And Device

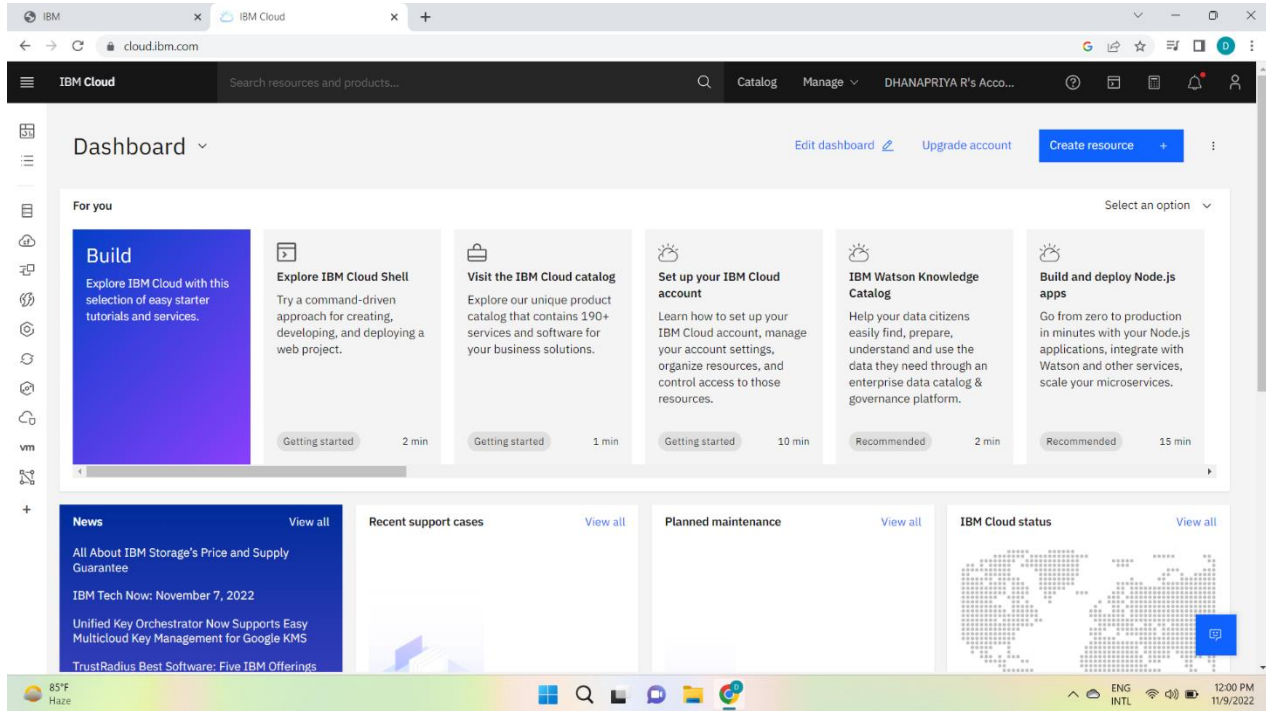
To create the IBM Watson IOT platform and device.

Steps:

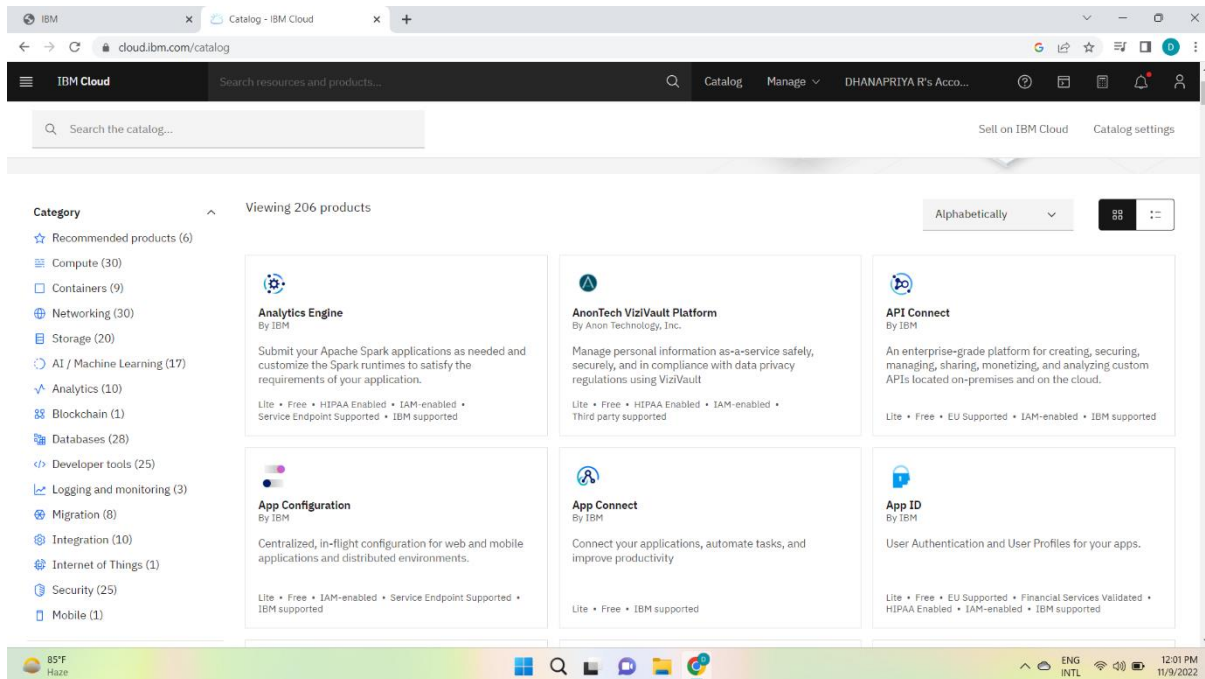
1. Create an IBM cloud account with the individual IBM id and password



2.Home page of “IBM cloud”



3.Click on “Catalog” on the top



4. Click on “Internet of Things” in the category

The screenshot shows the IBM Cloud 'Create' page for the Internet of Things Platform. The 'Location' dropdown is set to 'London (eu-gb)'. The 'Pricing' table shows the 'Lite' plan as the selected option.

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-70
Resource group: Default

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

[Create](#)

[Add to estimate](#)

5. Select the “location” and then click on “Create”

The screenshot shows the IBM Cloud 'Create' page for the Internet of Things Platform. The 'Location' dropdown is now set to 'Dallas (us-south)'. The 'Pricing' table remains the same, with the 'Lite' plan selected.

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: Dallas
Plan: Lite
Service name: Internet of Things Platform-au
Resource group: Default

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

[Create](#)

[Add to estimate](#)

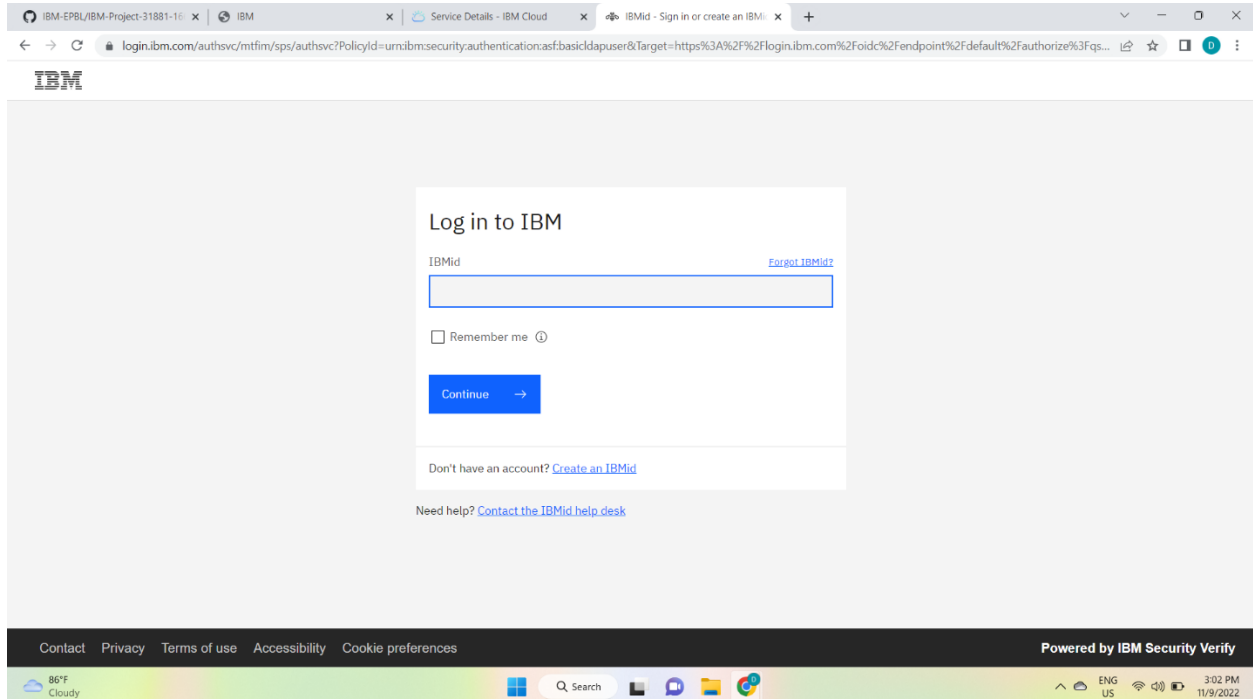
Step 6 : click on the launch .

The screenshot shows the IBM Cloud interface for the 'Internet of Things Platform-au'. The page is titled 'Let's get started with IBM Watson IoT Platform' and features a 'Launch' button. Below this, there is a section titled 'Ready for the next level?' with the 'IBM Watson IoT Platform Journey' diagram. The journey consists of three stages: 'Lite', 'Non-Production', and 'Production'. The 'Lite' stage is currently selected and marked with a checkmark. It describes a lightweight development environment. The 'Non-Production' stage is described as a full-featured, fully-integrated offering. The 'Production' stage is described as a fully managed SaaS offering. The 'Lite' stage includes a 'Free' plan, while the 'Non-Production' stage starts at '\$500 per month' and the 'Production' stage includes 'IBM Service & Support'. The page also has a sidebar with 'Manage', 'Plan', and 'Connections' options. The bottom of the page shows a Windows taskbar with the date and time as 3:01 PM on 11/9/2022.

Step 7: Click on sign in.

The screenshot shows the IBM Watson IoT Platform 'Sign in' page. The page has a dark background with a large 'Buildings' text in the center. To the left of 'Buildings' is the text 'Collect data from' and to the right is 'and make value from it'. Below the 'Buildings' text is a 'Learn More' link. The page also has a 'Sign in' button in the top right corner. The bottom of the page shows a Windows taskbar with the date and time as 3:02 PM on 11/9/2022.

Step 8: login to ibm using ibm cloud credentials.



The screenshot shows the IBM login page in a web browser. The browser's address bar displays the URL: `login.ibm.com/authsvc/mtfm/sps/authsvc?PolicyId=urn:ibm:security:authentication:asf:basicdapuser&Target=https%3A%2F%2Flogin.ibm.com%2Foidc%2Fdefault%2Fauthorize%3Fqs...`. The page features the IBM logo at the top left. The main content area is a white box titled "Log in to IBM". Inside this box, there is a label "IBMid" followed by a text input field. To the right of the input field is a link that says "Forgot IBMid?". Below the input field is a checkbox labeled "Remember me" with a small information icon. A blue "Continue" button with a right-pointing arrow is positioned below the checkbox. At the bottom of the white box, there is a link that says "Don't have an account? Create an IBMid". Below the white box, there is a link that says "Need help? Contact the IBMid help desk". The footer of the page is a dark bar containing links for "Contact", "Privacy", "Terms of use", "Accessibility", and "Cookie preferences" on the left, and "Powered by IBM Security Verify" on the right. The Windows taskbar is visible at the bottom of the screen, showing the time as 3:02 PM on 11/9/2022.

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](#)

Contact Privacy Terms of use Accessibility Cookie preferences

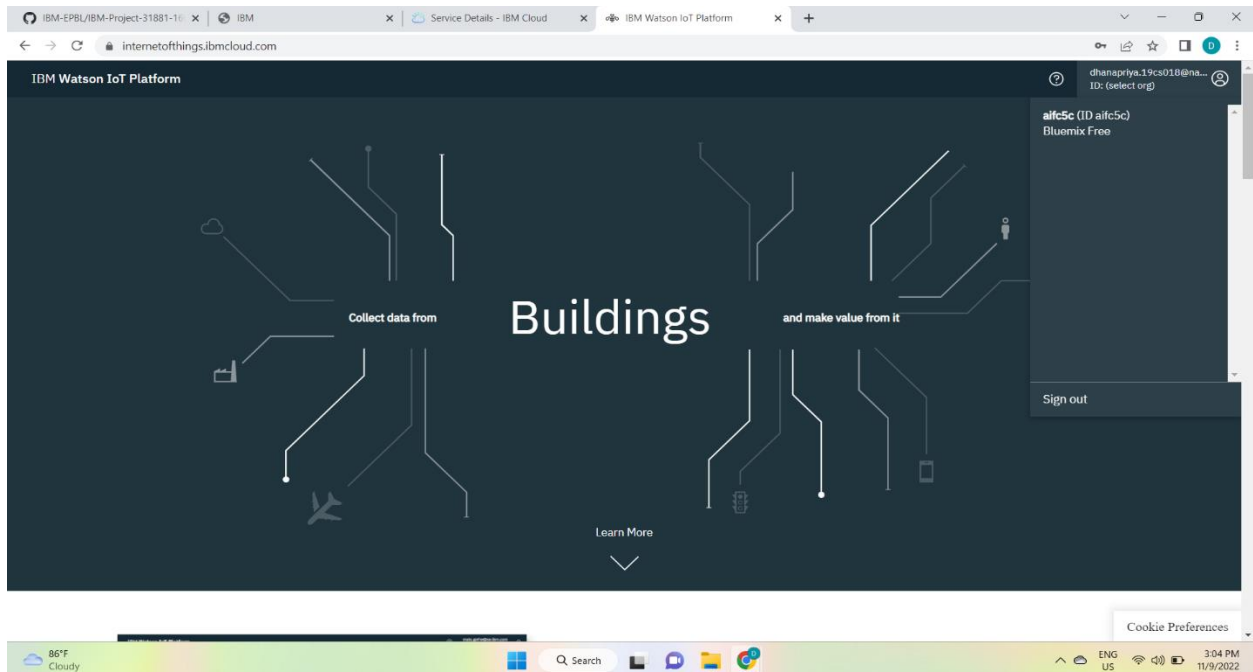
Powered by IBM Security Verify

86°F Cloudy

Search

ENG US 3:02 PM 11/9/2022

Step 9: select the cloud Id.



The screenshot shows the IBM Watson IoT Platform dashboard. The browser's address bar displays the URL: `internetofthings.ibmcloud.com`. The dashboard has a dark blue background with a central graphic that says "Buildings" in large white text. To the left of "Buildings" is the text "Collect data from" and to the right is "and make value from it". Below "Buildings" is a "Learn More" link with a downward-pointing arrow. On the right side of the dashboard, there is a user profile dropdown menu. The menu shows the user's email address "dhanprya.19cs018@na..." and the text "ID: (select org)". Below this, there is a list of organizations: "aifc5c (ID aifc5c)" and "Bluemix Free". At the bottom of the menu is a "Sign out" button. The Windows taskbar is visible at the bottom of the screen, showing the time as 3:04 PM on 11/9/2022.

IBM Watson IoT Platform

Collect data from

Buildings

and make value from it

[Learn More](#)

dhanprya.19cs018@na...
ID: (select org)

aifc5c (ID aifc5c)
Bluemix Free

[Sign out](#)

Cookie Preferences

86°F Cloudy

Search

ENG US 3:04 PM 11/9/2022

Step 10: Click on add device type.

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types' (selected), and 'Interfaces'. A blue 'Add Device Type' button is in the top right. The main heading is 'Device Types'. Below it, a text block explains that the table lists defined device types and can be filtered or searched. A search bar with the placeholder 'Type the name to search f...' is present. Below the search bar is a table with columns: 'Name', 'Description', 'Number of Devices', 'Class ID', and 'Date Added'. The table is currently empty, displaying a message: 'You don't have any device types created.' with an 'Add Device Type' button below it. The bottom of the screen shows a Windows taskbar with the date and time '3:04 PM 11/9/2022'.

Step 11: create a “Device name”.

The screenshot shows the 'Add Type' dialog box in the IBM Watson IoT Platform. The dialog has two tabs: 'Identity' (selected) and 'Device Information'. The 'Identity' tab contains the following fields and options:

- Type:** A dropdown menu with 'Device' selected, and 'Or Gateway' as an alternative option.
- Name:** A text input field with the placeholder 'Enter Name'. Below it, a note 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.'
- Description:** A text input field.

At the bottom right of the dialog are 'Cancel' and 'Next' buttons. The background shows the same IBM Watson IoT Platform interface as in Step 10.

Step 12: Click “Finish”.

The screenshot shows the 'Add Type' dialog box in the IBM Watson IoT Platform. The dialog has a progress bar with two steps: 'Identity' (completed) and 'Device Information' (current step). Below the progress bar, a message states: 'These attributes will be used as a template for new devices that are assigned this device type'. There is an 'Edit Metadata' link. The form contains two columns of input fields:

Attribute	Input Field
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

At the bottom right of the dialog are 'Back' and 'Finish' buttons. The background shows the 'Device Types' page with a 'Device Types' header.

Step 13: device type is created.

The screenshot shows the 'Register Devices, Define Interfaces' page in the IBM Watson IoT Platform. A message at the top states: 'You added the new device type: device_name'. Below this, there are two tabs: 'Register Device' (selected) and 'Advanced Flow'. The 'Register Device' tab has a sub-header 'Optional Register Devices, Define Interfaces' and a message: 'Now that you added a device type, you can register and connect devices for this type.' There is a 'Register Devices' button. On the right side of the page is a large grey area with a gear icon. At the bottom right are 'Cancel' and 'Next' buttons. The background shows the 'Device Types' page with a 'Device Types' header.

Step 14: Now create “Device Id”.

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Device' wizard is open, showing a progress bar with four steps: Identity (selected), Device Information, Security, and Summary. Below the progress bar, the text reads: '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 placeholder 'device_name' and 'Device ID' with the placeholder 'device_id'. At the bottom right of the wizard are 'Cancel' and 'Next' buttons. Below the wizard, the 'Browse Devices' section is visible with 'All Devices' and 'Diagnose' buttons.

Step 15: Click on “Next” .

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Device' wizard is open, showing a progress bar with four steps: Identity, Device Information (selected), Security, and Summary. Below the progress bar, the text reads: '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 includes: 'Serial Number' (placeholder: Enter Serial Number), 'Model' (placeholder: Enter Model), 'Description' (placeholder: Enter Description), and 'Hardware Version' (placeholder: Enter Hardware Version). The right column includes: '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 wizard is an 'Add Metadata' button with a plus icon. At the bottom right are 'Back' and 'Next' buttons.

Step 16: Give a “Token number “.

IBM Watson IoT Platform

dhanaPriya.19cs018@nandhaengg.org
ID: aifc5c

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

There are two options for selecting a device authentication token.

Auto-generated authentication token (default)

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.

Self-provided authentication token

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.

Authentication Token: 00001111

Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.

Authentication token are encrypted before we store them.

87°F Haze 3:10 PM 11/9/2022

Step 17: click on “Finish”.

IBM Watson IoT Platform

dhanaPriya.19cs018@nandhaengg.org
ID: aifc5c

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

Verify that the following information is correct then select Finish

Device Type
device_name

Device ID
device_id

[View Metadata](#)

Security Token
00001111

Back Finish

87°F Haze 3:10 PM 11/9/2022

Step 18: Now change “Connection security”.

The screenshot shows the IBM Watson IoT Platform dashboard for Connection Security. The page has a dark blue header with the IBM logo and user information. A sidebar on the left contains various icons. The main content area is titled "Connection Security" and includes a "Default Rule" section. Below this, there is a table with three columns: "Scope", "Security Level", and "# of Devices". The table contains one row with "Default" in the Scope column, "TLS with Token Authentication" in the Security Level column, and "0 devices" in the # of Devices column. There are "Back", "Close", and "Save" buttons at the top right of the main content area. The bottom of the screen shows a Windows taskbar with the date and time as 3:15 PM on 11/9/2022.

Scope	Security Level	# of Devices
Default	TLS with Token Authentication	0 devices

Step 19 : Select the security level to “TLS optional”.

The screenshot shows the IBM Watson IoT Platform dashboard for Connection Security, similar to the previous one, but with the "Security Level" changed to "TLS Optional". The table now shows "TLS Optional" in the Security Level column. The "Back", "Cancel", and "Save" buttons are visible at the top right of the main content area. The bottom of the screen shows a Windows taskbar with the date and time as 3:15 PM on 11/9/2022.

Scope	Security Level	# of Devices
Default	TLS Optional	0 devices

Step 20: Thus the “Dashboard” created is shown.

