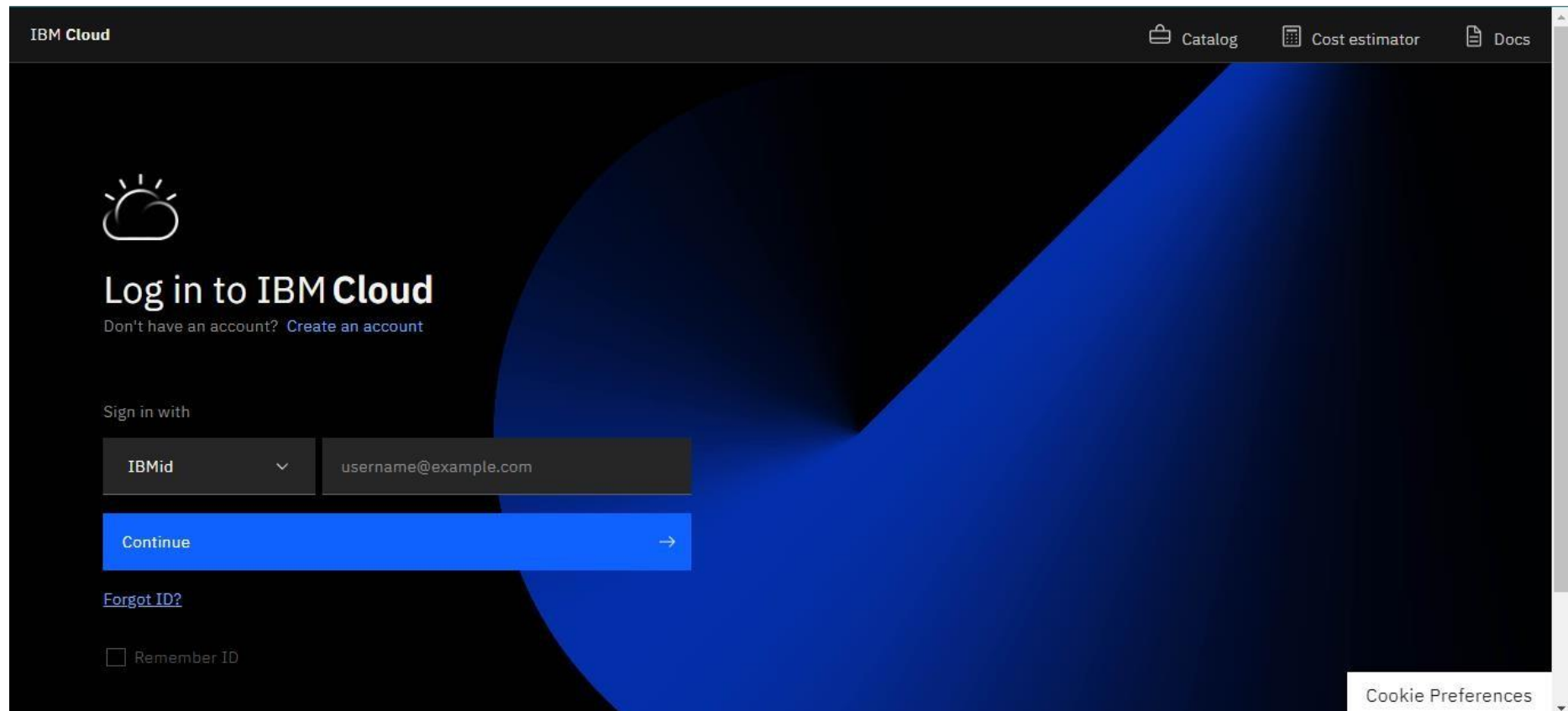


Create The IBM Watson IoT Platform And A Device

Project Title	SmartFarmer – IoT Enabled Smart Farming Application
Team ID	PNT2022TMID22142
Content	IBM Cloud and Device Creation

STEP 1:


Login into your IBM Cloud.



The screenshot shows the IBM Cloud login interface. At the top, a dark navigation bar contains the 'IBM Cloud' logo on the left and links for 'Catalog', 'Cost estimator', and 'Docs' on the right. The main content area has a dark background with a large blue abstract shape. On the left, there is a cloud icon with sun rays, followed by the text 'Log in to IBM Cloud'. Below this, a link says 'Don't have an account? [Create an account](#)'. Under the heading 'Sign in with', there is a dropdown menu showing 'IBMid' and a text input field containing 'username@example.com'. A prominent blue 'Continue' button with a right-pointing arrow is positioned below the input field. At the bottom left, there is a link for '[Forgot ID?](#)' and a checkbox labeled 'Remember ID'. In the bottom right corner, a 'Cookie Preferences' link is visible.

IBM Cloud

Catalog Cost estimator Docs



Log in to IBM Cloud

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

Sign in with

IBMid

Continue →

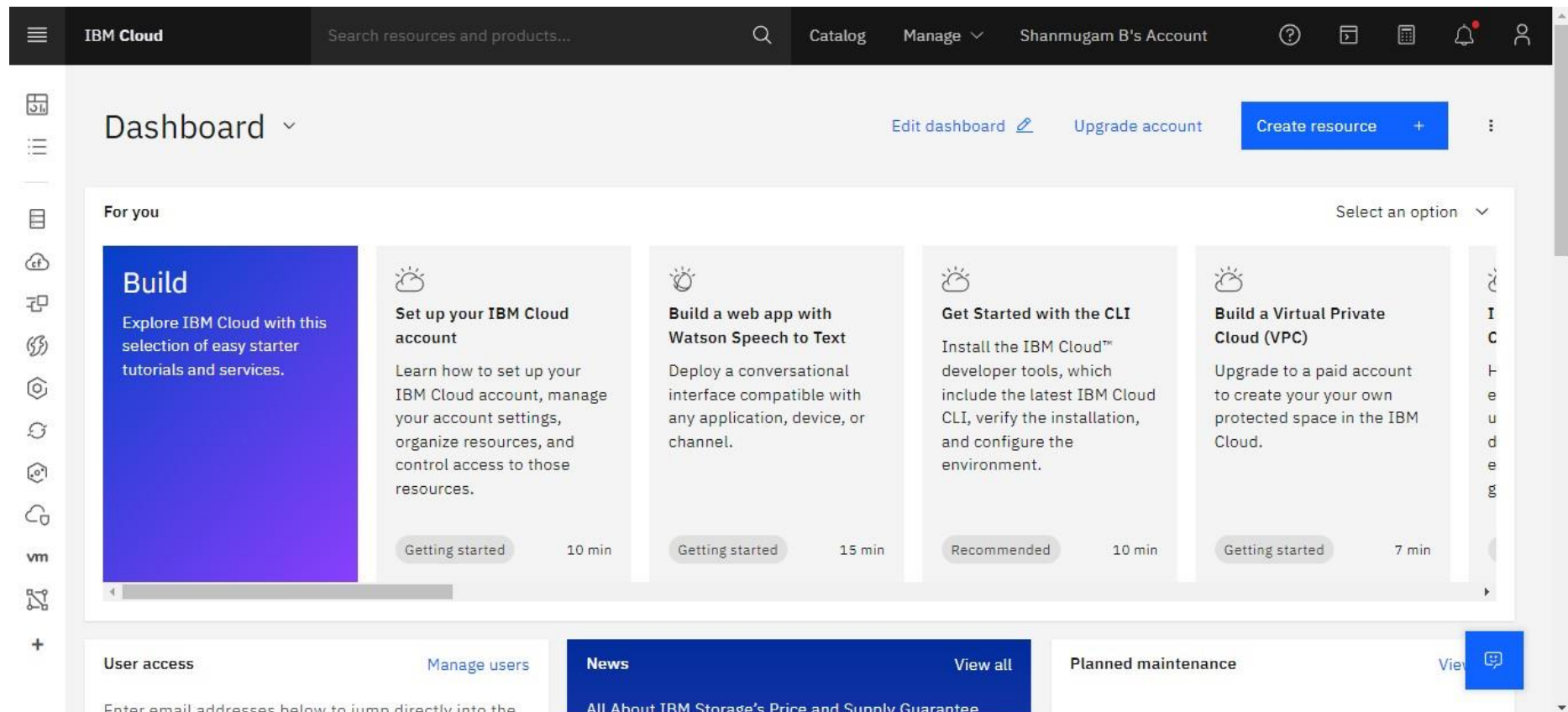
[Forgot ID?](#)

☐ Remember ID

Cookie Preferences

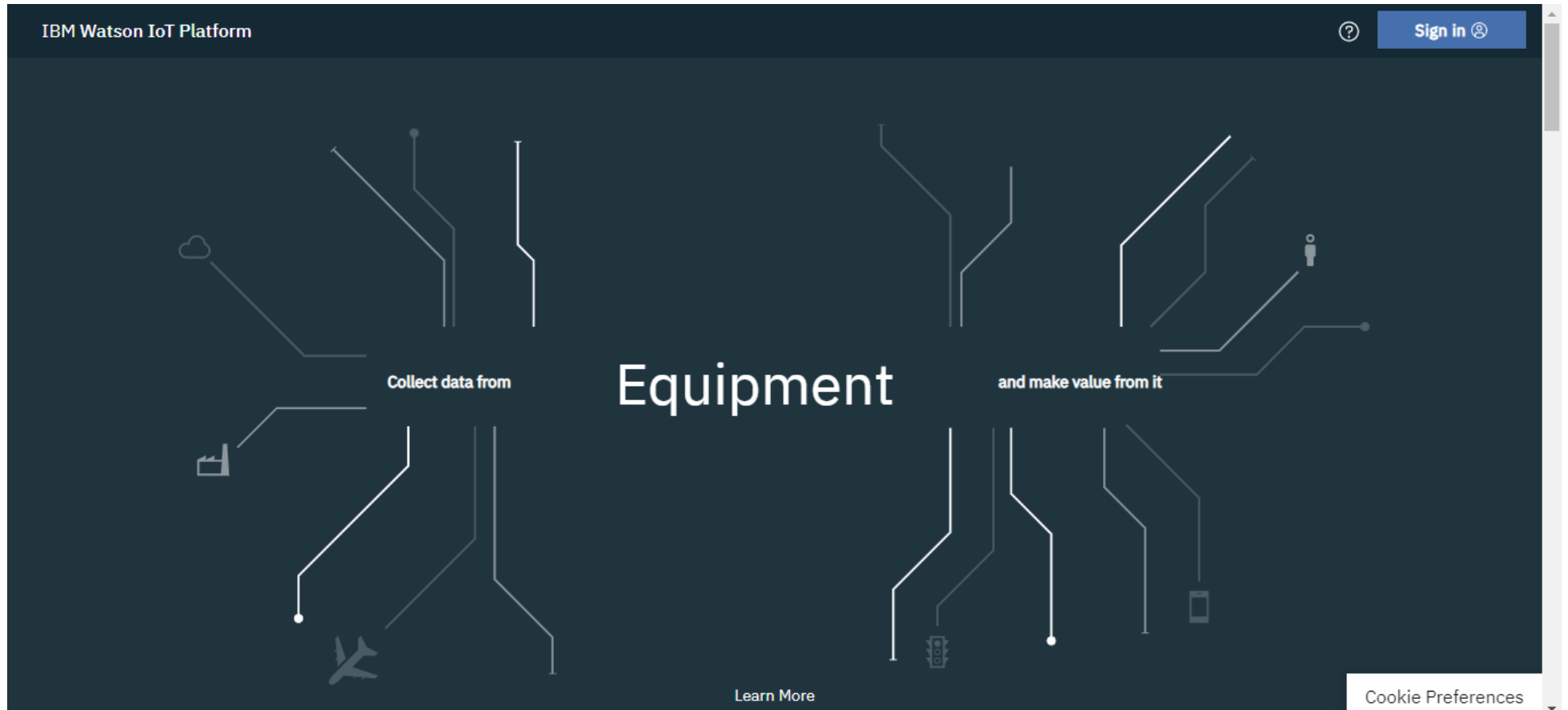
STEP 2:

After Login you will redirected to your dashboard. Search Internet of Things and Click on it.



STEP 3:

Now click on existing instance and then click Launch. Now you will be redirected to new page and Sign In again if it's prompt. Next select your org.



STEP 4:

Go to Devices section, there click on Add Device. There enter your device type and device id. Then click Next and Click Next again.

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The interface includes a top navigation bar with the platform name, a user profile, and a help icon. A left sidebar contains various icons for navigation. The main content area is titled 'Add Device' and features a progress bar with four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is currently active. Below the progress bar, there is a prompt: 'Select a device type for the device that you are adding and give the device a unique ID.' Two input fields are provided: 'Device Type' with the value 'esp32' and 'Device ID' with the value '8au7tk'. At the bottom right of the form, there are 'Cancel' and 'Next' buttons. The 'Browse Devices' section is visible at the bottom of the screen.

IBM Watson IoT Platform

vh10086_ece19@velhightech.com
ID: 8au7tk

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

Select a device type for the device that you are adding and give the device a unique ID.

Device Type esp32

Device ID 8au7tk

Cancel Next

Browse Devices

STEP 5:

Enter your authentication token or otherwise it will be auto generated and then click Next and then click Finish.

The screenshot shows the 'Add Device' page in the IBM Watson IoT Platform. The page is titled 'Add Device' and has a progress bar with four steps: Identity, Device Information, Security (current step), and Summary. The 'Security' step is highlighted with a blue circle. Below the progress bar, there are two options for selecting a device authentication token: 'Auto-generated authentication token (default)' and 'Self-provided authentication token'. The 'Auto-generated' option is selected. Below the options, there is a text input field for the 'Authentication Token' containing the value '12345678'. A tooltip is visible over the input field, stating 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' and 'Authentication token are encrypted'. A status bar at the bottom right indicates '0 Simulations running'.

IBM Watson IoT Platform

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ID: 8au7tk

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 12345678 ⓘ

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

Authentication token are encrypted

0 Simulations running

STEP 6:

Now you can see your Device Credentials.

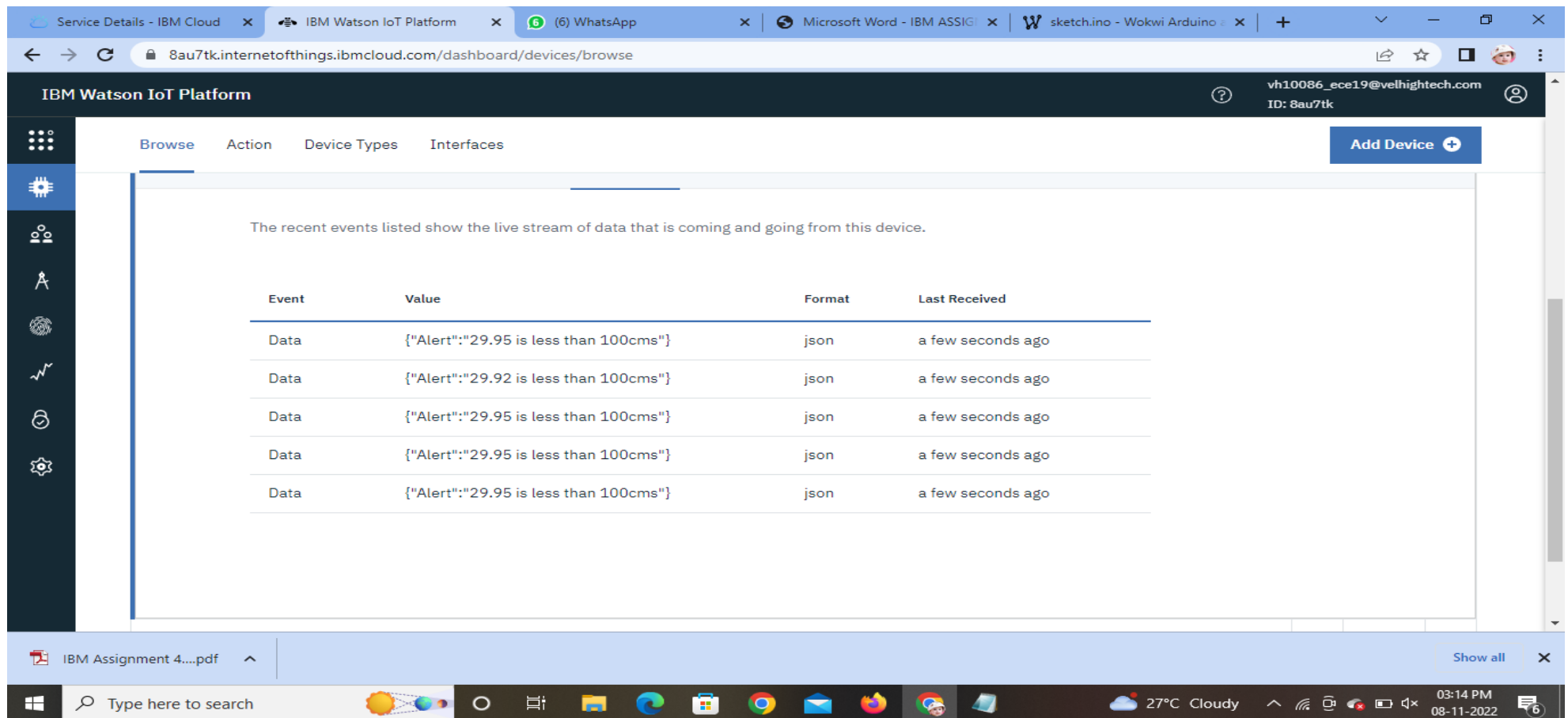
The screenshot displays the IBM Watson IoT Platform interface. At the top, a dark blue header bar contains the text "IBM Watson IoT Platform" on the left, a help icon and user information "vh10086_ece19@velhightech.com ID: 8au7tk" on the right, and a user profile icon. Below the header is a dark blue sidebar with a grid of icons. The main content area is white and titled "Device Drilldown - 8au7tk" with a "Back" link. A left-hand menu lists several options: "Device Credentials" (highlighted with a blue bar), "Connection Information", "Recent Events", "State", "Device Information", "Metadata", "Diagnostics", "Connection Logs", and "Device Actions". The "Device Credentials" section is active, showing a title "Device Credentials" and a descriptive paragraph: "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 is a table of credentials:

Organization ID	8au7tk
Device Type	esp32
Device ID	8au7tk
Authentication Method	use-token-auth
Authentication Token	12345678

At the bottom of the interface, there is a warning message: "Authentication tokens are non-recoverable authentication token." and a status box indicating "0 Simulations running".

Step 7:

Now click Back, there you can see the list of devices you created with device type, device id, date that device is created and status.



The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes tabs for 'Service Details - IBM Cloud', 'IBM Watson IoT Platform', '(6) WhatsApp', 'Microsoft Word - IBM ASSIGNMENT', 'sketch.ino - Wokwi Arduino', and a plus sign for additional tabs. The browser address bar shows the URL '8au7tk.internetofthings.ibmcloud.com/dashboard/devices/browse'. The dashboard header features the 'IBM Watson IoT Platform' logo, a user profile icon with the email 'vh10086_ece19@velhightech.com' and ID '8au7tk', and an 'Add Device' button. The main content area is titled 'Browse' and contains a table of recent events. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. The events listed are all 'Data' events with a value of '{"Alert": "29.95 is less than 100cms"}' in 'json' format, received 'a few seconds ago'. A sidebar on the left contains icons for various IoT functions. The bottom of the screen shows a Windows taskbar with a search bar, several application icons, and system status information including '27°C Cloudy' and the time '03:14 PM 08-11-2022'.

Event	Value	Format	Last Received
Data	{"Alert": "29.95 is less than 100cms"}	json	a few seconds ago
Data	{"Alert": "29.92 is less than 100cms"}	json	a few seconds ago
Data	{"Alert": "29.95 is less than 100cms"}	json	a few seconds ago
Data	{"Alert": "29.95 is less than 100cms"}	json	a few seconds ago
Data	{"Alert": "29.95 is less than 100cms"}	json	a few seconds ago