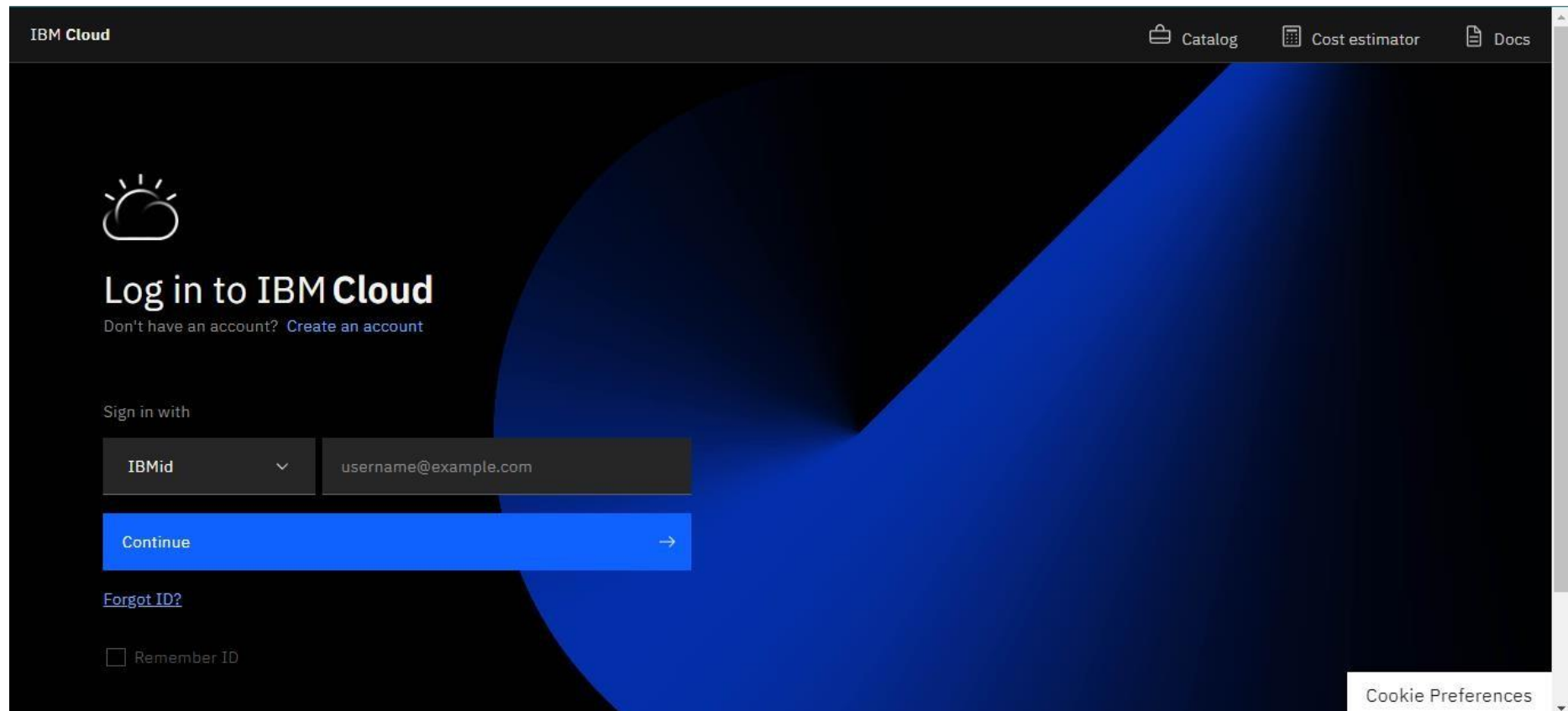


## **Create The IBM Watson IoT Platform And A Device**

<b>Project Title</b>	SmartFarmer – IoT Enabled Smart Farming Application
<b>Team ID</b>	PNT2022TMID53961
<b>Content</b>	IBM Cloud and Device Creation

## STEP 1:


Login into your IBM Cloud.



The screenshot shows the IBM Cloud login interface. At the top, there is a dark navigation bar with 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'. Below these is a prominent blue 'Continue' button with a right-pointing arrow. Underneath the button is a link for '[Forgot ID?](#)'. At the bottom left, there is a checkbox labeled 'Remember ID'. In the bottom right corner, there is a 'Cookie Preferences' link.

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 be redirected to your dashboard. Search Internet of Things and Click on it.

The screenshot displays the IBM Cloud dashboard interface. At the top, a browser window shows the URL `cloud.ibm.com`. The dashboard header includes the IBM Cloud logo, a search bar, and navigation links for Catalog, Manage, and a user profile. The main content area is titled "Dashboard" and features a "For you" section with several service tiles. These tiles include "Build" (a large blue tile), "Build a web app with Watson Speech to Text" (15 min), "Get Started with Watson Studio" (2 hr), "Build a virtual machine" (7 min), "Build and deploy Node.js apps" (15 min), and "Get started with Watson Discovery" (15 min). Each tile provides a brief description and a "Getting started" or "Recommended" button. Below the "For you" section, there are three panels: "User access" with a "Manage users" link, "News" with links to "IBM Cloud Satellite New Pricing" and "IBM Cloud Data Shield Deprecation", and "Planned maintenance" with a "View all" link. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

IBM Cloud

Search resources and products...

Catalog Manage GNANAESWARAMOOR...

Dashboard

Edit dashboard Upgrade account Create resource

For you

Select an option

**Build**  
Explore IBM Cloud with this selection of easy starter tutorials and services.

**Build a web app with Watson Speech to Text**  
Deploy a conversational interface compatible with any application, device, or channel.  
Getting started 15 min

**Get Started with Watson Studio**  
Get started with using AI and Cloud Object Storage in 15 minutes.  
Popular 2 hr

**Build a virtual machine**  
Lift and shift your VMware workloads to the IBM Cloud.  
Getting started 7 min

**Build and deploy Node.js apps**  
Go from zero to production in minutes with your Node.js applications, integrate with Watson and other services, scale your microservices.  
Recommended 15 min

**Get started with Watson Discovery**  
Get up and running with Watson Discovery tutorial and code samples.  
Recommended 15 min

**User access** Manage users  
Enter email addresses below to jump directly into the invite user setup:

**News** View all  
IBM Cloud Satellite New Pricing  
IBM Cloud Data Shield Deprecation

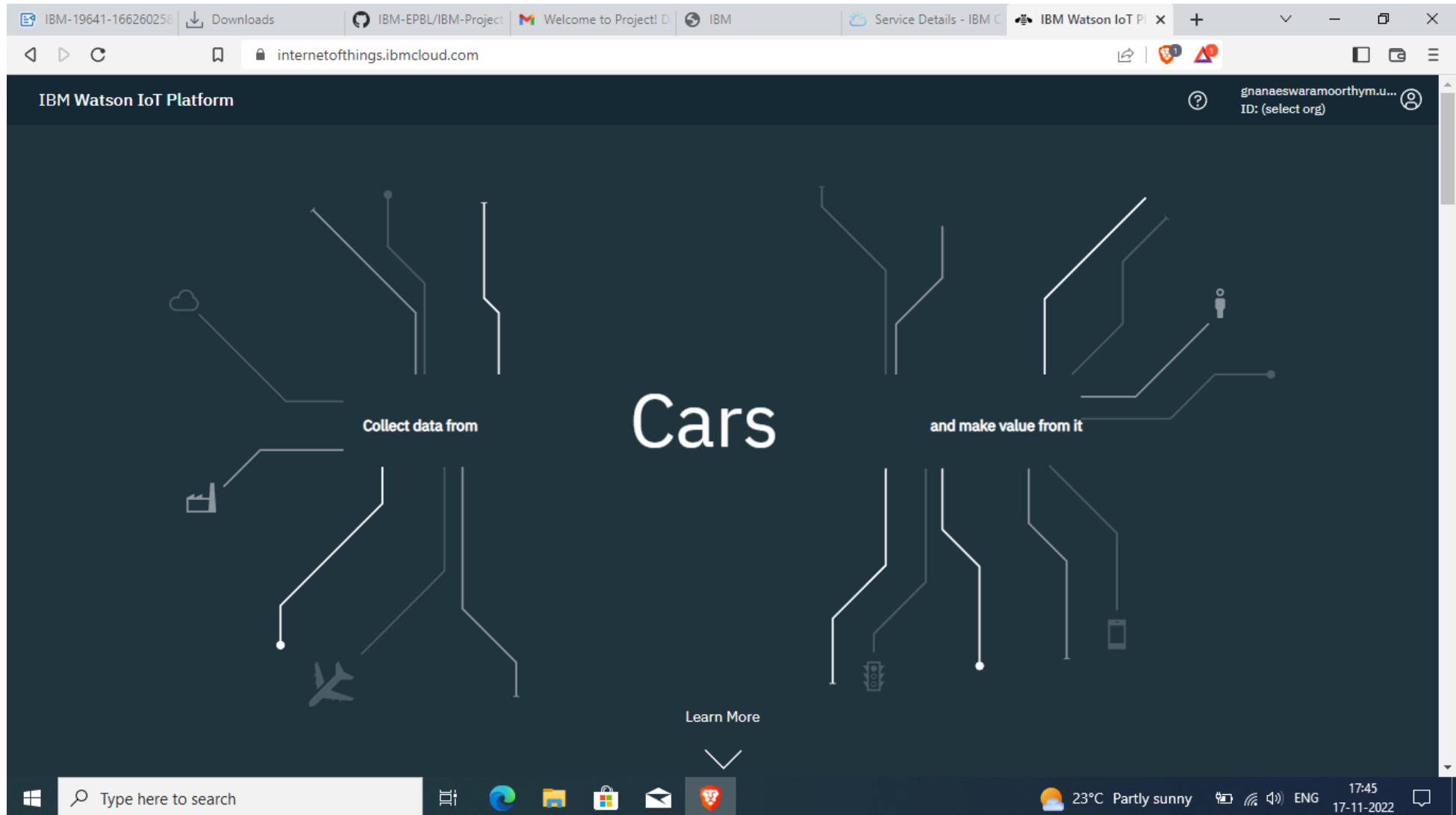
**Planned maintenance** View all

Type here to search

23°C Partly sunny 17:42 17-11-2022

## 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 IBM Watson IoT Platform interface. The top navigation bar includes the IBM logo and the text 'IBM Watson IoT Platform'. The user's profile is visible in the top right corner with the email 'gnanaeswaramoorthym.ug19.ec@francisxavier.ac.in' and the ID '8pr6da'. The left sidebar contains various icons for navigation. The main content area displays the 'Add Device' wizard, which is a multi-step process. The first step, 'Identity', is currently active and highlighted. The wizard includes a progress bar with four steps: Identity, 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.' Two input fields are provided: 'Device Type' with the value 'Arduino' and 'Device ID' with the value '12345'. At the bottom right of the wizard, there are two buttons: 'Cancel' and 'Next'.

IBM Watson IoT Platform

gnanaeswaramoorthym.ug19.ec@francisxavier.ac.in  
ID: 8pr6da

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: Arduino

Device ID: 12345

Cancel Next

## 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 IBM Watson IoT Platform dashboard. The browser address bar displays the URL: `8pr6da.internetofthings.ibmcloud.com/dashboard/devices/browse/add`. The page title is "IBM Watson IoT Platform". The user is logged in as `gnanaeswaramoorthym.ug19.ec@franciscxavier.ac.in` with ID: `8pr6da`. The navigation menu on the left includes icons for Home, Devices, Actions, Device Types, Interfaces, and Settings. The main content area is titled "Browse" and shows 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.

The "Auto-generated authentication token" option is selected, and a text box displays the generated token: `12345678`. Below the text box, a warning message states: "Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored." and "Authentication token are encrypted before we store them."

At the bottom right of the page, there are two buttons: "Back" and "Next".

## STEP 6:

Now you can see your Device Credentials.

The screenshot displays the IBM Watson IoT Platform web interface. The browser address bar shows the URL: `8pr6da.internetofthings.ibmcloud.com/dashboard/devices/drilldown/Arduino:12345?returnTo=/devices/browse`. The user is logged in as `gnanaeswaramoorthym.ug19.ec@francisxavier.ac.in` with ID `8pr6da`.

The main content area is titled "Device Drilldown - 12345". On the left, a sidebar menu lists various options: Connection Information (selected), Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions.

The "Connection Information" section provides details about the device:

Property	Value
Device ID	12345
Device Type	Arduino
Date Added	Nov 17, 2022 5:52 PM
Added By	gnanaeswaramoorthym.ug19.ec@francisxavier.ac.in
Connection Status	Disconnected

Below this, the "Recent Events" section is visible, with a sub-header indicating it shows a live stream of data. A table header is partially visible at the bottom of the screenshot:

Event	Value	Format	Last Received
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The Windows taskbar at the bottom shows the system clock as 18:06 on 17-11-2022, with a weather forecast of 23°C Partly sunny.

## 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 interface. The top navigation bar includes the IBM logo and the text 'IBM Watson IoT Platform'. The user's profile is shown as 'gnanaeswaramoorthym.ug19.ec@francisxavier.ac.in' with ID '8pr6da'. The main heading is 'Browse Devices'. Below the heading are two tabs: 'All Devices' (selected) and 'Diagnose'. A message states: '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.' Below this is a search bar labeled 'Search by Device ID'. To the right of the search bar is a 'Device Simulator' toggle switch. The table below has the following columns: Device ID, Status, Device Type, Class ID, and Date Added. There are two rows of data, both with Device ID '12345' and Status 'Disconnected'. The first row is for an 'Arduino' device, added on 'Nov 17, 2022 5:52 PM'. The second row is for a 'NodeMCU' device, added on 'Oct 19, 2022 11:44 PM'. At the bottom of the table, it says 'Items per page 50 | 1-2 of 2 items' and '1 of 1 page'.

Device ID	Status	Device Type	Class ID	Date Added
12345	Disconnected	Arduino	Device	Nov 17, 2022 5:52 PM
12345	Disconnected	NodeMCU	Device	Oct 19, 2022 11:44 PM