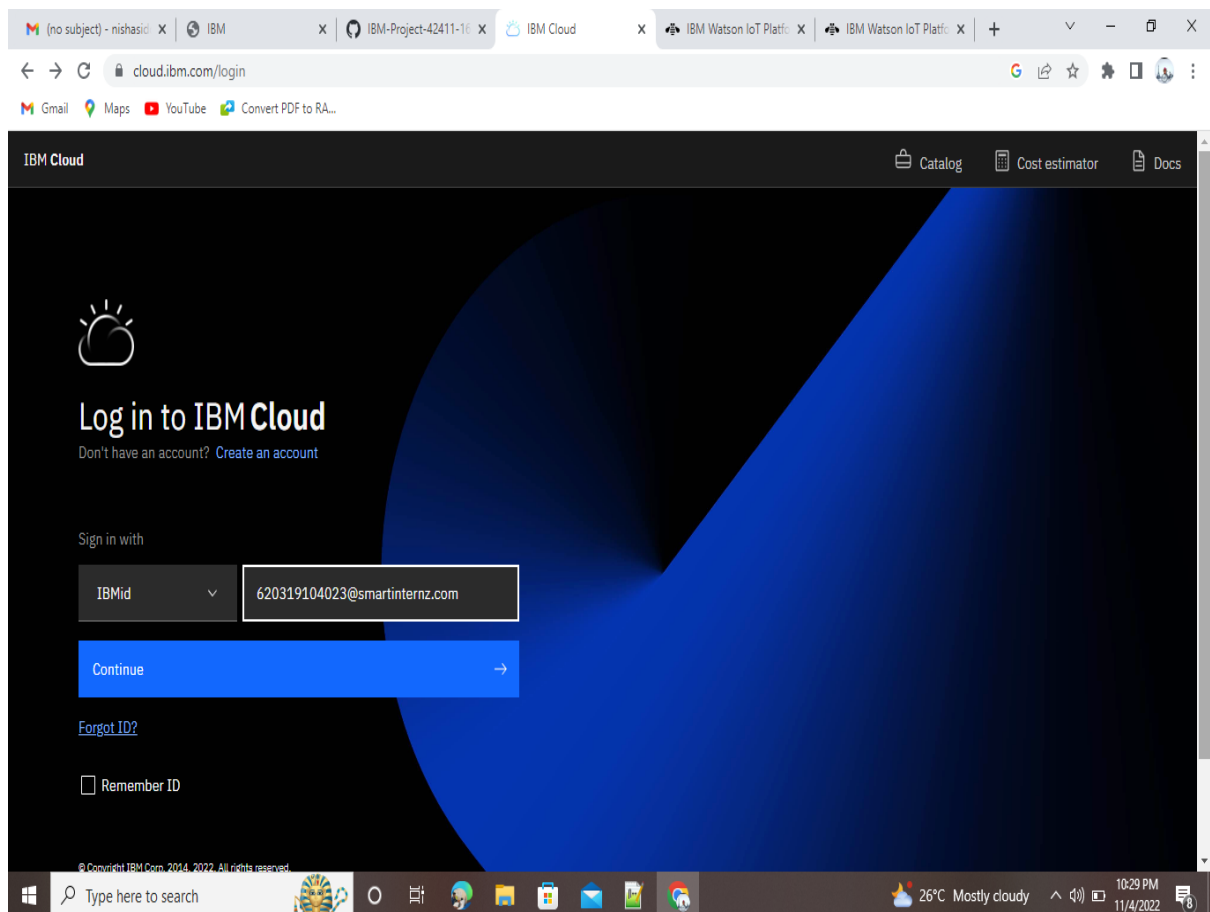


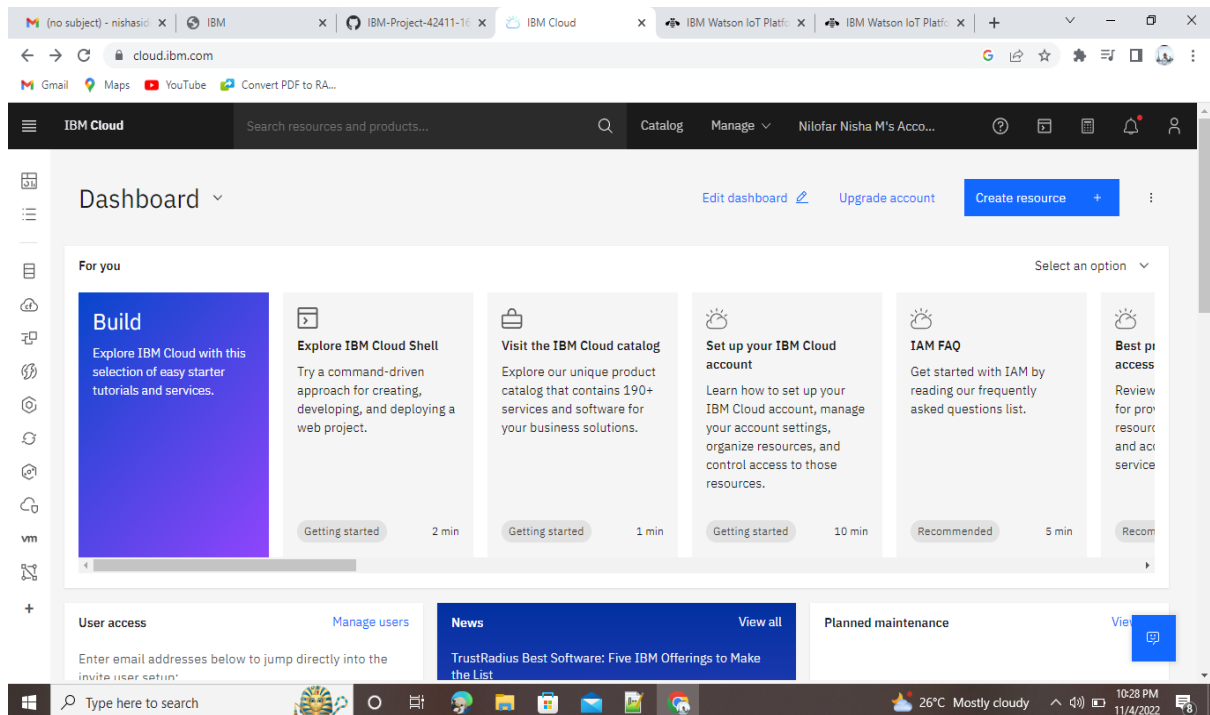
Date	5 November 2022
Team ID	PNT2022TMID41353
Project Name	IOT Based Smart Crop Protection System for Agriculture
Maximum Marks	4 Marks

STEPS

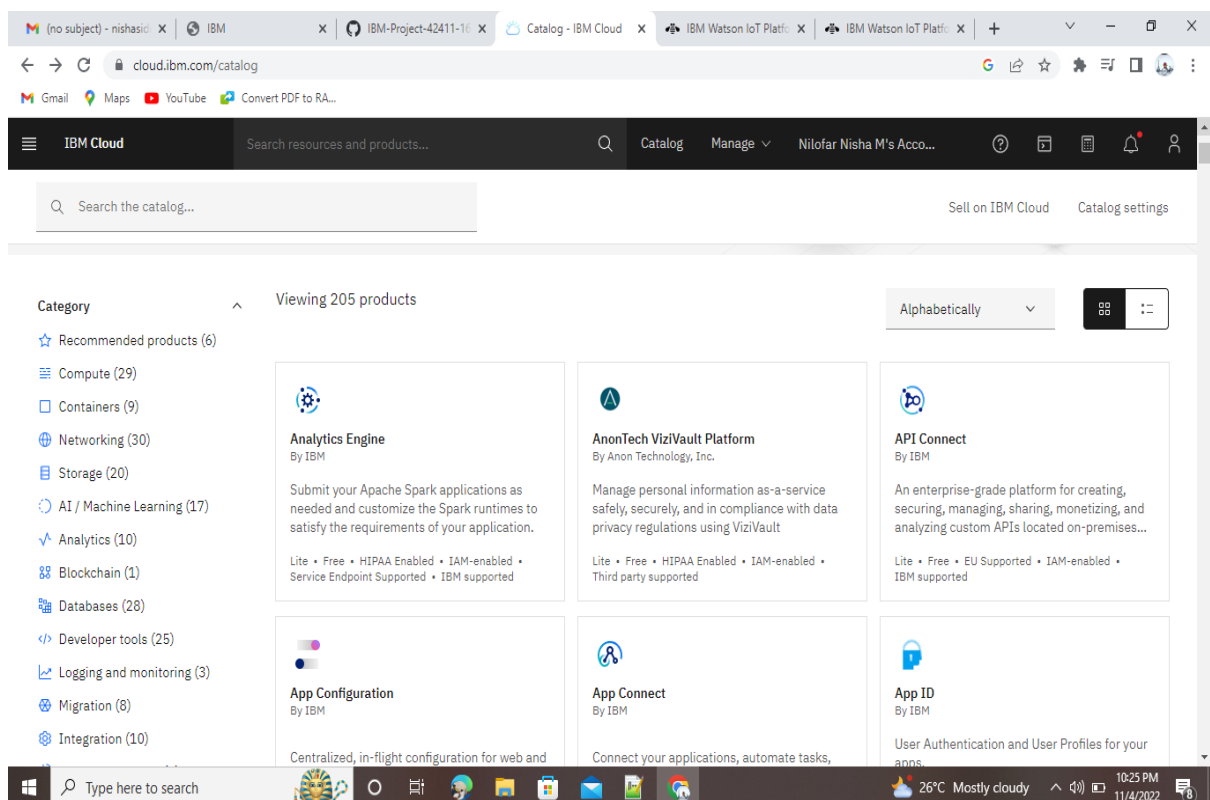
1. Firstly create an IBM cloud account with IBM ID and password.



2.Home page of IBM cloud



3.Click on the catalog on the top.



4. Click on the IOT in the category mentioned.

The screenshot shows the IBM Cloud 'Create' page for the Internet of Things Platform. The page is divided into several sections:

- Header:** IBM Cloud logo, search bar, and navigation links (Catalog, Manage, etc.).
- Service Details:** A sidebar on the left lists service details: Type (Service), Provider (IBM), Last updated (08/15/2022), Category (Internet of Things), Compliance (IAM-enabled), and Location (Frankfurt, London).
- Create Form:** The main area contains a 'Select a location' dropdown menu with 'London (eu-gb)' selected, and a 'Select a pricing plan' section with a table of available plans.
- Summary Panel:** A right-hand panel titled 'Summary' displays the service name, location, and plan. It also includes a warning message: '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.' Below this is a checkbox for 'I have read and agree to the following license agreements:' with a link to '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	Free

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

This screenshot is identical to the one above, showing the IBM Cloud 'Create' page for the Internet of Things Platform. It highlights the warning message in the summary panel: '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.'

6. Enter the location and in the configure your resources type the service name and choose the plan, tick the agree with it agreements and then click on create.

The screenshot shows the IBM Cloud 'Internet of Things Platform' service configuration page. The browser address bar shows the URL: `cloud.ibm.com/catalog/services/internet-of-things-platform`. The page has a dark header with the IBM Cloud logo and a search bar. The main content area is divided into a left sidebar, a central configuration area, and a right summary panel.

Left Sidebar:

- Type: Service
- Provider: IBM
- Last updated: 08/15/2022
- Category: Internet of Things
- Compliance: IAM-enabled
- Location: Frankfurt, London

Central Configuration Area:

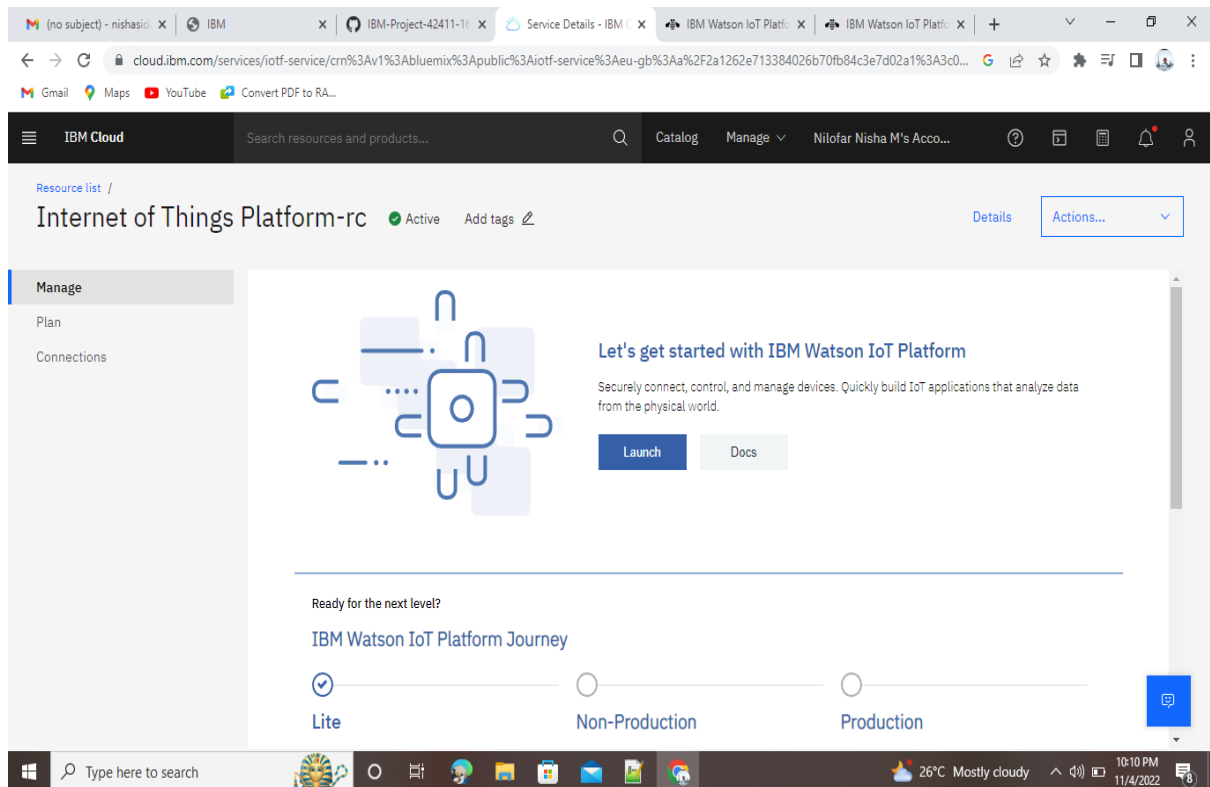
- Internet of Things Platform**
This service is the hub of all things IBM IoT, it is where you can set up and manage your connected devices so that your apps can access their live and historical data.
- Create** (selected) | About
- Select a location:** London (eu-gb) (dropdown menu)
- Select a pricing 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 | Free |

Right Summary Panel:

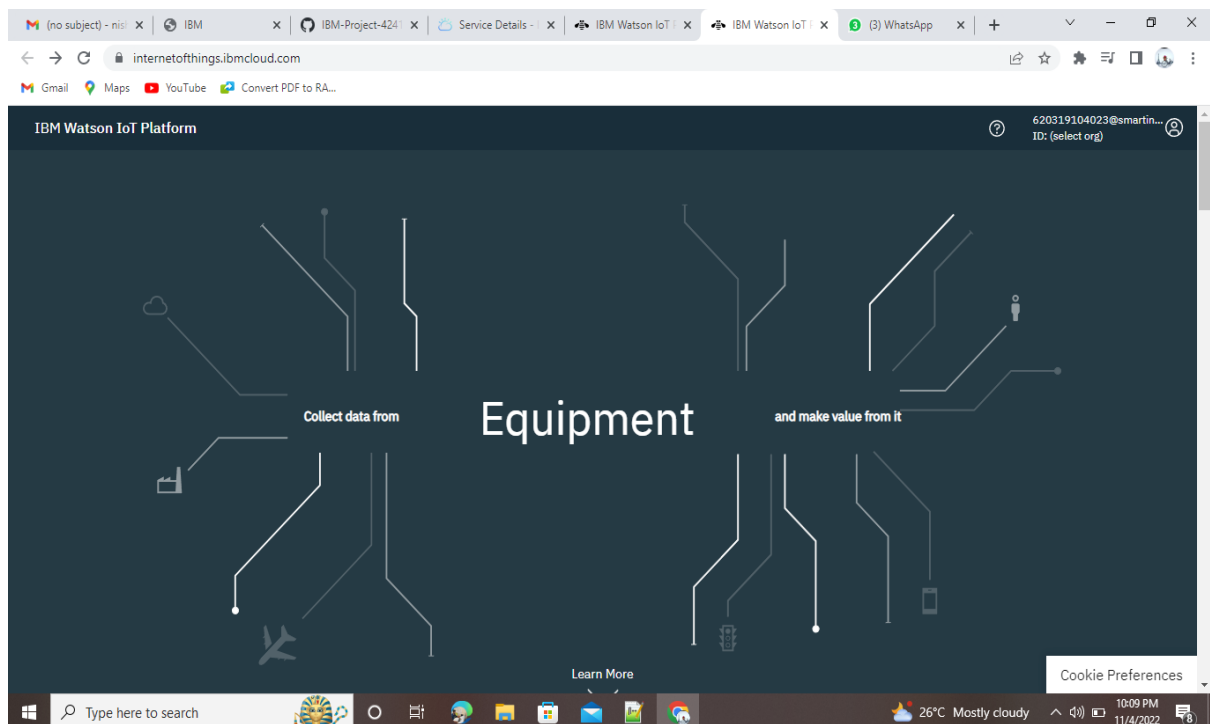
- Summary**
- Internet of Things Platform** **Free**
- Location: London
- Plan: Lite
- Service name: Internet of Things Platform-On
- Resource group: Default
- ☐ I have read and agree to the following license agreements:
[Terms](#)
- Create button
- Add to estimate button

The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with weather (26°C Mostly cloudy) and time (10:43 PM 11/4/2022).

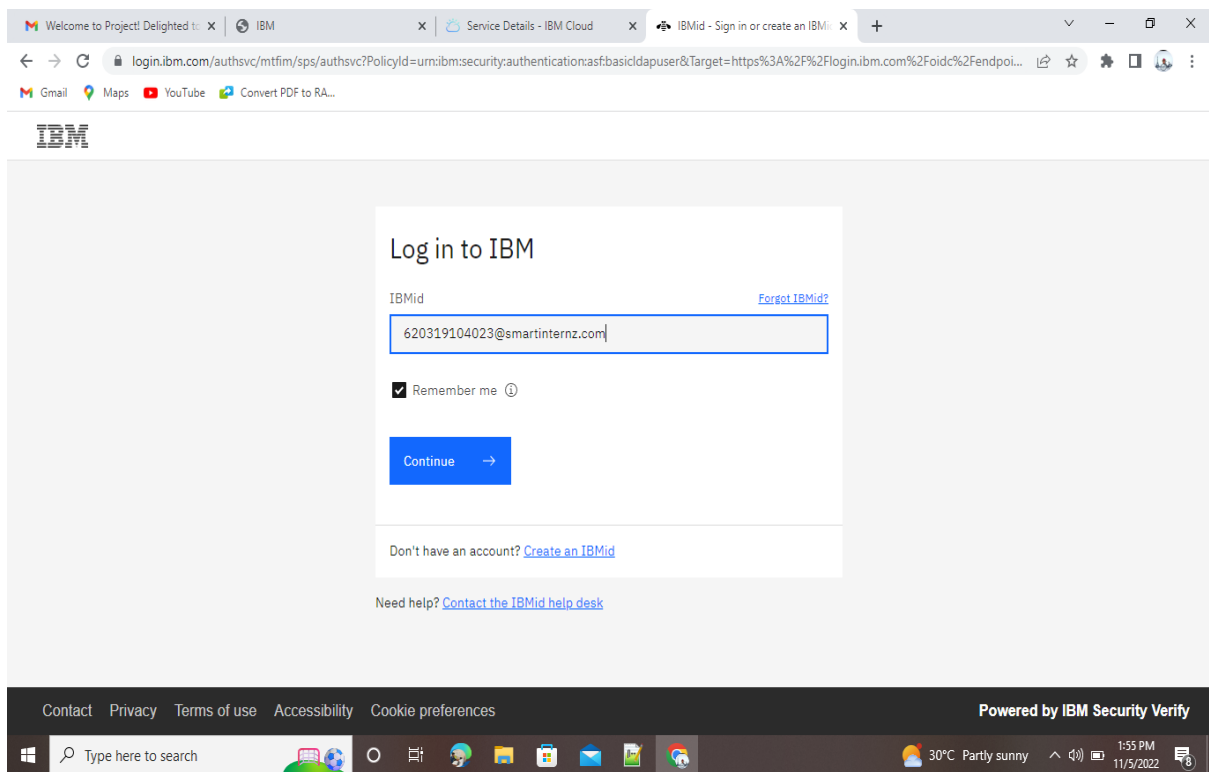
7. Internet of things platform smart crop protection will be created, where there are different options like manage, plan, and connection.



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



9. Enter the details to sign in to the Watson cloud to create a device.

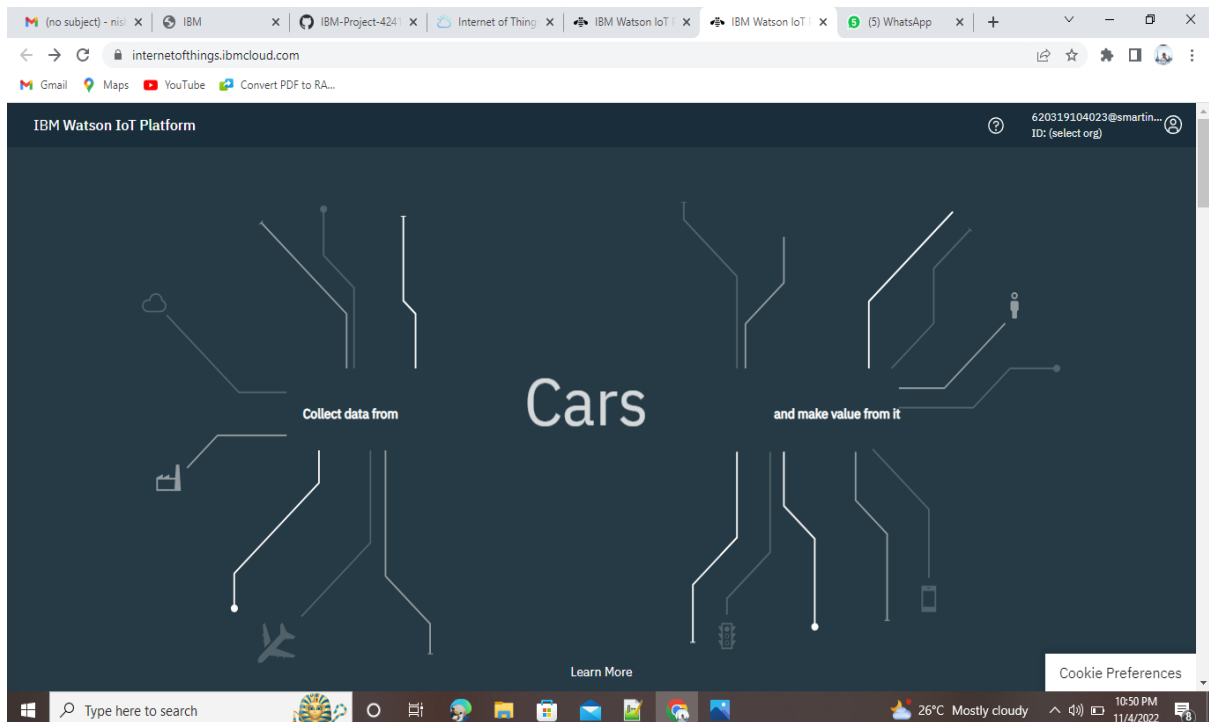


The screenshot shows a web browser window with the URL `login.ibm.com/authsvc/mtfim/sps/authsvc?PolicyId=urn:ibm:security:authentication:asf:basicdapuser&Target=https%3A%2F%2Flogin.ibm.com%2Foidc%2Fendpoi...`. The page features the IBM logo at the top left. The main content area is titled "Log in to IBM" and contains a form with the following elements:

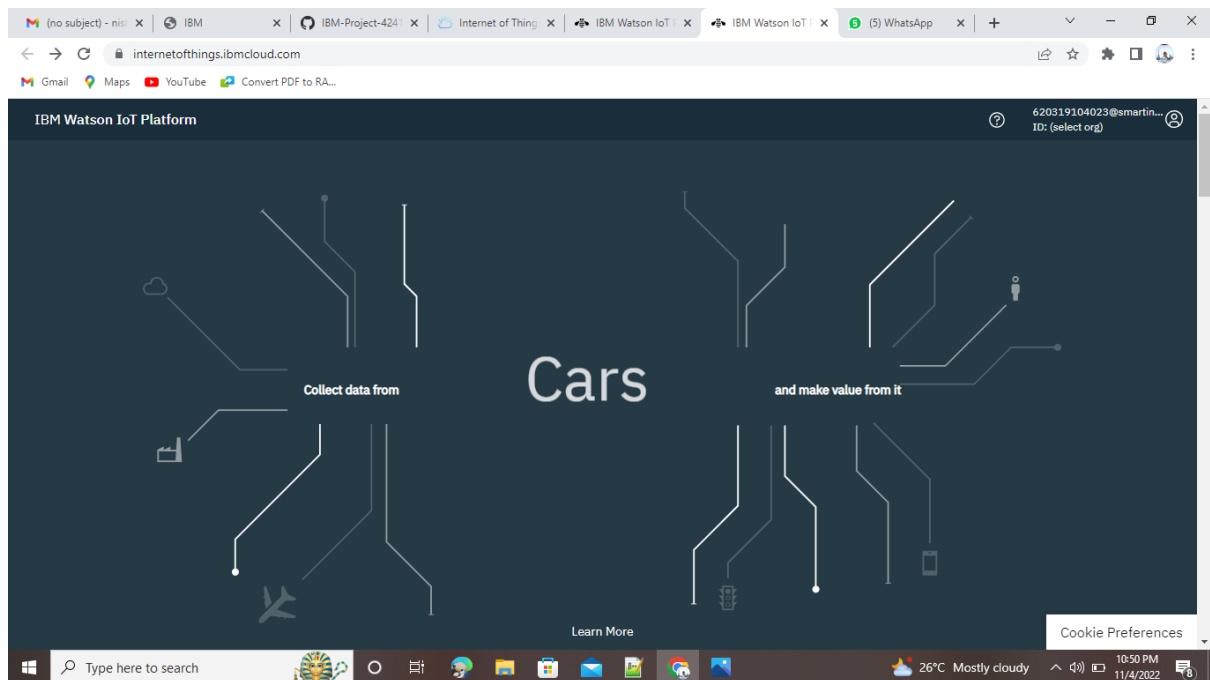
- A label "IBMid" and a link "Forgot IBMId?".
- A text input field containing the email address "620319104023@smartinternz.com".
- A checkbox labeled "Remember me" with an information icon.
- A blue "Continue" button with a right-pointing arrow.
- A link "Don't have an account? [Create an IBMId](#)".
- A link "Need help? [Contact the IBMId help desk](#)".

The footer of the page includes links for "Contact", "Privacy", "Terms of use", "Accessibility", and "Cookie preferences", along with the text "Powered by IBM Security Verify". The Windows taskbar at the bottom shows the search bar, task view button, and several application icons, including a weather widget displaying "30°C Partly sunny" and the time "1:55 PM 11/5/2022".

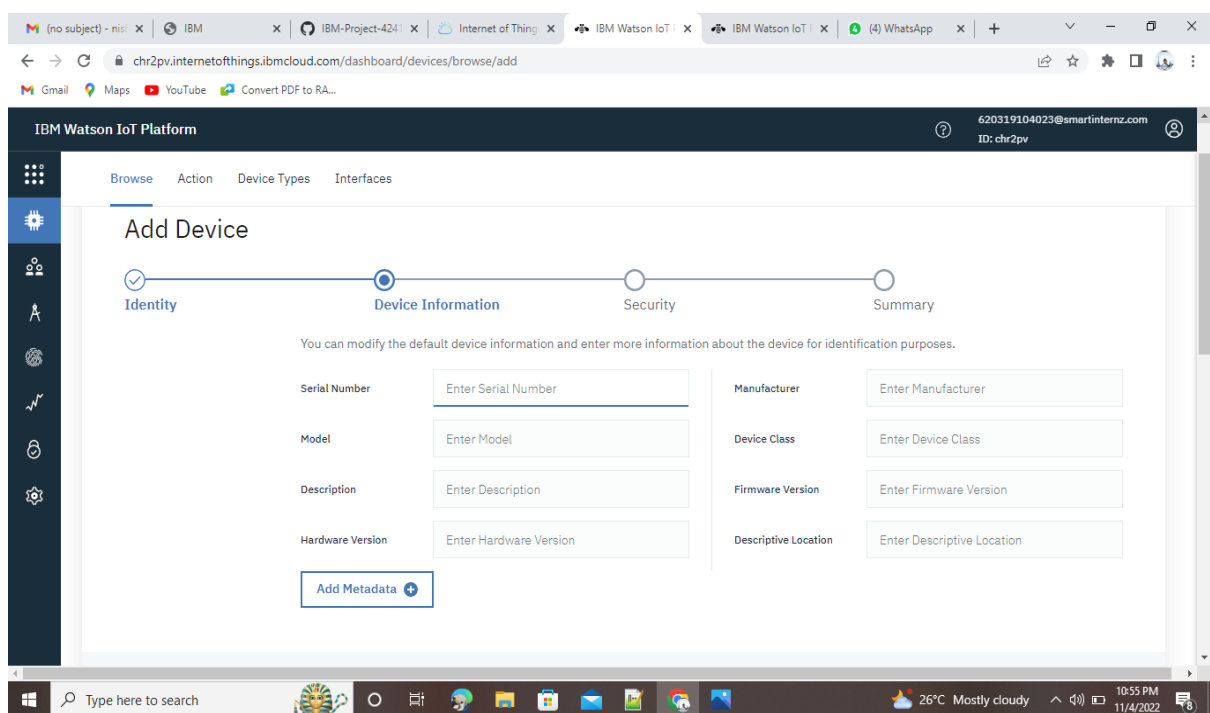
10. Once logged in the name will be displayed and it goes back to the first page.



11. 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.



12. The member tab is add the teams members to work in the platform.



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

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Device' modal 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 a dropdown menu labeled 'Select or create a device type...' and 'Device ID' with a text input labeled 'Enter Device ID'. At the bottom right of the modal are 'Cancel' and 'Next' buttons. The browser's address bar shows the URL 'chr2pv.internetofthings.ibmcloud.com/dashboard/devices/browse/add'.

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

The screenshot shows the IBM Watson IoT Platform interface, now on the 'Device Information' step of the 'Add Device' modal. The progress bar shows 'Identity' as completed and 'Device Information' as the current step. 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' (text input), 'Model' (text input), 'Description' (text input), and 'Hardware Version' (text input). The right column includes: 'Manufacturer' (text input), 'Device Class' (text input), 'Firmware Version' (text input), and 'Descriptive Location' (text input). At the bottom left of the modal is an 'Add Metadata' button with a plus icon. The browser's address bar shows the same URL as the previous screenshot.

15. Clicking next it goes to the security where we do authentication token ID.

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

17. The device credentials will be displayed with all details.

18. Clicking on the device tab we can now see the added device. Clicking on it will display the order the other details.

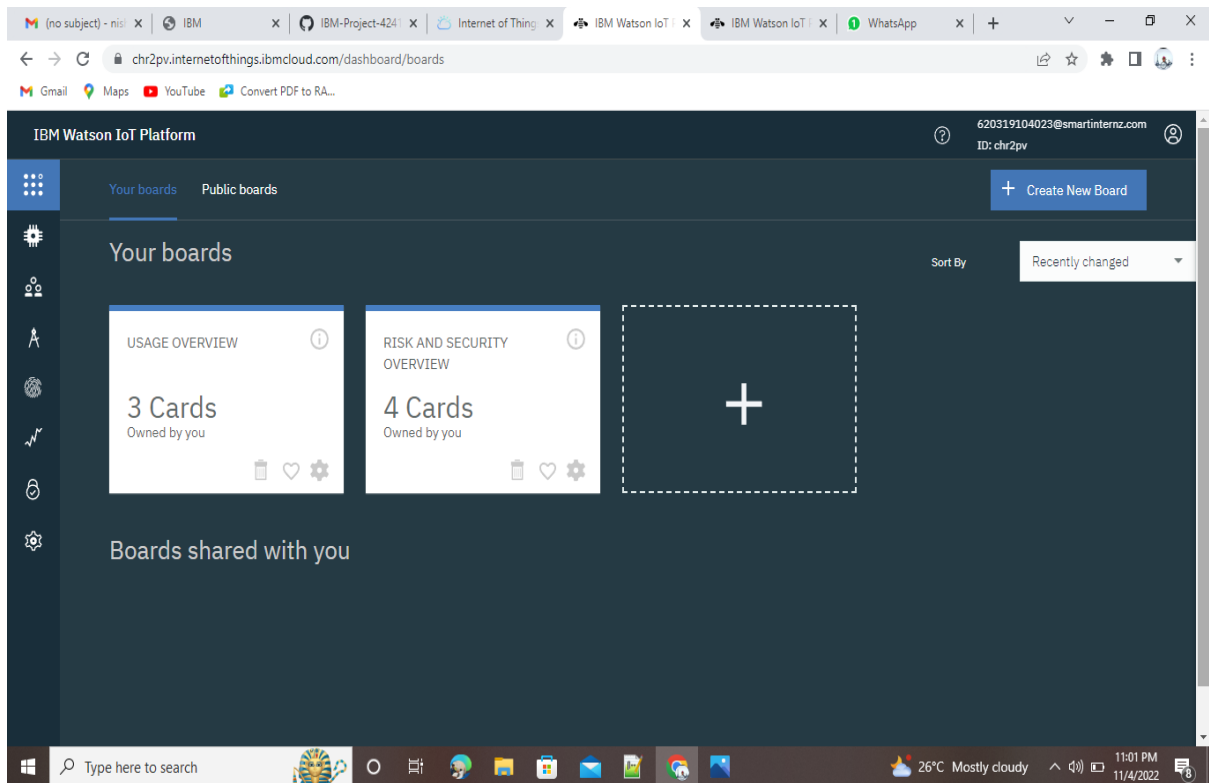
It has different the like identity, device information, state and login.

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. Below the navigation bar, a table lists devices. The first device has ID 12345, status 'Disconnected', and type 'NodeMCU'. A modal window is open showing details for this device, including its ID, type, date added, added by, and connection status.

Device ID	Status	Device Type	Class ID	Date Added
12345	Disconnected	NodeMCU	Device	Nov 4, 2022 9:59 PM

Identity	Device Information	Recent Events	State	Logs
Device ID	12345			
Device Type	NodeMCU			
Date Added	Nov 4, 2022 9:59 PM			
Added By	620319104023@smartinternz.com			
Connection Status	Disconnected			

19. The Boards will display card for the project.



RESULT:

An IBM Watson cloud for IOT and device is created.

TEAM ID : PNT2022TMID41353

TEAM LEADER : M. Nilofar Nisha

TEAM MEMBER 1 : R. PRIYA

TEAM MEMBER 2 : Z. JAFRIN

TEAM MEMBER 3 : N. SNEKA

TEAM SIZE : 4

MENTOR : T. RAGAVI