

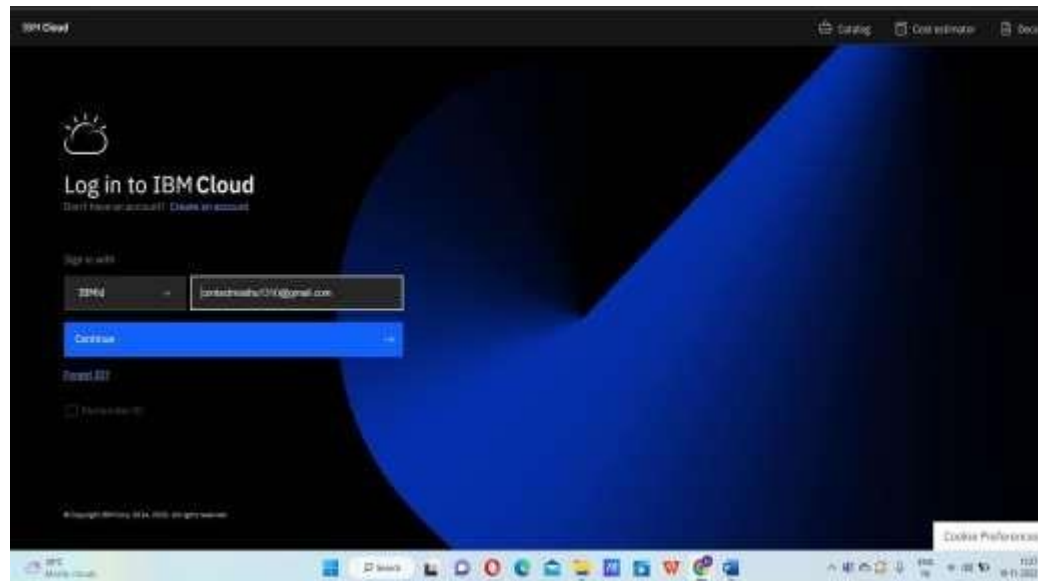
# CREATE IBM WATSON IOT PLATFORM AND DEVICE

## AIM:

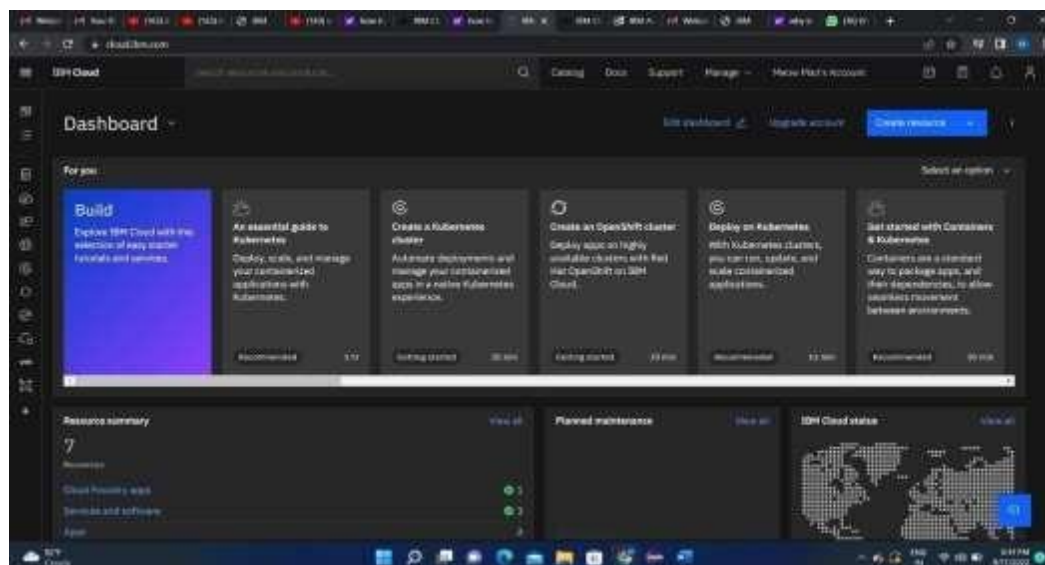
To create the IBM Watson IoT platform and device

## STEPS:

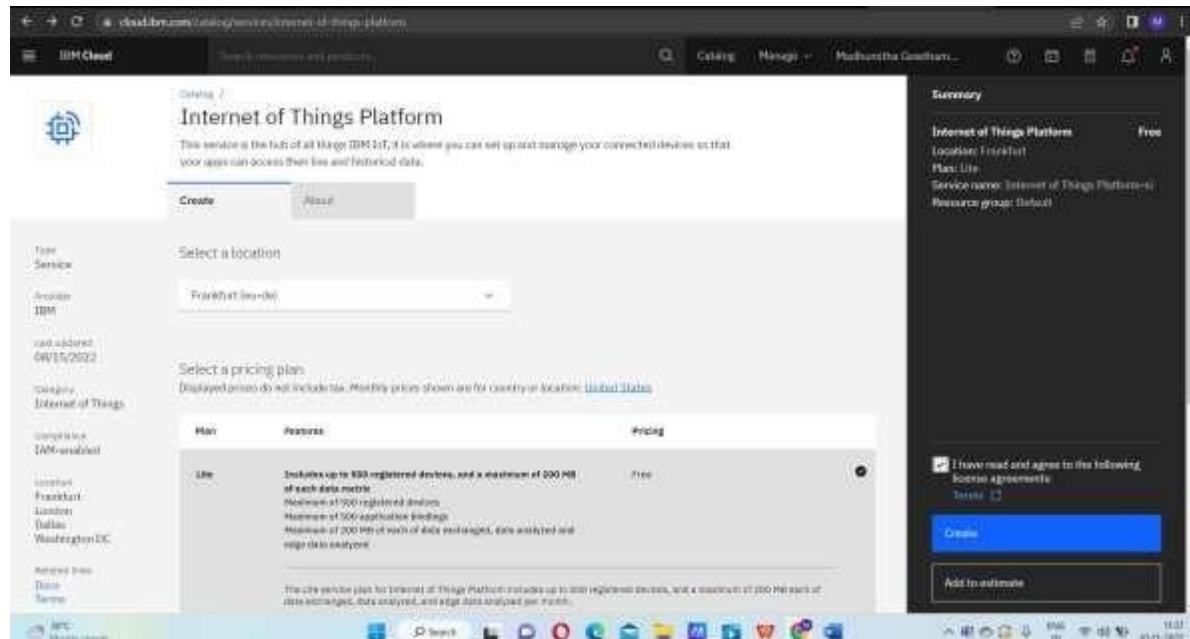
1. Firstly create an IBM cloud account with IBM id and password:



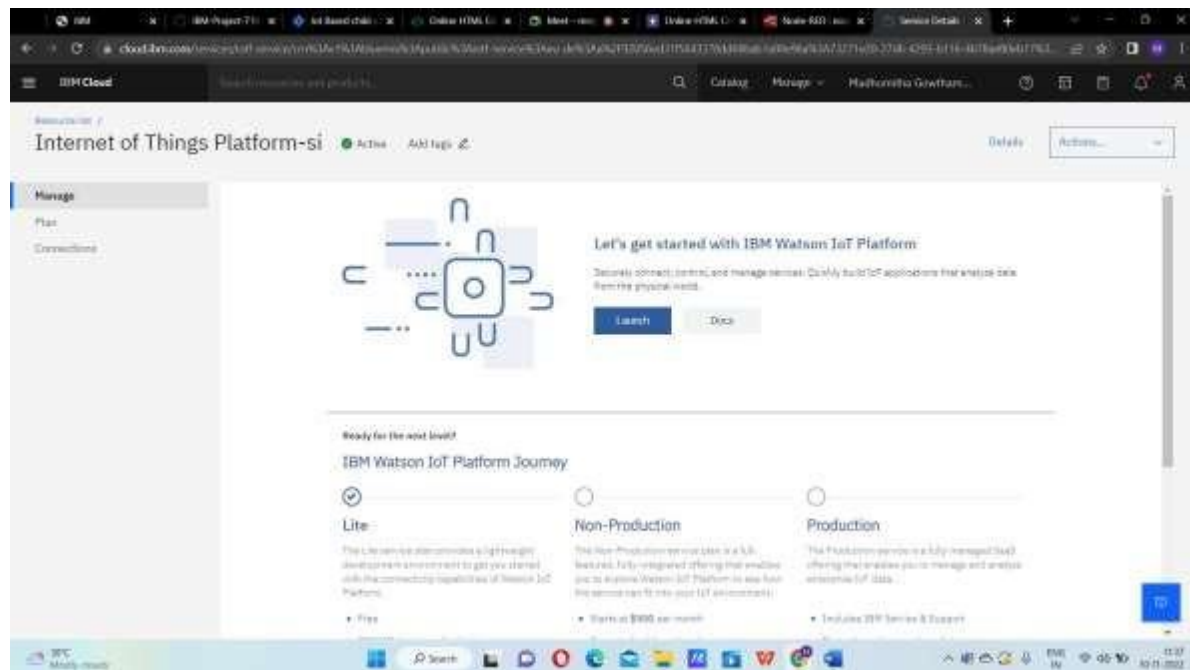
2. Home page of IBM cloud :



3. Click on the catalog on the top and select internet of things :



4. Click on IoT in the category mentioned :



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

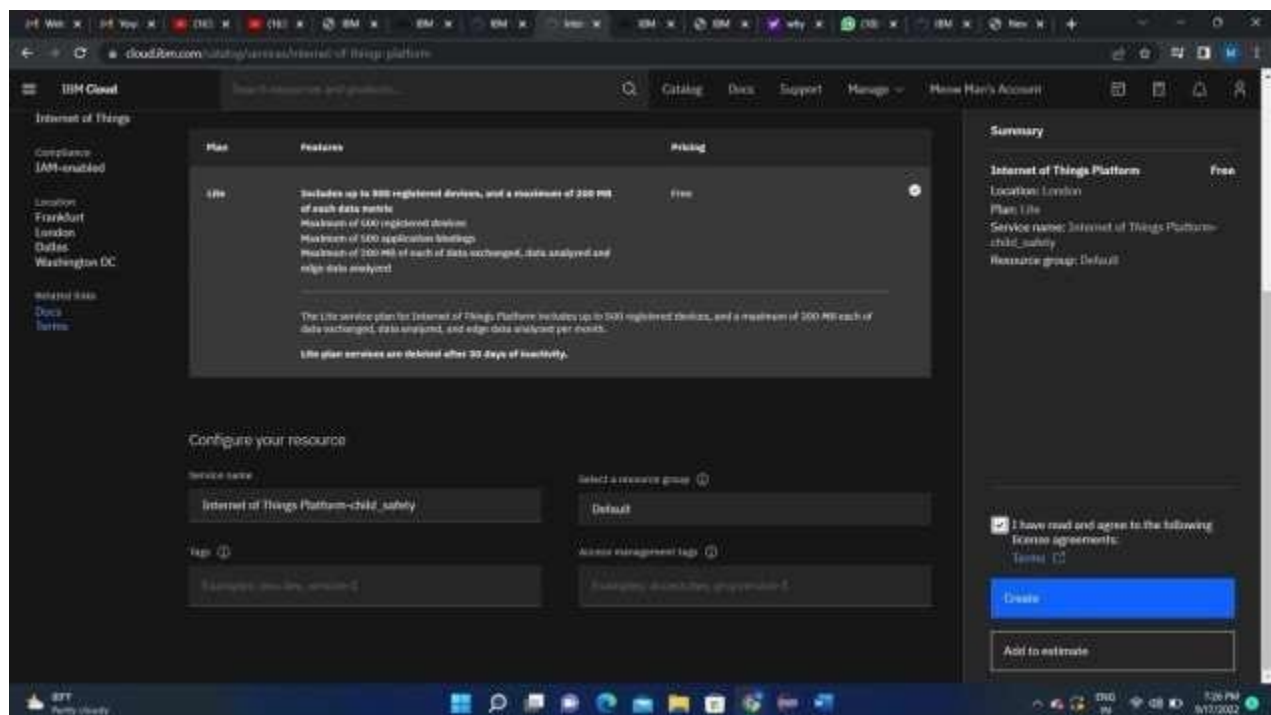
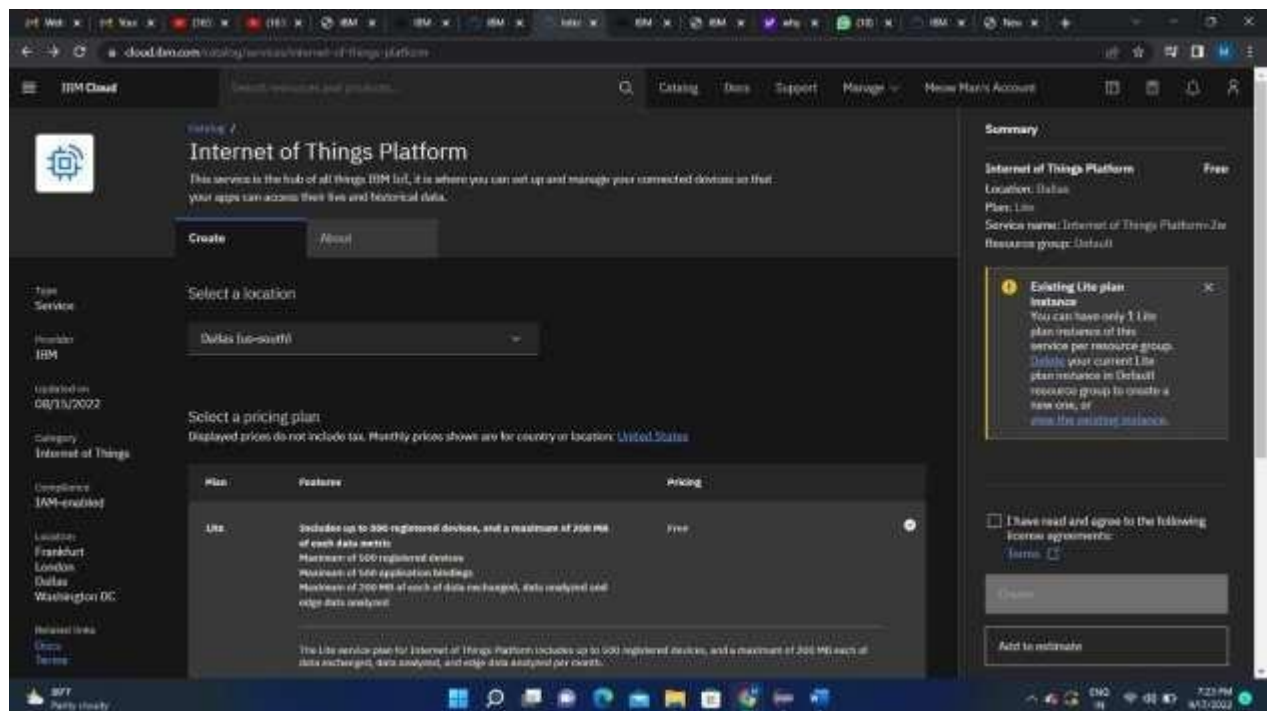
The screenshot shows the IBM Cloud console for the Internet of Things Platform. The main content area displays a table with the following details:

Plan	Features	Pricing
Lite	<ul style="list-style-type: none"><li>Includes up to 100 registered devices, and a maximum of 200 MB of each data source.</li><li>Maximum of 100 registered devices.</li><li>Maximum of 100 application bindings.</li><li>Maximum of 100 MB of each of data exchanged, data analyzed and edge data analyzed.</li></ul> <p>The Lite service plan for Internet of Things Platform includes up to 100 registered devices, and a maximum of 200 MB each of data exchanged, data analyzed, and edge data analyzed per month.</p> <p>Lite plan resources are deleted after 30 days of inactivity.</p>	Free

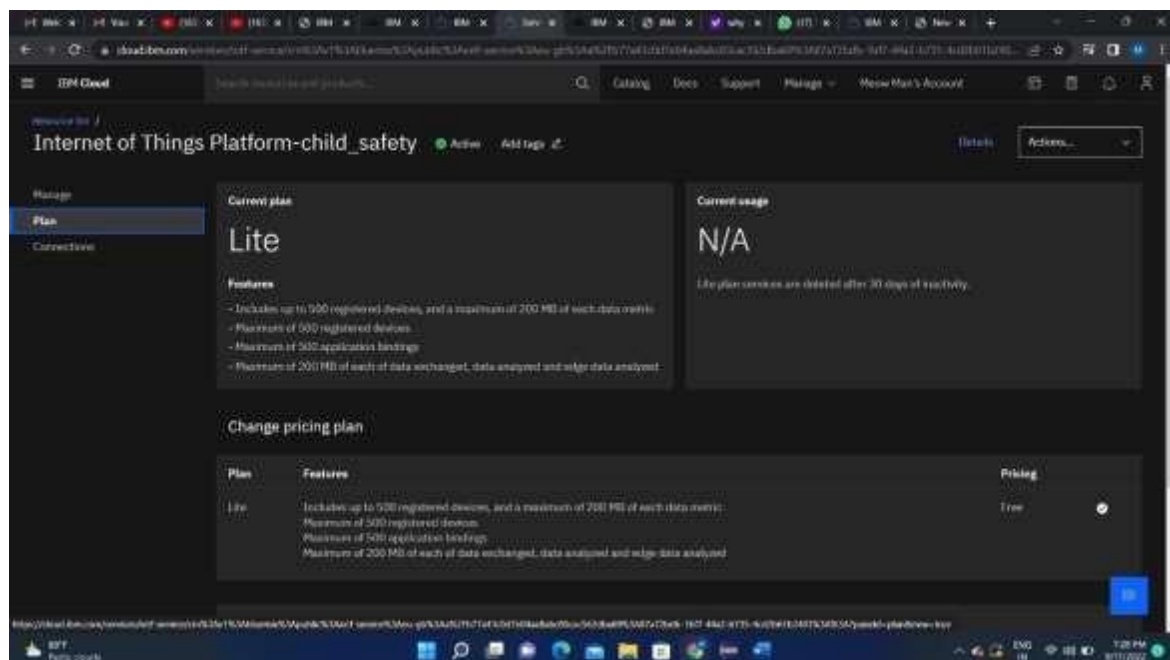
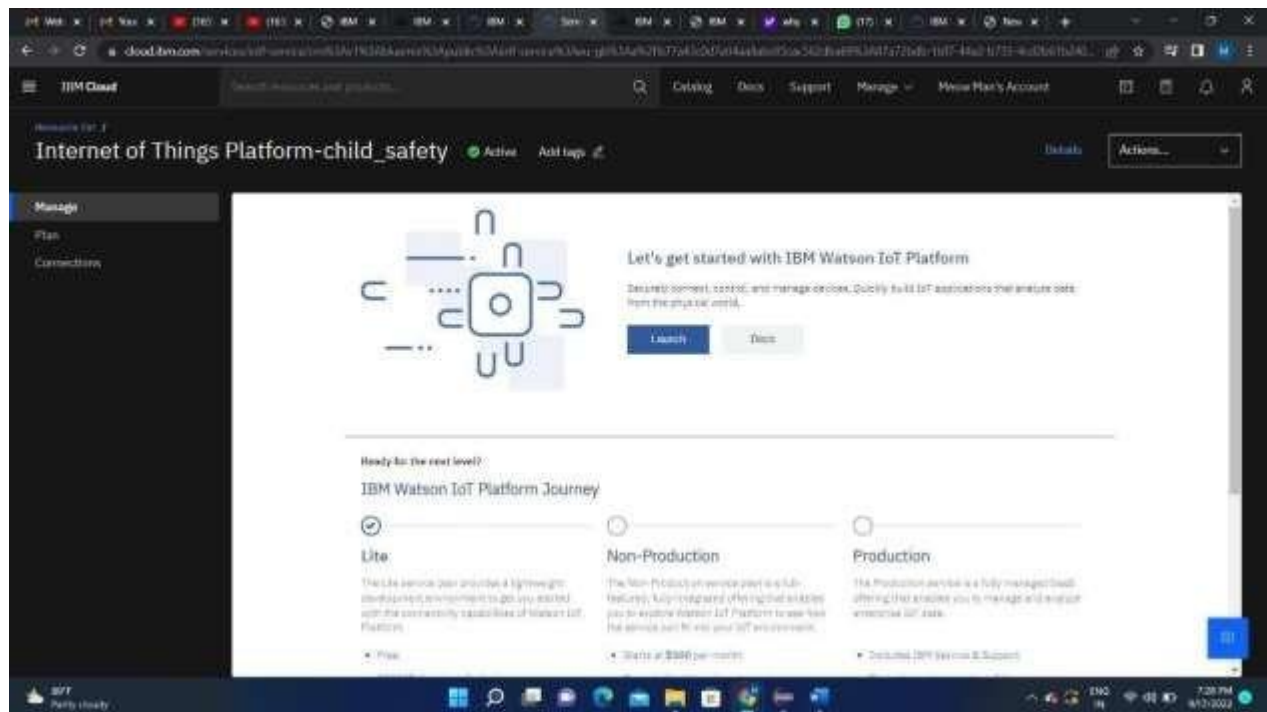
Below the table, the 'Configure your resource' section includes fields for 'Workload name' (set to 'Internet of Things Platform-Lite'), 'Select a resource group' (set to 'Default'), 'Tags' (with a link to 'Examples, tags and metadata'), and 'Access management tags' (with a link to 'Examples, tags and metadata').

On the right, the 'Summary' panel shows the 'Internet of Things Platform' service, 'Location: London', 'Plan: Lite', 'Service name: Internet of Things Platform-Lite', and 'Resource group: Default'. A yellow warning box titled 'Existing Lite plan' states: '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 update the existing instance.' Below this, there is a checkbox for 'I have read and agree to the following service agreements', a 'Cancel' button, and an 'Add to catalog' button.

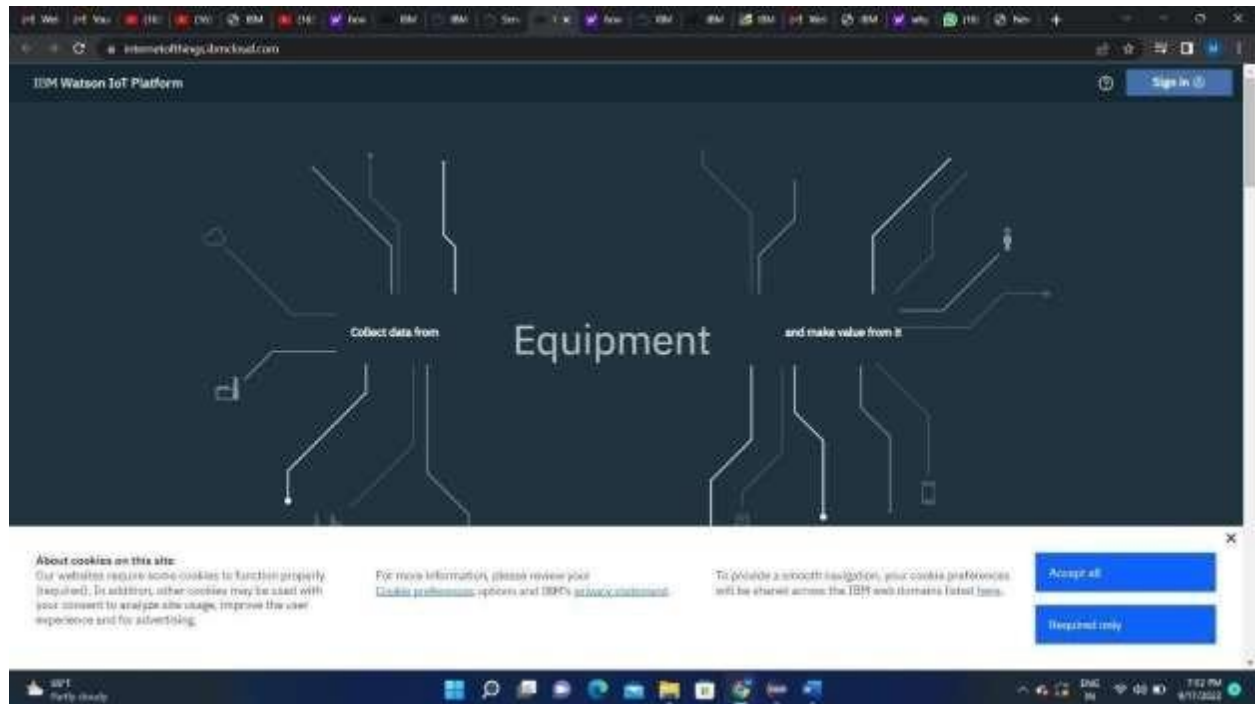
6. Enter the location and in the configure your resource type the service name and choose the plan, tick the agree with agreements and then click on create:



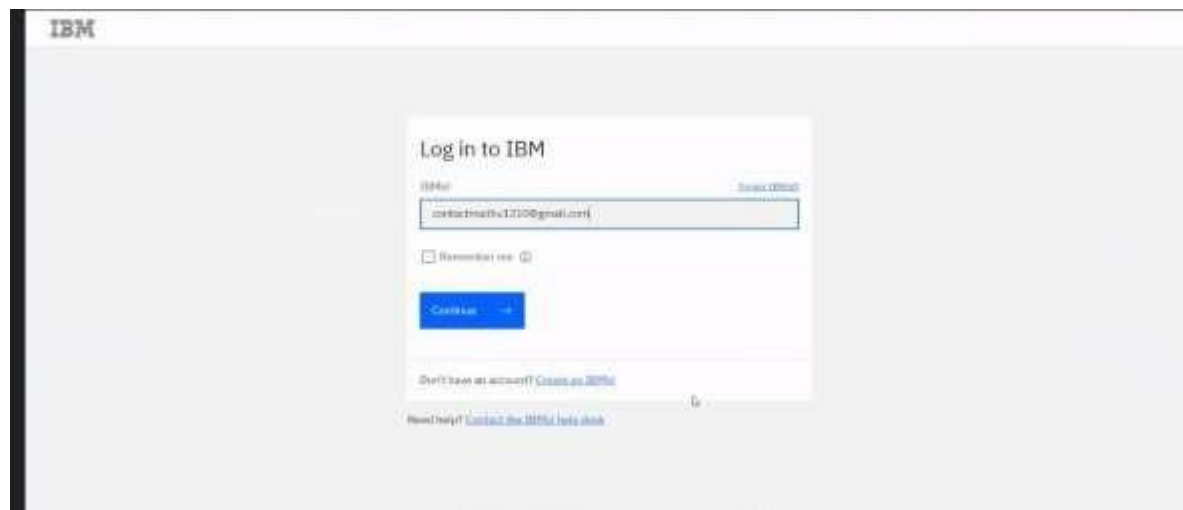
7. Internet of Things Platform Child\_safety will be created, where there are different options like manage, plan, and connection (manage is for launch, Plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IoT with other services) :



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



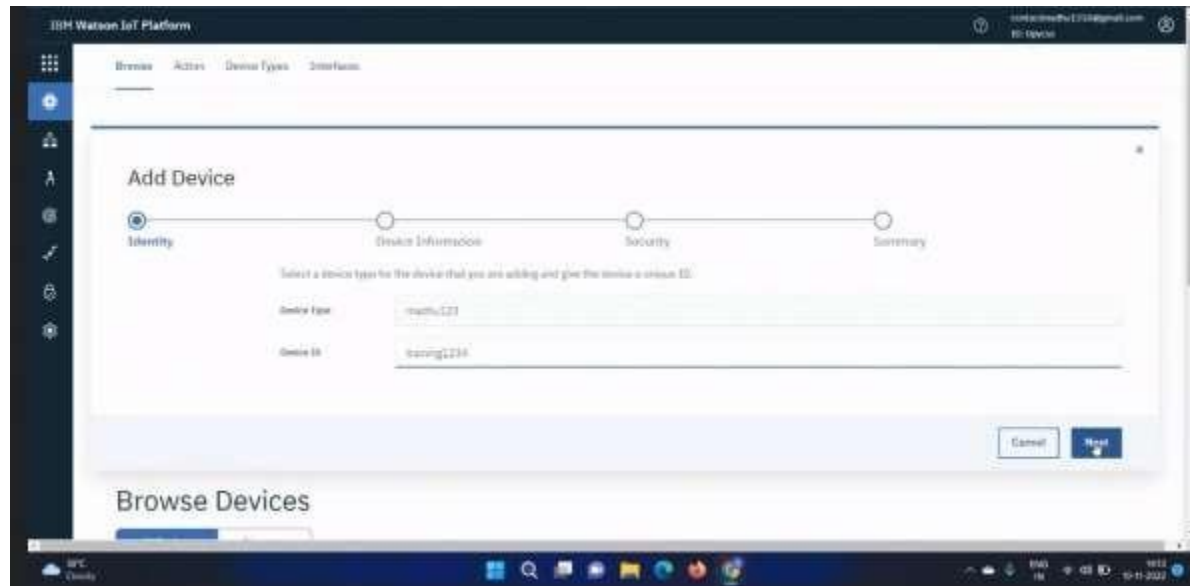
9. Enter the details to sign in to the Watson Cloud to create a device :



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



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





12. This page to enter extra details and of the hardware :

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The current step is 'Device Information', which is the second of four steps: Identity, Device Information, Security, and Summary. The page contains several input fields for device details:

- Serial Number:** Enter Serial Number
- Manufacturer:** Enter Manufacturer
- Model:** Enter Model
- Device Class:** Enter Device Class
- Description:** Enter Description
- Hardware Version:** Enter Hardware Version
- Descriptive Location:** Enter Descriptive Location

There is an 'Add Metadata' button with a plus icon. At the bottom right, there are 'Back' and 'Next' buttons. The page title is 'Add Device' and the breadcrumb trail is 'Browse > Action > Device Types > Interfaces'.

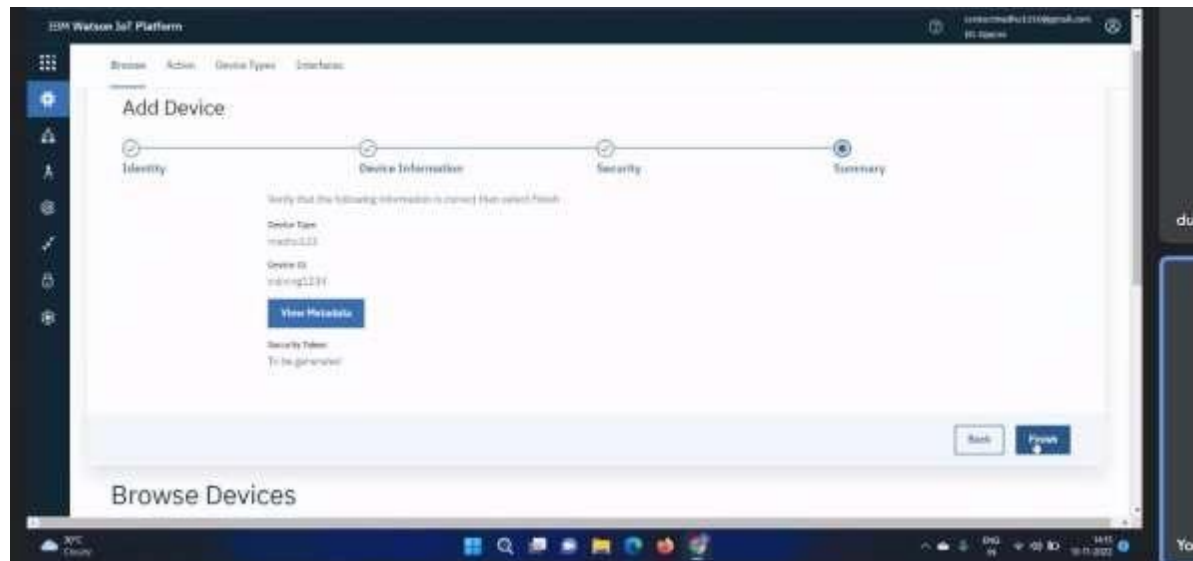
13. Clicking next it goes to the security where we do authentication token id :

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, specifically the 'Security' step. The page offers two options for providing an authentication token:

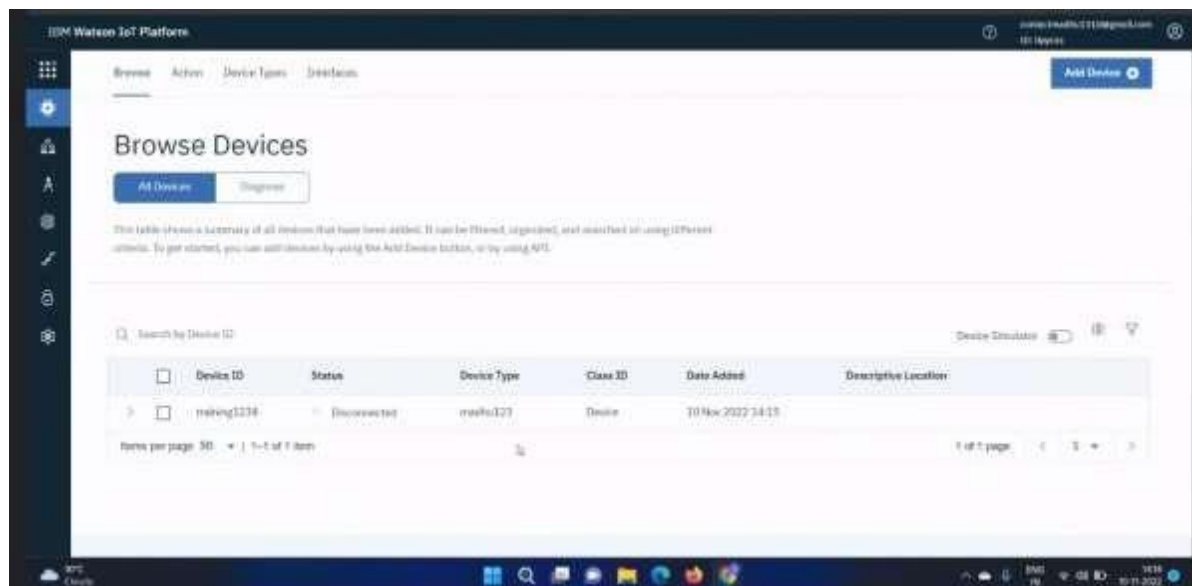
- Auto-generated authentication token (default):** This option allows the service to generate a token for the user. It states that tokens are 38 characters long, containing a mix of alphanumeric characters and symbols, and are returned at the end of the device registration process.
- Self-provided authentication token:** This option requires the user to provide their own token. It specifies that the token must be between 6 and 36 characters and contain a mix of lowercase and uppercase letters, numbers, and symbols, including hyphens, underscores, and periods. It also warns against using repeated characters, dictionary words, user names, or other predictable sequences.

Below these options, there is a text input field for the 'Authentication Token' with a placeholder 'Enter an external token' and a character count of '0'. A warning message states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored. Authentication tokens are encrypted before we store them.' At the bottom, there are 'Back' and 'Next' buttons. The page title is 'Add Device' and the breadcrumb trail is 'Browse > Action > Device Types > Interfaces'.

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



15. Save the details of the device as the authentication tokens are non-recoverable and if misplaced then we have to create a new one:



## RESULT:

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

