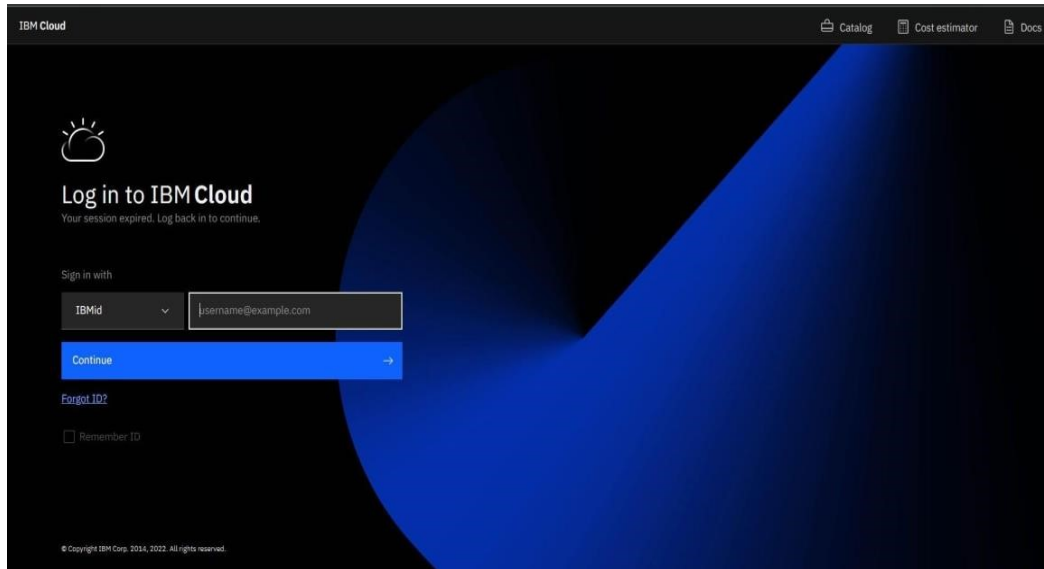


TEAM ID : PNT2022TMID32078
CREATE IBM WATSON IOT PLATFORM AND DEVICE

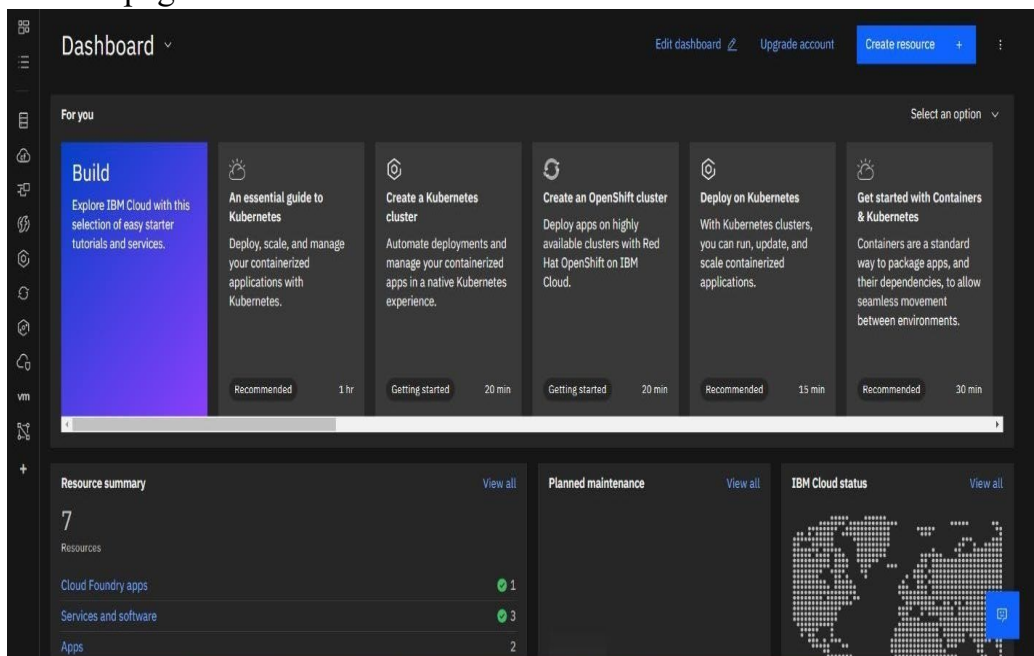
1.To create the IBM Watson IOT platform and device

STEPS:

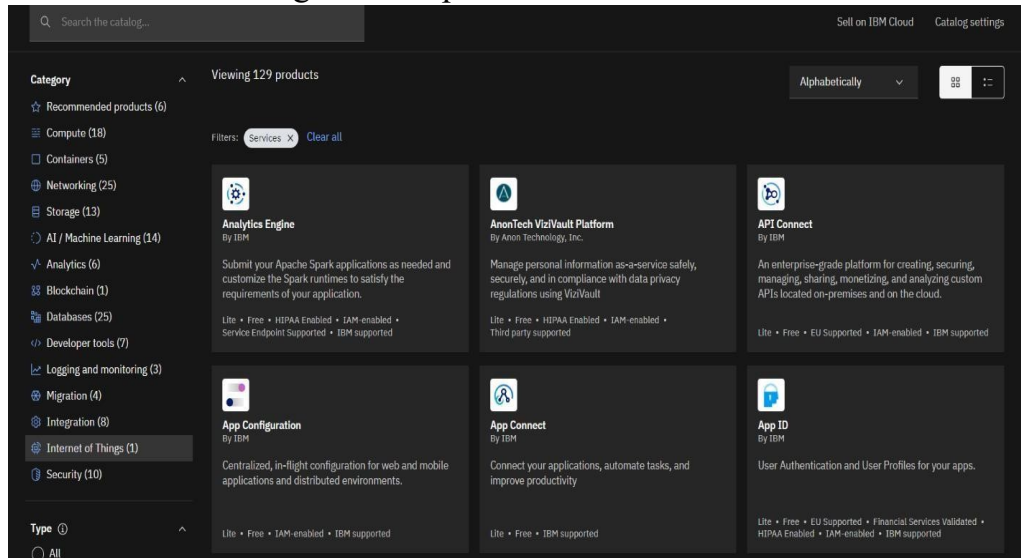
1.Create an IBM cloud account with the individual IBM id and password



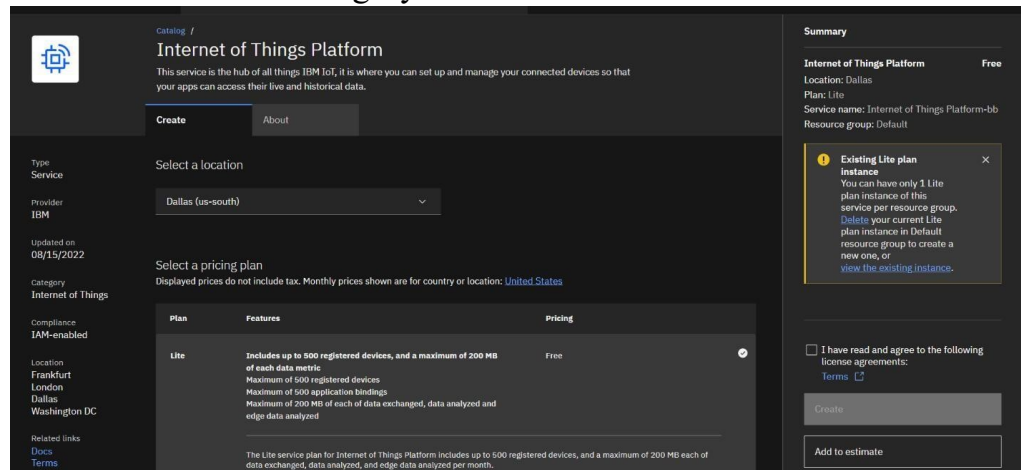
2.Home page of IBM cloud



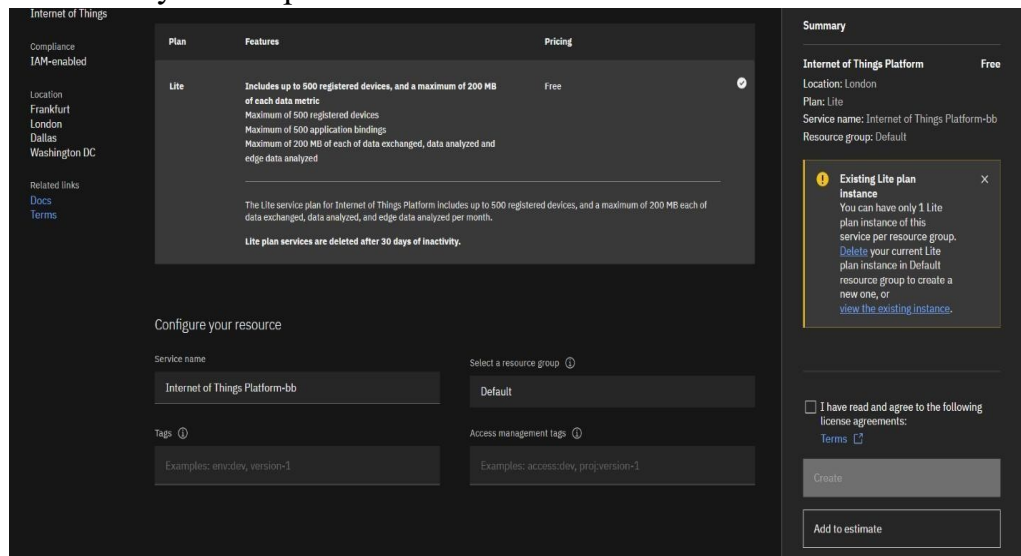
3. Click on the catalog on the top



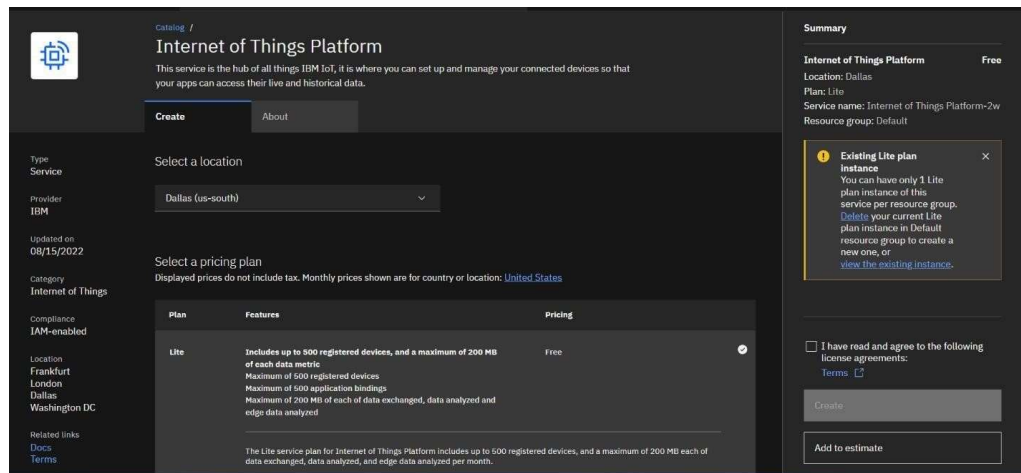
4. Click on IT in the category mentioned



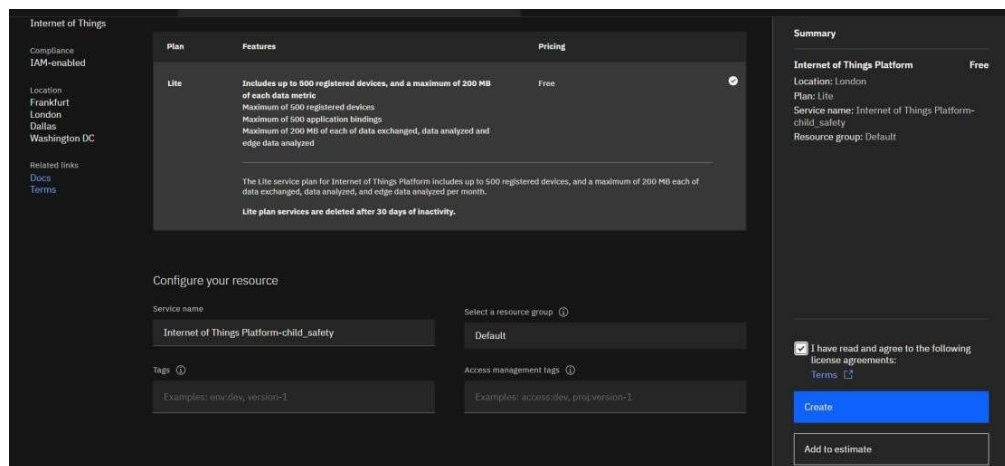
5. If already a lite is present delete it else you can't create another



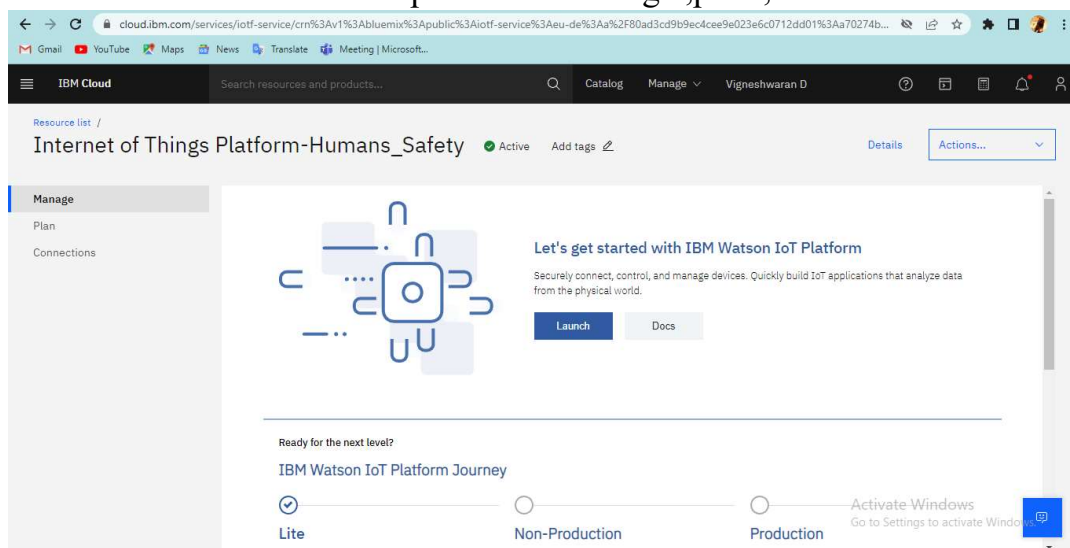
6. Enter the location and in the configure your resource type the servicename and choose the plan, tick the agree with agreements and then click on create



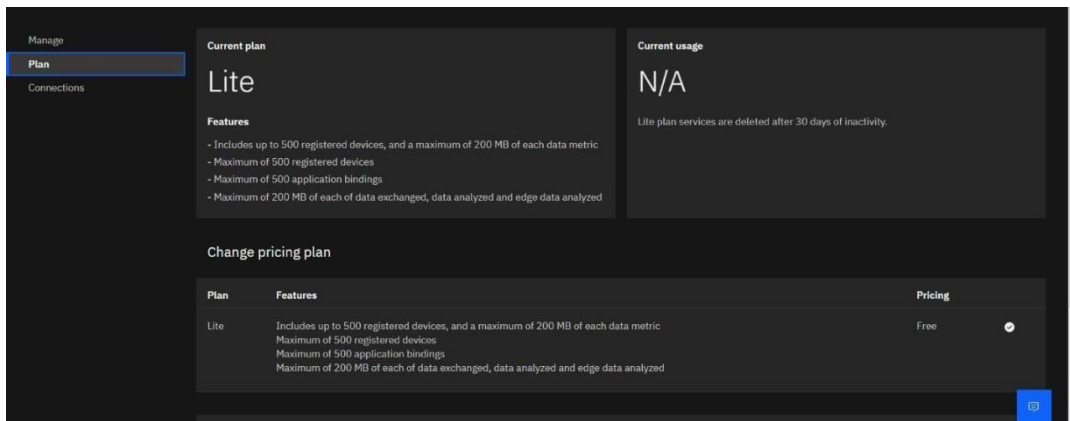
7. Click create



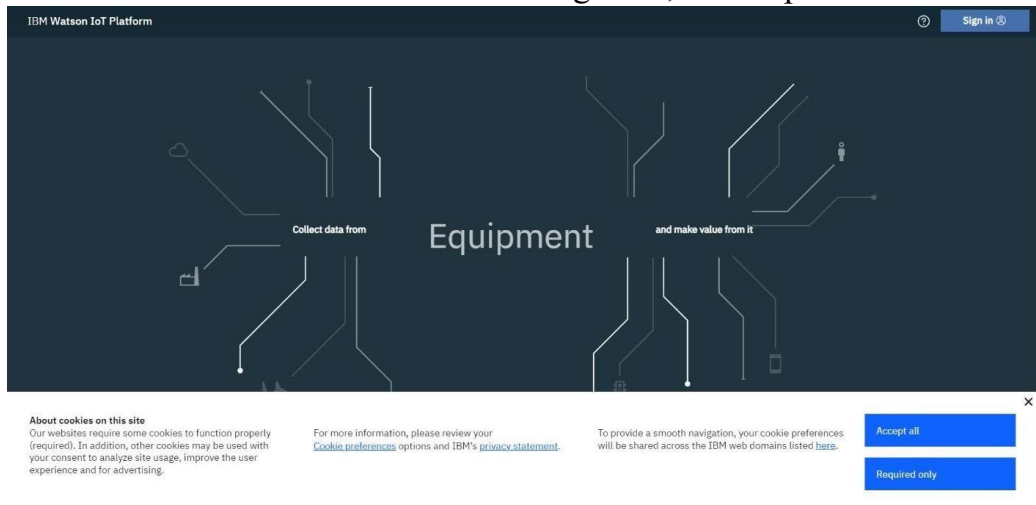
8. Internet of Things Platform crop protection system will be created, where the reared different options like manage ,plan ,and connection



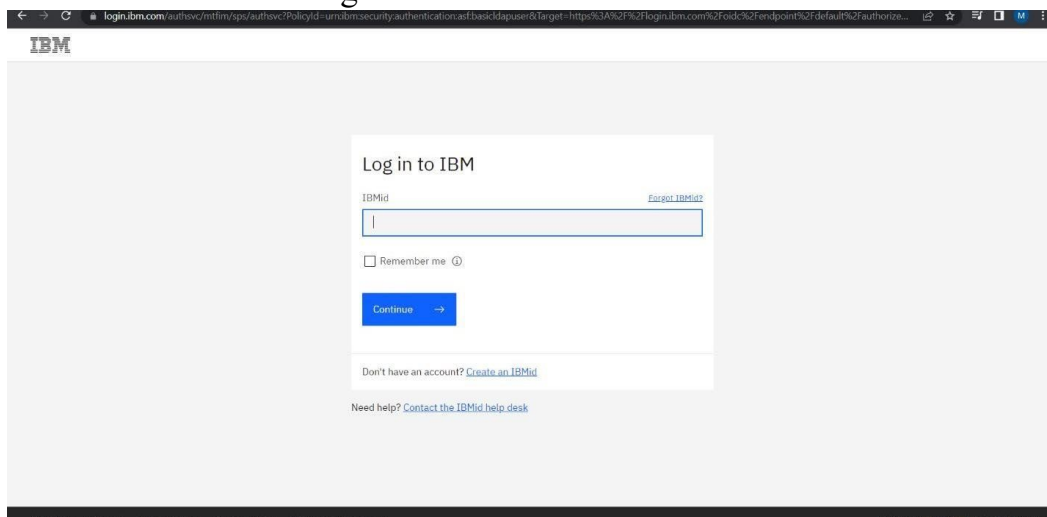
9. manage is for launch, plan gives us the idea about the payment package and its upgrades, and lastly the connection is for to connect IOT with other services



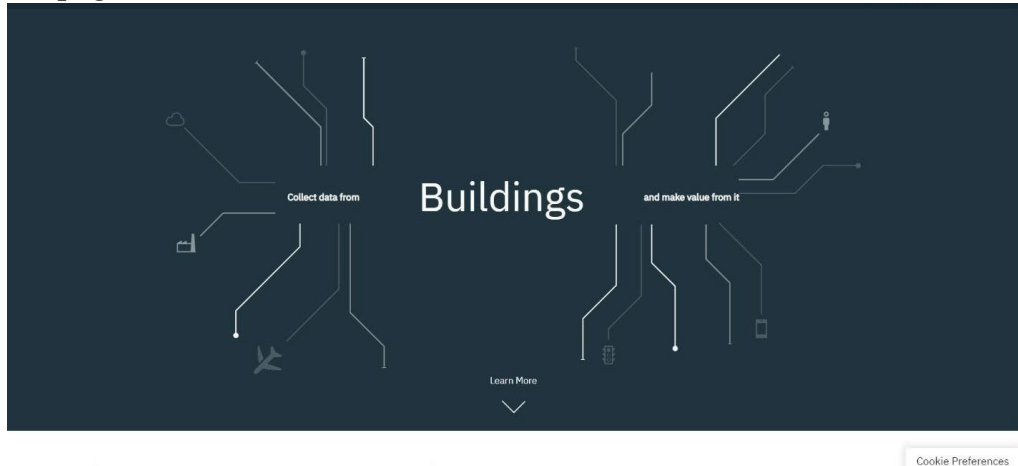
10. Click on the launch button in the manage tab, it will open to this



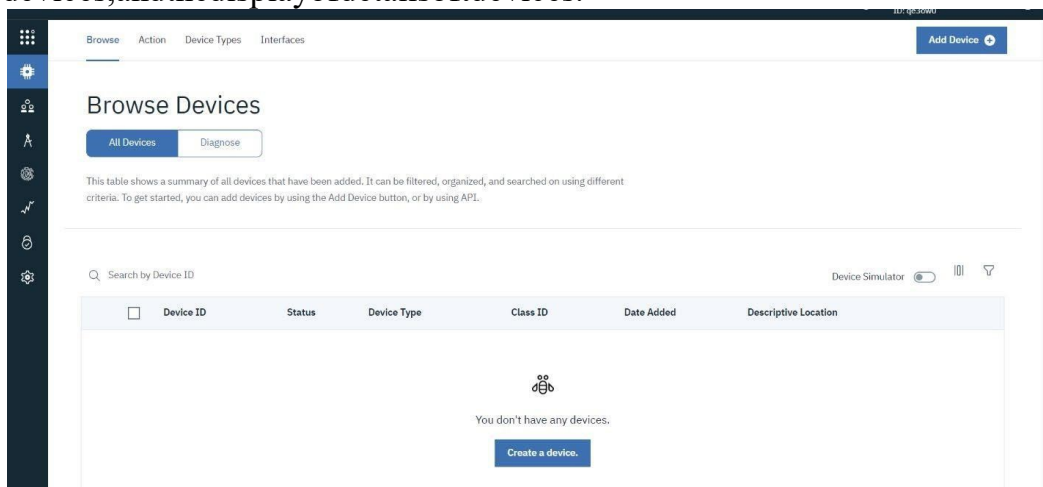
11. Enter the details to sign in to the Watson Cloud to create a device



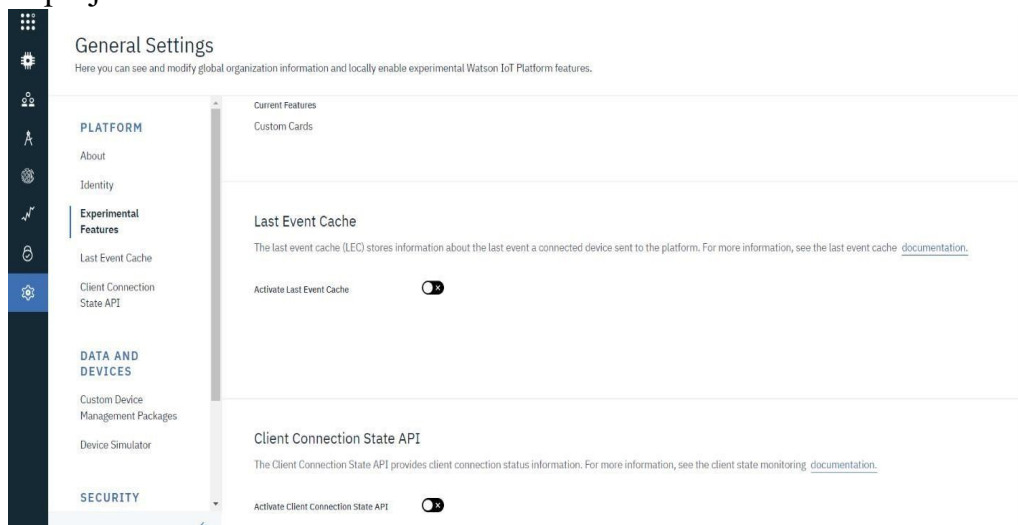
12. Once logged in the name will be displayed and it goes back to the first page



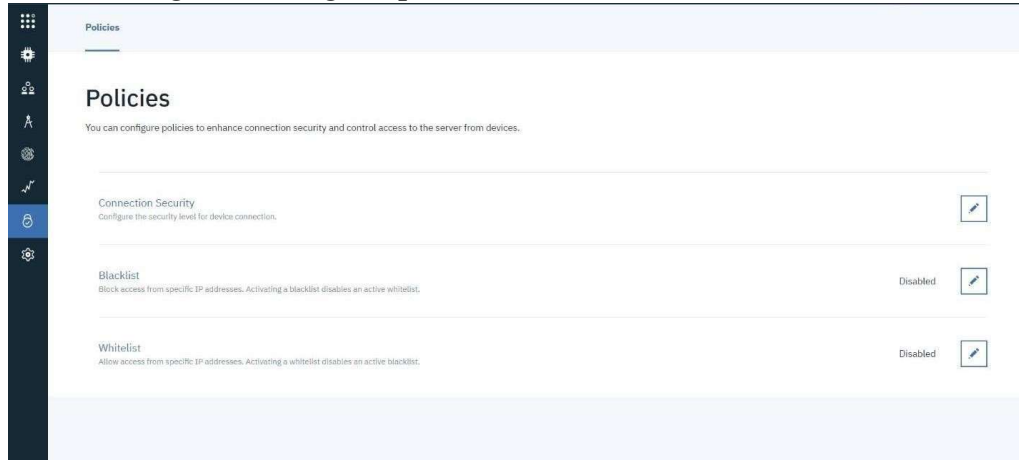
13. And again clicking on the launch button will open this tab, the device will help in the creation of the devices, the addition of devices, and the display of details of devices.



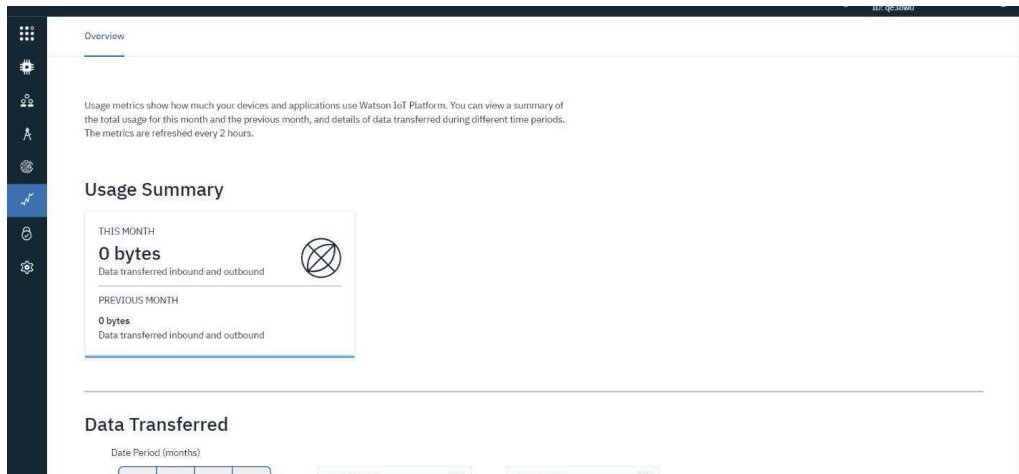
14. The setting tab is used to change the general setting if needed for the project.



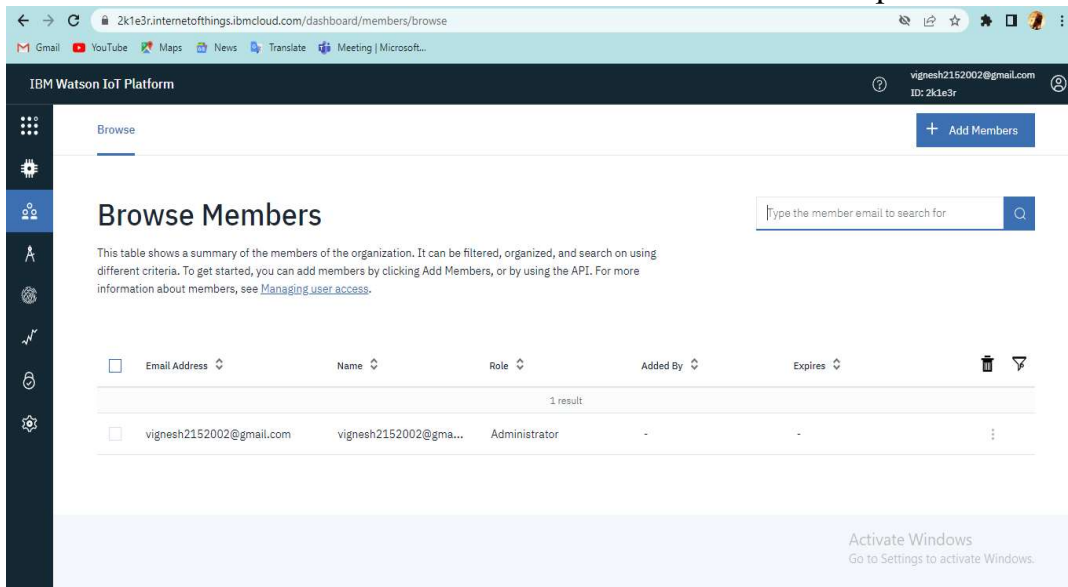
15. In the security tab we can choose the type of security connection and can change according to specification



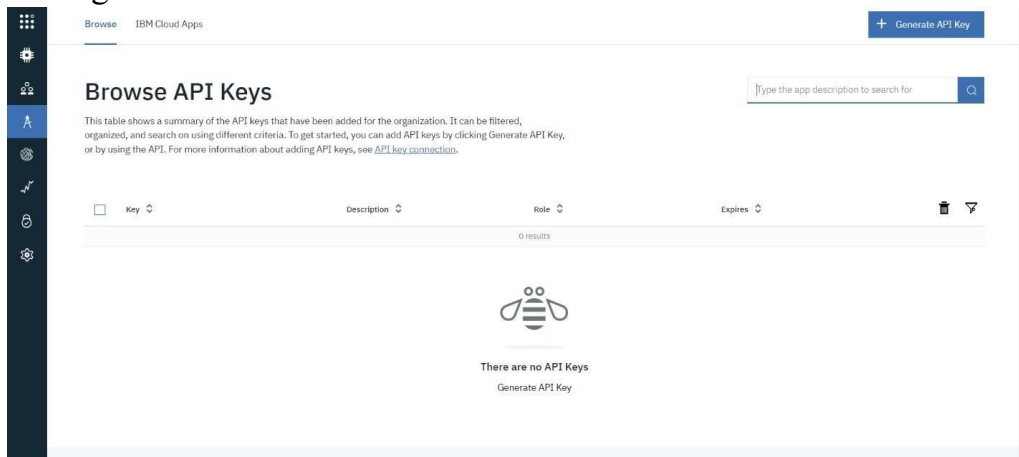
16. Usage gives the summary of how many bytes are used between the devices and the IBM cloud



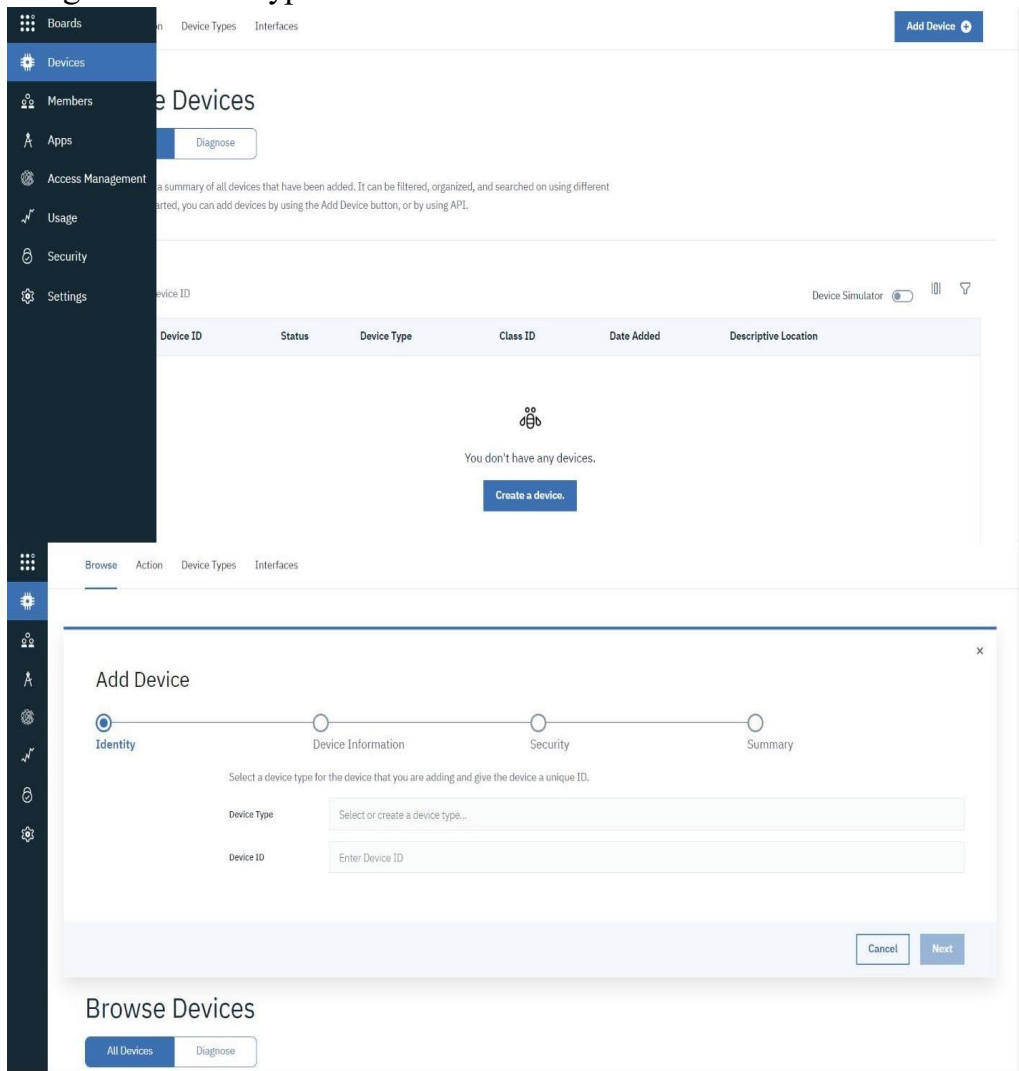
17. The member tab is add the teams members to work in the platform



18. This tab is used when you want to connect to some other platform and to integrate with other services.



19. Click on the device tab and click on the add device button, then give the device type and device ID and click next



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

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The 'Device Information' step is active, indicated by a blue dot on the progress bar. The progress bar shows four steps: Identity, Device Information, Security, and Summary. Below the progress bar, a message states: 'You can modify the default device information and enter more information about the device for identification purposes.' The form contains several input fields: 'Serial Number' (with a placeholder 'Enter Serial Number'), 'Model' (with a placeholder 'Enter Model'), 'Description' (with a placeholder 'Enter Description'), 'Hardware Version' (with a placeholder 'Enter Hardware Version'), 'Manufacturer' (with a placeholder 'Enter Manufacturer'), 'Device Class' (with a placeholder 'Enter Device Class'), 'Firmware Version' (with a placeholder 'Enter Firmware Version'), and 'Descriptive Location' (with a placeholder 'Enter Descriptive Location'). There is an 'Add Metadata' button with a plus icon. At the bottom right, there are 'Back' and 'Next' buttons.

21. Clicking next it goes to the security where we do authentication to kind.

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Security' step. The progress bar shows four steps: Identity, Device Information, Security, and Summary. The 'Security' step is active, indicated by a blue dot. The page contains two columns of text. The left column says: '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.' The right column says: '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.' Below the text, there is an 'Authentication Token' input field with the value '1998997996995994'. A tooltip is visible over the input field with the text: 'Make a note of the tokens cannot be recovered. Tokens are encrypted before being stored. Authentication token are encrypted before we store them.' At the bottom right, there are 'Back' and 'Next' buttons.

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

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Summary' step. The progress bar shows four steps: Identity, Device Information, Security, and Summary. The 'Summary' step is active, indicated by a blue dot. The page contains a message: 'Verify that the following information is correct then select Finish'. Below the message, there is a 'View Metadata' button. The summary information displayed is: 'Device Type: NodeMCU', 'Device ID: 199795', and 'Security Token: 1997199520012005'. At the bottom right, there are 'Back' and 'Finish' buttons.

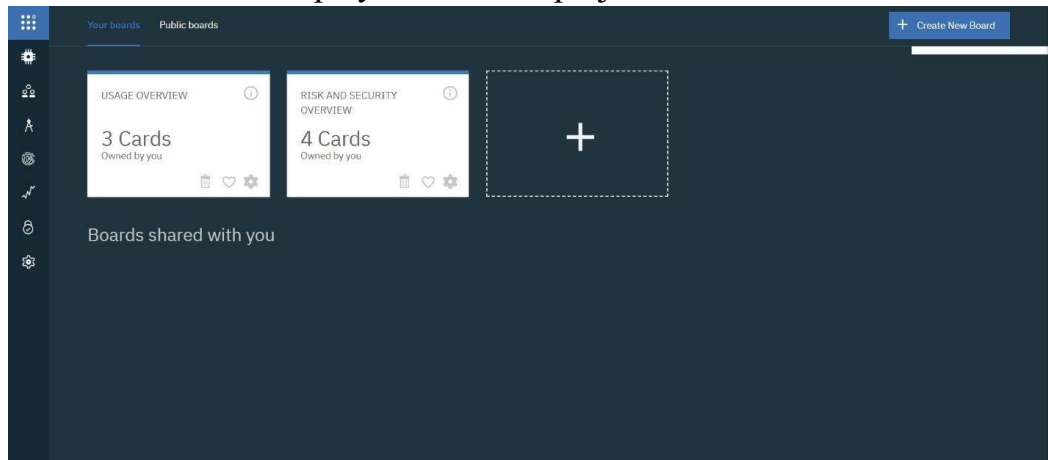
23. The device credentials will be displayed with all the details

24. Save the details of the device as the authentication tokens are non recoverable and if misplaced then we have to create new ones.

25. Clicking on the device tab we can now see the added device. Clicking on it will display the other details. It has different tabs like Identity, Device Information, State and login.

In a similar way, we can create a number of devices with a 50 per page limit as per the requirement of our project

26. The Boards will display card for the project.



CONCLUSION:

An IBM Watson cloud for IoT and a device is created