

SENDING DATA FROM RASPBERRY-PI TO IBM WATSON

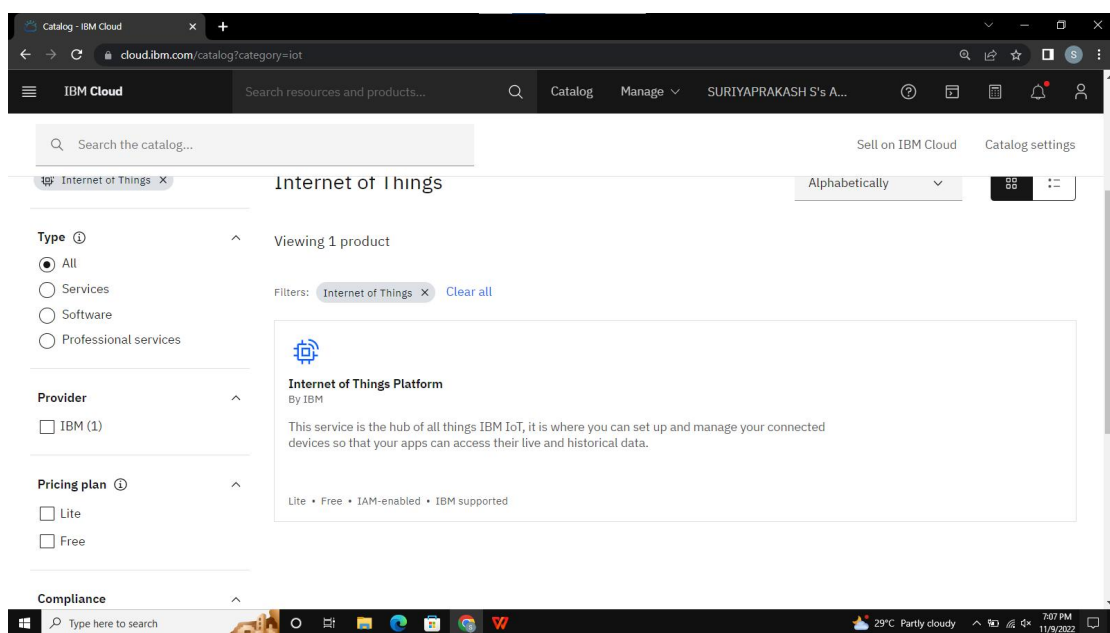
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Team Members: Suriyaprakash S, Rajesh G, Ragul R, Sujith M.

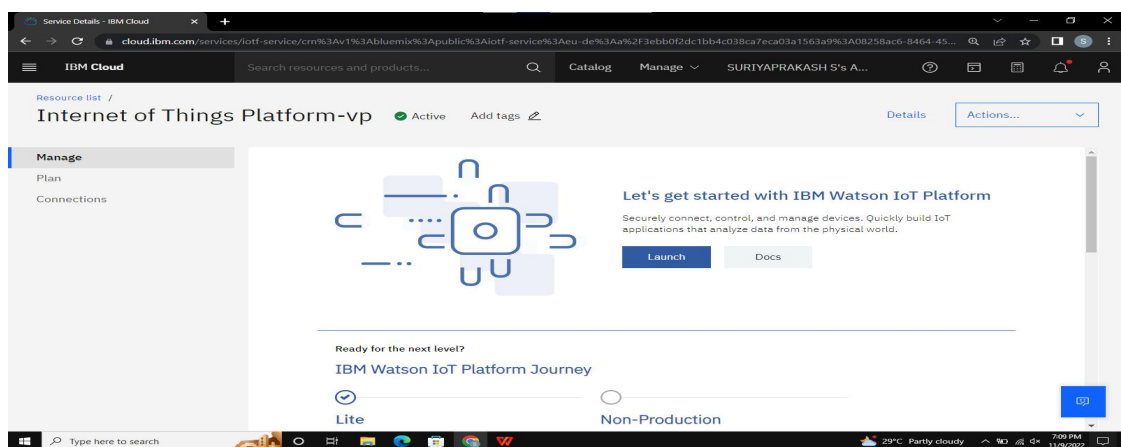
Project: Gas Leakage Monitoring and Alerting System for Industries.

Steps to followed to send data from raspberry pi to IBM Watson:

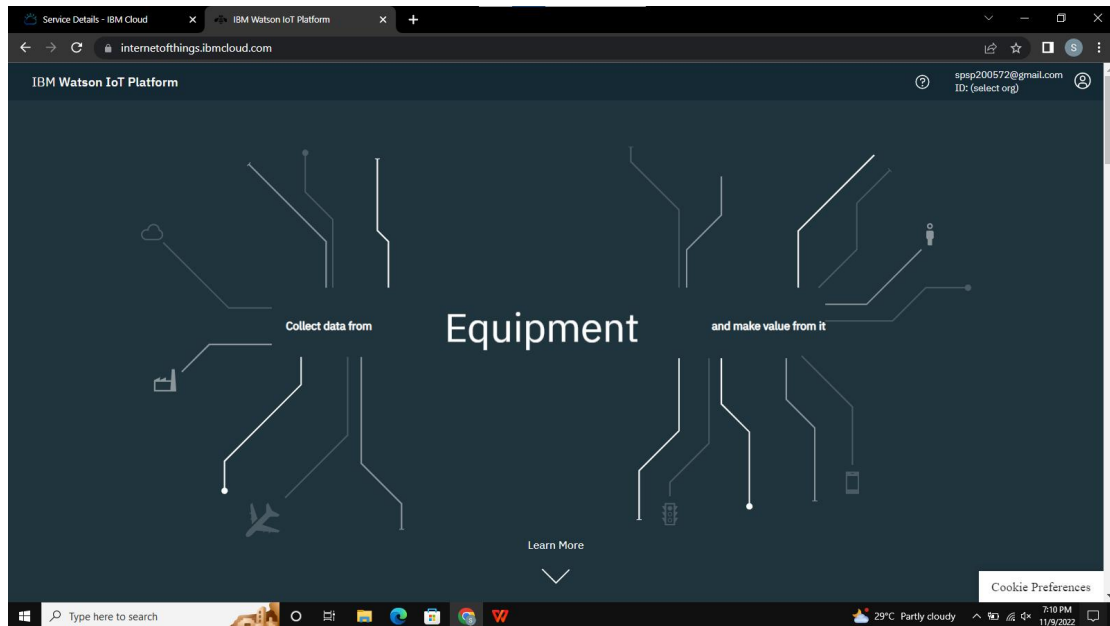
Step 1: GO to IOT in resource list.



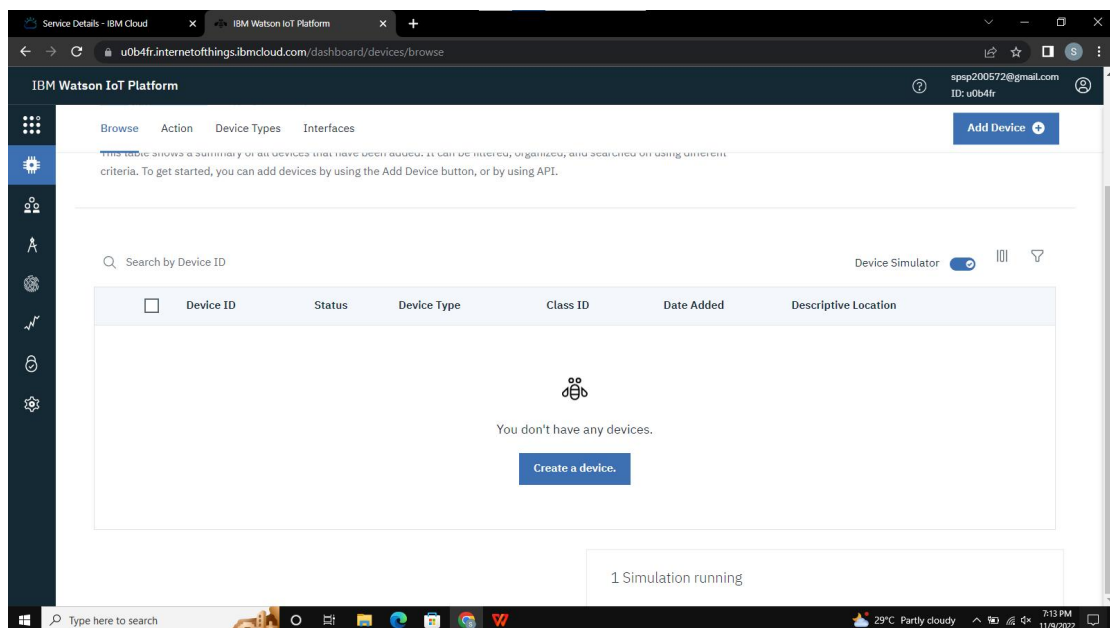
Step 2: Click launch button.



Step 3:



Step 4: Go to Browse option and create a device.



Step 5: Enter detail in add device option

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The wizard is a multi-step process with four steps: Identity, Device Information, Security, and Summary. The 'Identity' step is currently active, indicated by a blue circle and a checkmark. The 'Device Information' step is also marked with a checkmark, suggesting it has been completed. The 'Security' and 'Summary' steps are marked with empty circles, indicating they are yet to be completed. The 'Identity' step contains a form with two fields: 'Device Type' and 'Device ID'. The 'Device Type' field has a dropdown menu with the text 'Select or create a device type...'. The 'Device ID' field has a text input with the placeholder 'Enter Device ID'. Below the form, there are 'Cancel' and 'Next' buttons. A 'Browse Devices' button is visible at the bottom left of the wizard. A status bar at the bottom right indicates '1 Simulation running'. The background shows the 'Browse Devices' page with a search bar and a list of devices.

IBM Watson IoT Platform

u0b4fr.internetofthings.ibmcloud.com/dashboard/devices/browse/add

spap200572@gmail.com
ID: u0b4fr

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 Select or create a device type...

Device ID Enter Device ID

Cancel Next

Browse Devices

1 Simulation running

Step 6: Click **Finish** button.

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The wizard is a multi-step process with four steps: Identity, Device Information, Security, and Summary. The 'Summary' step is currently active, indicated by a blue circle and a checkmark. The 'Identity', 'Device Information', and 'Security' steps are also marked with checkmarks, indicating they have been completed. The 'Summary' step contains a form with the following information: 'Device Type: TestdriveDevice', 'Device ID: 123456', and 'Security Token: To be generated'. Below the form, there is a 'View Metadata' button. A status bar at the bottom right indicates '1 Simulation running'. The background shows the 'Browse Devices' page with a search bar and a list of devices.

IBM Watson IoT Platform

u0b4fr.internetofthings.ibmcloud.com/dashboard/devices/browse/add

spap200572@gmail.com
ID: u0b4fr

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

Verify that the following information is correct then select Finish

Device Type TestdriveDevice

Device ID 123456

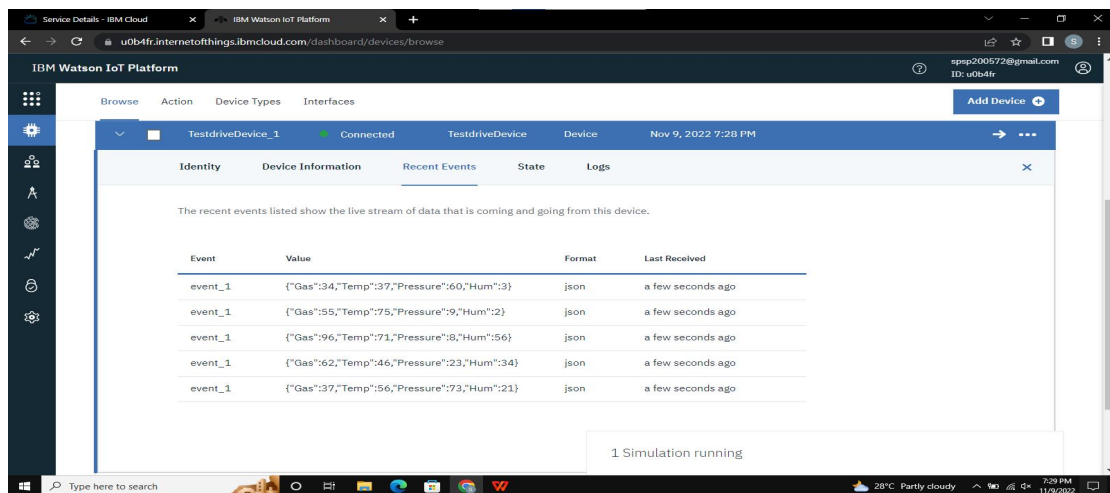
View Metadata

Security Token To be generated

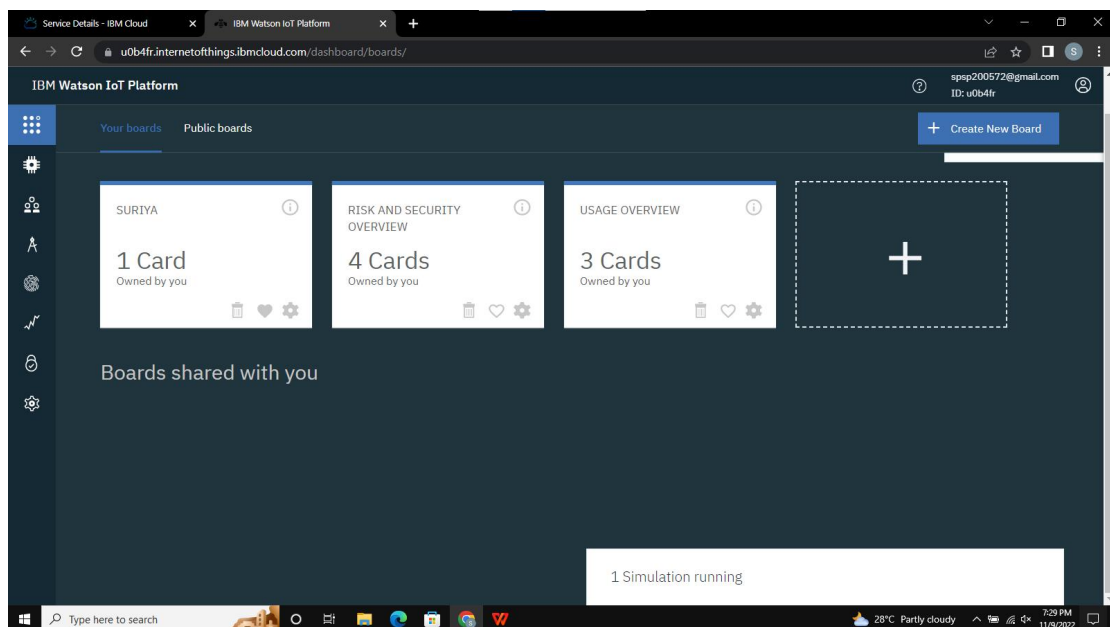
1 Simulation running

Step 7: Click stimulation running menu in below and Enter following code in JSON file:

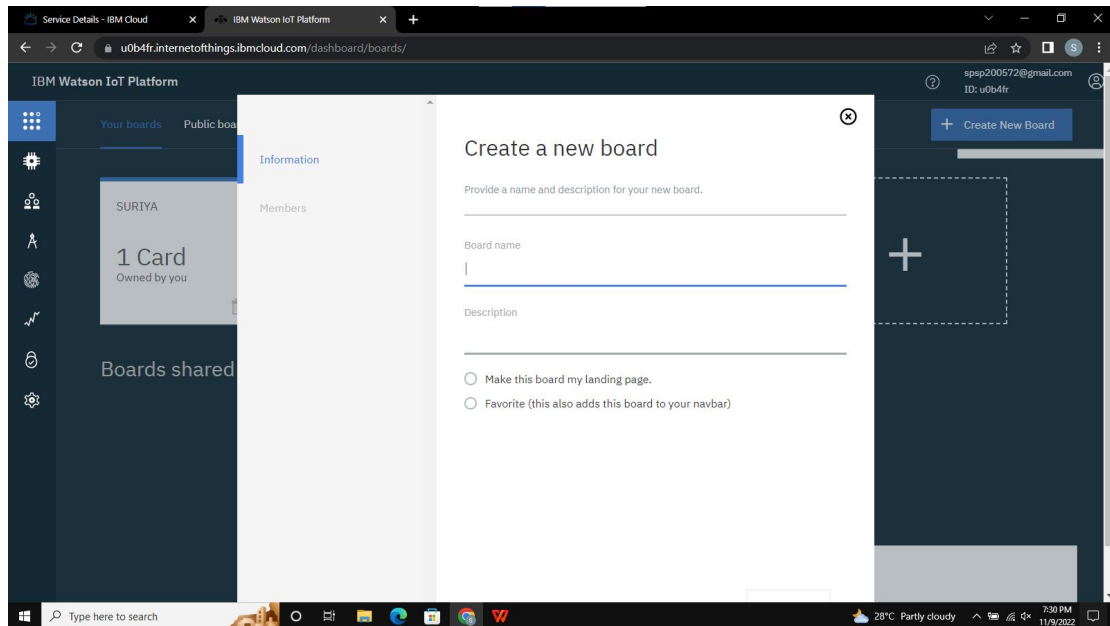
```
{ "Gas": random(0,100),  
  "Temp": random(0,100),  
  "Pressure":random(0,100),  
  "Hum": random(0,100) }
```



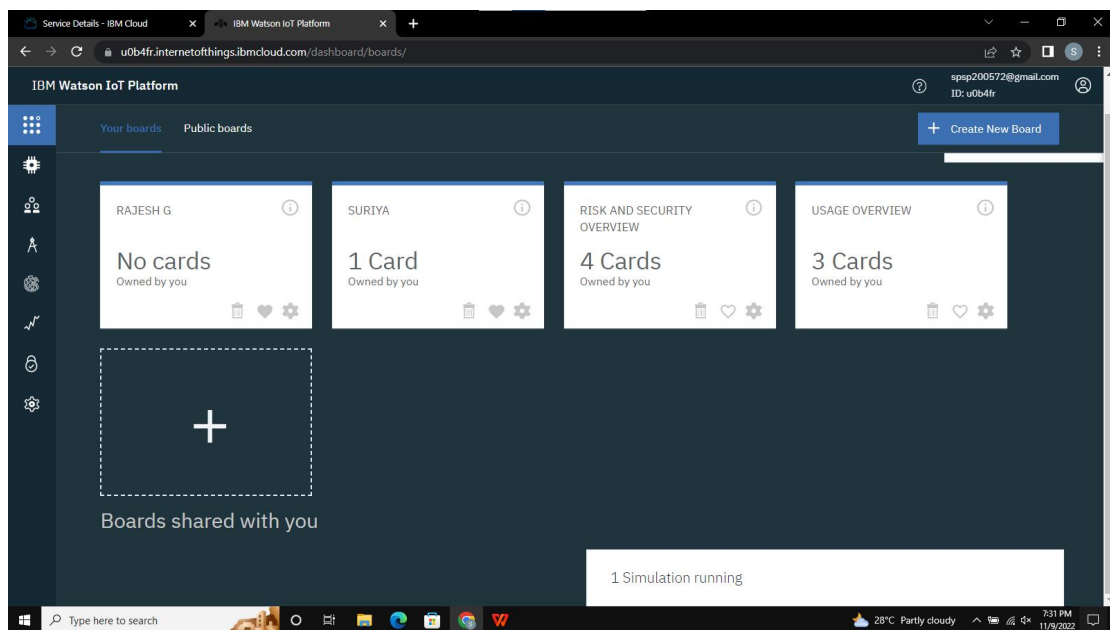
Step 8: Create boards and cards for virtualization of data:



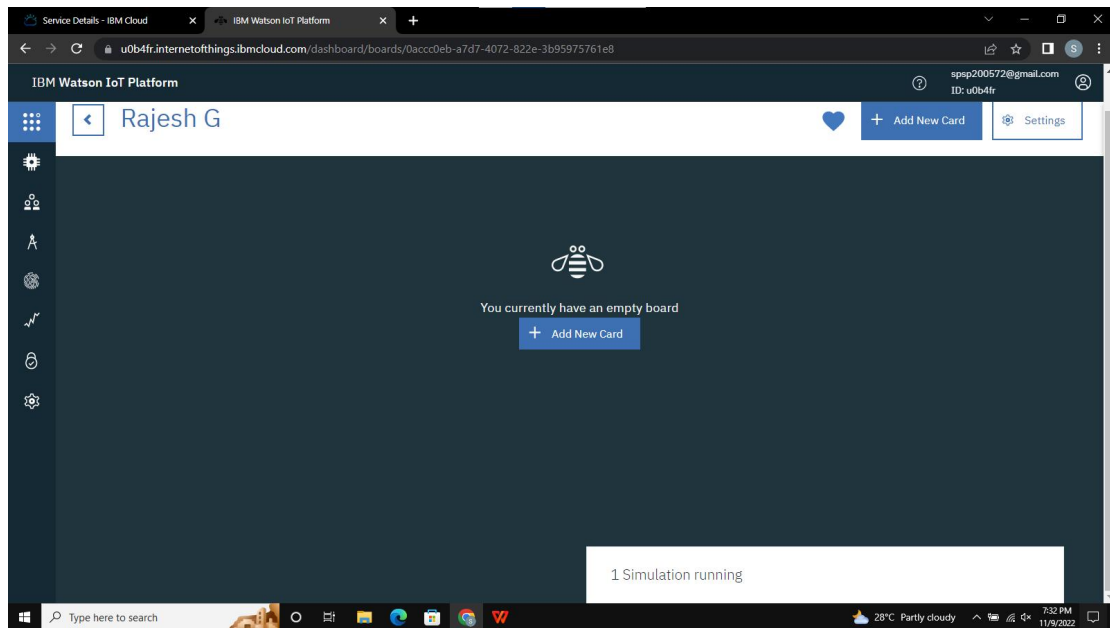
Step 9: Create boards



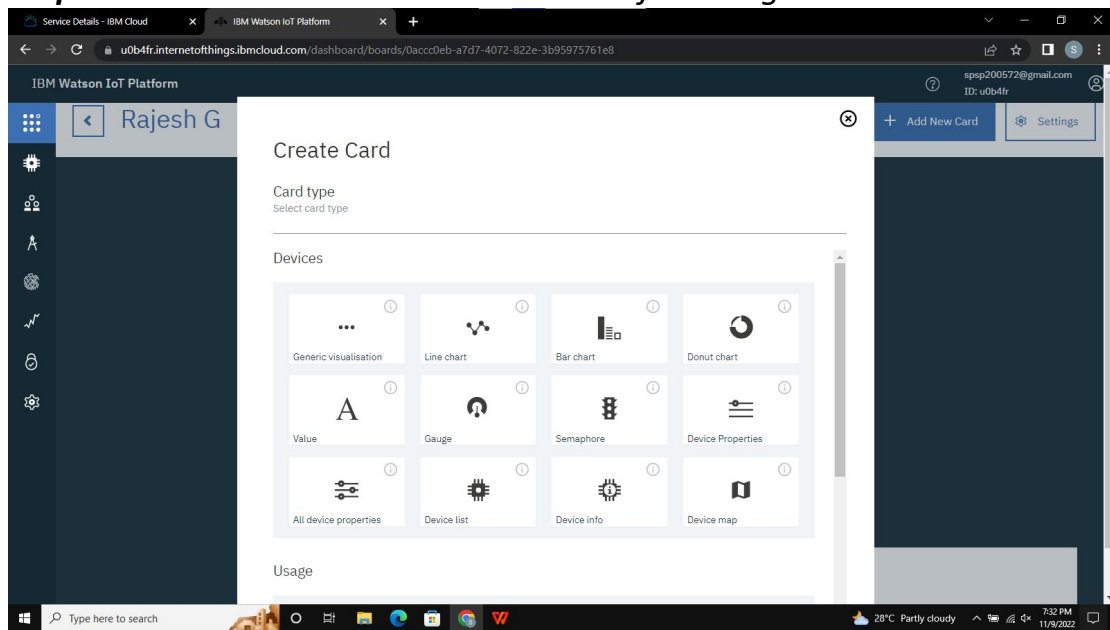
Step 10: Card is created by entering following detail in step 9 image.



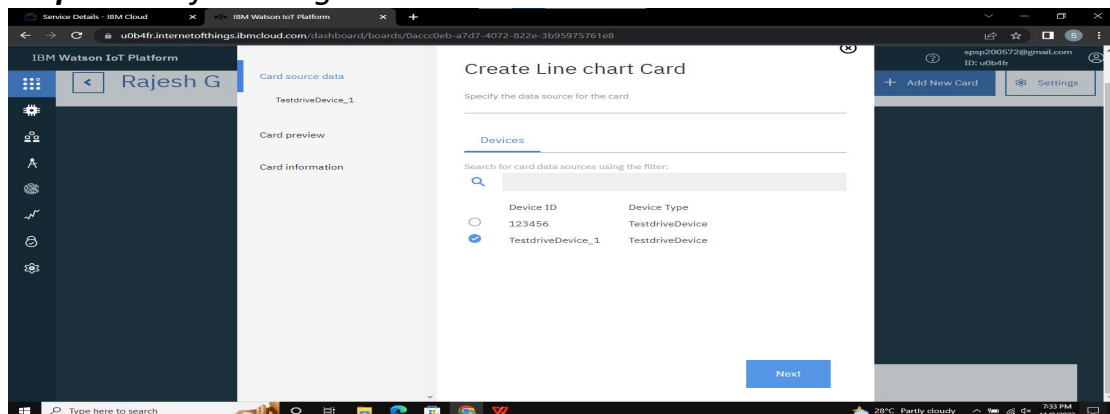
Step 11: Click into new boards.



Step 12: Click “Add new Card” and select following devices.



Step 13: Fill following details device detail menu.



Step 14: Enter the following details in chart card.

The screenshot shows the 'Create Line chart Card' form in the IBM Watson IoT Platform. The left sidebar contains a navigation menu with icons for various functions. The main content area is divided into three sections: 'Card source data', 'Card preview', and 'Card information'. The 'Card information' section is currently active. It contains the following fields:

- Event:** event_1
- Property:** Temp
- Name:** Temp
- Type:** Number (dropdown menu)
- Unit:** (empty field)
- Min:** 0
- Max:** 100

At the bottom of the form are two buttons: 'Back' and 'Next'.

Step 15: Improve contrast of the colour in card information.

The screenshot shows the 'Create Line chart Card' form in the IBM Watson IoT Platform, with the 'Card information' section active. The form has been updated with improved contrast for the color scheme. The fields are:

- Enter title and description of the card:** (empty field)
- Title:** Line chart
- Color scheme:** A selection of four color swatches: purple, green, blue, and teal.
- Description:** A line chart to display time series information with historic and live data

At the bottom of the form are two buttons: 'Back' and 'Submit'.

Step 16: Finally card generated different device.

