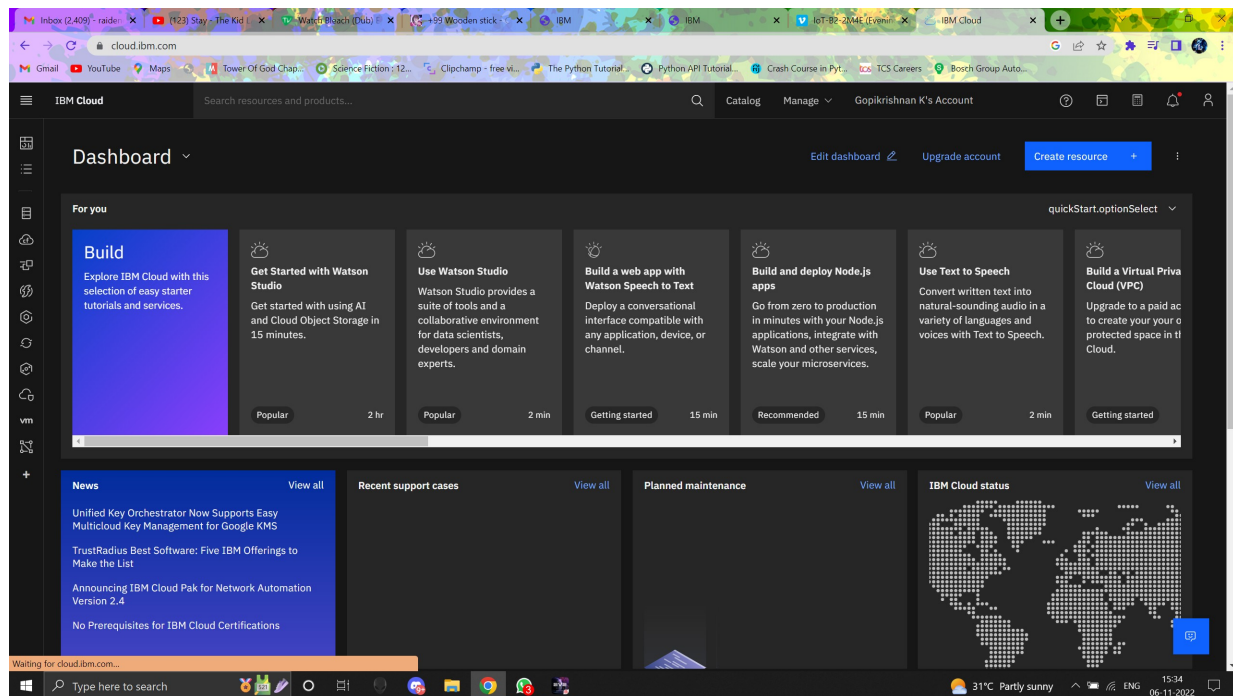


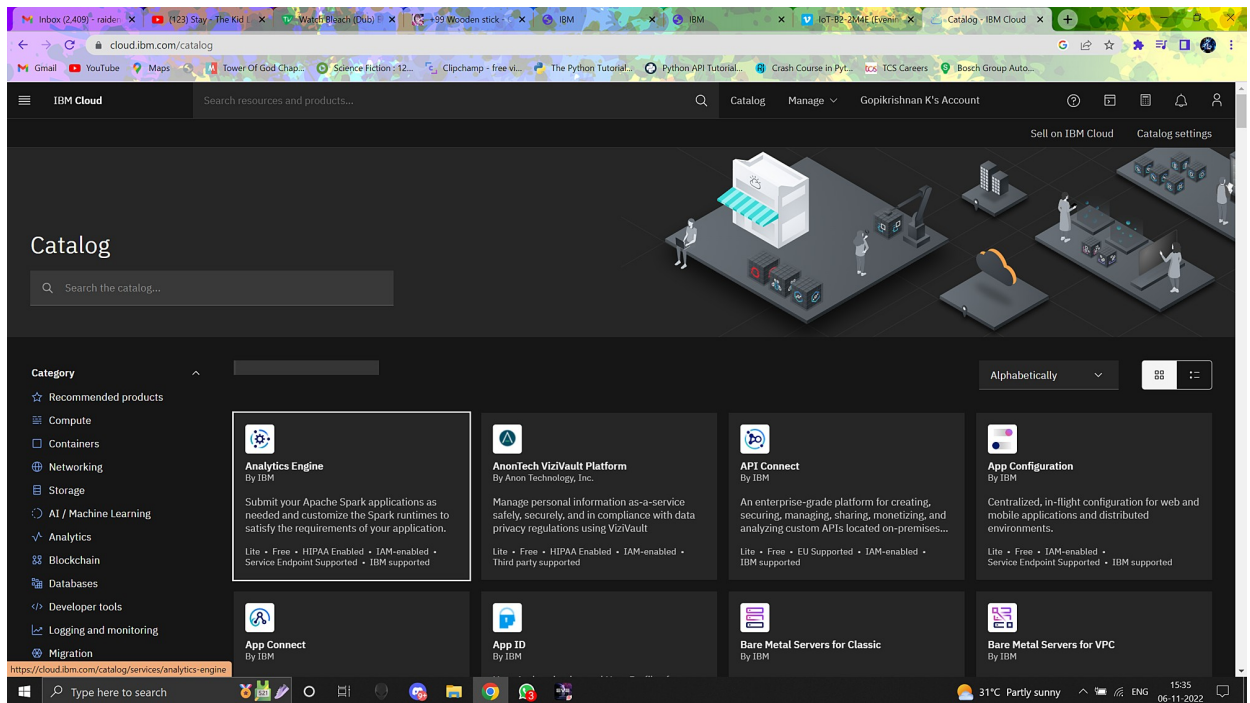
Create IBM Watson IoT Platform

Date	25 October 2022
Team ID	PNT2022TMID27109
Project Name	Smart Farmer - IoT Enabled Smart Farming Application

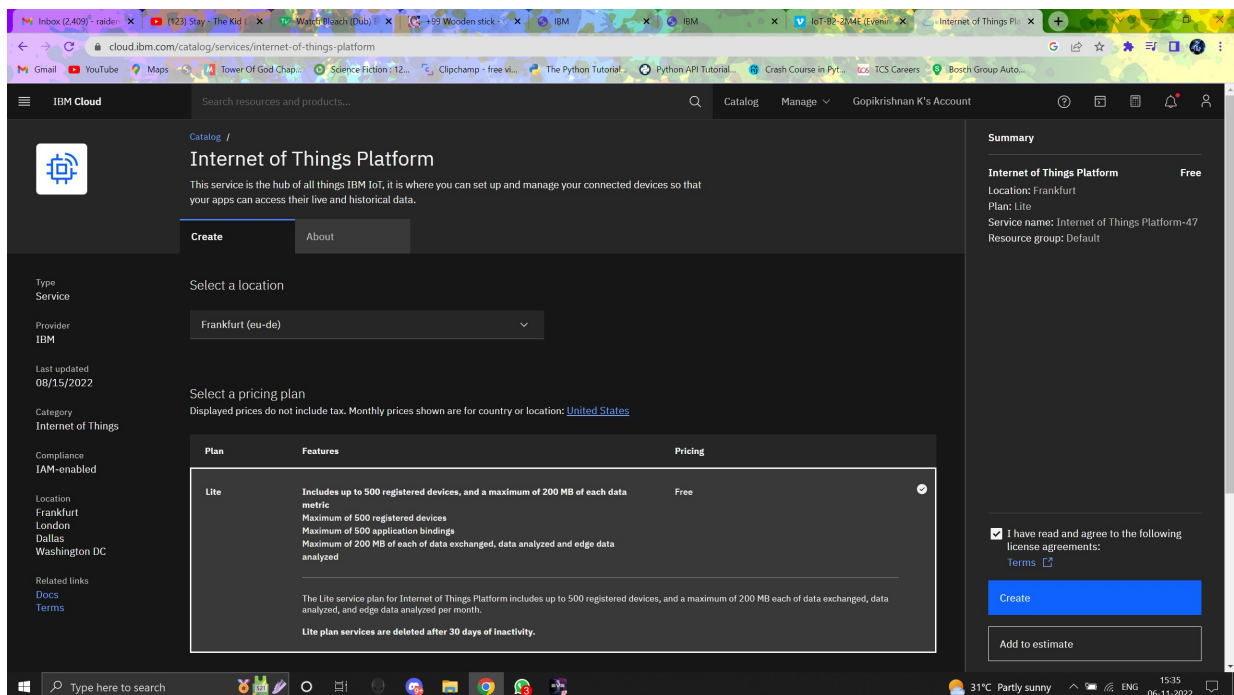
Step 1: Home page of IBM cloud.



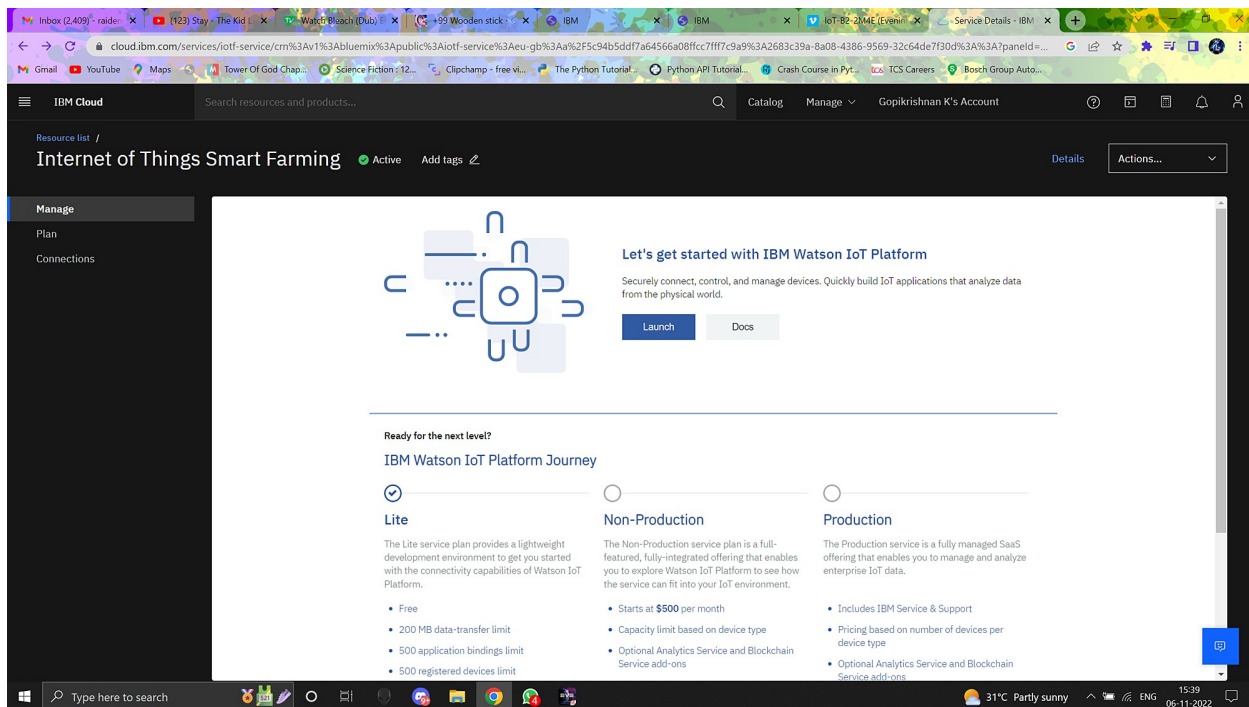
Step 2: Click on the catalog on the top.



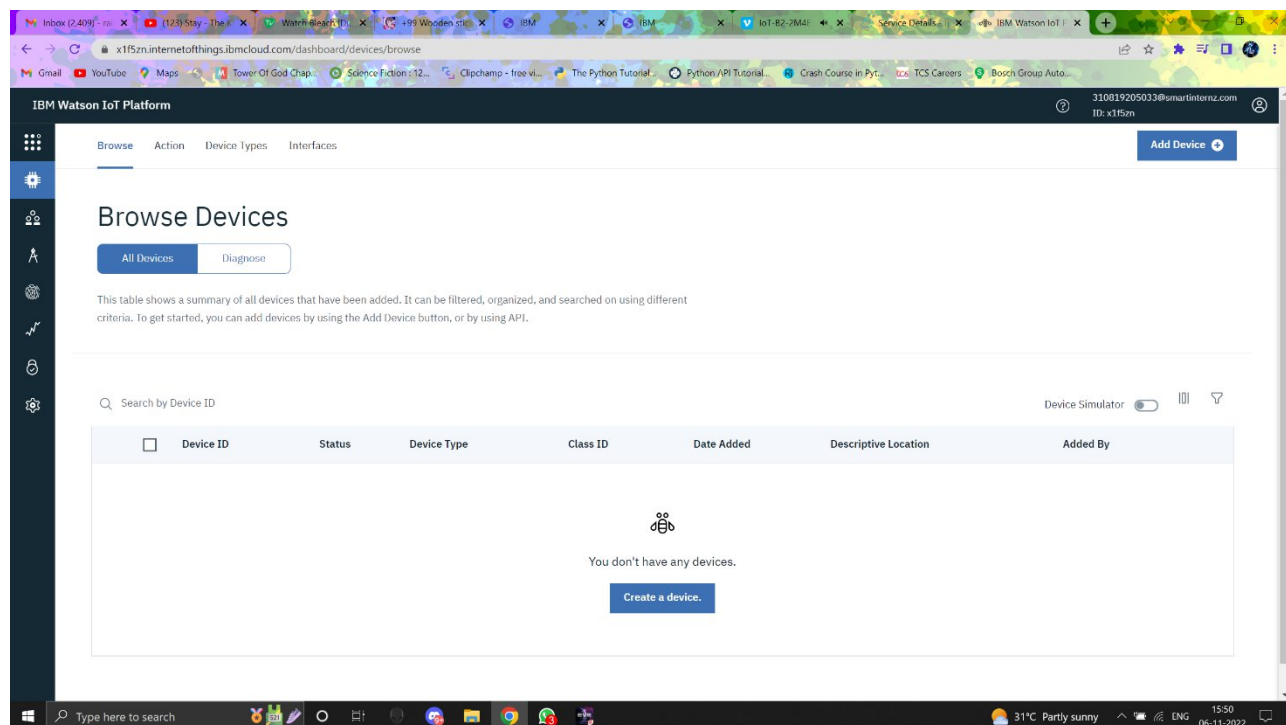
Step 3: Click on Internet of Things Platform.



Step 4: Click on the launch button.



Step 5: This is the IBM Watson platform.



Step 6: Click on Device Type.

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 the word 'Identity' below it. Below the step indicator, there is a text prompt: '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 the value 'NodeMCU' and 'Device ID' with the value '00769'. At the bottom right of the wizard, there are 'Cancel' and 'Next' buttons. Below the wizard, there is a 'Browse Devices' section with 'All Devices' and 'Diagnose' buttons. A brief description of the table follows.

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: NodeMCU

Device ID: 00769

Cancel Next

Browse Devices

All Devices Diagnose

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.

Step 7: After creating the device, Copy the Device Credentials.

The screenshot shows the 'Browse Devices' page in the IBM Watson IoT Platform. At the top right, there is an 'Add Device' button. Below the header, there are 'All Devices' and 'Diagnose' buttons. A brief description of the table follows. Below the description, there is a search bar and a 'Device Simulator' toggle. The main part of the page is a table with columns: Device ID, Status, Device Type, Class ID, Date Added, Descriptive Location, and Added By. The table contains one row with the following data: Device ID: 00769, Status: Disconnected, Device Type: NodeMCU, Class ID: Device, Date Added: Nov 6, 2022 4:10 PM, Descriptive Location: , Added By: 310819205033@smartinternz.com. Below the table, there is a 'Details' section with tabs: Identity, Device Information, Recent Events, State, and Logs. The 'Identity' tab is selected, showing details for the device: Device ID: 00769, Device Type: NodeMCU, Date Added: Nov 6, 2022 4:10 PM, Added By: 310819205033@smartinternz.com, and Connection Status: Disconnected.

Browse Devices

All Devices Diagnose

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.

Search by Device ID Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
00769	Disconnected	NodeMCU	Device	Nov 6, 2022 4:10 PM		310819205033@smartinternz.com

Details

Identity Device Information Recent Events State Logs

Device ID: 00769

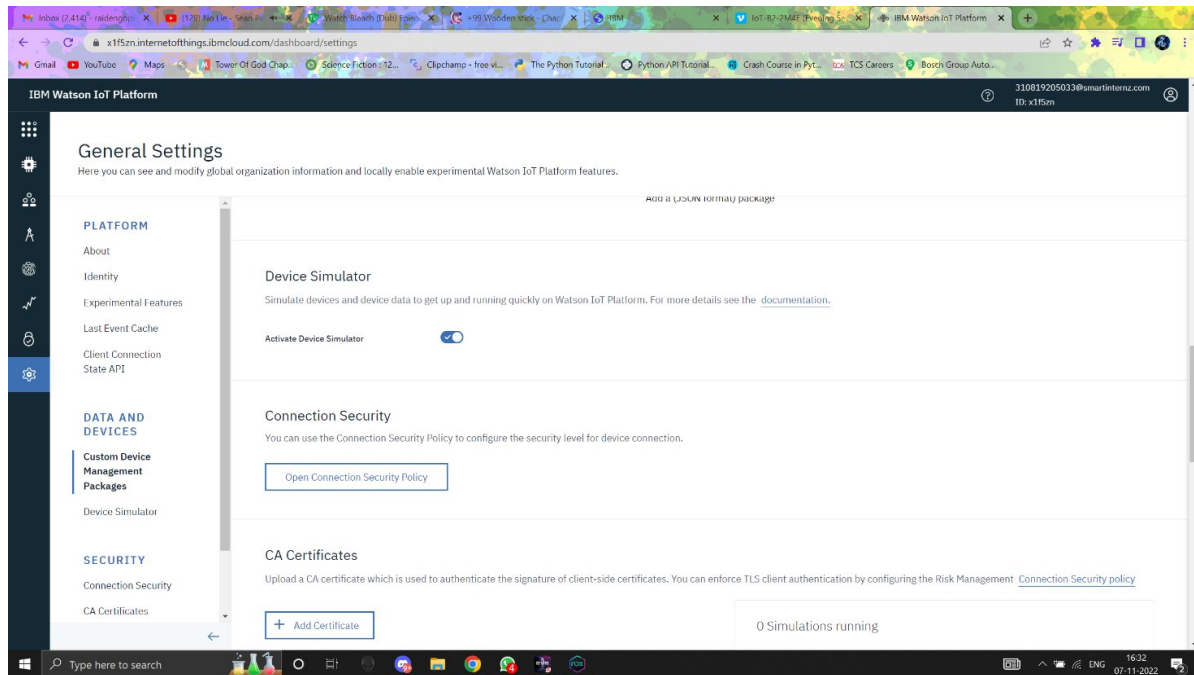
Device Type: NodeMCU

Date Added: Nov 6, 2022 4:10 PM

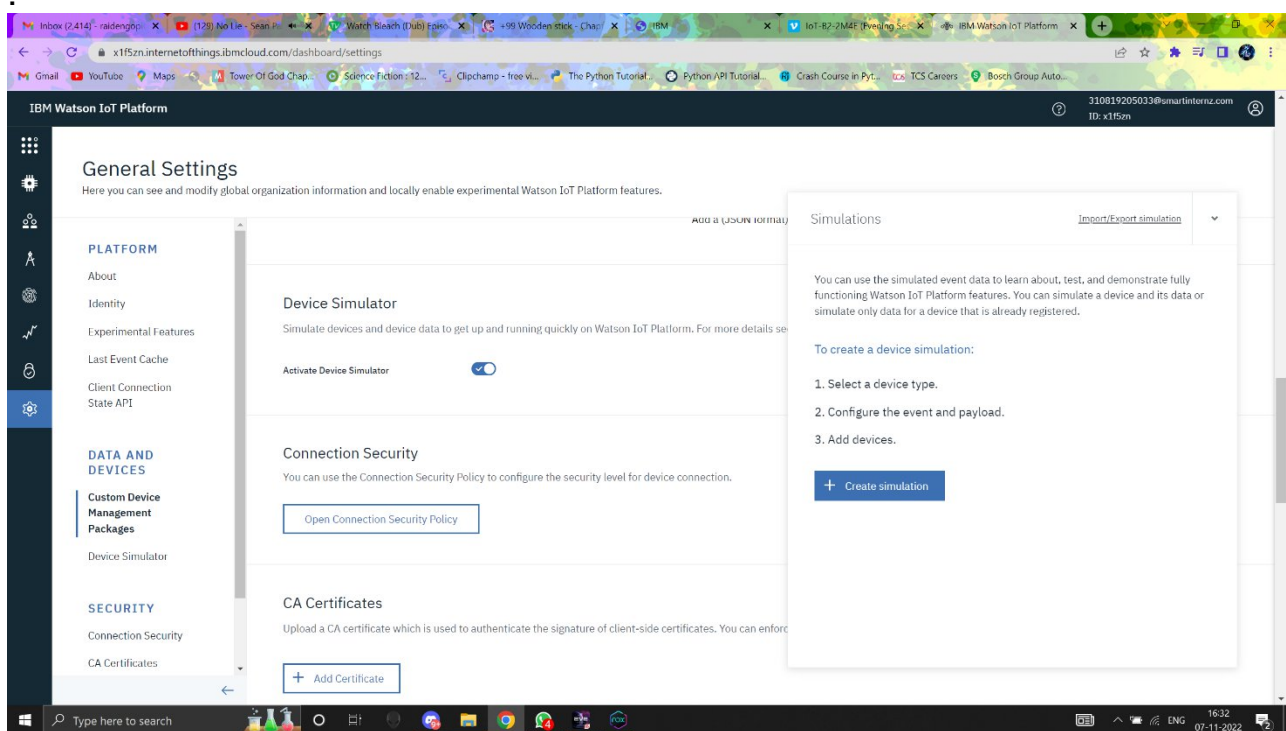
Added By: 310819205033@smartinternz.com

Connection Status: Disconnected

Step 8: Then click on Device Simulator and Activate Device Simulator.



Step 9: Click on the pop-up screen on the right side



Step 10: Click on Use Registered Device and choose the device and run it.

The screenshot shows the IBM Watson IoT Platform interface. On the right, the 'Simulations' panel is open, displaying '1/50 Simulations Running' and a '+ New Simulation' button. Below this, a list of devices is shown, including '00769' and 'NodeMCU_1'. At the bottom of the simulation panel, there are buttons for 'Create Simulated Device' and 'Use Registered Device'. On the left, a table lists recent events for device 00769. The table has columns for Event, Value, Format, and Last Received. The events are as follows:

Event	Value	Format	Last Received
event_1	["temperature":90,"humidity":36,"moisture":39]	json	a few seconds ago
event_1	["temperature":75,"humidity":51,"moisture":43]	json	a few seconds ago

Step 11: Go to devices then click on devices and check the recent events whether the code is running or not.

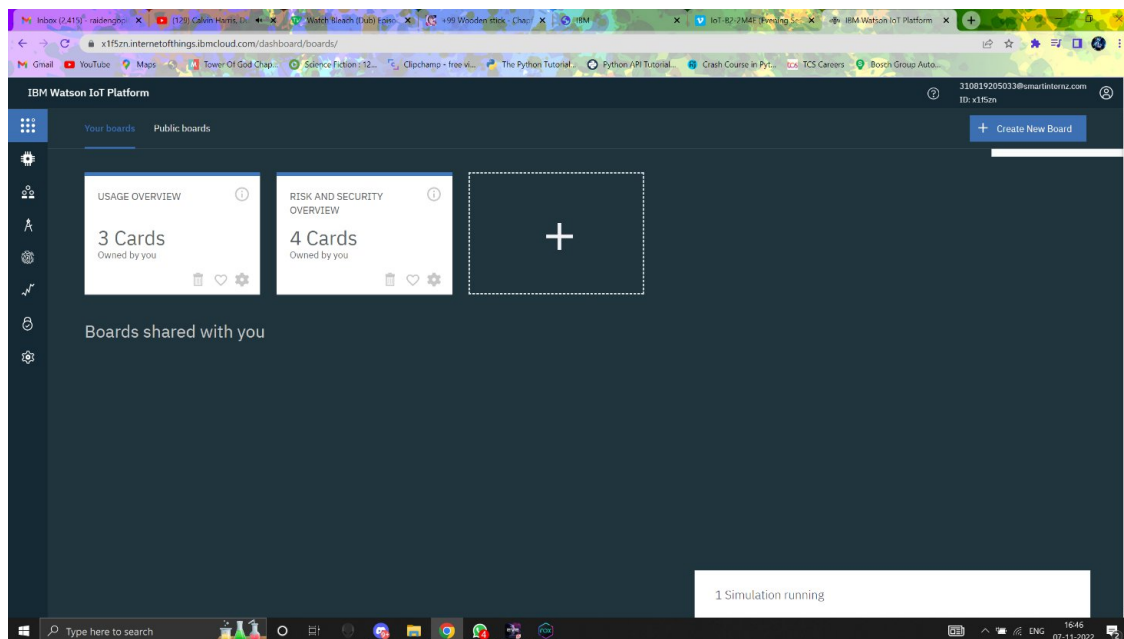
The screenshot shows the IBM Watson IoT Platform interface. On the right, the 'Events' panel for device 'NodeMCU 00769' is open. It shows 'Event type name' as 'event_1' and 'Frequency' as '20 x Every Minute'. Below this, a 'Payload' editor is visible, showing a JSON payload with fields for 'temperature', 'humidity', and 'moisture'. The payload is as follows:

```
{
  "temperature": random(0, 100),
  "humidity": random(0, 100),
  "moisture": random(0, 100)
}
```

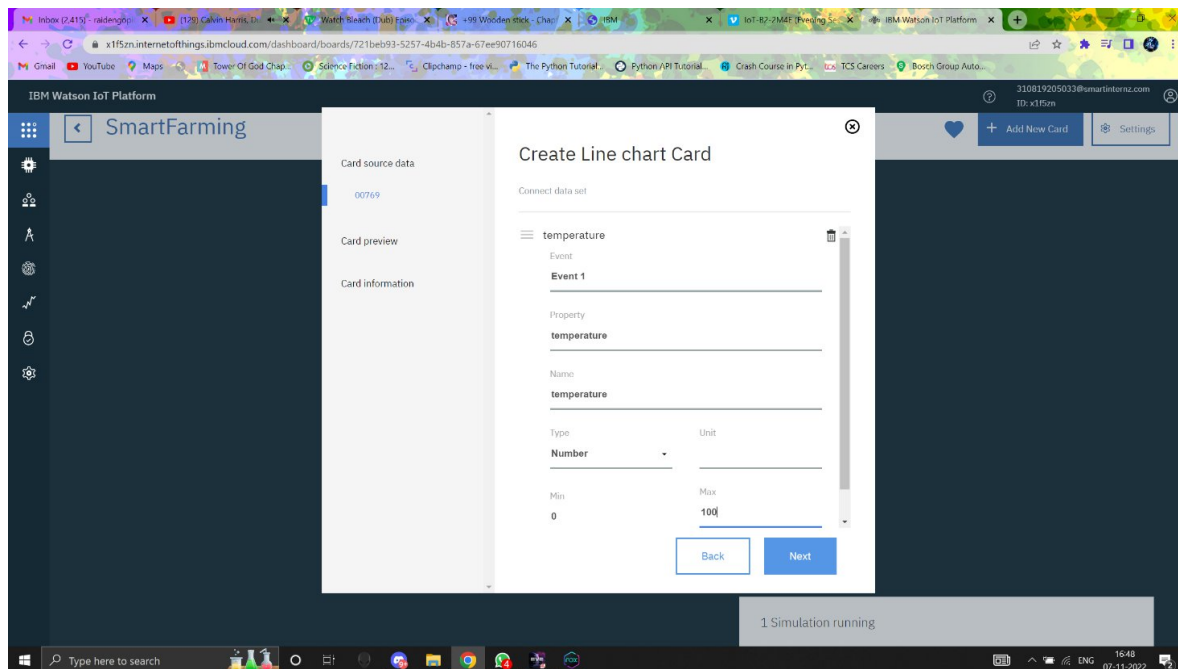
On the left, a table lists recent events for device 00769. The table has columns for Event, Value, Format, and Last Received. The events are as follows:

Event	Value	Format	Last Received
event_1	["temperature":75,"humidity":51,"moisture":43]	json	a few seconds ago

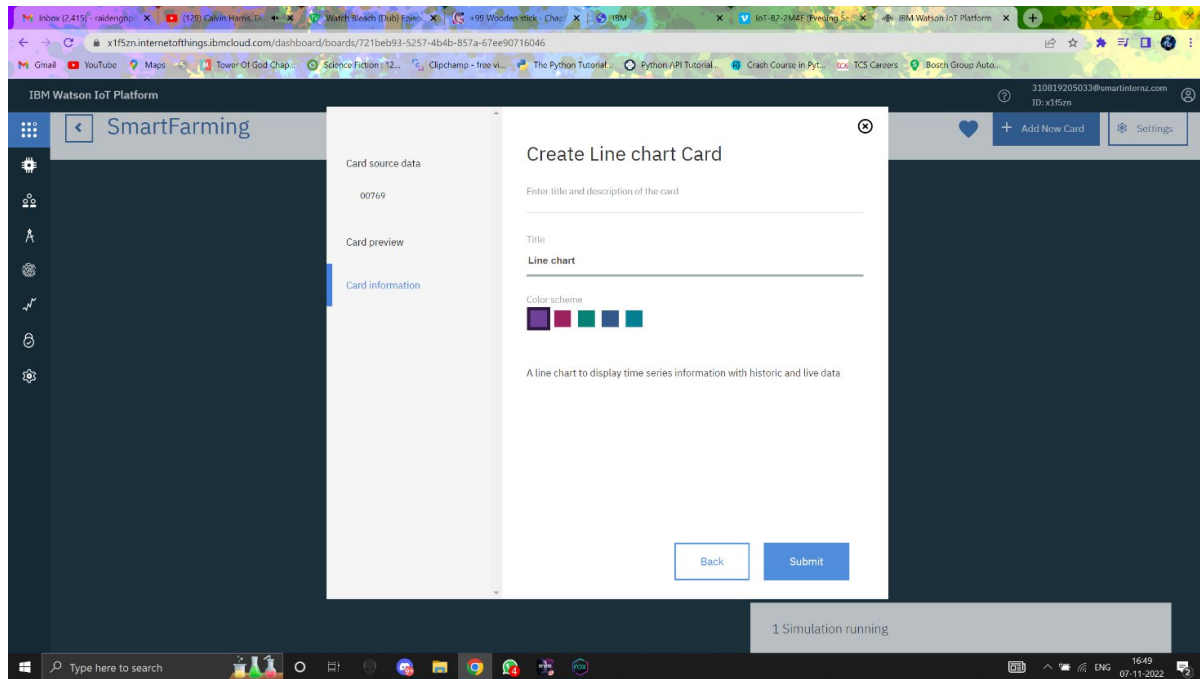
Step 12: Go to Board and click on + Create New Board, fill the details and create a board.



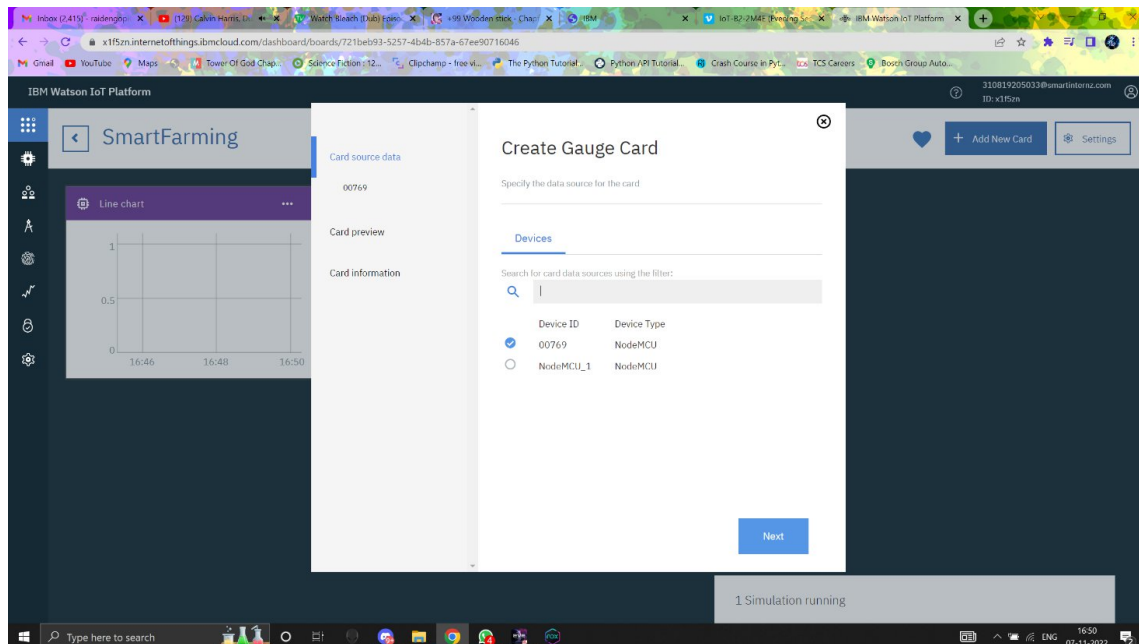
Step 13: Fill the details to get Temperature graph.



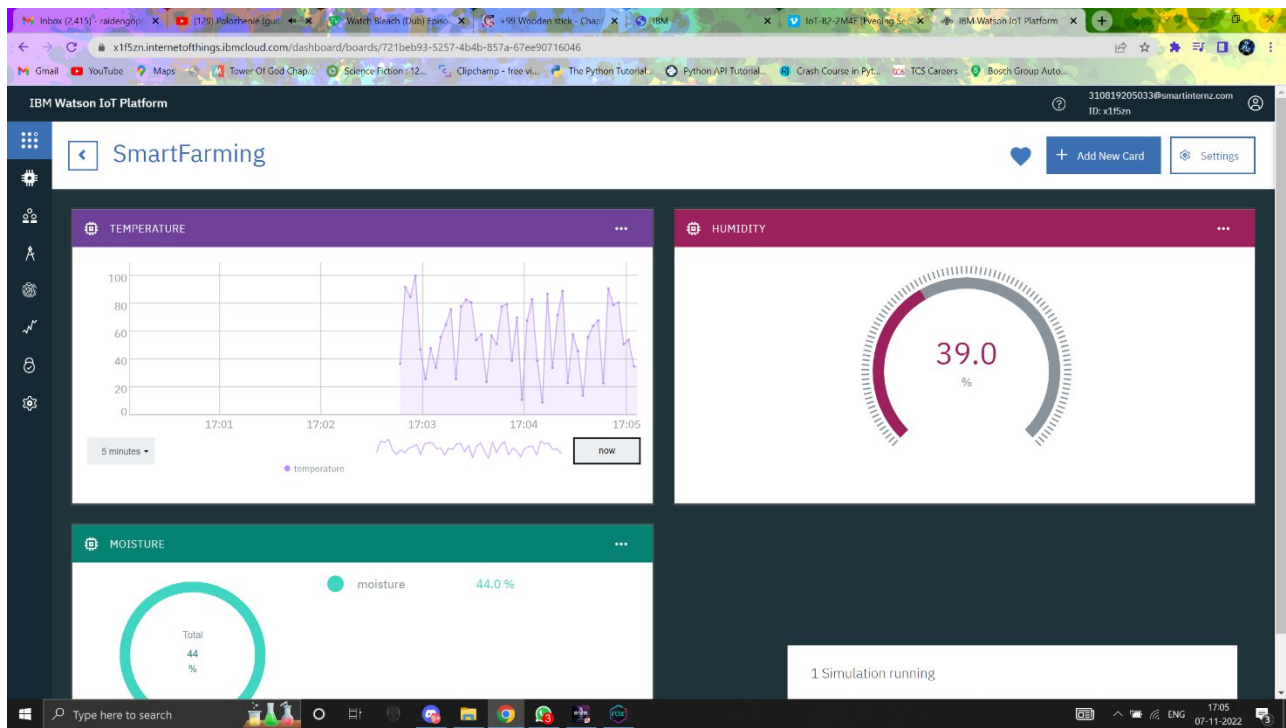
Step 14: Select the Color from the given option.



Step 15: Repeat the same process again to get the Humidity graph and M



Step 16: Here is the Final graph.



Result:

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