Practicals With IBM IoT Platform

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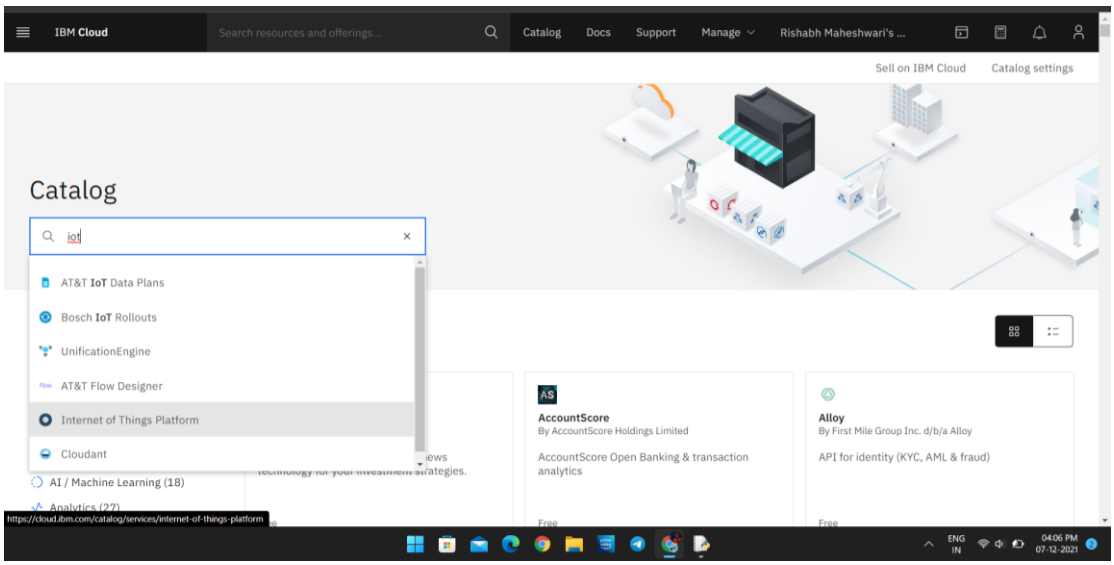
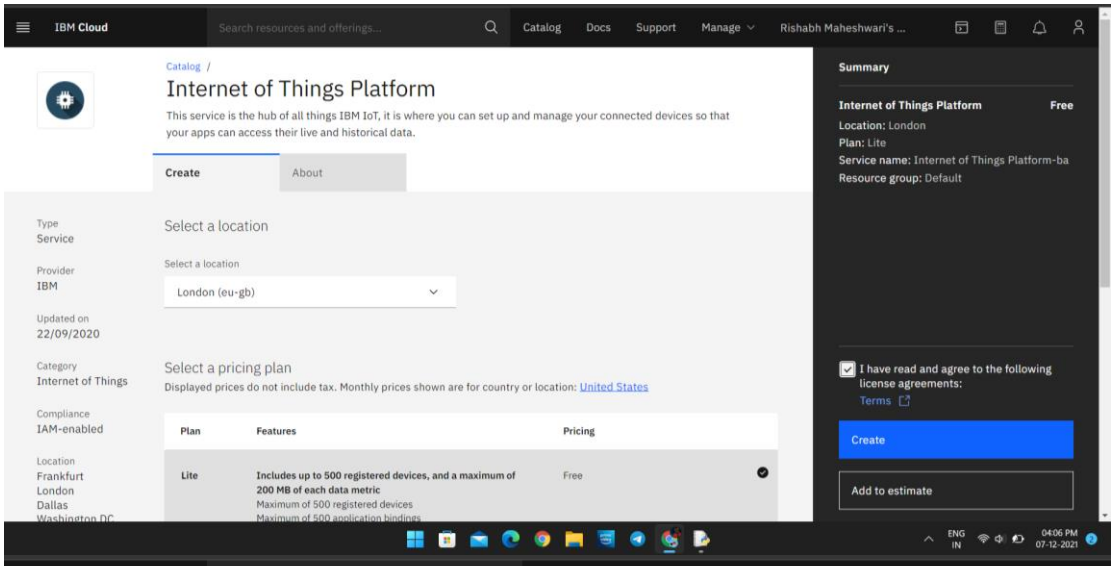
19BCY10145

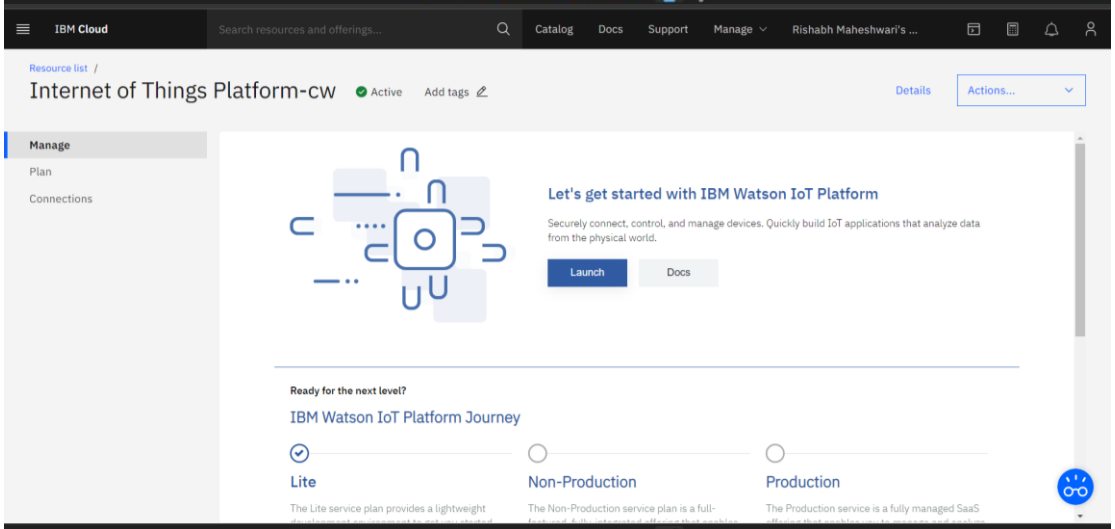
Create IBM IoT Platform for communicating with IoT devices. Create the devices and Configure the connection security.

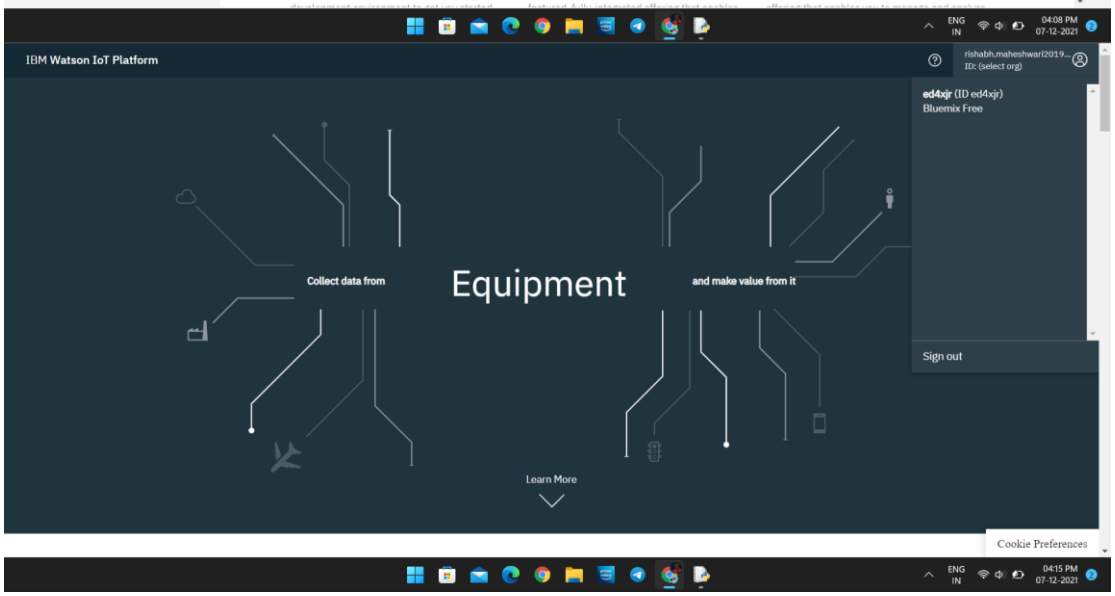
Connect the online simulator to the IBM IoT device and visualize the data with internal boards and cards.

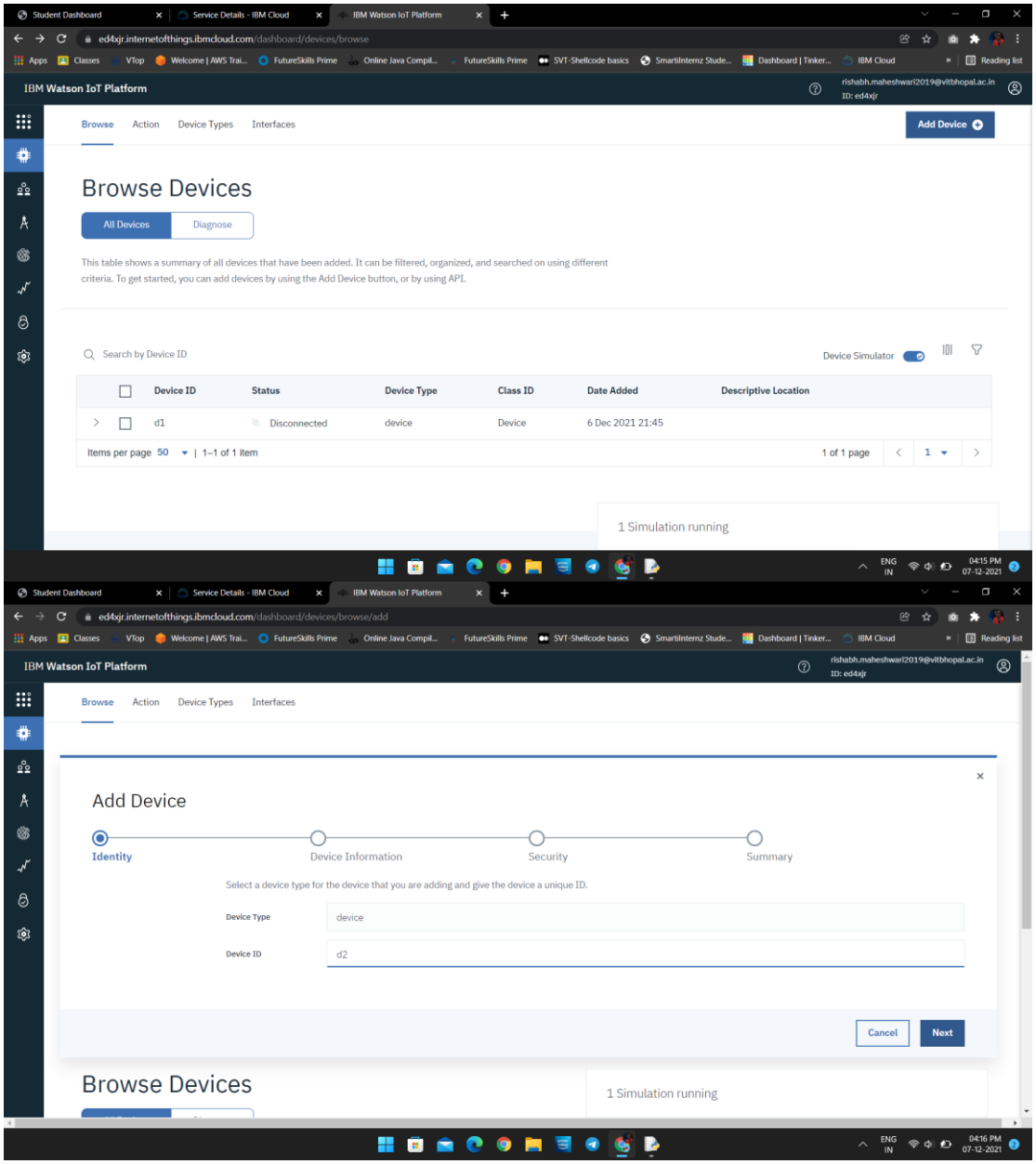
To do the above tasks just follow the Screenshots given below on IBM Cloud Services -

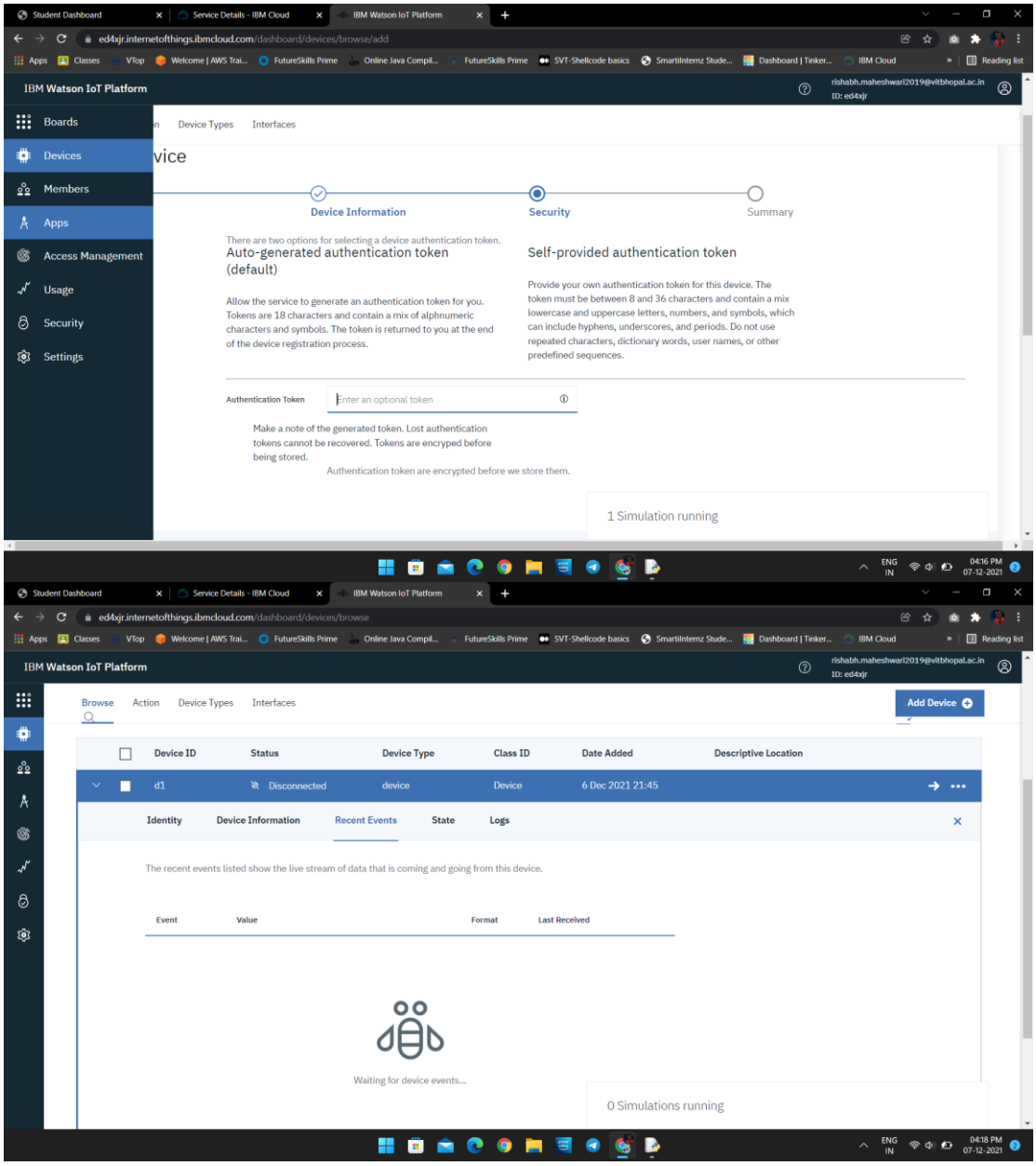


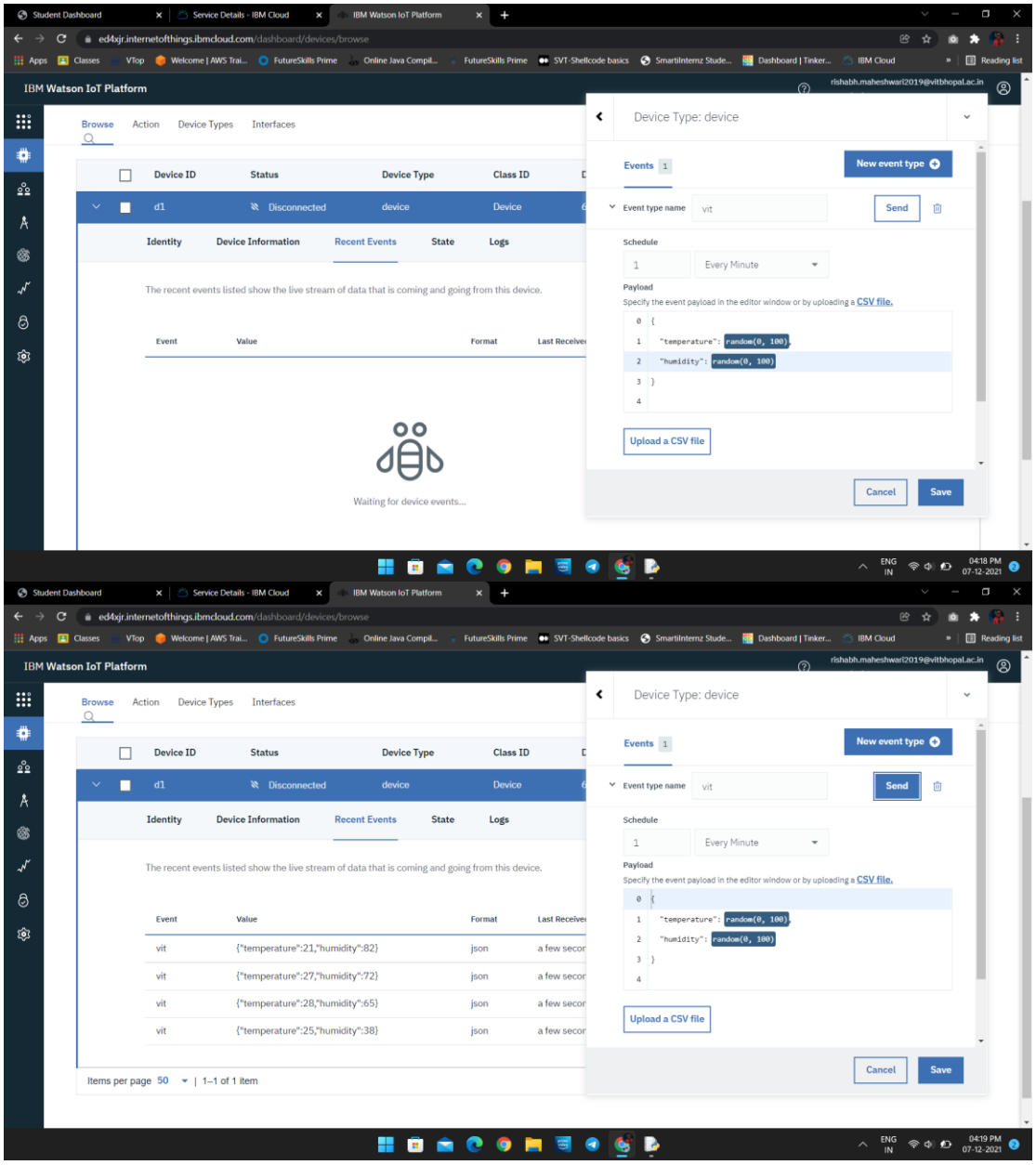

IBM Cloud
Search resources and offerings...
Catalog
Docs
Support
Manage
Rishabh Maheshwari's ...
Catalog /
Internet of Things Platform
This service is the hub of all things IBM IoT, it is where you can set up and manage your connected devices so that your apps can access their live and historical data.
Create
About
Type
Service
Provider
IBM
Updated on
22/09/2020
Category
Internet of Things
Compliance
IAM-enabled
Location
Frankfurt
London
Dallas
Select a location
Select a location
London (eu-gb)
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
Free
Summary
Internet of Things Platform
Free
Location: London
Plan: Lite
Service name: Internet of Things Platform-ba
Resource group: Default
I have read and agree to the following license agreements:
Terms
Create
Add to estimate
ENG
IN
04:06 PM
07-12-2021

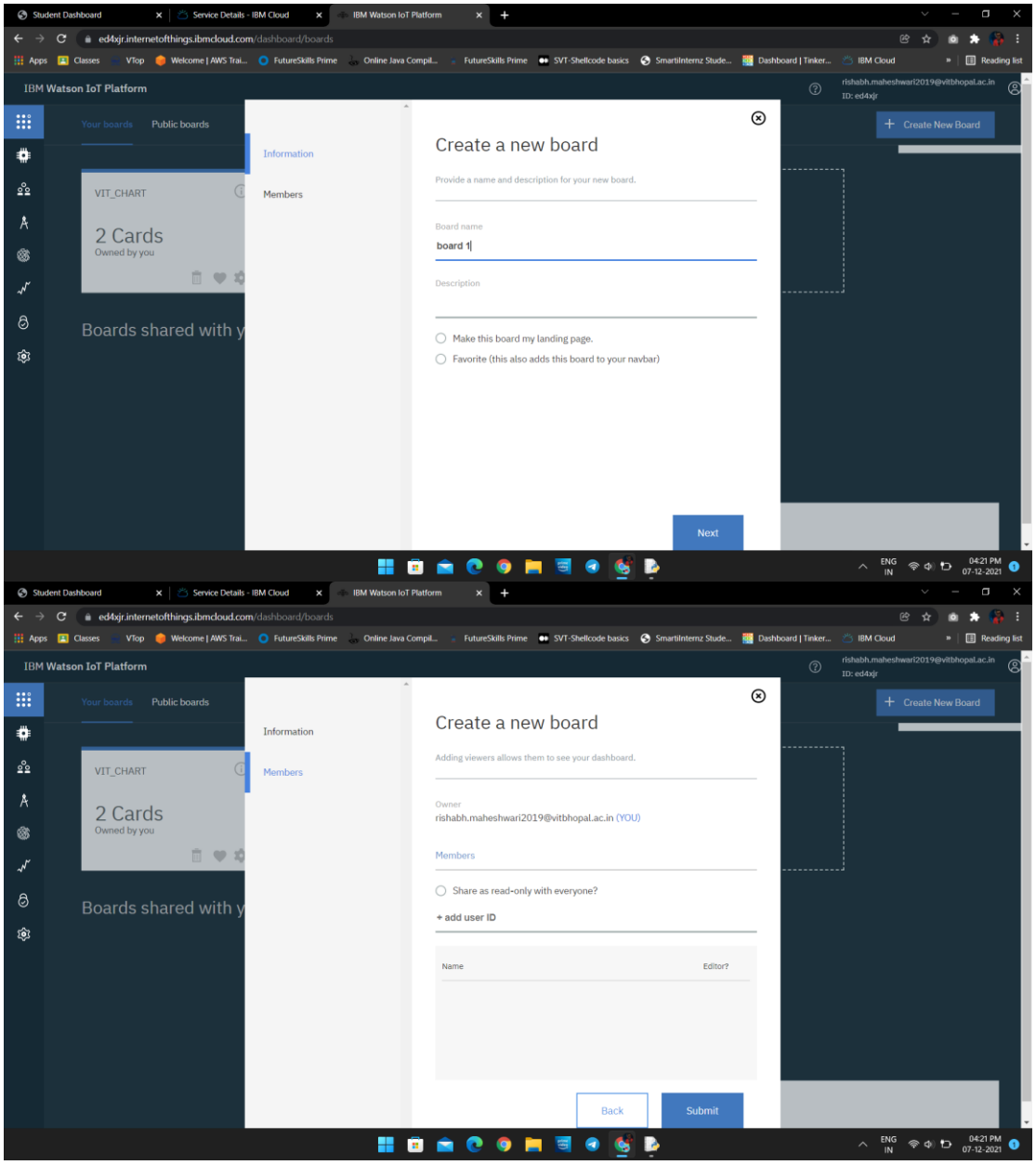

IBM Cloud
Search resources and offerings...
Catalog
Docs
Support
Manage
Rishabh Maheshwari's ...
Resource list /
Internet of Things Platform-cw
Active
Add tags
Details
Actions...
Manage
Plan
Connections
Let's get started with IBM Watson IoT Platform
Securely connect, control, and manage devices. Quickly build IoT applications that analyze data from the physical world.
Launch
Docs
Ready for the next level?
IBM Watson IoT Platform Journey
Lite
The Lite service plan provides a lightweight
Non-Production
The Non-Production service plan is a full-
Production
The Production service is a fully managed SaaS
ENG
IN
04:08 PM
07-12-2021

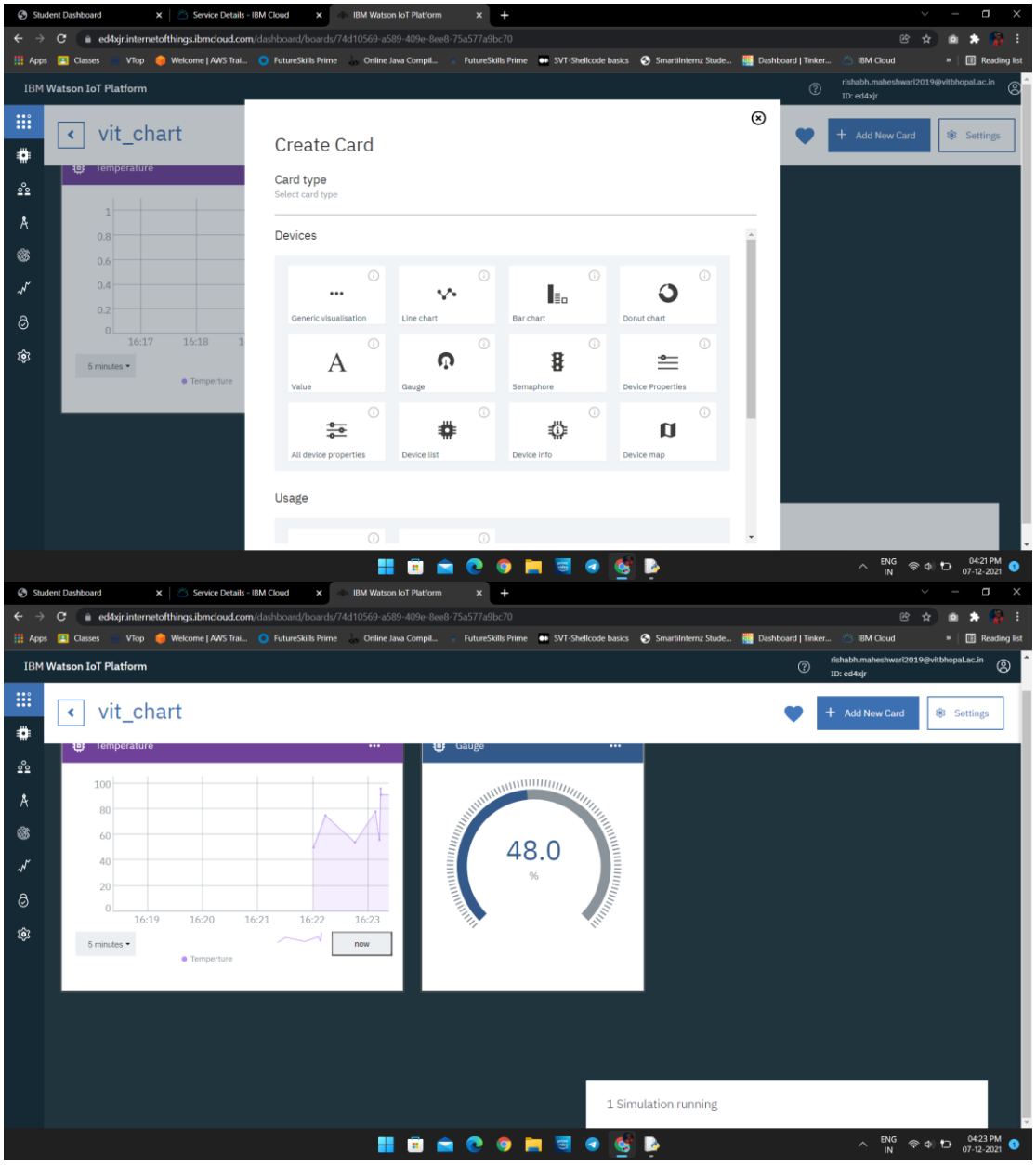

IBM Watson IoT Platform
rishabh.maheshwari2019...
ID: (select org)
ed4xjr (ID ed4xjr)
Bluemix Free
Sign out
Collect data from
Equipment
and make value from it
Learn More
Cookie Preferences
ENG
IN
04:15 PM
07-12-2021


Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
rishabh.maheshwari2019@vitbhopal.ac.in
ID: ed4xjr
Browse
Action
Device Types
Interfaces
Add Device
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
d1
Disconnected
device
Device
6 Dec 2021 21:45
Items per page 50
1–1 of 1 Item
1 of 1 page
1 Simulation running
ENG
IN
04:15 PM
07-12-2021
ed4xjr.internetofthings.ibmcloud.com/dashboard/devices/browse/add
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
device
Device ID
d2
Cancel
Next
Browse Devices
1 Simulation running
04:16 PM
07-12-2021


Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/devices/browse/add
IBM Watson IoT Platform
rishabh.maheshwari2019@vitbhopal.ac.in
ID: ed4xjr
Boards
Devices
Members
Apps
Access Management
Usage
Security
Settings
Device Types
Interfaces
Device Information
Security
Summary
There are two options for selecting a device authentication token.
Auto-generated authentication token (default)
Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphnumeric characters and symbols. The token is returned to you at the end of the device registration process.
Self-provided authentication token
Provide your own authentication token for this device. The token must be between 8 and 36 characters and contain a mix 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.
Authentication Token
Enter an optional token
Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encryped before being stored.
Authentication token are encrypted before we store them.
1 Simulation running
ENG
IN
04:16 PM
07-12-2021
Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
rishabh.maheshwari2019@vitbhopal.ac.in
ID: ed4xjr
Browse
Action
Device Types
Interfaces
Add Device
Device ID
Status
Device Type
Class ID
Date Added
Descriptive Location
d1
Disconnected
device
Device
6 Dec 2021 21:45
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
Waiting for device events...
0 Simulations running
ENG
IN
04:18 PM
07-12-2021


Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
rishabh.maheshwari2019@vitbhopal.ac.in
Browse
Action
Device Types
Interfaces
Device ID
Status
Device Type
Class ID
d1
Disconnected
device
Device
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Waiting for device events...
Device Type: device
Events 1
New event type
Event type name
vit
Send
Schedule
1
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"temperature": random(0, 100),
"humidity": random(0, 100)
}
Upload a CSV file
Cancel
Save
Items per page 50
1–1 of 1 item
{"temperature":21,"humidity":82}
{"temperature":27,"humidity":72}
{"temperature":28,"humidity":65}
{"temperature":25,"humidity":38}
json
a few secon
ENG
IN
04:18 PM
07-12-2021
04:19 PM
07-12-2021


Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/boards
IBM Watson IoT Platform
Your boards
Public boards
Create New Board
VIT_CHART
2 Cards
Owned by you
Boards shared with y
Information
Members
Create a new board
Provide a name and description for your new board.
Board name
board 1
Description
Make this board my landing page.
Favorite (this also adds this board to your navbar)
Next
Adding viewers allows them to see your dashboard.
Owner
rishabh.maheshwari2019@vitbhopal.ac.in (YOU)
Members
Share as read-only with everyone?
+ add user ID
Name
Editor?
Back
Submit


Student Dashboard
Service Details - IBM Cloud
IBM Watson IoT Platform
ed4xjr.internetofthings.ibmcloud.com/dashboard/boards/74d10569-a589-409e-8ee8-75a577a9bc70
IBM Watson IoT Platform
vit_chart
Add New Card
Settings
Create Card
Card type
Select card type
Devices
Generic visualisation
Line chart
Bar chart
Donut chart
Value
Gauge
Semaphore
Device Properties
All device properties
Device list
Device info
Device map
Usage
Temperature
5 minutes
Temperture
48.0
%
now
1 Simulation running