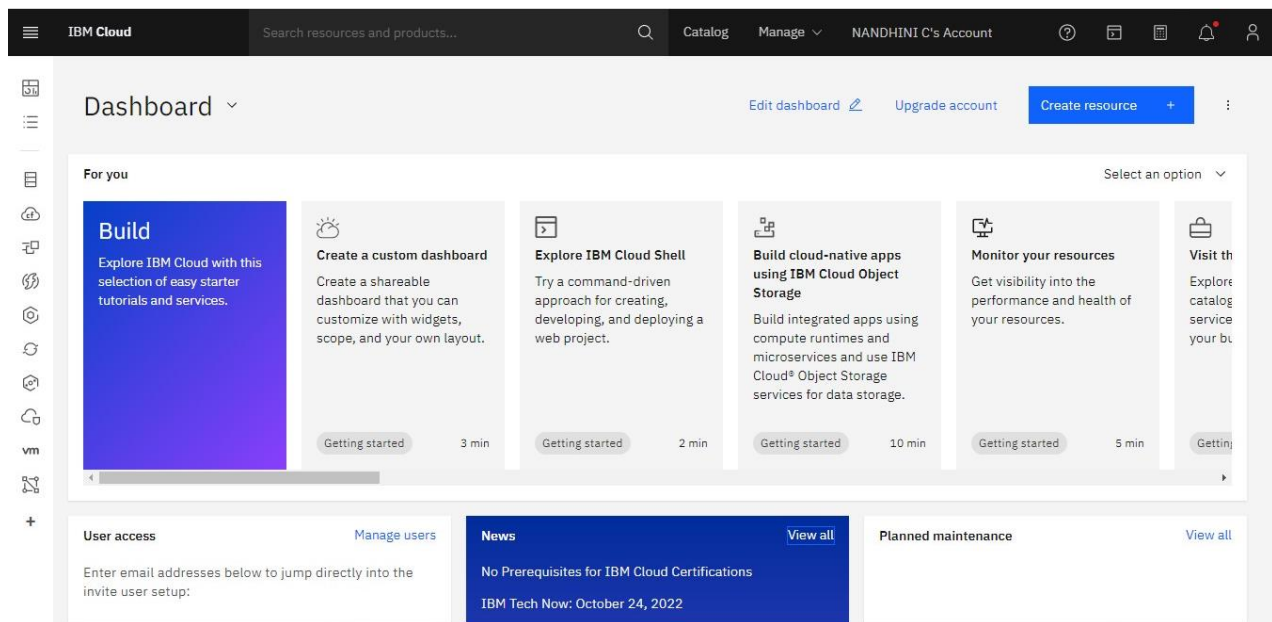


Project Development Phase Sprint-1

Date	29 October 2022
Team ID	PNT2022TMID05914
Project Name	Project – Real-time river water quality monitoring and control system

USN-1

As a user,I will register in ICTA Academy and create IBM cloud account.



USN-2

As a user, I will access IBM cloud and launch the IBM Watson IOT platform.

IBM Watson IoT Platform

815119106025@smartinternz.com
ID: rv07c6

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 ☒

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
>	<input type="checkbox"/> 123456	Disconnected	riverwaterquality-22_23	Device	Oct 28, 2022 1:47 AM		815119106025@smartinternz.com
>	<input type="checkbox"/> rv07c6	Disconnected	b11m3edeviceld	Device	Oct 9, 2022 9:52 PM		815119106025@smartinternz.com

Items per page 50 | 1-2 of 2 items

1 of 1 page

1 Simulation running

USN-3

As a user, I can create a device in the IOT IBM Watson platform for simulation .

The screenshot shows the IBM Watson IoT Platform dashboard. The main heading is "Browse Devices". Below it, there are tabs for "All Devices" and "Diagnose". A description states: "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."

A search bar labeled "Search by Device ID" is present. Below it is a table of devices:

Device ID	Status	Device Type	Class ID	Date Added	Description
123456	Disconnected	riverwaterquality-22_23	Device	Oct 28, 2022 1:47 AM	

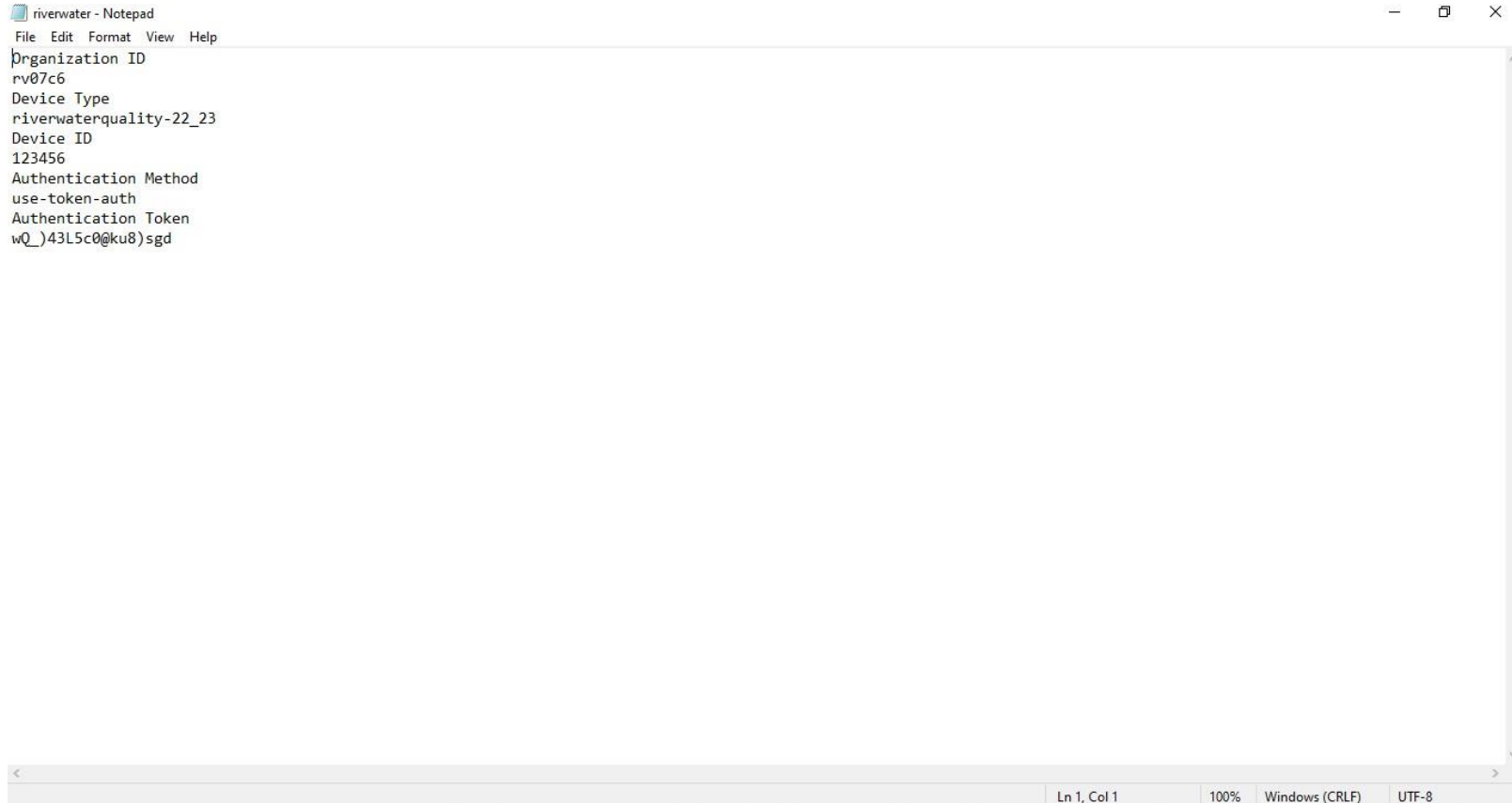
Below the table, there are tabs for "Identity", "Device Information", "Recent Events", "State", and "Logs". The "Device Information" tab is selected, showing details for the device 123456:

Device ID	123456
Device Type	riverwaterquality-22_23
Date Added	Oct 28, 2022 1:47 AM
Added By	815119106025@smartinternz.com
Connection Status	Disconnected

On the right side, a modal window titled "Simulations" is open. It shows "1/50 Simulations Running" and a "+ New Simulation" button. Below this, it lists the "Device Type" as "riverwaterquality-22_23" and shows "1 Event". At the bottom of the modal, it says "82 events sent" and "3.79 KB sent".

USN-4

As a user, I will get the device ID and device type of my device.



```
riverwater - Notepad
File Edit Format View Help
Organization ID
rv07c6
Device Type
riverwaterquality-22_23
Device ID
123456
Authentication Method
use-token-auth
Authentication Token
wQ_)43L5c0@ku8)sgd
Ln 1, Col 1 100% Windows (CRLF) UTF-8
```

USN-5

As a user, I can simulate the device created.

The screenshot displays the IBM Watson IoT Platform interface. The main dashboard shows a list of devices under the 'Browse' tab. A modal window is open for configuring a simulation event for the device 'riverwaterquality-22_23'.

Device List:

Device ID	Status	Device Type	Class ID	Date Added
123456	Disconnected	riverwaterquality-22_23	Device	Oct 28, 2022 1:47 AM
riverwaterquality-22_23_1	Connected	riverwaterquality-22_23	Device	Oct 28, 2022 10:32 PM
rv07c6	Disconnected	b11m3edeviceld	Device	Oct 9, 2022 9:52 PM

Device Information for riverwaterquality-22_23_1:

- Device ID: riverwaterquality-22_23_1
- Device Type: riverwaterquality-22_23
- Date Added: Oct 28, 2022 10:32 PM
- Added By: 815119106025@smartinternz.com
- Connection Status: Connected
- Connection Time: Oct 28, 2022 10:37 PM
- Client Address: 106.217.16.239 SecureToken

Simulation Event Configuration Modal:

- Device Type: riverwaterquality-22_23
- Event type name: Data
- Schedule: 20 Every Minute
- Payload (JSON):

```
{  "Temperature": "random(0, 100)",  "PH": "random(0, 14)",  "turbidity": "random(0, 100)"}
```
- Buttons: Upload a CSV file, Cancel, Save

USN-6

As a user ,I can get the values of temperature, PH and turbidity. I can create a line chart with my output data .

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. A table lists devices, with one device selected and its details expanded.

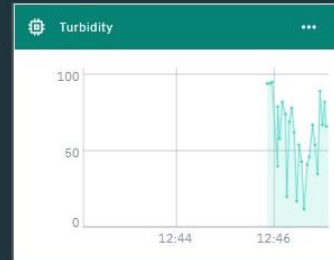
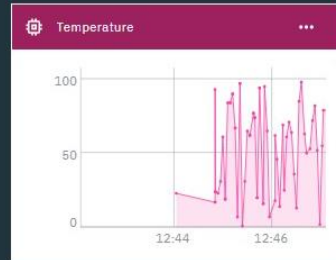
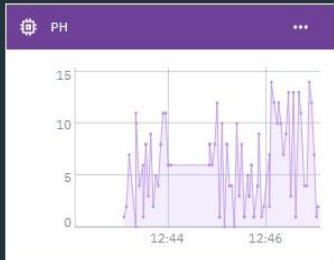
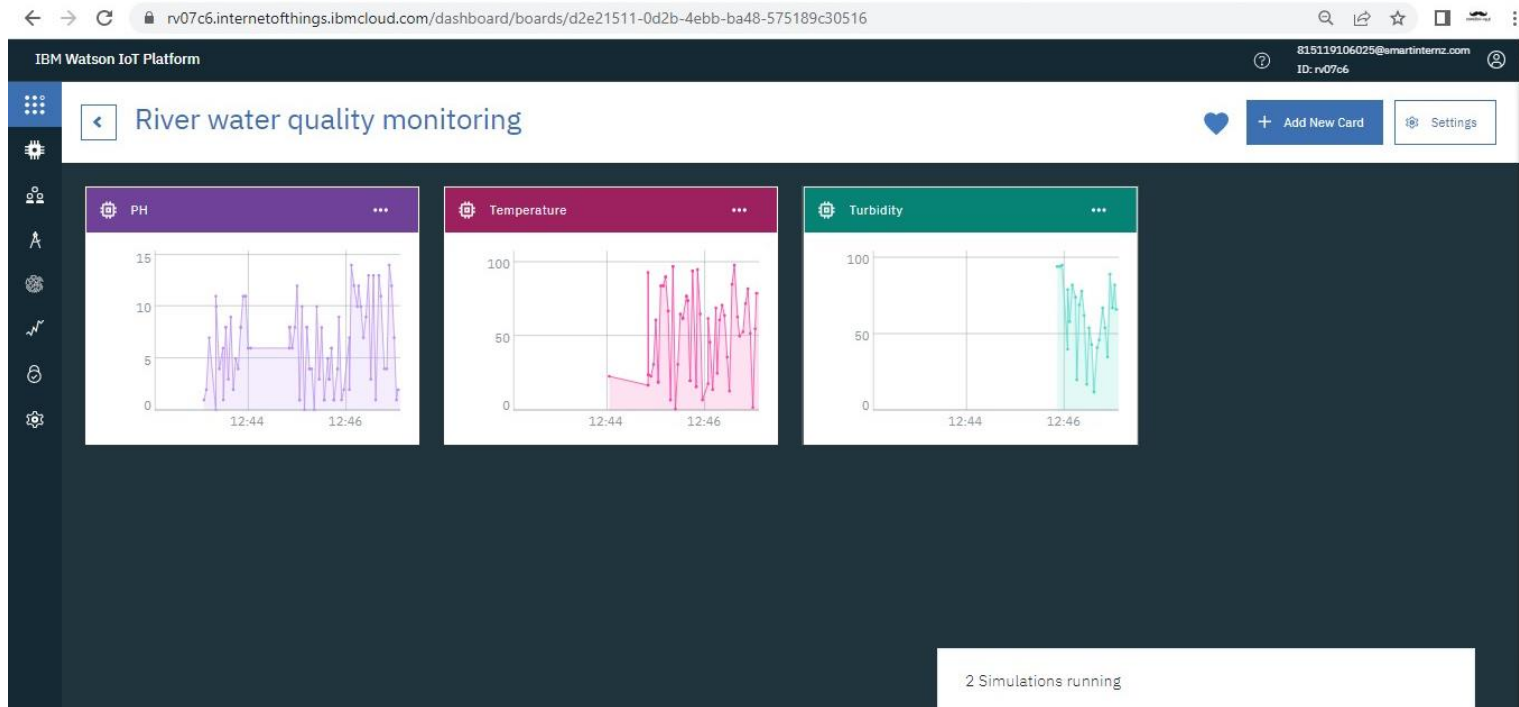
Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By
123456	Disconnected	riverwaterquality-22_23	Device	Oct 28, 2022 1:47 AM		815119106025@smartinternz.com
riverwaterquality-22_23_1	Connected	riverwaterquality-22_23	Device	Oct 28, 2022 10:32 PM		815119106025@smartinternz.com

The selected device's details are shown in a modal window with tabs for Identity, Device Information, Recent Events, State, and Logs. The 'Recent Events' tab is active, displaying a table of events.

Event	Value	Format	Last Received
Data	{"Temperature":55,"PH":10,"Turbidity":69}	json	a few seconds ago
Data	{"Temperature":19,"PH":1,"Turbidity":12}	json	a few seconds ago
Data	{"Temperature":84,"PH":10,"Turbidity":13}	json	a few seconds ago
Data	{"Temperature":38,"PH":1,"Turbidity":85}	json	a few seconds ago
Data	{"Temperature":79,"PH":5,"Turbidity":25}	json	a few seconds ago

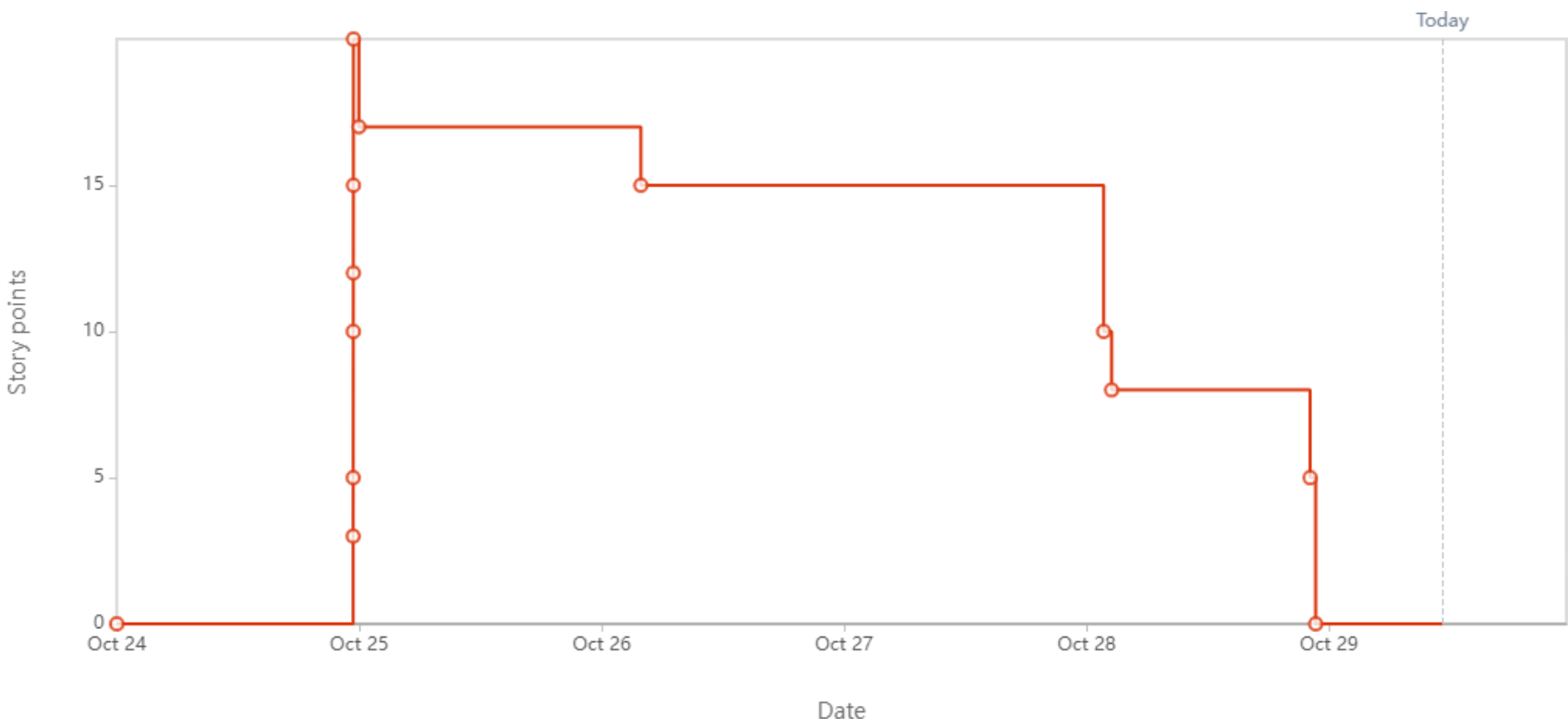
At the bottom right, a status box indicates '2 Simulations running'.

LINE CHART









2 Simulations running

SPRINT BURNDOWN CHART



ROAD MAP

	OCT				OCT						
	20	21	22	23	24	25	26	27	28	29	30
Sprints					Sprint 1						
>  <u>IBM1-7 Create and configure IBM cloud services (I...</u>											
>  <u>IBM1-8 Create and access Node-Red</u>											
>  <u>IBM1-13 MIT app inventor (Front end design and B...</u>											
>  <u>IBM1-16 Simulate ESP32</u>											
>  <u>IBM1-21 Create a Web UI</u>											
>  <u>IBM1-24 Connect with web application</u>											

VELOCITY CHART

