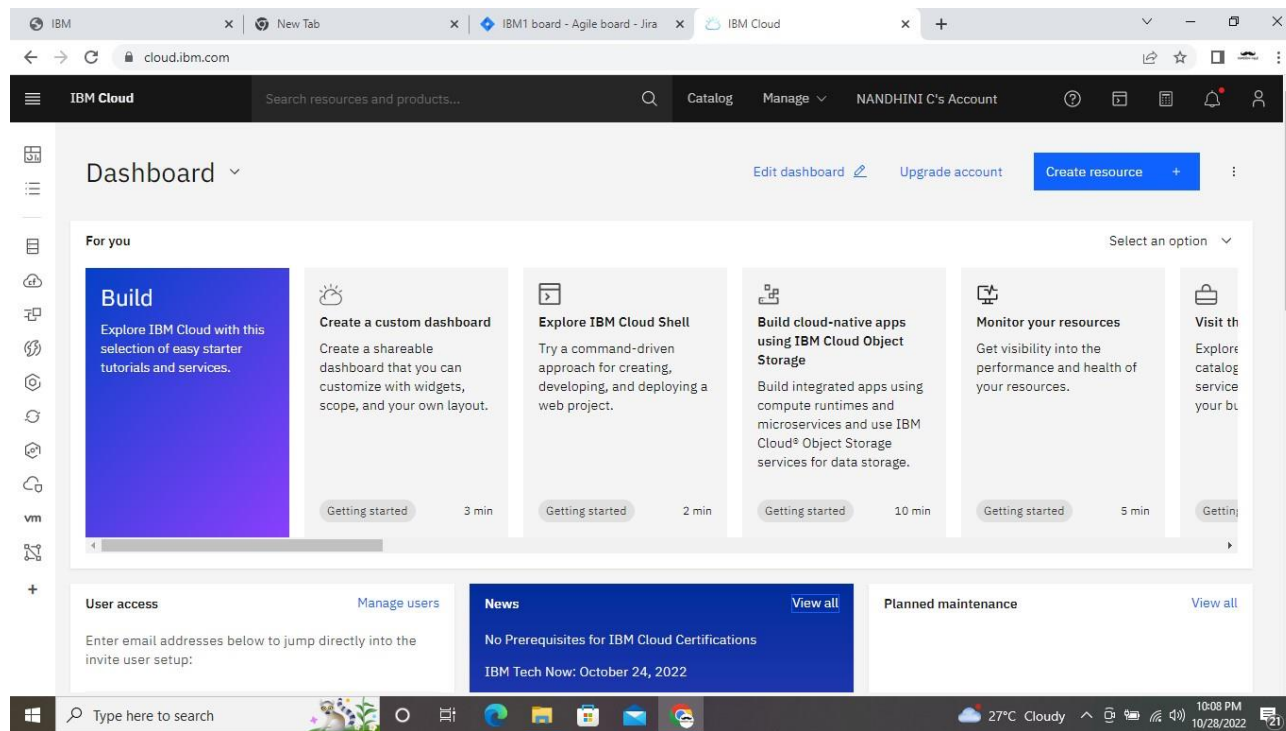


Project Development Phase Sprint-1

Date	6-11-2022
Team ID	PNT2022TMID24241
Project Name	Project – Real-time river water quality monitoring and control system

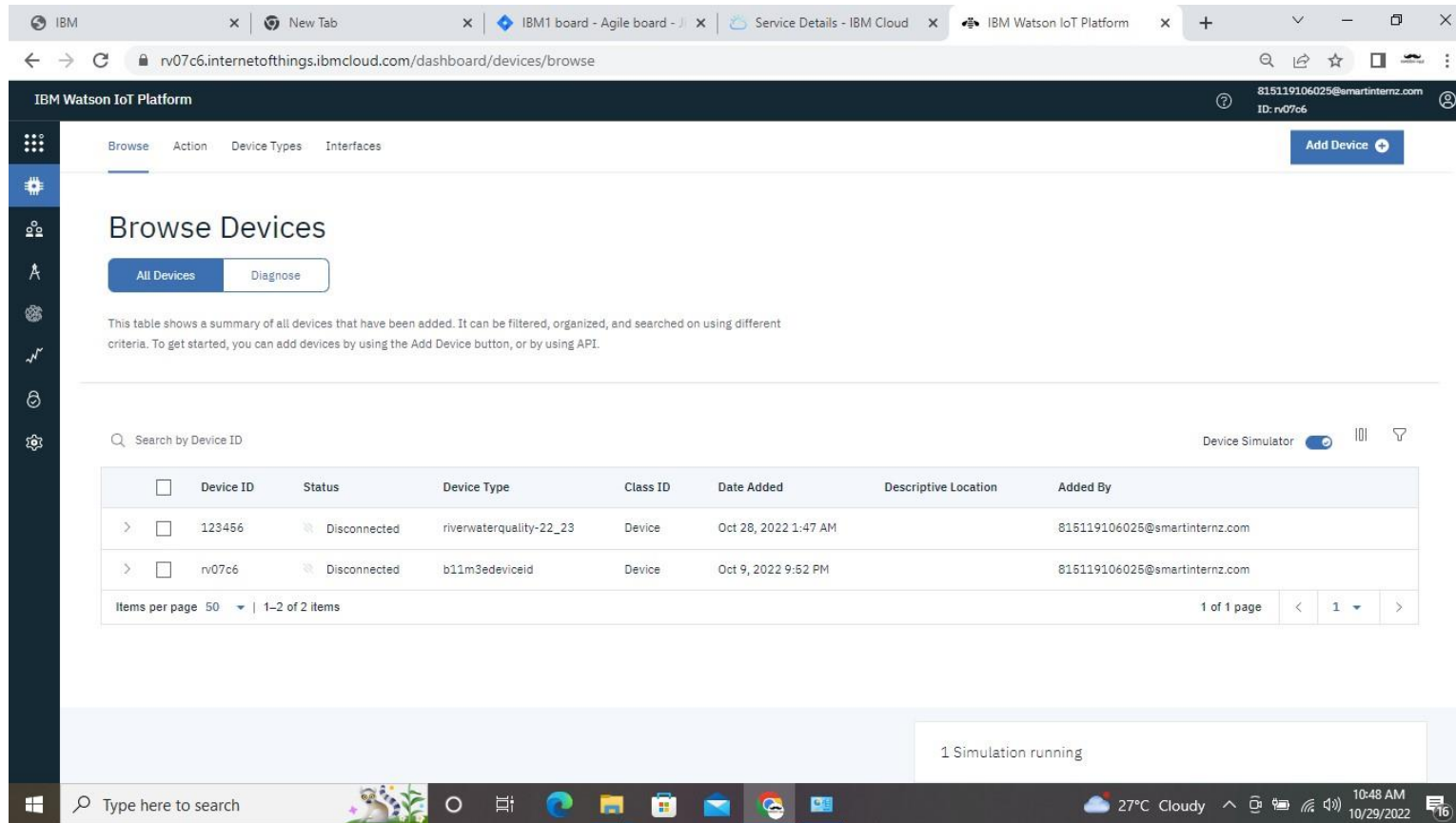
USN-1

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

	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
>	rv07c6	Disconnected	b11m3edevicid	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

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

USN-3

IBM Watson IoT Platform

Browse Action Device Types Interfaces

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

Identity Device Information Recent Events State Logs

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

Simulations Import/Export simulation

1/50 Simulations Running + New Simulation

Device Type: riverwaterquality-22_23 1 Event

1 Device: 123456

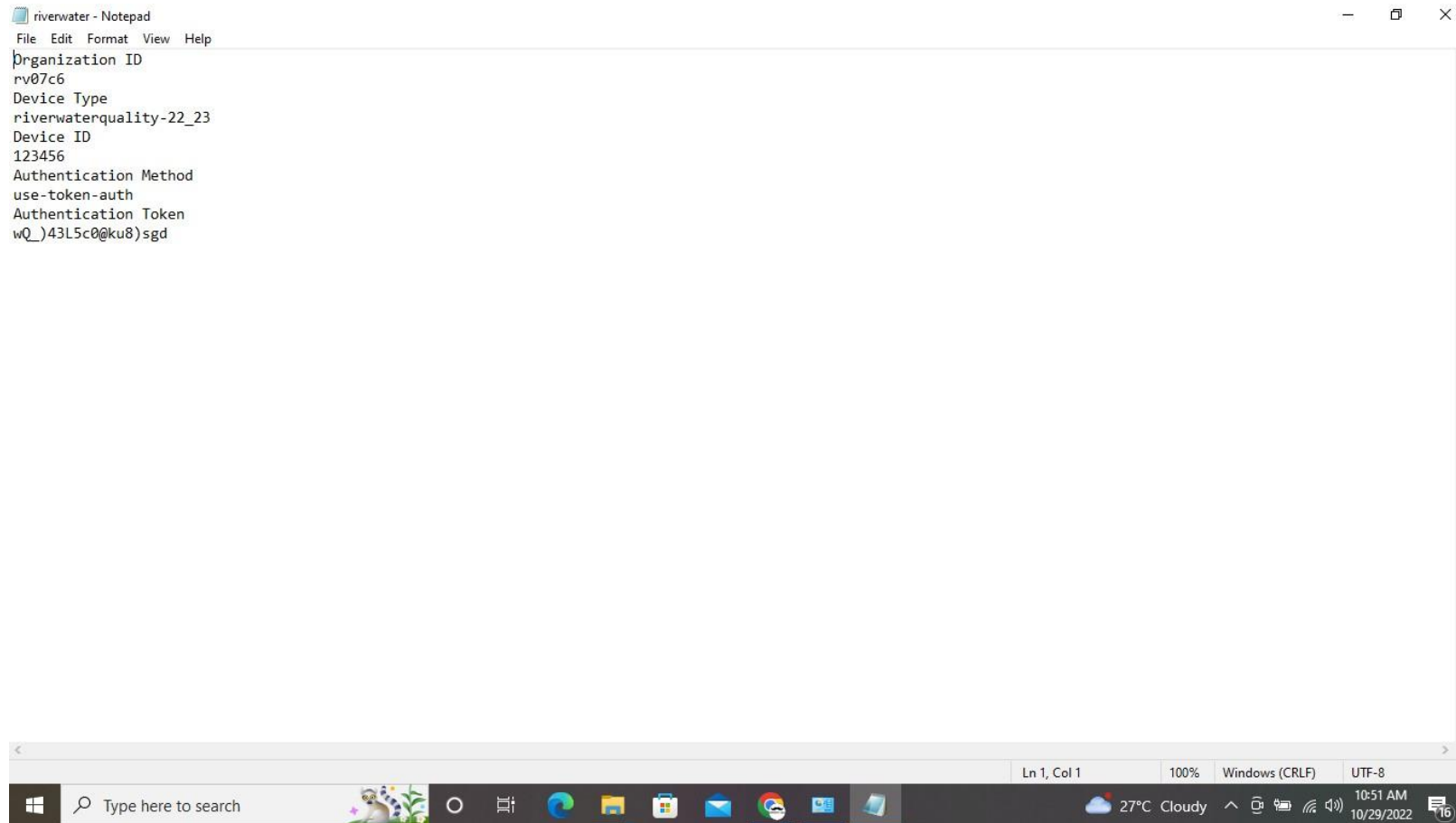
1 x Create Simulated Device Use Registered Device

82 events sent 3.79 KB sent

27°C Cloudy 10:52 AM 10/29/2022

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

USN-4



The screenshot displays a Windows operating system interface. A Notepad window titled "riverwater - Notepad" is open, showing the following configuration details:

```
Organization ID  
rv07c6  
Device Type  
riverwaterquality-22_23  
Device ID  
123456  
Authentication Method  
use-token-auth  
Authentication Token  
wQ_)43L5c0@ku8)sgd
```

The taskbar at the bottom includes the Start button, a search bar with the text "Type here to search", and several application icons. The system tray on the right shows the date and time as "10:51 AM 10/29/2022", along with weather information "27°C Cloudy" and various system icons.

As a user, I can simulate the device created.

The screenshot displays the IBM Watson IoT Platform dashboard. The main interface shows a list of devices with columns for Device ID, Status, Device Type, Class ID, and Date Added. One device, 'riverwaterquality-22_23_1', is highlighted as 'Connected'. A modal window is open for configuring this device, showing event type details and a payload editor.

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 Configuration Modal (Device Type: riverwaterquality-22_23):

- Events:** 1 (New event type +)
- Event type name:** Data (Send)
- Schedule:** 20 Every Minute
- Payload:**

```

0 {
1   "Temperature": random(0, 100)
2   "PH": random(0, 14)
3   "Turbidity": random(0, 100)
4 }
5

```
- Buttons:** Upload a CSV file, Cancel, Save

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

USN-6

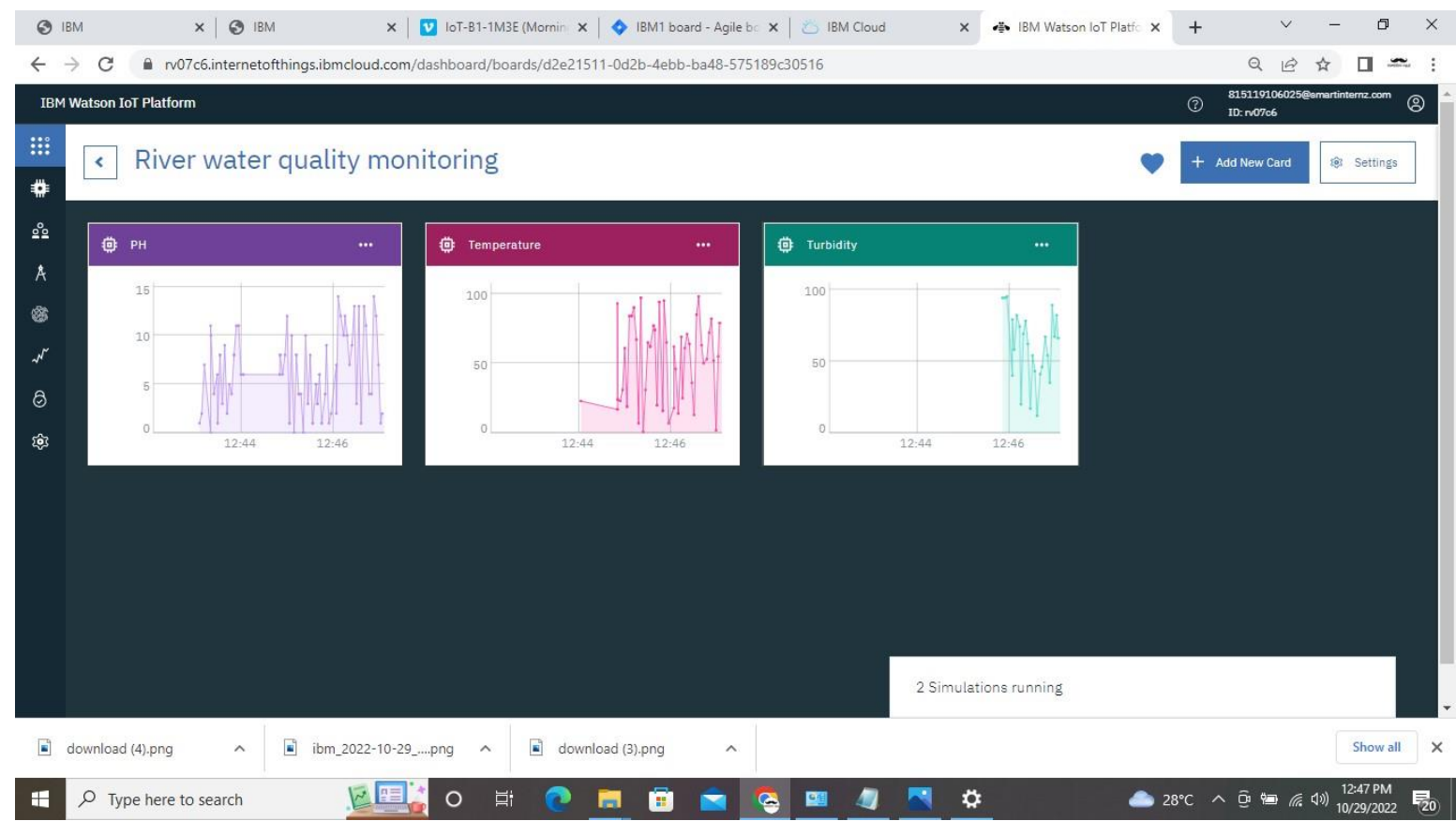
The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar labeled 'Search by Device ID' is present. A table lists devices, with one device, 'riverwaterquality-22_23_1', selected and highlighted in blue. Below the table, a detailed view of the selected device is shown, including tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, displaying a list of events with columns for 'Event', 'Value', 'Format', and 'Last Received'. The events show a stream of data points for temperature, pH, and turbidity. A status bar at the bottom indicates '2 Simulations running'.

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

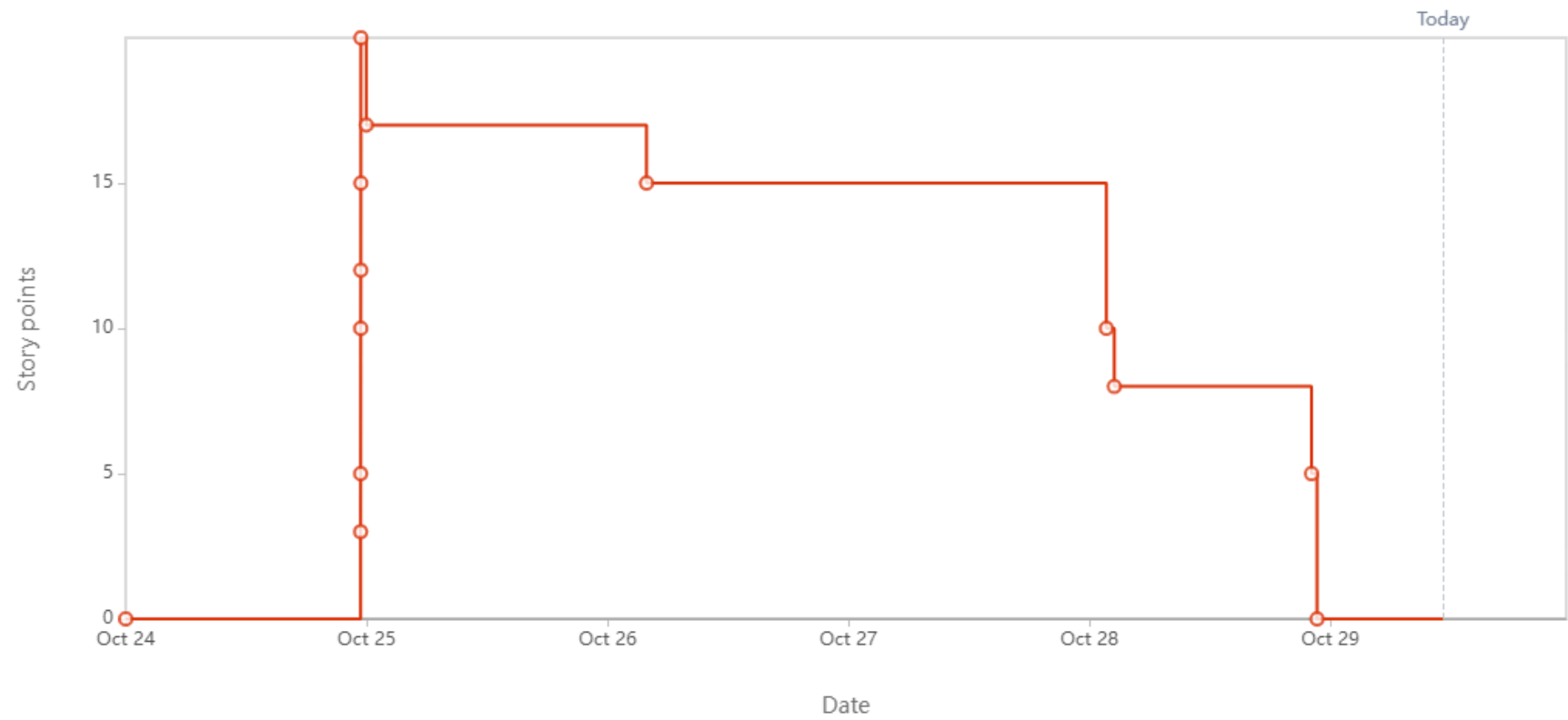
Event	Value	Format	Last Received
Data	{"Temperature":55,"PH":10,"Turbidity":69}	json	a few seconds ago
Data	{"Temperature":19,"PH":1,"Turbidity":12}	json	a few seconds ago
Data	{"Temperature":84,"PH":10,"Turbidity":13}	json	a few seconds ago
Data	{"Temperature":38,"PH":1,"Turbidity":85}	json	a few seconds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

2 Simulations running

LINE CHART



SPRINT BURNDOWN CHART



ROAD MAP

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

VELOCITY CHART

