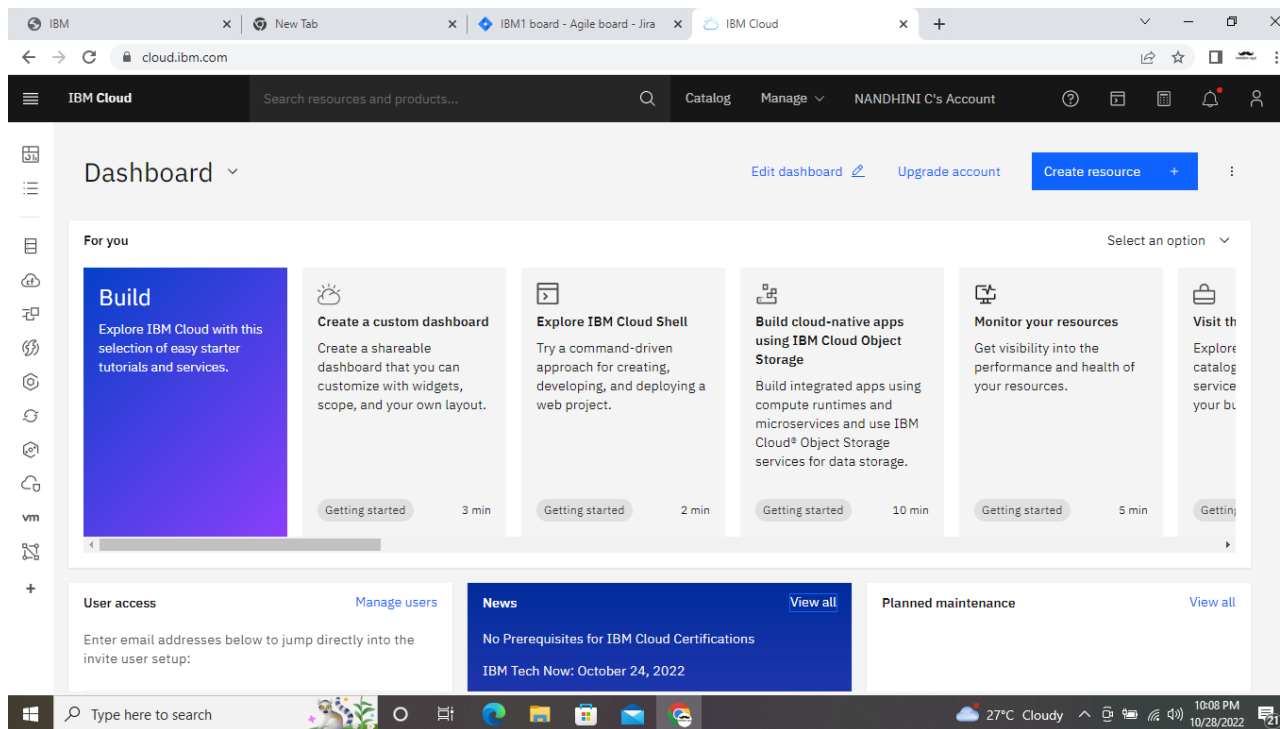


Project Development Phase Sprint-1

Date	29 October 2022
Team ID	PNT2022TMID46174
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 section is titled "Browse Devices" and includes a search bar and a table of devices. A sidebar on the right contains simulation controls.

Simulations Sidebar:

- 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

Device Table:

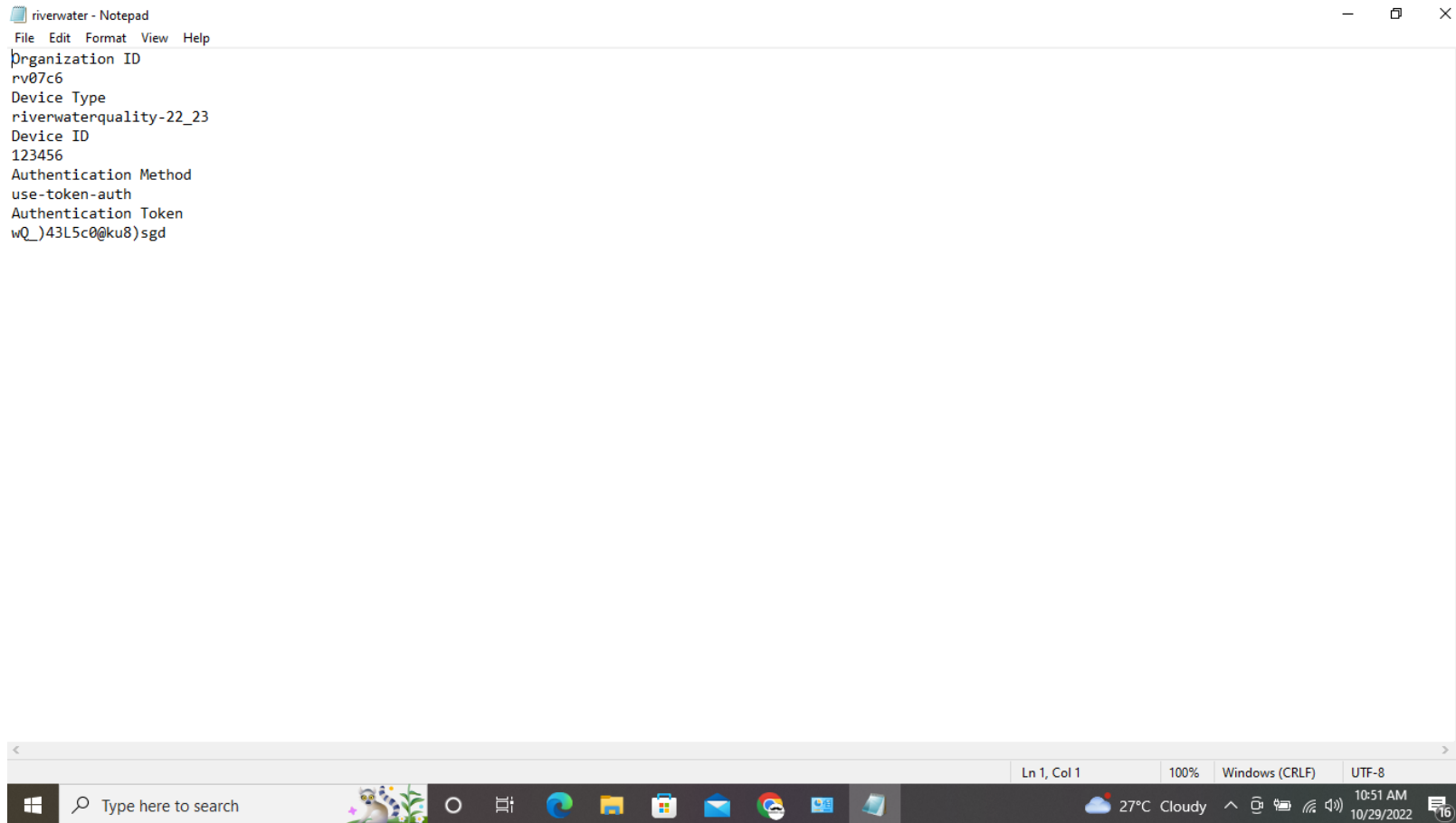
Device ID	Status	Device Type	Class ID	Date Added
123456	Disconnected	riverwaterquality-22_23	Device	Oct 28, 2022 1:47 AM

Device Details (for ID 123456):

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			

USN-4

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



The screenshot shows a Windows desktop with a Notepad application open. The Notepad window has a title bar that says "riverwater - Notepad" and a menu bar with "File", "Edit", "Format", "View", and "Help". The text inside the Notepad window is as follows:

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

At the bottom of the Notepad window, there is a status bar showing "Ln 1, Col 1", "100%", "Windows (CRLF)", and "UTF-8". Below the Notepad window is the Windows taskbar, which includes the Start button, a search bar with the text "Type here to search", and several pinned application icons. The system tray on the right side of the taskbar shows the date and time as "10:51 AM 10/29/2022", along with weather information "27°C Cloudy" and various system icons.

USN-5

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 under the 'Browse' tab. A modal window is open for the device 'riverwaterquality-22_23', allowing for simulation configuration.

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	b11m3edevicid	Device	Oct 9, 2022 9:52 PM

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

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

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

The bottom of the image shows a Windows taskbar with the search bar, application icons, and system tray information (27°C Cloudy, 11:11 AM, 10/29/2022).

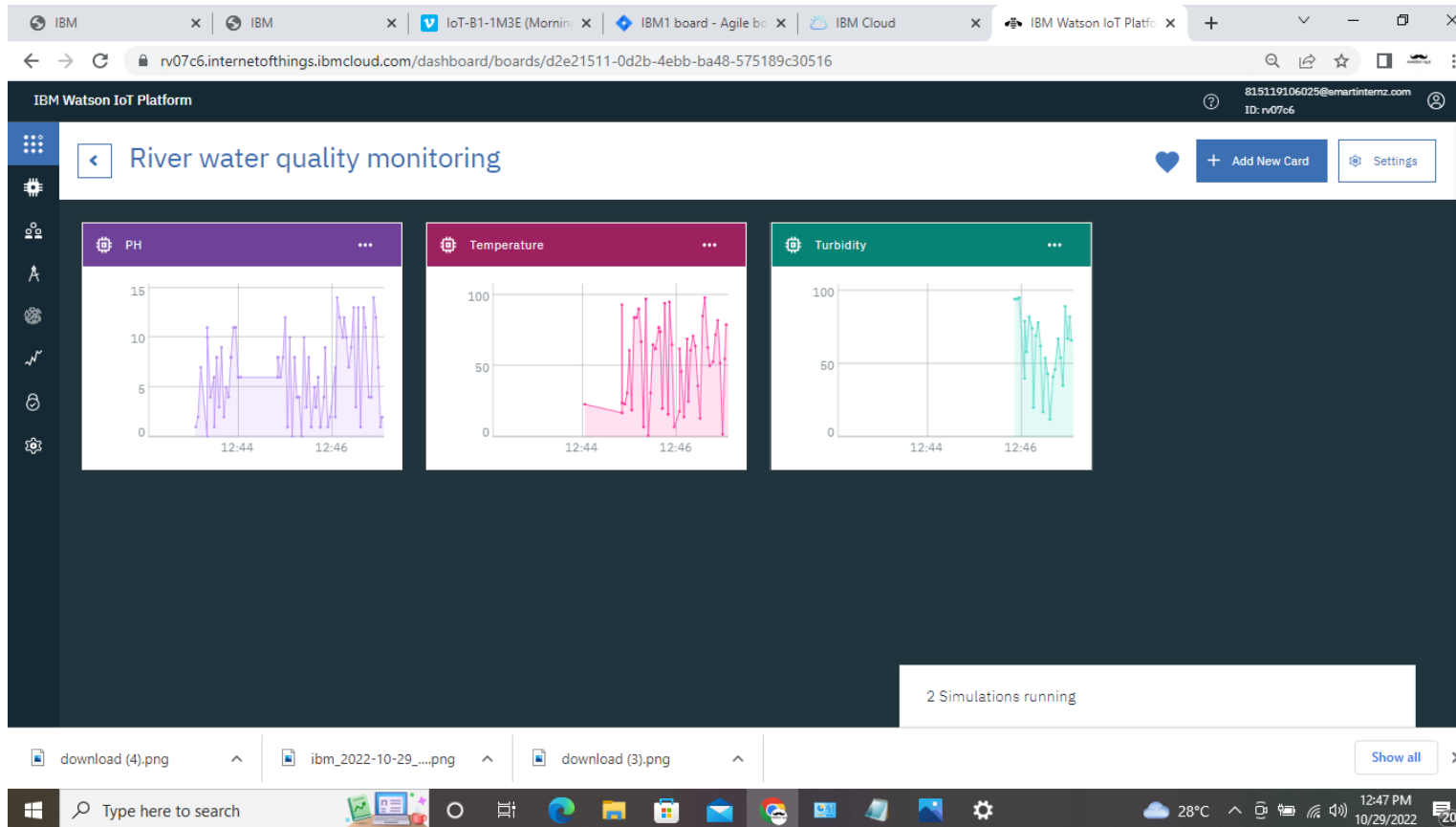
USN-6

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

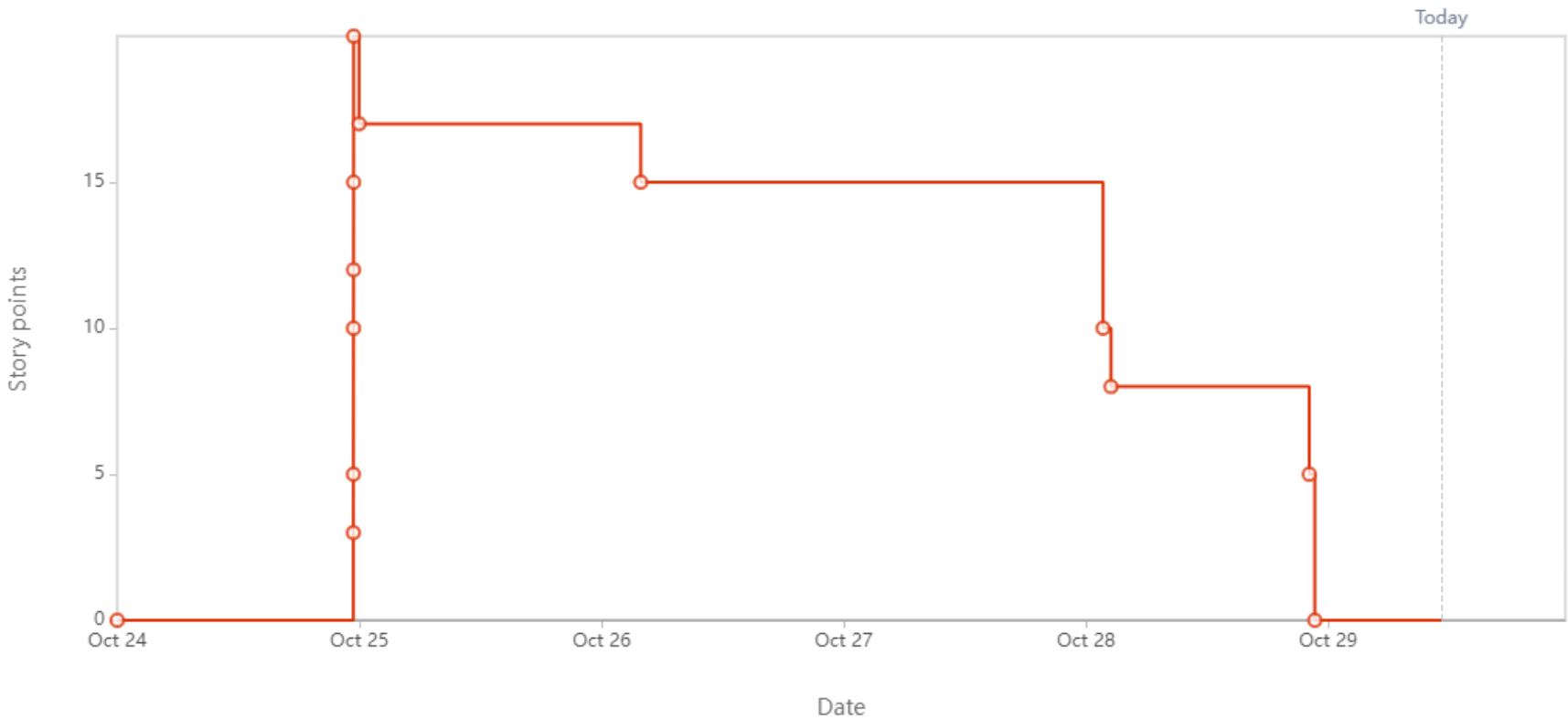
The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present, and a 'Device Simulator' toggle is visible. The main content area shows a list of devices. One device, 'riverwaterquality-22_23_1', is selected and highlighted in blue. Below the device list, a modal window titled 'Identity' is open, showing 'Recent Events'. This section contains a table with columns for 'Event', 'Value', 'Format', and 'Last Received'. The table lists five data points for temperature, PH, and turbidity. A status message at the bottom right indicates '2 Simulations running'.

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

LINE CHART



SPRINT BURNDOWN CHART



ROAD MAP

	OCT				OCT						
	20	21	22	23	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

