

## PROJECT DEVELOPMENT PHASE

### SPRINT 2

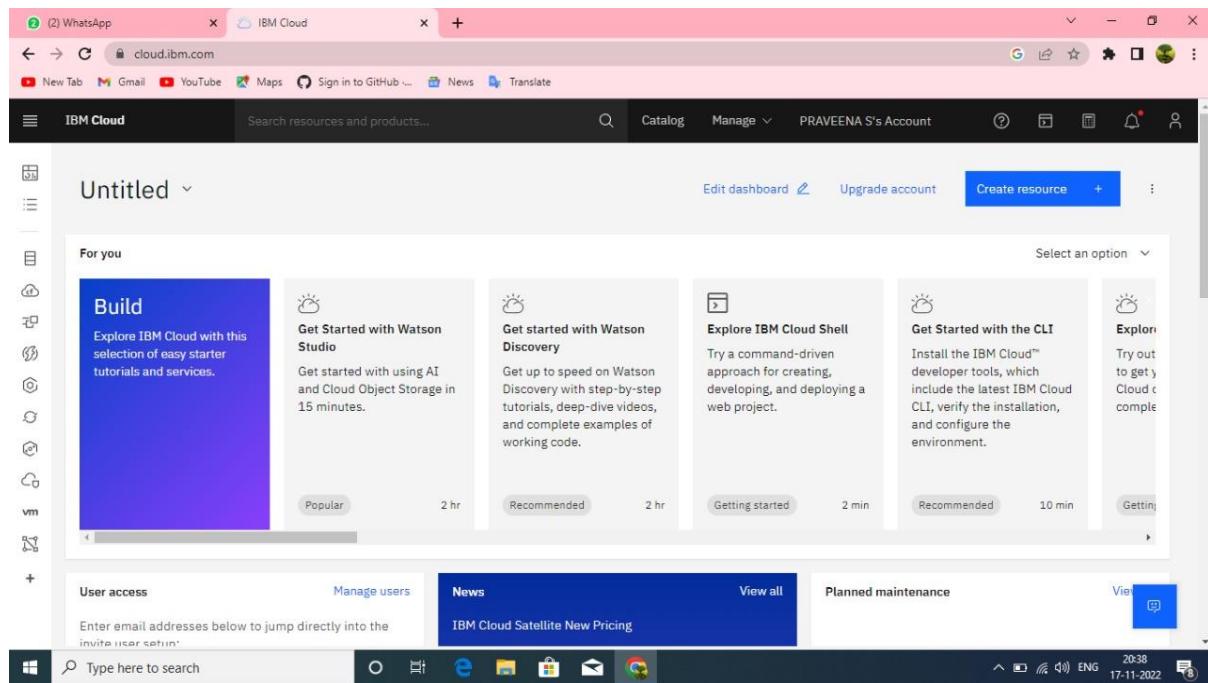
Date	16 November 2022
Team ID	PNT2022TMID13542
Project name	Hazardous area monitoring for industrial power plants by IoT
Maximum marks	2 marks

#### ANALYZE THE PREREQUISITES

Needed prerequisites for real time river water quality monitoring and control system using Internet Of Things (IoT) were

- ❖ IBM Watson IoT Platform
- ❖ Node-RED Service
- ❖ Cloudant DB

#### Creation of IBM cloud



#### Procedure for the creation of IBM IOT watson

The screenshot shows the 'IBM Watson IoT Platform' interface with the title 'Browse Devices'. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces', with 'Add Device' on the right. A sidebar on the left contains icons for device management. The main content area displays a table of devices. The table has columns: Device ID, Status, Device Type, Class ID, and Date Added. One row is visible, showing Device ID 123, Status Disconnected, Device Type Nodemcu, Class ID Device, and Date Added 13 Nov 2022 1:04 PM. Below the table are buttons for 'All Devices' and 'Diagnose'. A search bar at the top says 'Search by Device ID'. The bottom of the page shows pagination with '1 of 1 page'.

## Device creation

The screenshot shows the 'IBM Watson IoT Platform' interface with the title 'Device Drilldown - 123'. The top navigation bar includes tabs for 'Devices', 'Actions', 'Metrics', and 'Logs'. A sidebar on the left lists sections like 'Device Credentials', 'Connection Information', 'Recent Events', 'State', 'Device Information', 'Metadata', 'Diagnostics', and 'Connection Logs'. The main content area displays 'Device Credentials' for device 123. It shows the following details:

Parameter	Value
Organization ID	67yq8w
Device Type	Nodemcu
Device ID	123
Authentication Method	use-token-auth
Authentication Token	12345678

The bottom of the page shows a repeating pattern of 'WhatsApp Image...jpeg' and a 'Show all' button.

## Generation of random values in IBM Watson

Welcome to Project! Delights | IBM | IBM-Project-8377-16589167 | WhatsApp | IBM Watson IoT Platform

67yq8w.internetofthings.ibmcloud.com/dashboard/devices/browse

New Tab Gmail YouTube Maps Sign in to GitHub News Translate

vikrampraveenvp65@gmail.com ID: 67yq8w

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Device ID Status Device type Class ID Date Added

123 Disconnected Nodemcu Device 13 Nov 2022 12:23 PM

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
eventflow	[{"temperature":98}]	json	a few seconds ago
eventflow	[{"temperature":90}]	json	a few seconds ago
eventflow	[{"temperature":92}]	json	a few seconds ago
eventflow	[{"temperature":96}]		1 Simulation running
eventflow	[{"temperature":91}]		

WhatsApp Image...jpeg WhatsApp Image...jpeg WhatsApp Image...jpeg WhatsApp Image...jpeg WhatsApp Image...jpeg WhatsApp Image...jpeg Show all

Type here to search 12:38 ENG 13-11-2022

## NODE-RED

Node-RED on IBM Cloud

# Node-RED

Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at [nodered.org](https://nodered.org).

Go to your Node-RED flow editor

[Learn how to customise Node-RED](#)