Project Development Phase
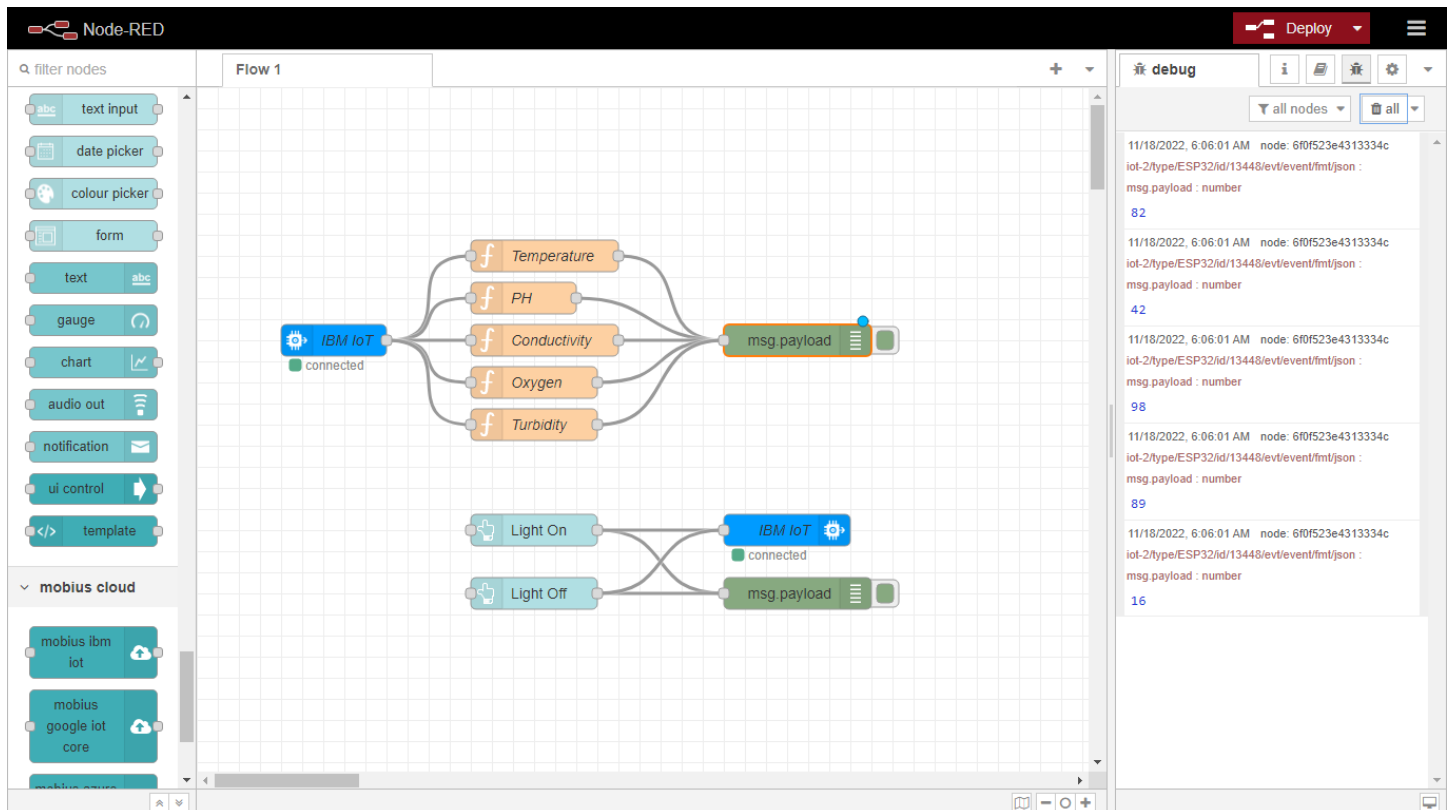
Sprint – 4

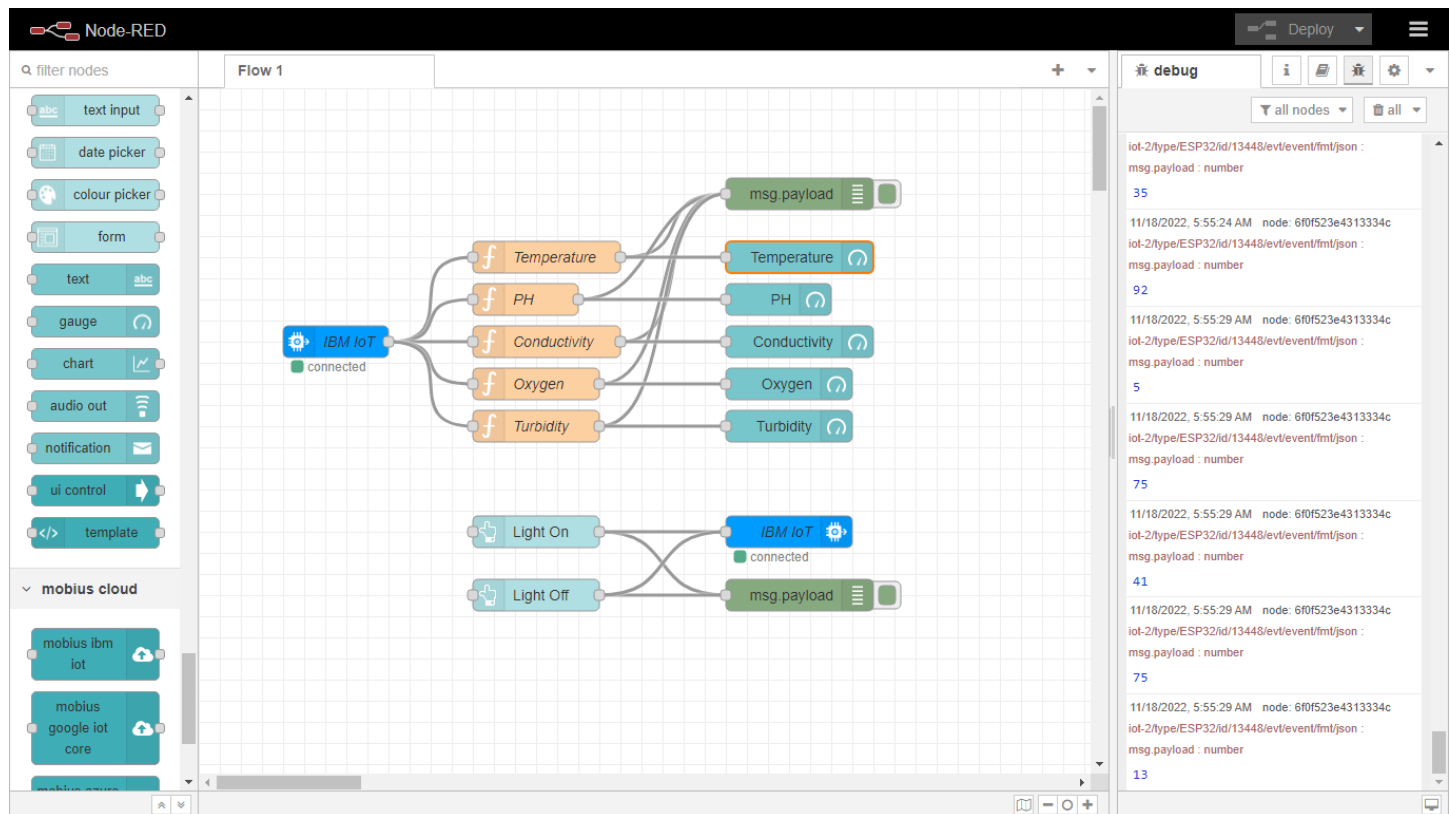| Date	19 Nov 2022
Team ID	PNT2022TMID06691
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	8 Marks

USN – 10: Create a Web UI using Node-red

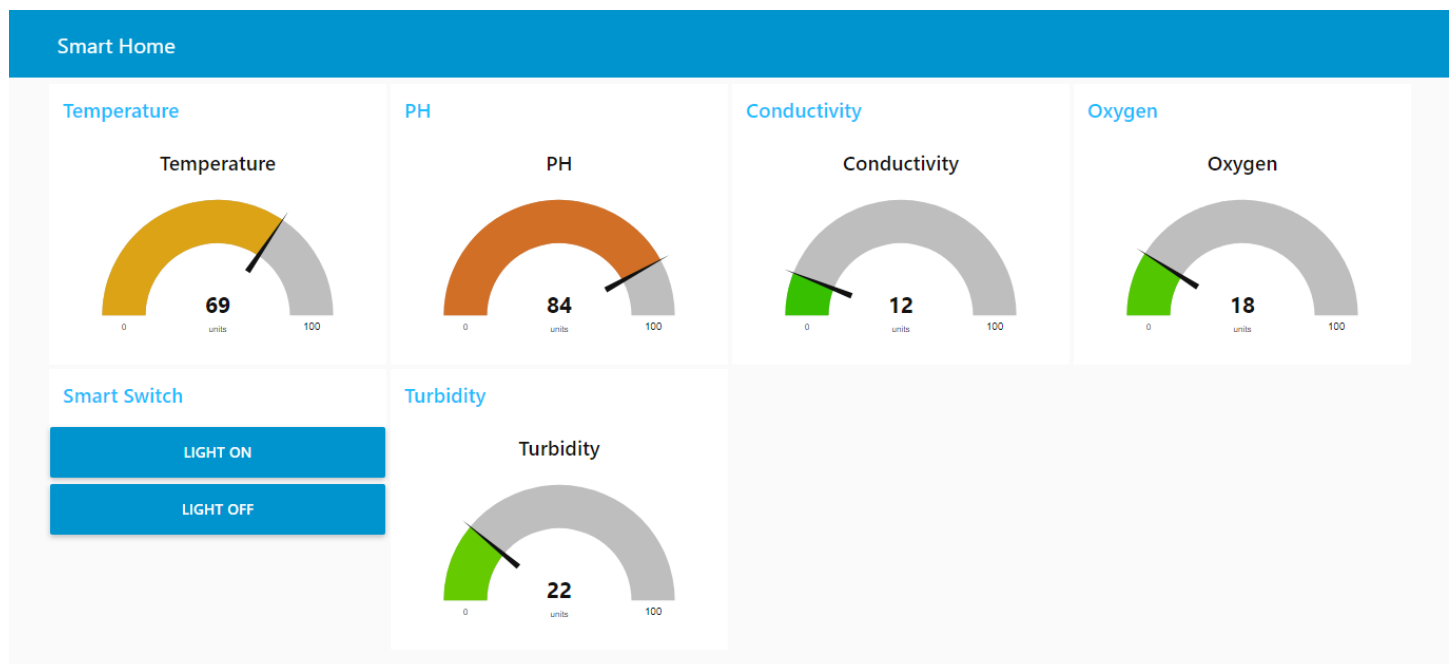   As a user, I can create a Web UI, to access the data from the cloud and display all parameters.

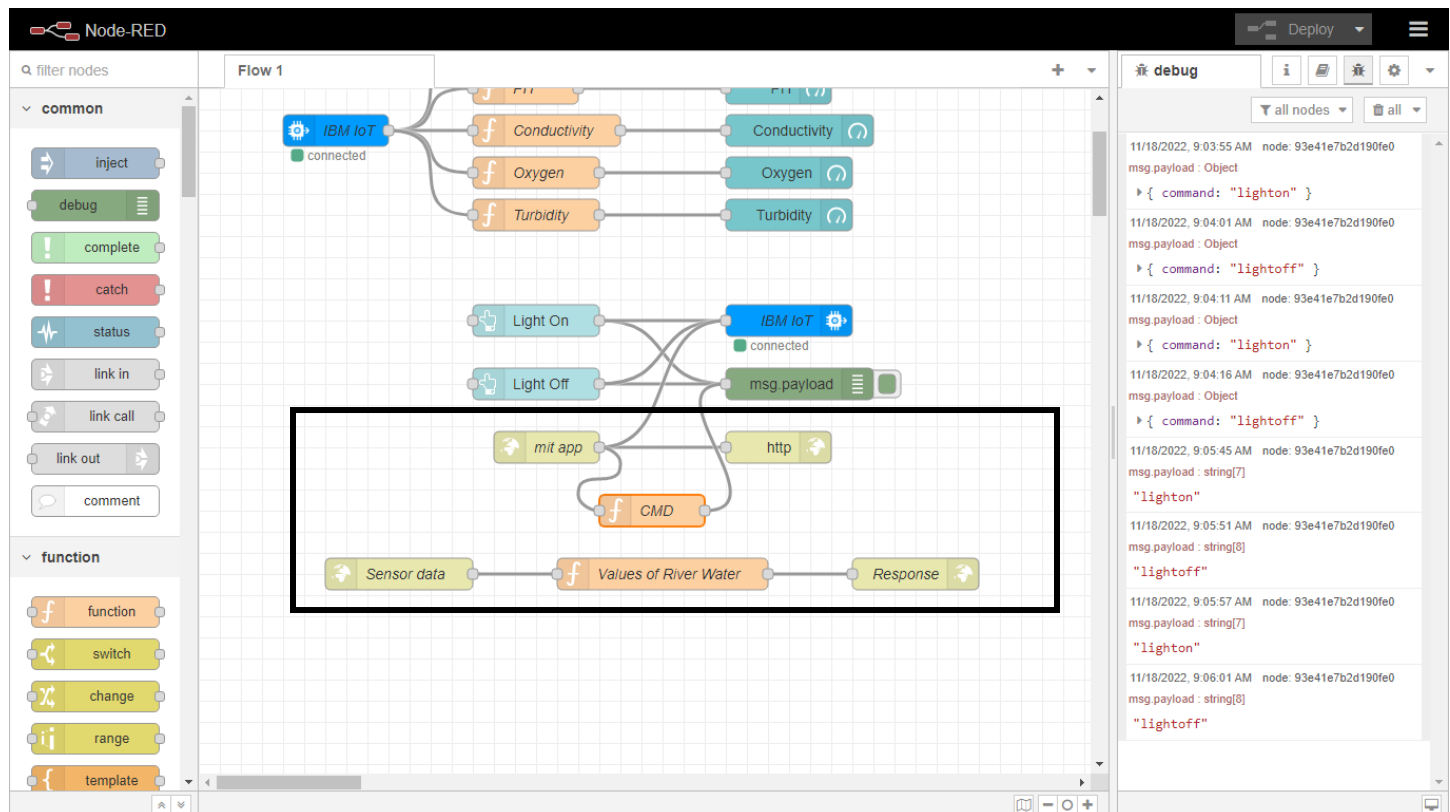## Creating web application in Node-Red:

Creating Web UI:

Web UI Dashboard:

USN – 11: Connecting Node-red to Mobile Application

As a user, I can connect the node-red to the mobile application to display all the parameters in the mobile app

Creating HTTP Request:

Data in Mobile App:

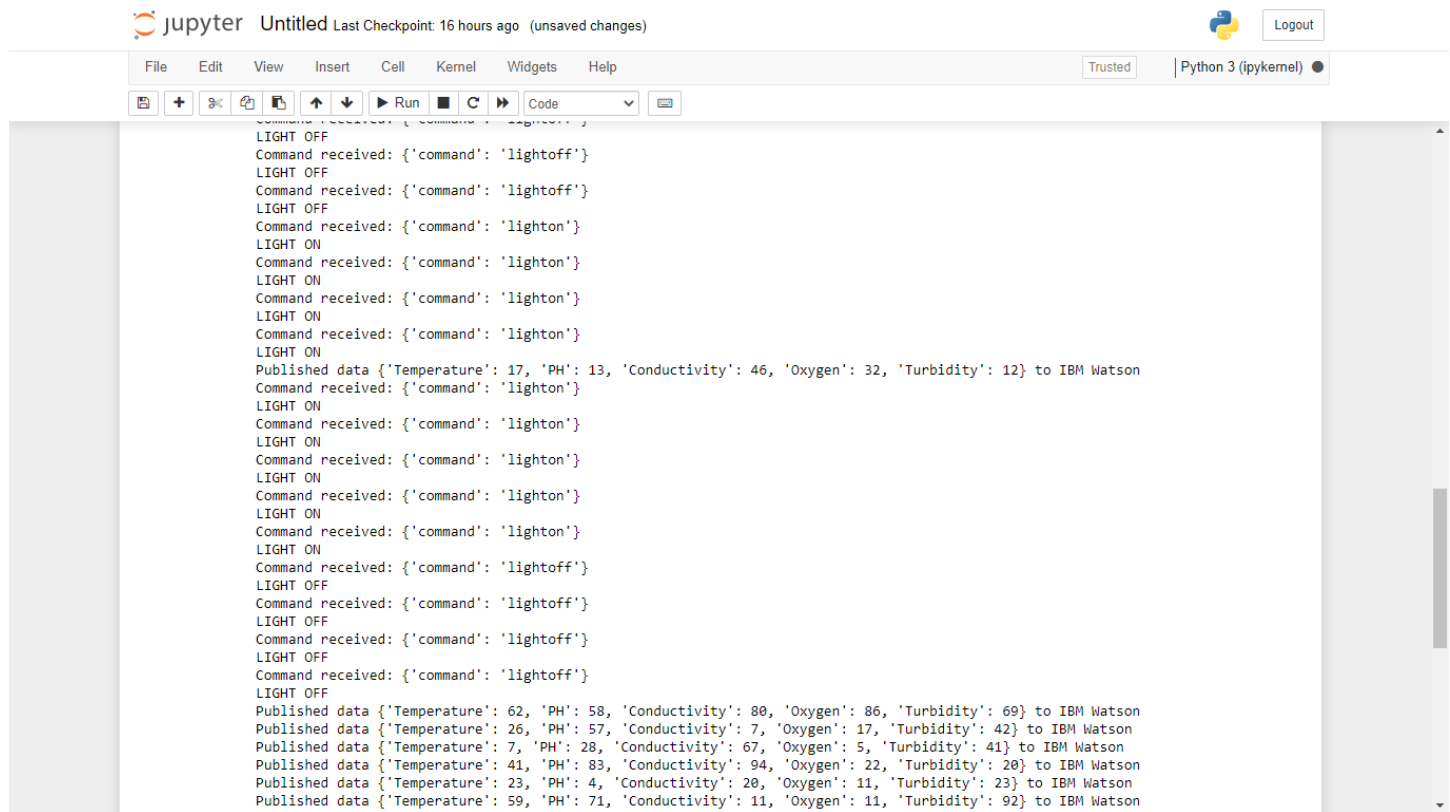# Real-Time River Water Quality Monitoring and Control System

Temperature:	69
PH:	84
Conductivity:	12
Oxygen:	18
Turbidity:	22

Smart Switch

Motor ON	Motor OFF

Command Received in Python Shell when the button is Clicked:

```
LIGHT OFF
Command received: {'command': 'lightoff'}
LIGHT OFF
Command received: {'command': 'lightoff'}
LIGHT OFF
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Published data {'Temperature': 17, 'PH': 13, 'Conductivity': 46, 'Oxygen': 32, 'Turbidity': 12} to IBM Watson
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lighton'}
LIGHT ON
Command received: {'command': 'lightoff'}
LIGHT OFF
Command received: {'command': 'lightoff'}
LIGHT OFF
Command received: {'command': 'lightoff'}
LIGHT OFF
Command received: {'command': 'lightoff'}
LIGHT OFF
Published data {'Temperature': 62, 'PH': 58, 'Conductivity': 80, 'Oxygen': 86, 'Turbidity': 69} to IBM Watson
Published data {'Temperature': 26, 'PH': 57, 'Conductivity': 7, 'Oxygen': 17, 'Turbidity': 42} to IBM Watson
Published data {'Temperature': 7, 'PH': 28, 'Conductivity': 67, 'Oxygen': 5, 'Turbidity': 41} to IBM Watson
Published data {'Temperature': 41, 'PH': 83, 'Conductivity': 94, 'Oxygen': 22, 'Turbidity': 20} to IBM Watson
Published data {'Temperature': 23, 'PH': 4, 'Conductivity': 20, 'Oxygen': 11, 'Turbidity': 23} to IBM Watson
Published data {'Temperature': 59, 'PH': 71, 'Conductivity': 11, 'Oxygen': 11, 'Turbidity': 92} to IBM Watson
```