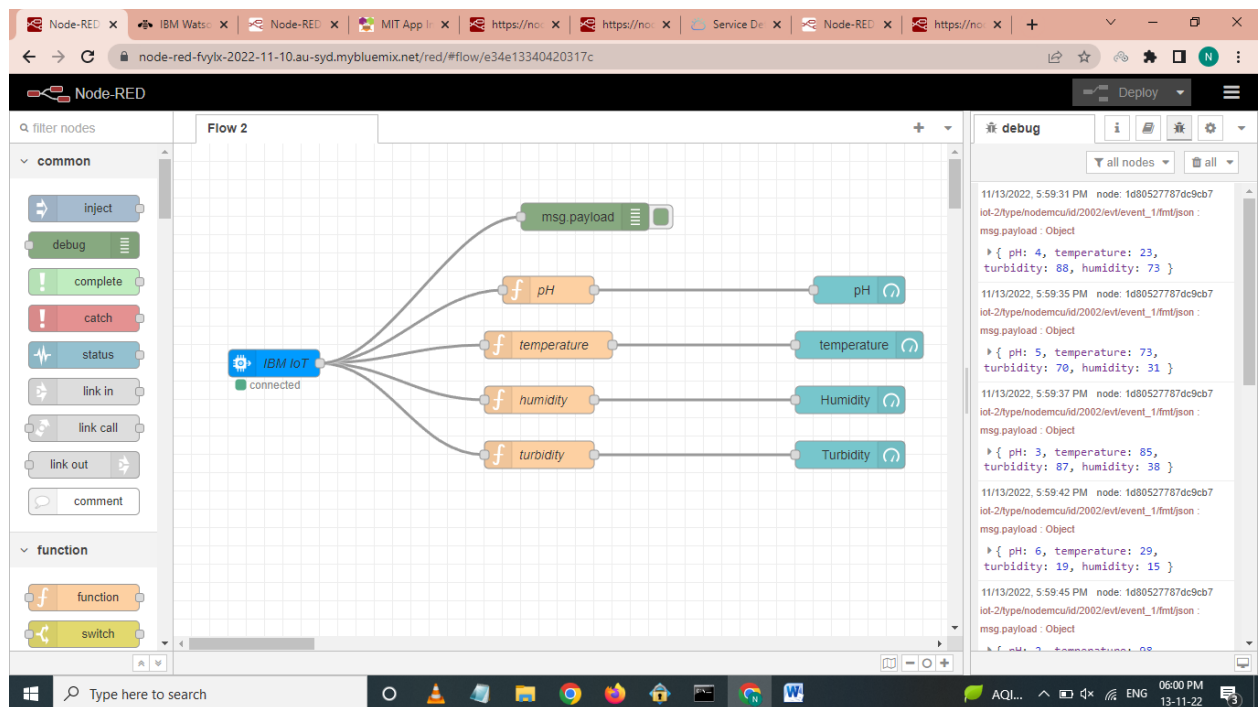


USE DASHBOARD NODES FOR CREATING UI (WEB APP)

DATE	11 NOVEMBER 2022
TEAM ID	PNT2022TMID26105
PROJECT NAME	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

- The dashboard nodes in Node-red have been used to design the flow.
- The design flow can be used to create UI.



Node-RED interface showing a flow named "Flow 2". The flow starts with an "IBM IoT" node (connected). It branches into four parallel paths, each leading to a "msg payload" node. The paths are: "pH", "temperature", "humidity", and "turbidity". Each path also includes a corresponding sensor node (pH, temperature, Humidity, Turbidity). Below these, there is a "[get] /sensor_data" node connected to a "function" node, which then connects to an "http" node. At the bottom, there are "LightON" and "LightOFF" nodes connected to the "IBM IoT" node and a "msg payload" node.

The debug console shows the following log entries:

```
11/13/2022, 6:11:30 PM node: a8703b97115443c
msg.payload: string[7]
"lighton"

11/13/2022, 6:12:02 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 5, temperature: 98,
  turbidity: 64, humidity: 77
}

11/13/2022, 6:12:05 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 1, temperature: 31,
  turbidity: 16, humidity: 41
}

11/13/2022, 6:12:08 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 3, temperature: 81,
  turbidity: 62, humidity: 60
}

11/13/2022, 6:12:11 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 1, temperature: 71,
  turbidity: 17, humidity: 78
}
```

Node-RED interface showing a flow named "Flow 2". The flow starts with an "IBM IoT" node (connected). It branches into four parallel paths, each leading to a "msg payload" node. The paths are: "pH", "temperature", "humidity", and "turbidity". Each path also includes a corresponding sensor node (pH, temperature, Humidity, Turbidity). Below these, there is a "[get] /sensor_data" node connected to a "function" node, which then connects to an "http" node. At the bottom, there are "LightON" and "LightOFF" nodes connected to the "IBM IoT" node and a "msg payload" node. There is also a "[get] /control" node connected to a "function" node, which then connects to an "http" node.

The debug console shows the following log entries:

```
{
  pH: 5, temperature: 98,
  turbidity: 64, humidity: 77
}

11/13/2022, 6:12:05 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 1, temperature: 31,
  turbidity: 16, humidity: 41
}

11/13/2022, 6:12:08 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 3, temperature: 81,
  turbidity: 62, humidity: 60
}

11/13/2022, 6:12:11 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 1, temperature: 71,
  turbidity: 17, humidity: 78
}

11/13/2022, 6:12:14 PM node: 1d80527787dc9cb7
iot-2/type/nodemcu/id/2002/evt/event_1/fmt/json :
msg.payload: Object
{
  pH: 7, temperature: 56,
  turbidity: 60, humidity: 49
}

11/13/2022, 6:28:37 PM node: a8703b97115443c
msg.payload: string[7]
```