

PROJECT DEVELOPMENT PHASE

SPRINT-2 CONNECTION (Interface Sensor)

Date	10 November 2022
Team ID	PNT2022TMID12298
Project Name	Real Time River Water Quality Monitoring and Control System
Maximum Marks	8 Marks

Device Details:

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'All Devices' tab is selected, showing a table of devices. The table has columns for Device ID, Status, Device Type, Class ID, and Date Added. Three devices are listed: 'real_1' (Connected), 'real_2' (Disconnected), and 'realtime' (Disconnected). The 'realtime' device is highlighted. The bottom status bar indicates '1 Simulation running'.

Device ID	Status	Device Type	Class ID	Date Added
real_1	Connected	real	Device	Nov 4, 2022 9:36 AM
real_2	Disconnected	real	Device	Nov 4, 2022 3:38 AM
realtime	Disconnected	real	Device	Nov 3, 2022 9:18 AM

Recent Events:

The screenshot shows the IBM Watson IoT Platform dashboard. The main panel displays a table of devices with the following data:

Device ID	Status	Device Type
real_1	Connected	real
real_2	Disconnected	real
realtime	Disconnected	real

Below the table, it indicates "Items per page 50" and "1-3 of 3 items".

An overlay window titled "Device Type: real" is open, showing the configuration for a new event type named "event_1". The schedule is set to "Every Minute". The payload is defined as:

```
{
  "ph": random(0, 14),
  "turb": random(0, 100)
}
```

The interface includes buttons for "Send", "Upload a CSV file", "Cancel", and "Save".

Node-Red Connection and Dashboard Design:

The screenshot shows the Node-RED interface with a flow titled "River Water Monitoring". The flow includes the following components:

- Inputs:** "IBM IoT" node (connected), "Motor On", "Motor Off", "[get] /command", and "[get] /data".
- Processing:** "PH Level" and "Turbidity" function nodes, and a "data" function node.
- Outputs:** "msg payload" node, "http" nodes, and "IBM IoT" node (connected).

The flow is designed to monitor water quality (PH Level and Turbidity) and control a motor (Motor On/Off) based on the received data. The interface also shows a sidebar with various nodes and a "Deploy" button.