

PROJECT DEVELOPMENT PHASE

SPRINT-3 TEST CASE

Date	08 November 2022
Team ID	PNT2022TMID49498
Project Name	Real Time River Water Quality Monitoring and Control System
Maximum Marks	8 Marks

Recent Event:

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various IoT functions. The main content area is titled 'Recent Events' and shows a table of live data streams. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. It lists five events from IoT sensors, each with a JSON value and a timestamp of 'a few seconds ago'. The bottom of the interface shows pagination controls indicating '1 of 1 page' and '1-3 of 3 items'.

Event	Value	Format	Last Received
IoTSensor	{"ph":13,"turb":65}	json	a few seconds ago
IoTSensor	{"ph":3,"turb":6}	json	a few seconds ago
IoTSensor	{"ph":3,"turb":65}	json	a few seconds ago
IoTSensor	{"ph":1,"turb":59}	json	a few seconds ago
IoTSensor	{"ph":12,"turb":88}	json	a few seconds ago

Node-Red Output:

The screenshot displays the Node-RED web interface in a browser. The main workspace shows a flow titled "River Water Monitoring". The flow starts with an "IBM IoT" node (connected) that triggers a "msg payload" node. This is followed by a "function" node that branches into two parallel paths. The top path consists of "PH Level" and "Turbidity" nodes, each followed by a corresponding "msg payload" node. The bottom path consists of a "show notification" node followed by a "msg payload" node. Below this, there are "Motor On" and "Motor Off" nodes, each connected to an "IBM IoT" node (connected). A "[get] /command" node is connected to an "http" node. At the bottom, a "[get] /data" node is connected to a "function" node, which is then connected to an "http" node. The right sidebar shows the "debug" console with a list of messages. The messages show the following payloads:

- 11/8/2022, 1:06:57 PM node: a4da725bace556d9
iot-2/type/realId/realtime/evl/IoTSensor/fmt/json :
msg.payload : string[16]
"PH Level is high"
- 11/8/2022, 1:07:01 PM node: 58066e8b039acb9a
iot-2/type/realId/realtime/evl/IoTSensor/fmt/json :
msg.payload : Object
{ ph: 5, turb: 41 }
- 11/8/2022, 1:07:01 PM node: a4da725bace556d9
iot-2/type/realId/realtime/evl/IoTSensor/fmt/json :
msg.payload : string[15]
"PH Level is low"
- 11/8/2022, 1:07:06 PM node: 58066e8b039acb9a
iot-2/type/realId/realtime/evl/IoTSensor/fmt/json :
msg.payload : Object
{ ph: 4, turb: 60 }
- 11/8/2022, 1:07:06 PM node: a4da725bace556d9
iot-2/type/realId/realtime/evl/IoTSensor/fmt/json :
msg.payload : string[15]
"PH Level is low"

Output:

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\New folder\river.py =====
2022-11-08 13:06:19,101 ibmiotf.device.Client INFO Connected successfully: dmsw0wqj:real:realtime
Published PH Level = 7 C Turbidity = 70 C to IBM Watson
Published PH Level = 10 C Turbidity = 4 C to IBM Watson
Published PH Level = 12 C Turbidity = 88 C to IBM Watson
Published PH Level = 1 C Turbidity = 59 C to IBM Watson
Published PH Level = 3 C Turbidity = 65 C to IBM Watson
Published PH Level = 3 C Turbidity = 6 C to IBM Watson
Published PH Level = 13 C Turbidity = 65 C to IBM Watson
Published PH Level = 10 C Turbidity = 14 C to IBM Watson
Published PH Level = 5 C Turbidity = 41 C to IBM Watson
Published PH Level = 4 C Turbidity = 60 C to IBM Watson
Published PH Level = 10 C Turbidity = 79 C to IBM Watson
Published PH Level = 6 C Turbidity = 90 C to IBM Watson
Published PH Level = 13 C Turbidity = 68 C to IBM Watson
Published PH Level = 3 C Turbidity = 46 C to IBM Watson
Published PH Level = 9 C Turbidity = 15 C to IBM Watson
Published PH Level = 14 C Turbidity = 95 C to IBM Watson
Published PH Level = 0 C Turbidity = 77 C to IBM Watson
Published PH Level = 10 C Turbidity = 47 C to IBM Watson
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