

SPRINT-4

TEAM ID	PNT2022TMID36352
PROJECT TITLE	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM
DATE	11 NOVEMBER 2022

WEB UI – TO MAKE USER TO INTERACT WITH THE SOFTWARE

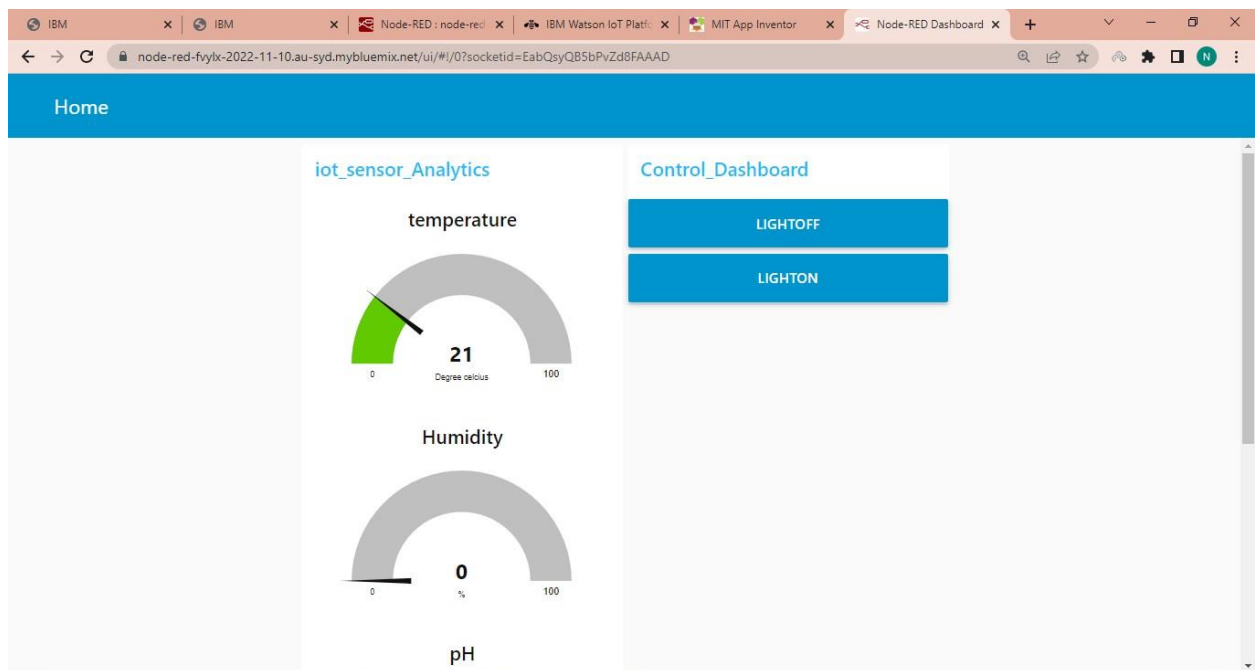


FIGURE-1: WEB UI CREATED USING NODE RED DASHBOARD

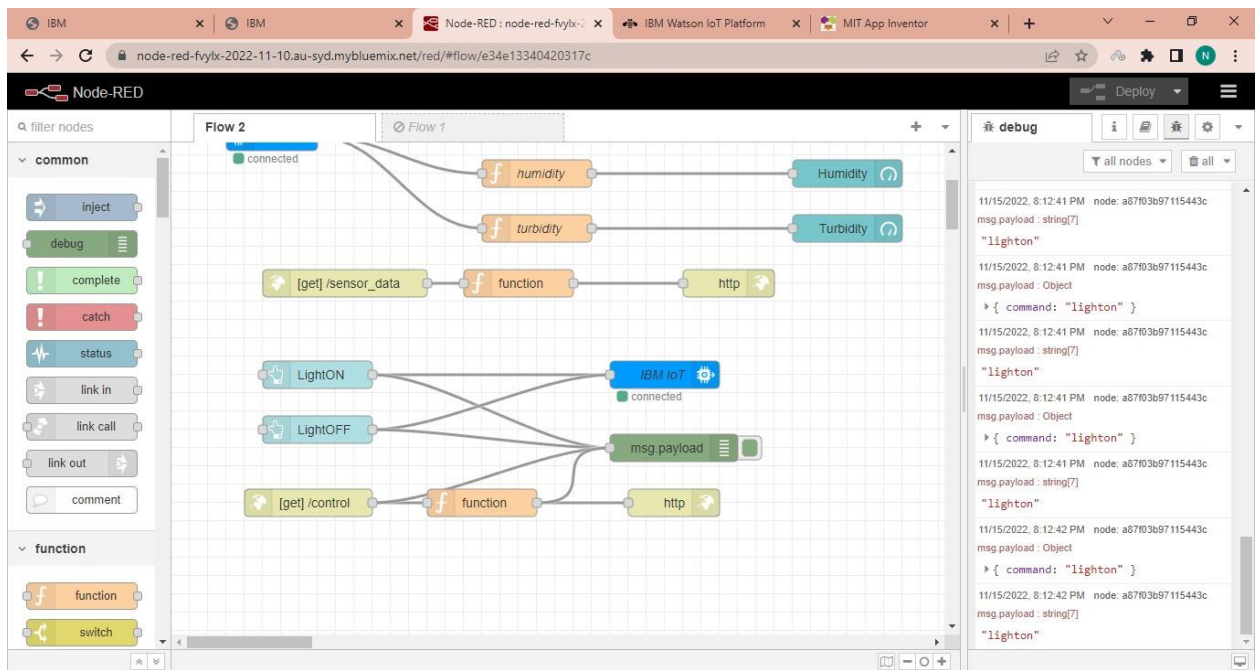


FIGURE2: WHEN THE LIGHTON BUTTON IS PRESSED

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Command received: lighton
LIGHT ON
Command received: lighton
LIGHT ON
Published data {'temperature': 3, 'ph': 19, 'conductivity': 72, 'oxygen': 100, 'turbidity': 31} to IBM Watson
Command received: lighton
LIGHT ON
Command received: lighton
LIGHT ON
Command received: lighton
LIGHT ON
Published data {'temperature': 34, 'ph': 37, 'conductivity': 86, 'oxygen': 49, 'turbidity': 10} to IBM Watson
Published data {'temperature': 66, 'ph': 26, 'conductivity': 55, 'oxygen': 45, 'turbidity': 4} to IBM Watson
Published data {'temperature': 74, 'ph': 62, 'conductivity': 73, 'oxygen': 69, 'turbidity': 59} to IBM Watson
Published data {'temperature': 19, 'ph': 63, 'conductivity': 62, 'oxygen': 17, 'turbidity': 80} to IBM Watson
Published data {'temperature': 80, 'ph': 8, 'conductivity': 38, 'oxygen': 27, 'turbidity': 92} to IBM Watson
Published data {'temperature': 4, 'ph': 20, 'conductivity': 60, 'oxygen': 45, 'turbidity': 15} to IBM Watson
Published data {'temperature': 16, 'ph': 8, 'conductivity': 19, 'oxygen': 50, 'turbidity': 70} to IBM Watson
Published data {'temperature': 40, 'ph': 37, 'conductivity': 75, 'oxygen': 86, 'turbidity': 84} to IBM Watson
Published data {'temperature': 58, 'ph': 91, 'conductivity': 77, 'oxygen': 64, 'turbidity': 39} to IBM Watson
Published data {'temperature': 20, 'ph': 23, 'conductivity': 100, 'oxygen': 76, 'turbidity': 84} to IBM Watson
Published data {'temperature': 23, 'ph': 74, 'conductivity': 66, 'oxygen': 37, 'turbidity': 28} to IBM Watson
Published data {'temperature': 54, 'ph': 100, 'conductivity': 16, 'oxygen': 56, 'turbidity': 61} to IBM Watson
Published data {'temperature': 13, 'ph': 4, 'conductivity': 36, 'oxygen': 95, 'turbidity': 96} to IBM Watson
Published data {'temperature': 75, 'ph': 59, 'conductivity': 76, 'oxygen': 61, 'turbidity': 84} to IBM Watson
Published data {'temperature': 43, 'ph': 45, 'conductivity': 9, 'oxygen': 66, 'turbidity': 54} to IBM Watson
Command received: lighton
LIGHT ON
Command received: lighton
LIGHT ON
Command received: lighton
LIGHT ON
Published data {'temperature': 49, 'ph': 1, 'conductivity': 44, 'oxygen': 46, 'turbidity': 15} to IBM Watson
Command received: lighton
LIGHT ON
Published data {'temperature': 28, 'ph': 35, 'conductivity': 56, 'oxygen': 44, 'turbidity': 63} to IBM Watson
```

FIGURE3: PYTHON IDLE SOFTWARE OUTPUT WHEN LIGHT ON BUTTON ON WEB UI IS PRESSED

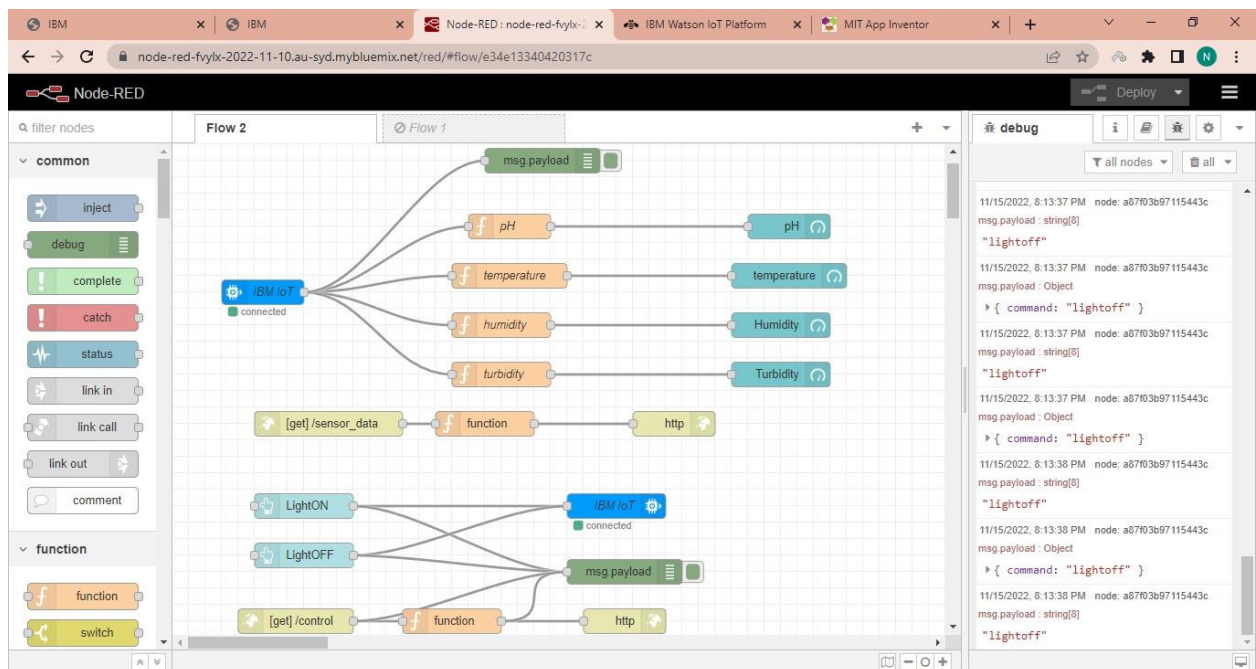


FIGURE4: WHEN LIGHTOFF BUTTON IS PRESSED ON THE WEB UI

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Published data ('temperature': 56, 'ph': 47, 'conductivity': 41, 'oxygen': 46, 'turbidity': 0) to IBM Watson
Published data ('temperature': 70, 'ph': 36, 'conductivity': 20, 'oxygen': 3, 'turbidity': 44) to IBM Watson
Published data ('temperature': 92, 'ph': 22, 'conductivity': 65, 'oxygen': 29, 'turbidity': 19) to IBM Watson
Published data ('temperature': 94, 'ph': 16, 'conductivity': 16, 'oxygen': 93, 'turbidity': 10) to IBM Watson
Published data ('temperature': 4, 'ph': 12, 'conductivity': 96, 'oxygen': 16, 'turbidity': 42) to IBM Watson
Published data ('temperature': 23, 'ph': 82, 'conductivity': 68, 'oxygen': 83, 'turbidity': 10) to IBM Watson
Published data ('temperature': 12, 'ph': 3, 'conductivity': 50, 'oxygen': 96, 'turbidity': 62) to IBM Watson
Published data ('temperature': 41, 'ph': 93, 'conductivity': 96, 'oxygen': 44, 'turbidity': 7) to IBM Watson
Published data ('temperature': 60, 'ph': 72, 'conductivity': 48, 'oxygen': 9, 'turbidity': 16) to IBM Watson
Published data ('temperature': 99, 'ph': 26, 'conductivity': 7, 'oxygen': 7, 'turbidity': 8) to IBM Watson
Command received: lightoff
LIGHT OFF
Command received: lightoff
LIGHT OFF
Published data ('temperature': 93, 'ph': 32, 'conductivity': 50, 'oxygen': 57, 'turbidity': 93) to IBM Watson
Published data ('temperature': 90, 'ph': 26, 'conductivity': 22, 'oxygen': 61, 'turbidity': 64) to IBM Watson
Command received: lightoff
LIGHT OFF
Published data ('temperature': 76, 'ph': 18, 'conductivity': 73, 'oxygen': 79, 'turbidity': 84) to IBM Watson
Command received: lightoff
LIGHT OFF
Command received: lightoff
LIGHT OFF
Command received: lightoff
LIGHT OFF
Command received: lightoff
LIGHT OFF
Command received: lightoff
LIGHT OFF
Published data ('temperature': 45, 'ph': 36, 'conductivity': 0, 'oxygen': 36, 'turbidity': 20) to IBM Watson
Published data ('temperature': 70, 'ph': 61, 'conductivity': 89, 'oxygen': 39, 'turbidity': 39) to IBM Watson
Published data ('temperature': 94, 'ph': 61, 'conductivity': 91, 'oxygen': 35, 'turbidity': 99) to IBM Watson
Published data ('temperature': 33, 'ph': 80, 'conductivity': 39, 'oxygen': 95, 'turbidity': 68) to IBM Watson
Published data ('temperature': 59, 'ph': 36, 'conductivity': 3, 'oxygen': 1, 'turbidity': 73) to IBM Watson
Published data ('temperature': 97, 'ph': 12, 'conductivity': 35, 'oxygen': 95, 'turbidity': 96) to IBM Watson
Published data ('temperature': 58, 'ph': 21, 'conductivity': 98, 'oxygen': 22, 'turbidity': 77) to IBM Watson
Published data ('temperature': 87, 'ph': 89, 'conductivity': 13, 'oxygen': 49, 'turbidity': 2) to IBM Watson
Published data ('temperature': 7, 'ph': 55, 'conductivity': 79, 'oxygen': 69, 'turbidity': 86) to IBM Watson
```

FIGURE5: PYTHON IDLE SOFTWARE OUTPUT WHEN LIGHT OFF BUTTON ON WEB UI IS PRESSED