Phase 4 project:

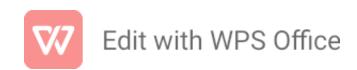**Project Title:** SMART WATER FOUNTAIN

College Code: 6208

College : Gnanamani College of Technology

Branch: B.E-BIOMEDICAL ENGINEERING
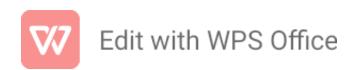
Year: IIIrd year

Team Members:

- SIBIRAJ. S (62082121108)
- MOULI. R   (620821121069)
- YUGENTHIRAN. S (620821121133)
- VISHNU. S (620821121130)
- PRAVEEN KUMAR. S (620821121085)
- NALLIAPPAN. M (620821121071)

SMART WATER FOUNTAIN

The platform to receive and display real-time water fountain data, including water flow rate and malfunction alerts using html , css, javascript

HTML :

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="style.css">
   <title>Water Fountain Data</title>
</head>
<body>
   <marquee bgcolor="blue" behavior="alternate" direction="right">
   <h1>Smart Water Fountain</h1>
   </marquee>
   <div id="waterFlow">
      <h2>Water Flow Rate: <span id="flowRate">0 L/min</span></h2>
   </div>
```
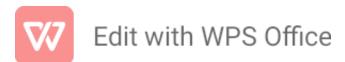
```html
<div id="malfunctionAlert">
    <h2>Malfunction Alert: <span id="alertStatus">No Alerts</span></h2>
</div>
<input type="submit">
<script src="script.js"></script>
</body>
</html>
```

CSS :

```css
body {
    font-family: Arial, sans-serif;
    text-align: center;
}
h1 {
    color: white;
    padding: 20px;
}

#waterFlow, #malfunctionAlert {
    margin: 20px;
    padding: 10px;
    border: 1px solid #ccc;
}
```

```css
#waterFlow h2, #malfunctionAlert h2 {
    margin: 0;
}
#flowRate, #alertStatus {
    color: #007bff;
}
```

JAVASCRIPT :

```javascript
const flowRateElement = document.getElementById("flowRate");

const alertStatusElement =
document.getElementById("alertStatus");

// Simulate real-time data with a function that generates random data

function generateRandomData() {
    const flowRate = (Math.random() * 10).toFixed(2); // Simulated flow rate data

    const isMalfunction = Math.random() > 0.8; // Simulated malfunction alert

  return { flowRate, isMalfunction };
}

function updateData() {
    const data = generateRandomData();

 // Update the flow rate display

    flowRateElement.textContent = `${data.flowRate} L/min`;

// Update the malfunction alert status
```

```
    alertStatusElement.textContent = data.isMalfunction ? "Alert
Detected" : "No Alerts";

    if (data.isMalfunction) {

        alertStatusElement.style.color = "red";

    } else {

        alertStatusElement.style.color = "#007bff";

    }

}

// Update the data every 2 seconds (simulated real-time)

setInterval(updateData, 2000);

// You would typically use websockets to receive real-time data
from a server.
```

Here basic HTML structure with placeholders for displaying the water flow rate and malfunction alerts. The JavaScript code simulates real-time data updates by generating random data and updating the HTML elements accordingly. In a real-world scenario, you would replace the simulated data generation with actual data received via websockets from a server that collects data from smart water fountains.