

SMART WATER FOUNTAINS

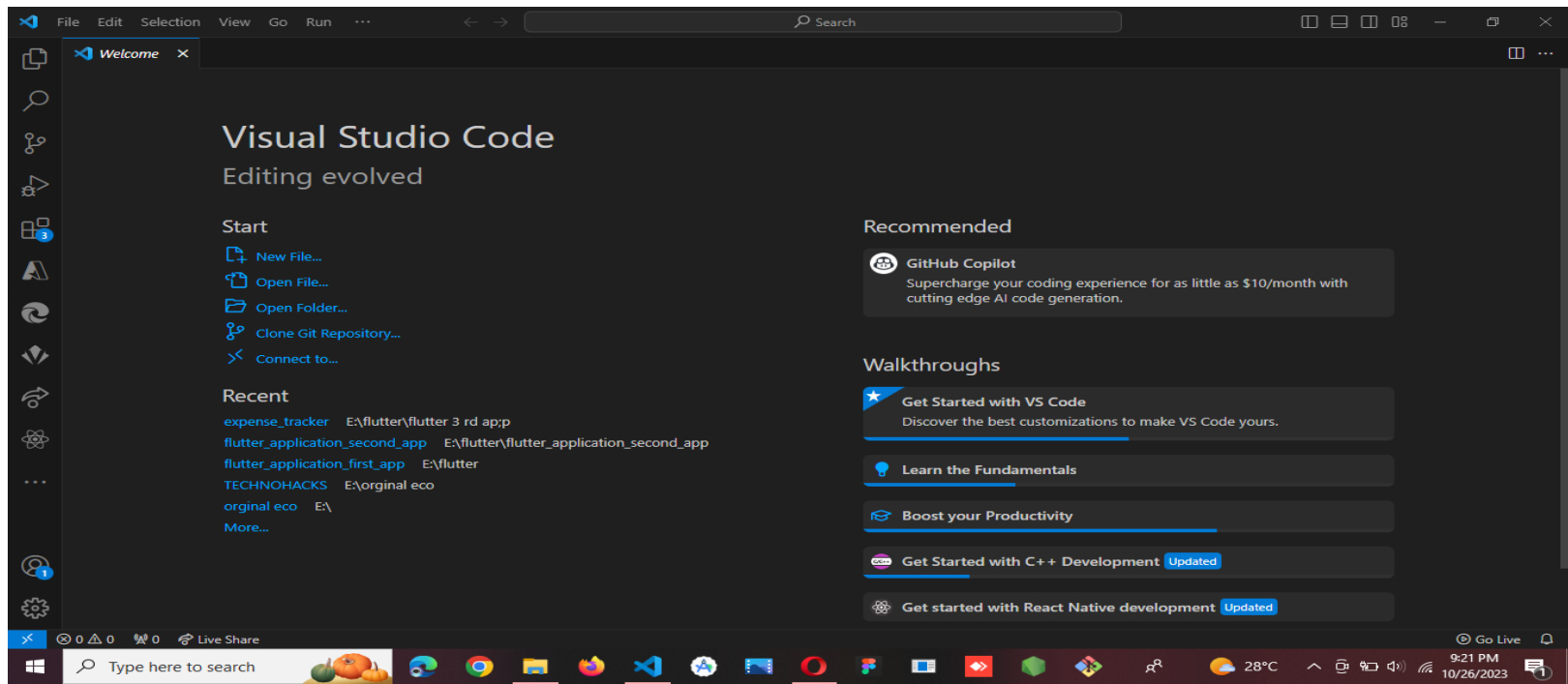
PHASE 4: DEVELOPMENT PART-2

Objectives

The primary objective of our smart water fountain system website is to provide users with real-time information and control over the operation of a water fountain. This includes monitoring the status of the fountain, initiating start and stop commands, and receiving alerts when necessary. Additionally, the website aims to offer insightful live data charts for users to track water usage trends and make informed decisions regarding water conservation and management. Our goal is to promote the efficient and responsible use of water resources while offering a user-friendly and engaging online experience.

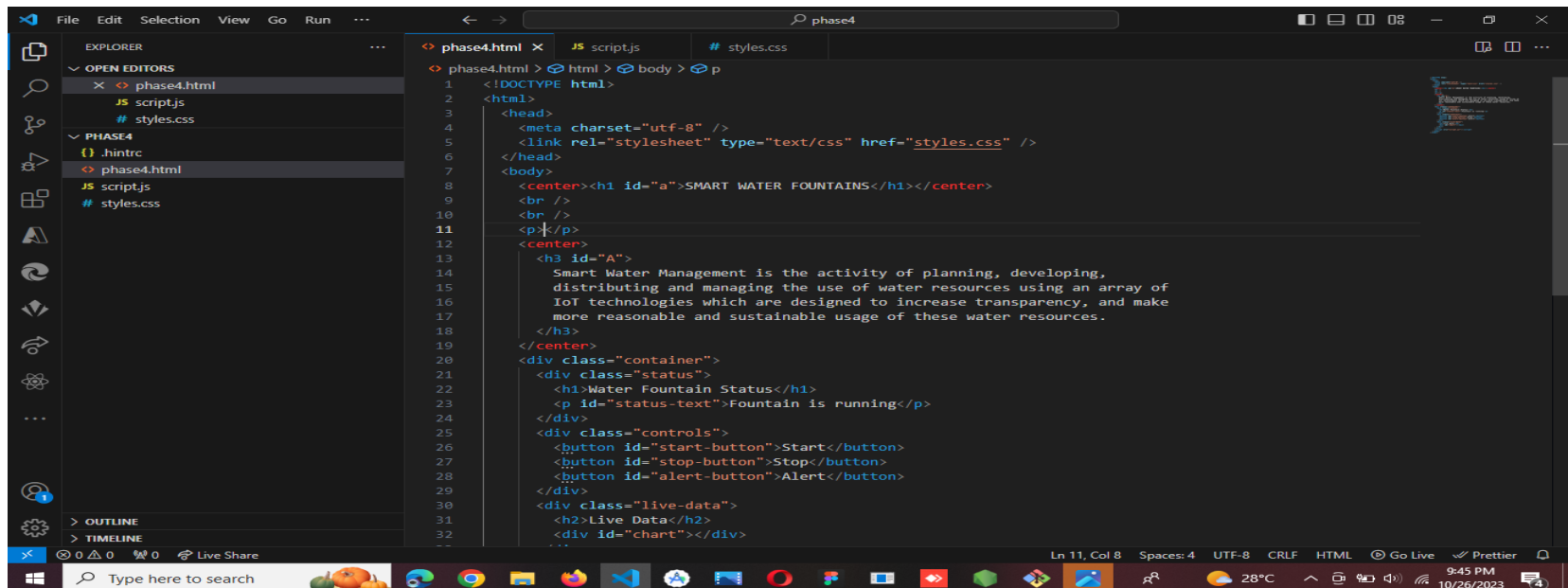
VISUAL STUDIO CODE:

Visual Studio Code, often referred to as VS Code, is a popular and versatile source code editor that's widely used for software development. It's known for its flexibility, speed, and a rich ecosystem of extensions, making it a top choice for many developers.



CODE AND IT'S EXPLANATION: HTML

- The HTML (index.html) file lays the foundation for the webpage's structure and content. It begins by defining the document type and including a reference to an external CSS stylesheet for styling.



```
1 <!DOCTYPE html>
2 <html>
3
4   <head>
5     <meta charset="utf-8" />
6     <link rel="stylesheet" type="text/css" href="styles.css" />
7   </head>
8   <body>
9     <center><h1 id="a">SMART WATER FOUNTAINS</h1></center>
10    <br />
11    <br />
12    <p></p>
13    <center>
14      <h3 id="A">
15        Smart Water Management is the activity of planning, developing,
16        distributing and managing the use of water resources using an array of
17        IoT technologies which are designed to increase transparency, and make
18        more reasonable and sustainable usage of these water resources.
19      </h3>
20    </center>
21    <div class="container">
22      <div class="status">
23        <h1>Water Fountain Status</h1>
24        <p id="status-text">Fountain is running</p>
25      </div>
26      <div class="controls">
27        <button id="start-button">Start</button>
28        <button id="stop-button">Stop</button>
29        <button id="alert-button">Alert</button>
30      </div>
31      <div class="live-data">
32        <h2>Live Data</h2>
33        <div id="chart"></div>
34      </div>
35    </div>
36  </body>
37 </html>
```

FileEditSelectionViewGoRun...phase4

EXPLORER

OPEN EDITORS

phase4.htmlXJS script.js# styles.css

PHASE4

.hintrc

phase4.html

JS script.js

styles.css

OUTLINE

TIMELINE

phase4.html XJS script.js# styles.css

phase4.html > html > body > p

22<h1>Water Fountain Status</h1>

23<p id="status-text">Fountain is running</p>

24</div>

25<div class="controls">

26<button id="start-button">Start</button>

27<button id="stop-button">Stop</button>

28<button id="alert-button">Alert</button>

29</div>

30<div class="live-data">

31<h2>Live Data</h2>

32<div id="chart"></div>

33</div>

34</div>

35<script src="script.js"></script>

36</body>

37</html>

38

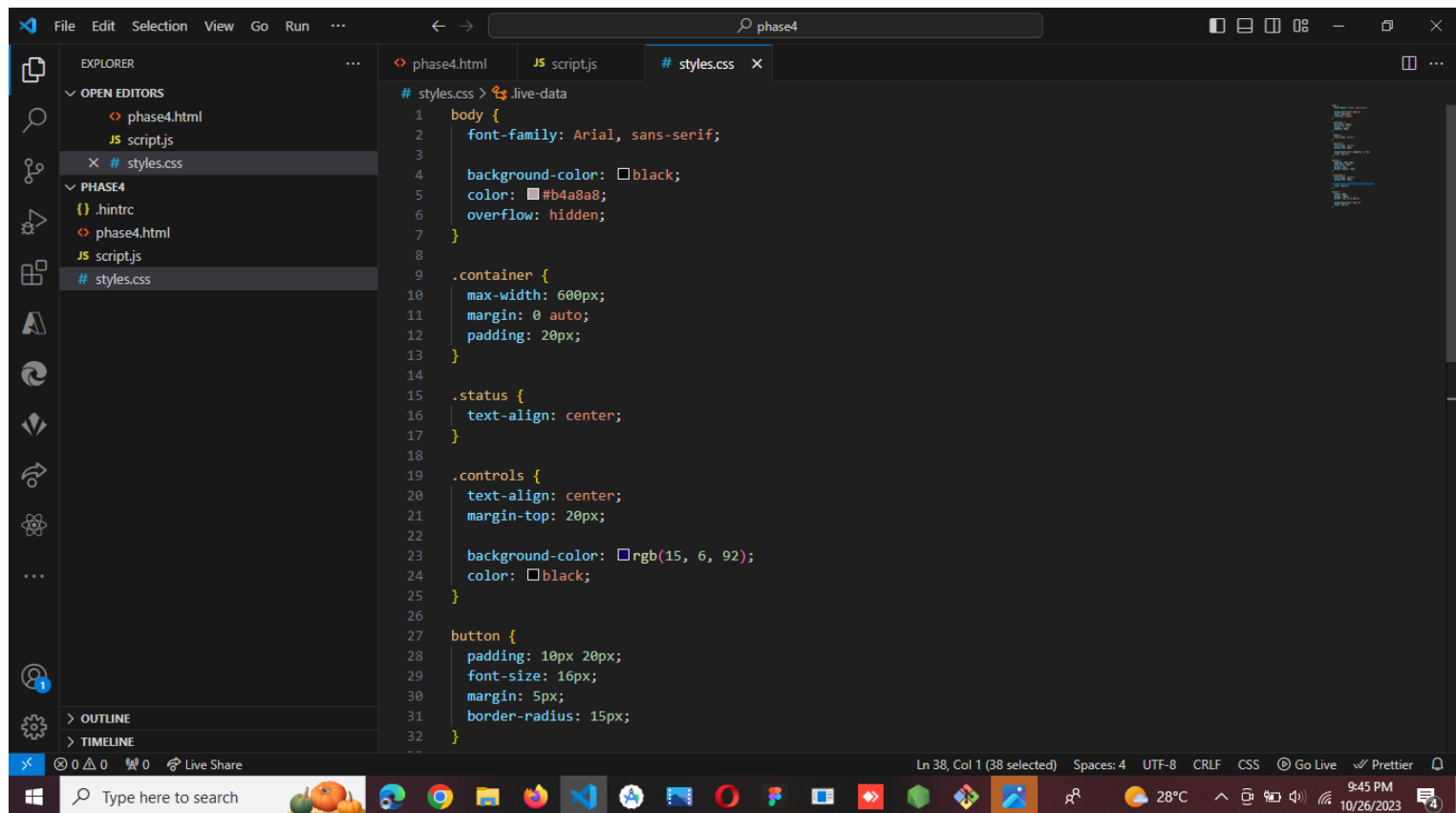
Ln 11, Col 8Spaces: 4UTF-8CRLFHTMLGo LivePrettier

Type here to search

9:45 PM10/26/2023

CSS STYLING:

The CSS stylesheet(style.css), linked in the HTML file, provides the visual styling for the page.



Visual Studio Code interface showing a CSS file (# styles.css) being edited. The Explorer sidebar on the left shows the project structure, including phase4.html, JS script.js, and # styles.css. The main editor displays the CSS code for a button and a chart.

```
# styles.css > ...
27 button {
28   padding: 10px 20px;
29   font-size: 16px;
30   margin: 5px;
31   border-radius: 15px;
32 }
33
34 .live-data {
35   text-align: center;
36   margin-top: 20px;
37
38   background-color: rgb(75, 209, 209);
39   color: black;
40 }
41
42 #chart {
43   width: 100%;
44   height: 300px;
45   border: 1px solid #ccc;
46
47   background-color: azure;
48   color: black;
49 }
50
```

The status bar at the bottom indicates the current line and column (Ln 41, Col 1), the number of spaces (4), the encoding (UTF-8), the line ending (CRLF), the active language (CSS), and the Go Live extension. The Windows taskbar at the very bottom shows the search bar, system tray, and the date/time (9:45 PM, 10/26/2023).

.Website Description:

***The smart water fountain system website is a user-friendly platform designed to monitor, control, and manage a water fountain in real time. It provides a seamless and intuitive interface for users to interact with the fountain and stay informed about its status.**

***Key Features:**

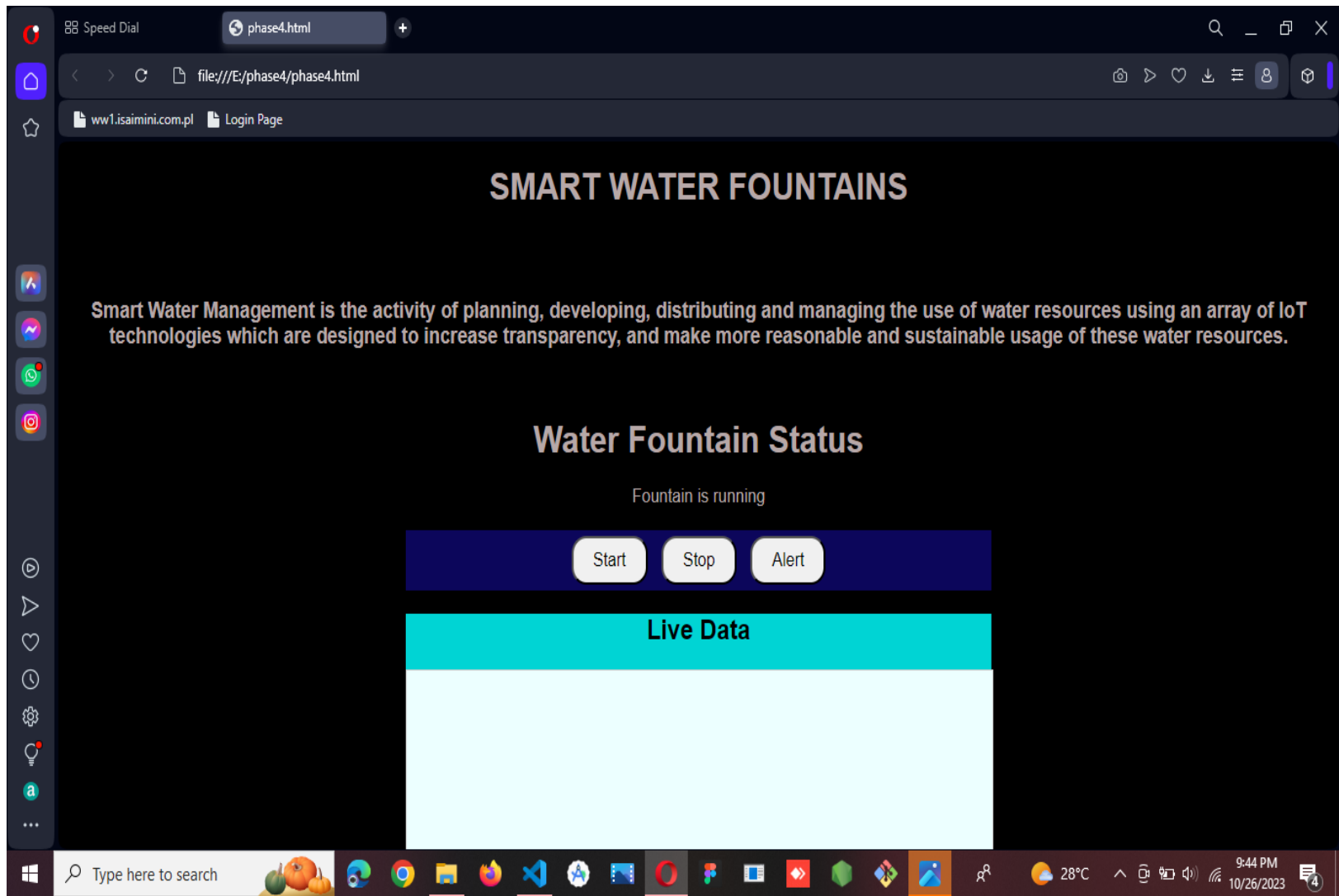
- *1. *Fountain Status:*** Users can instantly check whether the water fountain is running or stopped. The system provides real-time updates on the current status, ensuring users always know the fountain's operational state.
- *2. *Control Functionality:*** The website allows users to control the fountain with the click of a button. They can easily start or stop the fountain according to their preferences, contributing to efficient water usage.
- *3.**

.]Alert System

For added convenience and security, the website includes an alert button. Users can trigger alerts when necessary, ensuring rapid response to any fountain-related issues or emergencies.

4. *Live Data Charts:* The website features live data charts that visually represent water usage trends. This empowers users to track water consumption over time, facilitating informed decisions and promoting responsible water management. The website's ultimate goal is to encourage sustainable water usage and conservation by providing real-time insights and control options for a smart water fountain system. It offers a seamless experience for users who are keen on efficiently managing their water resources while enjoying the beauty and utility of a water fountain.

RESULT



CONCLUSION

In conclusion, the smart water fountain system website is a user-friendly and informative platform designed to provide real-time monitoring, control, and data insights for a water fountain. It empowers users to efficiently manage water resources by offering clear visibility into the fountain's status, easy control options, and the ability to trigger alerts when needed. The inclusion of live data charts further enhances decision-making by visualizing water usage trends. Overall, this website promotes responsible water usage and contributes to the sustainable and effective management of water features, ensuring an engaging and interactive experience for users.