

Software

*Web Devs*

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# Coffee Shop Website and Report

# Introduction

This assignment focuses on creating a **Coffee-Themed Website**, which serves as a platform to showcase different coffee products, company information, and a contact section. The website is designed using **HTML** for structure and **CSS** for styling, ensuring a responsive and visually appealing user experience.

This project provides an opportunity to apply my skills in web development and design, while allowing me to explore a theme I enjoy—coffee.

# Project Overview

The website contains several sections:

**About Us**: Introduction to the coffee brand, its history, and core values.

**Menu**: A list of coffee products and drinks offered by the brand.

**Contact Us**: A form where users can submit their inquiries or feedback.

This coffee-themed website is designed to be an attractive and functional platform for coffee lovers, businesses, and enthusiasts to explore the brand’s offerings and get in touch with the company.

# Technical Details

The website is built using the following technologies:

* **HTML**: For structuring the webpage and its content.
* **CSS**: For styling the webpage, making the layout clean, modern, and responsive.
* **JavaScript**: (Optional) Could be used for future enhancements like form validation or interactive elements.

The website layout is created using **CSS Grid**, with a simple structure that ensures the website adapts to both desktop and mobile screens. Key CSS features include:

* **Grid Layout**: For organizing the header, menu, and footer.
* **Media Queries**: To ensure the site adjusts based on screen size, making it fully responsive.
* **CSS Transitions**: Used for interactive effects like hover states and smooth transitions.

# Validation Checks

As part of the assignment, the following three validation checks were performed on the HTML and CSS code to ensure compliance with web standards and best practices.

**1. W3C HTML Validation**

The **W3C HTML Validator** checks whether the HTML code is well-formed and follows the official HTML specifications. This ensures that the website is compatible across browsers and is accessible to a wide range of users.  
**Steps for validation**:

* Go to the [W3C Markup Validation Service](https://validator.w3.org/).
* Paste the URL of the deployed website or directly upload the HTML file.
* The tool will show any errors or warnings related to the HTML structure and syntax.

For my Coffee website, I made sure that:

* All HTML tags are correctly closed and nested.
* I used semantic tags like <header>, <nav>, <section>, and <footer> for accessibility.
* Form elements are correctly structured, and all required fields include the required attribute for validation.

**2. W3C CSS Validation**

The **W3C CSS Validator** ensures that the CSS code is written according to standards, free of errors, and adheres to best practices. It helps avoid styling issues across different browsers.  
**Steps for validation**:

* Go to the [W3C CSS Validation Service](https://jigsaw.w3.org/css-validator/).
* Paste the URL of the deployed site or upload the CSS file directly.
* The tool will check the CSS for any errors, warnings, and style issues.

For my Coffee website, I validated the CSS to:

* Ensure there are no errors or unused CSS rules.
* Check that all properties and values are correctly specified.
* Confirm that the media queries work as intended for responsive design.

**3. Google Lighthouse Performance and Accessibility Check**

**Google Lighthouse** is a tool that audits the performance, accessibility, SEO, and best practices of your web page. It helps ensure that your site is optimized for fast loading and accessible to all users, including those with disabilities.  
**Steps for validation**:

* Open the website in **Google Chrome**.
* Press Ctrl + Shift + I to open the Developer Tools and navigate to the **Lighthouse** tab.
* Run the audit for **Performance**, **Accessibility**, **Best Practices**, and **SEO**.
* Review the scores and recommendations provided by Lighthouse.

For my Coffee website, I used Lighthouse to:

* **Improve performance**: Ensuring the site loads quickly, which is vital for user retention.
* **Enhance accessibility**: Including features like semantic HTML elements, proper form labels, and colour contrast to ensure the site is accessible to users with disabilities.
* **SEO Optimization**: Ensuring the website is optimized for search engines by using proper headings and metadata.

**Results of the Validation Checks:**

* **W3C HTML Validation**: The HTML passed with no critical errors.
* **W3C CSS Validation**: The CSS also passed with no critical issues, ensuring that the styles were applied as intended.
* **Lighthouse Report**: The website received positive feedback in terms of **performance** and **accessibility**, with some suggestions for minor improvements in **SEO**.

# Design and Layout

The layout of the coffee-themed website is structured as follows:

* **Header**: The header spans across the top, with a coffee logo and navigation links to “Home” "About Us," "Our Coffee," and "Contact Us."
* **Main Content**: The main area includes sections for ”Home” "About Us," "Our Coffee," and "Contact," where visitors can learn more about the company, view products, and interact with the contact form.
* **Footer**: The footer contains copyright information and additional navigation links.
* **Grid Layout**: The grid ensures that the content is well-aligned and displayed cleanly. The design ensures users have a pleasant experience whether they are browsing the menu or reaching out through the contact form.

**Responsive Design:**

* The layout is optimized for various devices using **CSS media queries**. This makes the website fully functional across different screen sizes, from mobile phones to larger desktop monitors.

# Conclusion

This coffee-themed website project allowed me to practice and apply my web development skills in a creative context. The project reinforced the importance of responsive design and user-centred development. In future, I plan to expand this website with JavaScript functionality, such as interactive product selection or real-time updates for customer orders.

This website also provided valuable experience in making a website both aesthetically pleasing and functional, a skill I plan refund further in future projects.

# References

1. Mozilla Developer Network (MDN) – HTML Documentation:

[HTML: HyperText Markup Language | MDN](https://developer.mozilla.org/en-US/docs/Web/HTML)

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[CSS grid layout - CSS: Cascading Style Sheets | MDN](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_grid_layout)

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