

**FIT 1050 Web Fundamental**  
**Assignment 3 – Website Development Project**

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**Link to Hosted Page: <https://lawchrisss.github.io/monacakes.github.io/>**

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## **1.0 Overview of Mona Cakes and Target Audience**

The Mona Cakes website serves as a refined platform for a boutique cake business, addressing the web's design and usability limitations in its original version to provide a better overall user experience and essentially attract more online traffic. A consistent colour scheme, elegant typography, and high-quality imagery reminiscent of the brand's artisanal identity, the redesign aims to enhance visual presentation. There is a streamlined navigation system to make it easy for visitors to browse menus, filter cake options, and place orders without experiencing any difficulty. The reorganized content structure supports business goals such as increasing engagement with users and online sales by guiding users from brand introduction to product selection to checkout.

The new website is aimed at individuals interested in cakes for events such as weddings, birthdays, graduations, and corporate gatherings. The primary target audience is working adults between the ages of 23 and 45 who value aesthetics, convenience, and quality in both design and product. A polished and accessible interface is designed to resonate with emotionally driven, event-focused customers, fulfilling the website's objective of meeting their needs. Additionally, the website has been improved in terms of its layout, responsiveness, and interactivity to attract more online sales.

## 2.0 Information Architecture

In this section, the most important decision was to implement a sequential organisational structure on the homepage to guide users through a clear and purposeful narrative. There is a linear progression from a prominent hero section with call-to-action buttons, to the brand story, followed by featured menu items, and concluded with customer testimonials. Through this structure, the principle of progressive disclosure is supported, which allows users to absorb information at their own pace while reducing cognitive load in the process. Consequently, the decision reflects the organization system component of information architecture, which is responsible for arranging content according to the relevance of the task and the goals of the user. It also connects with labelling, where headings such as “Menu” and “Order Cakes” use familiar, descriptive language that supports recognition and ease of navigation. These labelling choices align with Jakob’s Law, which emphasises the importance of consistency with user expectations formed through experiences on other sites (SLU, n.d.).

Similarly, Tivoli Road Bakery follows a comparable structure, starting with a strong brand image (Figure 1), moving seamlessly into a story (Figure 2) and offering. The inspiration behind this decision drove the choice to prioritize storytelling as the entry point for the project. The layout, along with a simple top navigation bar, facilitates intuitive browsing and goal achievement, while presenting the brand in an engaging, user-friendly manner.



Figure 1: Tivoli Road Bakery's Header in Home Page

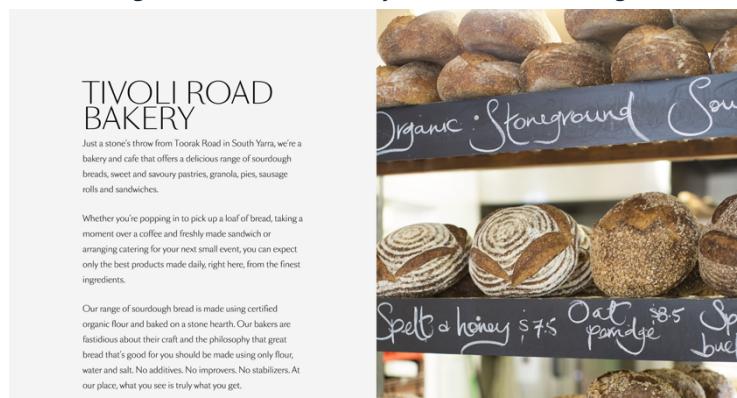


Figure 2: Tivoli Road Bakery's Brand Story

### 3.0 Visual Design Style

A significant design decision in this section was to establish a strong visual identity through the use of typographic pairs. This decision was mentioned in design theory, which recognises the role of typeface combinations in conveying brand tone, guiding user attention, and enhancing overall aesthetics. The Mona Cakes homepage (Figure 3) uses Poppins for both headings and body text, ensuring clarity and consistency across all sections. To complement this, Homemade Apple is used sparingly in key areas to introduce a handcrafted, personalised feel that reflects the boutique nature of the brand. The application of this typography pairing demonstrates the principle of contrast, where variation in font style and weight helps highlight important content. The contrast is further enhanced through colour, such as bold dark text on light cream backgrounds and vice versa to improve readability. The principle of repetition is presented by using the same fonts to dominate the site to maintain consistency and reinforce visual familiarity.

This typographic pair idea was influenced by the website of Flour and Stone, which also uses two complementary typefaces (Figure 4) to form a refined and emotionally engaging brand presence. Together, these choices form a recognisable visual style that supports both user experience and brand communication.



Figure 3: Redesigned Mona Cakes' Typography Pair

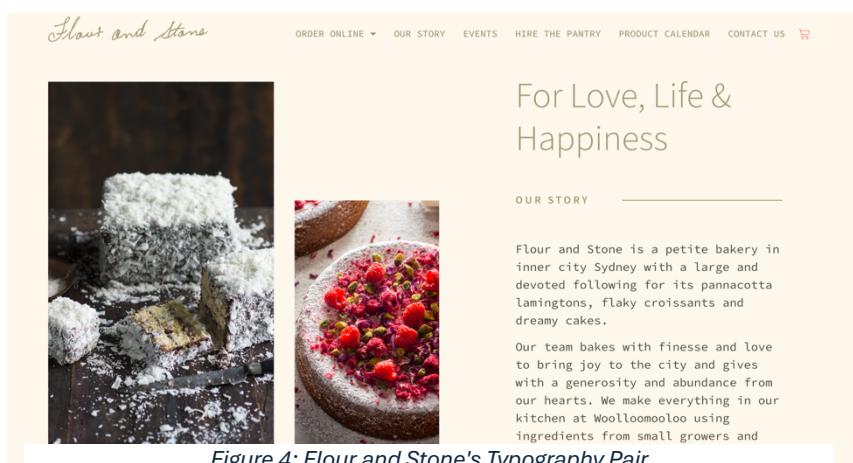


Figure 4: Flour and Stone's Typography Pair

## 4.0 Image Optimisation

In this section, the most important decision was to reduce file size without noticeably reducing visual quality by compressing high-resolution photographs into optimised JPG format. Photorea was used for this compression process, and images were reduced to approximately 30% to 50% of their original size. Based on block-based approximation, JPG divides an image into 8x8 pixel sections and encodes them efficiently, resulting in some detail loss which is usually not noticeable to users as illustrated in Figures 5 and 6.

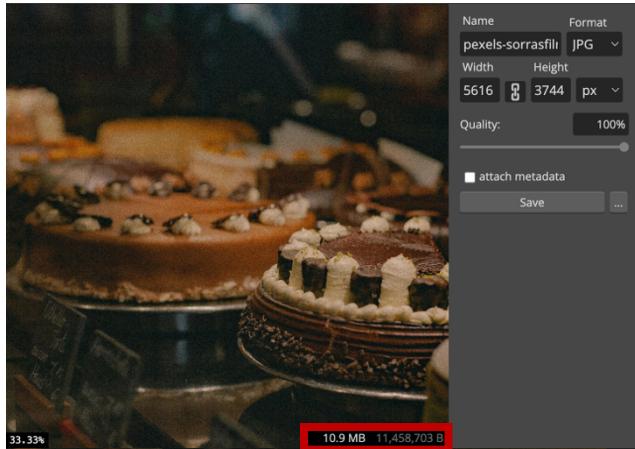


Figure 5: Header Image at 100% Quality with 10.9 MB

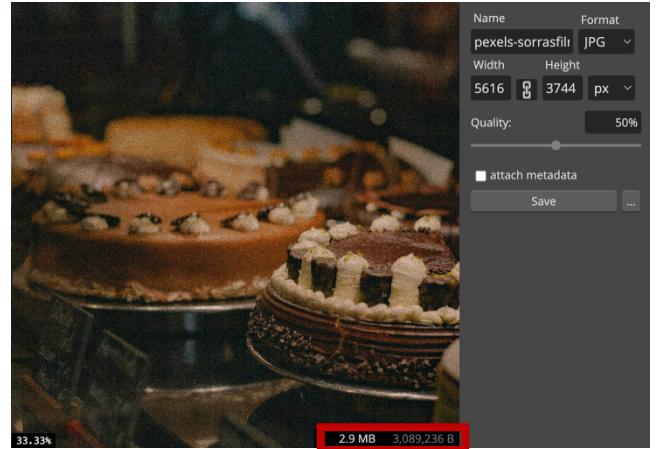


Figure 6: Header Image at 50% Quality with 2.9MB

The original image went from 10.9 MB to 2.9 MB, reducing file sizes significantly enhances site load speed and lowers bandwidth usage, which improves overall website performance in the end (Bothra, 2024). Although the images were compressed significantly, they still retained high visual quality while preserving the professional appearance of the cake products. JPG was chosen for its broad compatibility with modern browsers and its capacity to support 24-bit colour depth, making it especially suitable for high-resolution product photography. A research by Unbounce states that over 45% of online shoppers are less likely to complete a purchase if an eCommerce site loads slower than expected (Powell, 2024). This optimisation approach demonstrates a clear understanding of the importance of efficient media delivery, ensuring users experience seamless visuals without compromising performance.

## 5.0 Web Content Accessibility

In terms of web content accessibility, the site was redesigned using semantic HTML structure and meaningful alt text to improve accessibility for users with diverse needs, particularly those relying on assistive technologies. This was chosen as the most important decision in the redesign. The redesign introduced HTML semantic elements such as header, nav, section, and footer to define content regions. This allows screen readers to accurately present the structure of the site, aligning with the perceivable principle of WCAG Principle 1. Descriptive alternative text (Figure 7) were added to all images from the website to ensure that non-text content is conveyed through alternative text, particularly for users with vision impairments. Interactive elements, including form inputs and buttons, were labelled clearly for keyboard users.

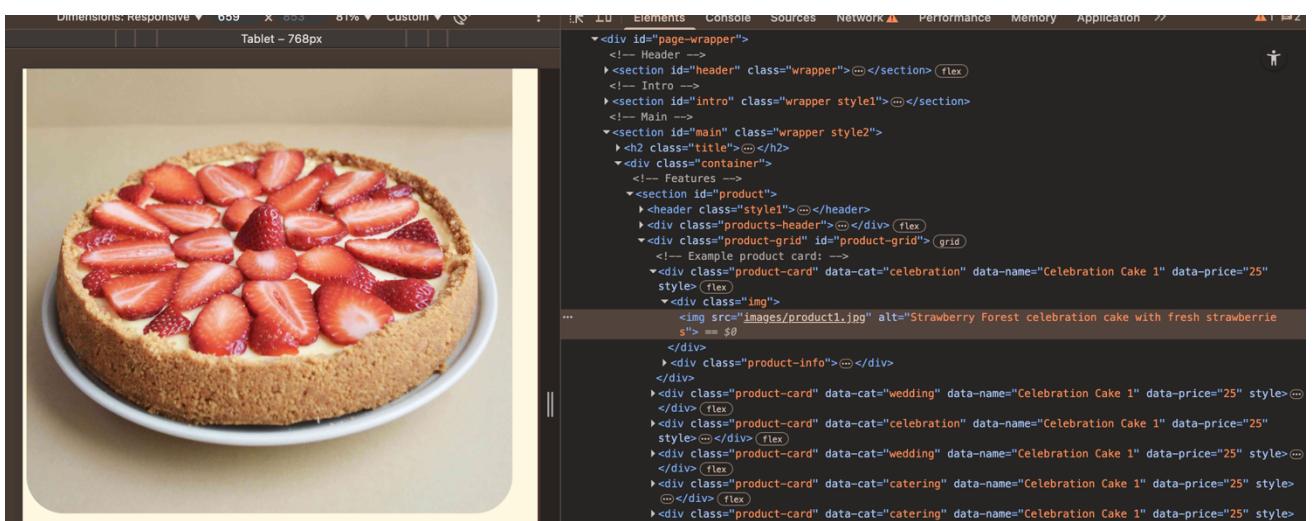


Figure 7: Alternative Text for Image

According to Figures 8 and 9, the site is navigable via the Tab key, supporting the operable principle. There are logical heading levels and a predictable layout that contribute to the ease of understanding. Lastly, semantic HTML ensures that interface elements can be determined programmatically, which increases compatibility with current and future assistive technologies. Through these changes, accessibility gaps in the original version have been directly addressed, integrating inclusive design principles into the homepage structure.

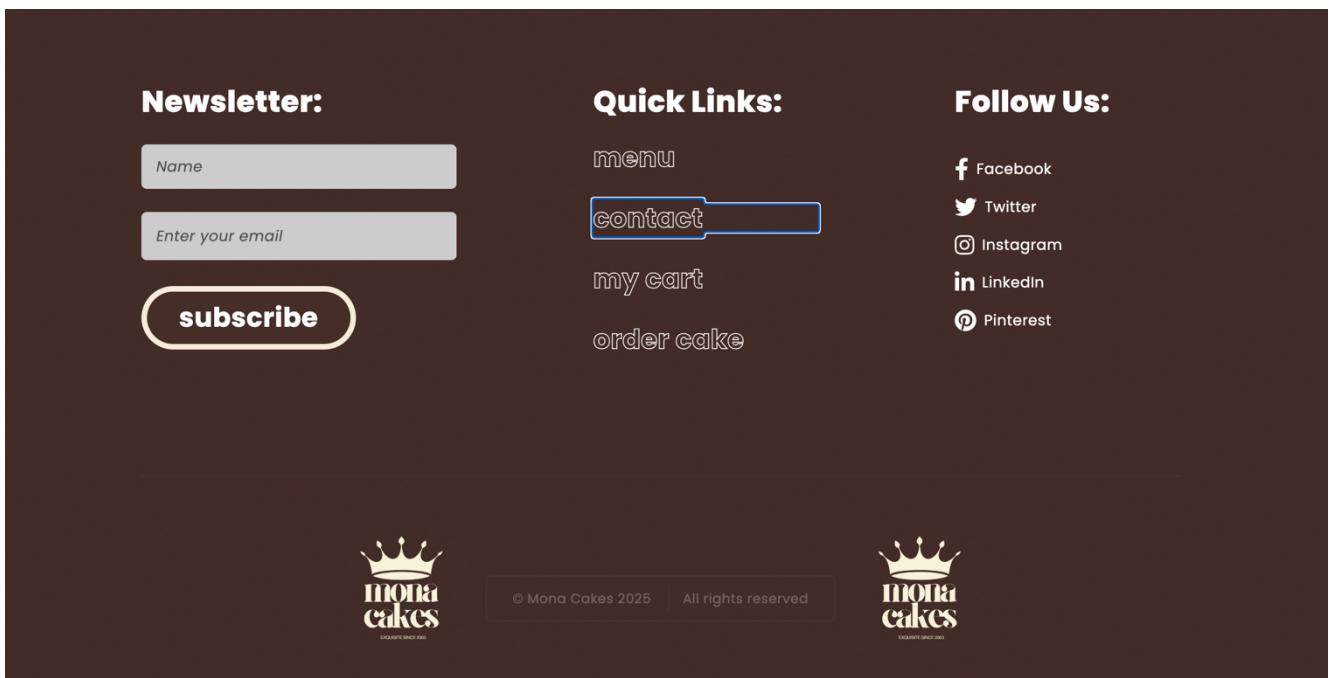


Figure 8: Navigating using the tab button on keyboard

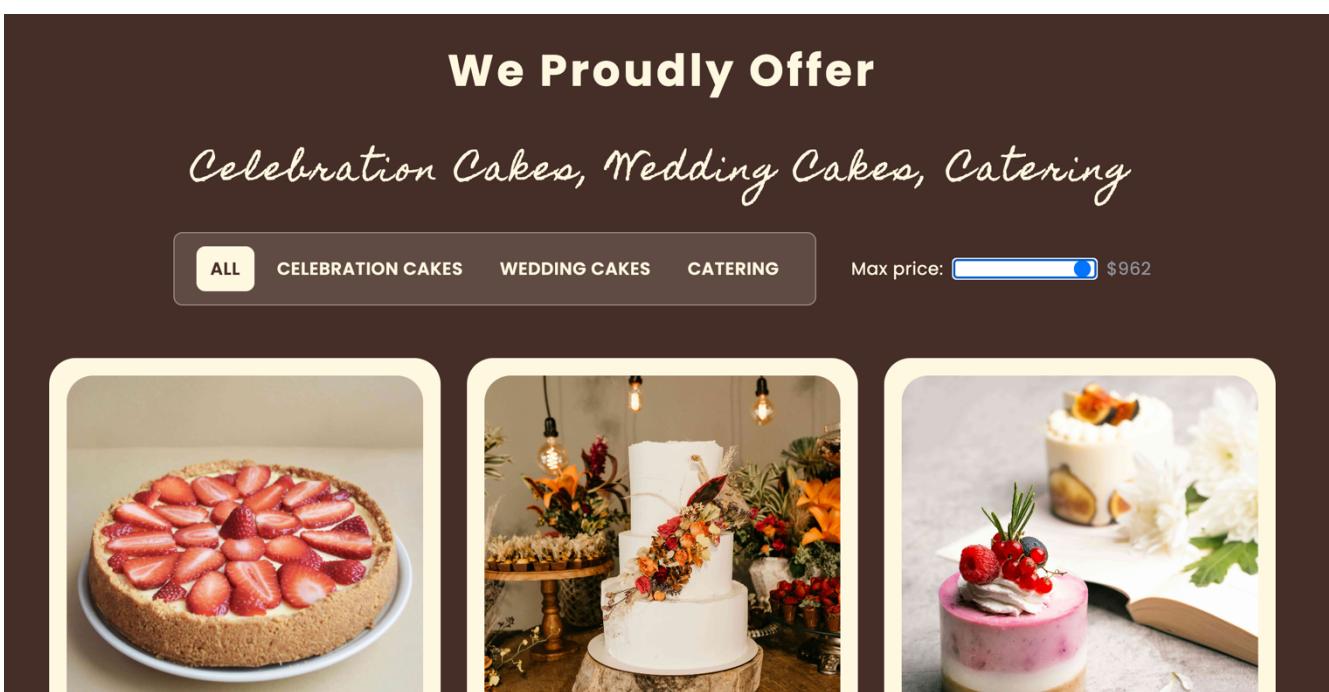


Figure 9: Controlling the price slide with arrow buttons on keyboard

## 6.0 Java Script Interactivity

In this last section, the most significant decision was the implementation of JavaScript to dynamically filter menu items based on category and price (Figure 10), which allows user to preview the range of cakes available before making a purchasing decision. Through this feature, users are able to identify relevant products more quickly, which will enhance transparency and make their browsing more efficient. The feature was developed using event-driven scripting, where the "addEventListener()" function responds to user interactions such as clicking on category buttons or adjusting the price slider. DOM manipulation is triggered as a result of these events, which displays only product cards that match the selection criteria. In conjunction with this real-time filtering, usability is then improved by enhancing access to key content and providing instant visual feedback.

This decision reflects the implementation of client-side scripts, which enables fast interface updates in the browser without the need for server requests. In addition, this implementation adheres to the principle of progressive enhancement, which ensures that users continue to have access to the core product list even if JavaScript is disabled, while enhancing user interaction on modern browsers (MDN Web Docs, 2024). This logic is embedded directly into the product section of the website, thereby increasing user engagement while reducing cognitive load, and transforming the static page into an intuitive yet dynamic interface that responds intuitively to user input.



Figure 10: Filtering Products and Price

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