# FIT 1050 – Web Fundamentals

Assignment 4 – Website Project Reflection Report

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### 1.0 Introduction and Overview

Mona Cakes' primary goal with this website is to create a strong online presence, drive qualified traffic, and convert visitors into sales for a defined customer segment of event-oriented adults aged between 23 and 45 who discover artisanal desserts on Instagram, Google reviews, and online searches. Visitors are enticed to purchase with elegant visuals, concise product cards, streamlined checkouts, and an interactive menu filter that allows them to refine options in real time to drive longer sessions in the website.

### 1.1 Comparison of A2 and A3 Project

A significant implementation of A3 that was not planned in A2 is the JavaScript driven interactive menu filter. In Assignment 2, there were plans to implement a gallery section (Figure 1) to showcase Mona Cake storefront, but the concept was not carried forward. Instead, Assignment 3 introduced an interactive menu, providing category tabs for product filtering and a price slider (Figure 2) that allows customers to match options to their budgets in real time. Event listeners update the page instantly to display only the matching items, transforming the menu from a static display into an engaging and user responsive experience. This filter stands as the most consequential change between A2 and A3.



Figure 1: Gallery section in A2



Figure 2: Interactive Filter in A3

### 1.2 Further Improvement of A3

If provided the opportunity to redo Assignment 3, an implementation of a visual cake customizer would be added on top of the existing interactive filter. The customizer will allow customers to choose preferred flavours, colours, and decorations while having a live preview and price refresh immediately. Having this personalised builder onto the current filter would encourage experimentation, highlight premium add-ons, and increase average order value. The feature would deepen engagement, further differentiate Mona Cakes, and provide an immersive ordering experience.

## 2.0 Improvements on Browsing for Mobile Devices

### Feature 1:

A feature that should be added is a fully responsive layout tuned through additional viewport breakpoints. Based on current testing on phones, the hero section appears wider than the screen (Figure 3), pushing headings and call-to-action buttons offscreen. Introducing sensible breakpoints will resize the hero image, scale heading text, and place the Menu and Order buttons in a centred row so both remain visible without zooming. In the interactive menu, changing from a single-column list (Figure 4) to a two-column grid on mobile devices allows shoppers to view more cakes at a glance, reducing scrolling and speeding comparison. Next, the same two-column concept to be applied in the review section keeps customer photos and reviews neatly inside the viewport. In media queries, flexible units and percentage widths ensure that horizontal overflow is prevented and that device margins remain balanced. The smoother and clutter-free mobile experience encourages faster checkouts, which directly increases online orders and revenue (Arsenault, 2017).



Figure 3: Mobile view for the website

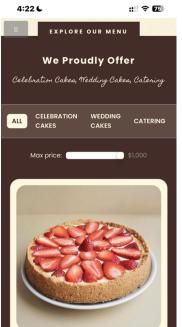


Figure 4: One product card taking up the whole screen



Figure 5: Reviews taking up the whole screen

#### **Feature 2:**

A second enhancement will be adding a fixed bottom navigation bar optimised for mobile screens. The current design hides every link inside a burger menu, so users must open the drawer each time to switch pages. The burger icon will remain for secondary items, while the scrolling bar will facilitate easy access to core actions. The bar will show four icons: burger menu, Home, Menu and Shopping Cart. Anchoring these controls reduces steps, helps visitors remain oriented, and facilitates effortless navigation throughout the site. Quora's mobile site uses the same pattern, demonstrating how a fixed navigation bar (Figure 6) guides users along lengthy pages without breaking flow. Incorporating this approach into Mona Cakes' shopping experience should streamline exploration, shorten the process from browsing to checkout, and create a relaxed shopping experience on small devices, resulting in higher mobile conversion rates and, ultimately, reducing distractions for users (BBVA API Market, 2016).

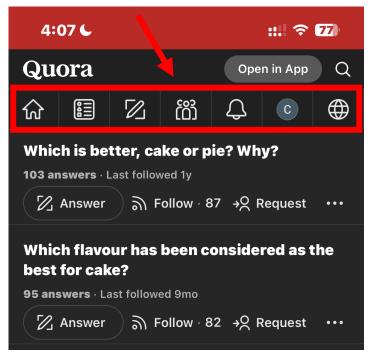


Figure 6: Quora's Website fixed navigation bar

### 3.0 Server-side Scripting/State Management Features

### **Feature 1:**

The introduction of server-side customer profiles will enable visitors to create an account, save favourite cakes, and store allergy notes for instant reorders. When a customer signs in, the server sets a session cookie, retrieves the profile from a database, and having a "Saved Favourites" panel for users to access their favourites. The preference is stored on the back end, so it persists across devices and survives cache clearing. Etsy shows the same pattern which is after logging in, shoppers can open the "Favourites" gallery (Figure 7) that remembers items from previous visits, proving the data is stored server side and not in the browser. Adopting this model for Mona Cakes shortens browsing, surfaces preferred flavours immediately, and encourages friction-free repeat purchases. The profile table also provides analytics on seasonal demand and popular combinations, guiding production schedules and promotions. As a result of reducing effort for returning customers and offering insights, repeat-order rates should increase, resulting in improved conversion, increased customer loyalty, and strengthened trust (Cassie, 2025).

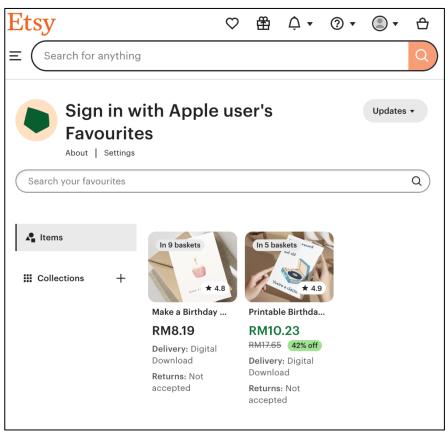


Figure 7: Etsy's favourite section

#### **Feature 2:**

To collect authentic customer feedback and securely publish it, we can implement a server-moderated customer review system. Upon submission, each submission is checked by a server script that sanitizes the text, stores the comments in a table and marks them as pending. The admin panel allows staff members to review genuine posts and reject spam, after which the template pulls approved entries and recalculates the average score (GTCSYS Services Pvt Ltd, 2024). Ben & Jerry's product pages follow this exact workflow, offering a "Choose Rating" form (Figure 8), dynamic aggregate rating and dated customer comments retrieved from their back end, proving the model works in practice. Server-side moderation keeps malicious content off the site, protects brand credibility and guarantees the rating reflects real buyers. As a result of verified reviews, customers are more likely to make a purchase, while fresh content feeds search rankings and a sentiment dataset is created to help guide product tweaks and marketing decisions (GoSite Team, 2022).

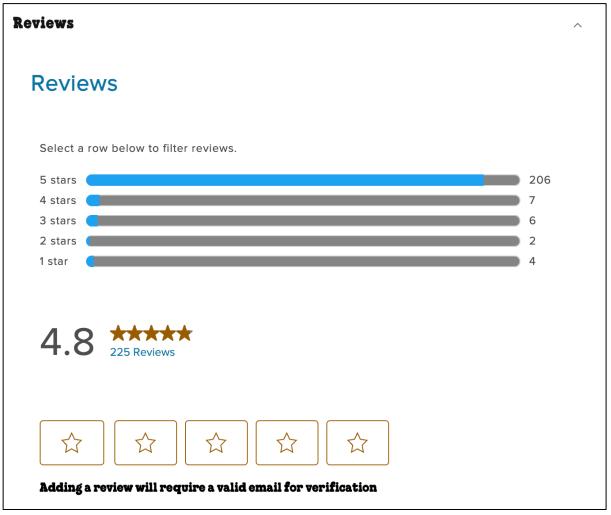


Figure 8: Ben & Jerry's review validation

### 4.0 Modifications for Search Engine Optimization

### **Feature 1:**

Mona Cakes pages can be discovered more quickly by search engines if they are published as XML sitemaps and registered in Google Search Console. A sitemap is a simple XML file listing every crawlable URL together with the last modified date, as highlighted in the slides. This file provides crawlers with a complete roadmap and is the basis for prioritizing new flavors, blog posts and seasonal promotions, even if external links are scarce (Mandelbaum, 2021). Faster discovery enables pages to compete for rankings sooner, providing Mona Cakes opportunities to appear ahead of competitors in relevant searches. As a result of the sitemap format, important pages like the online order form can also be ranked higher in priority, which encourages more frequent bot visits and allows pricing and availability snippets to remain updated (Mollah, 2021). The file should be updated regularly to signal freshness, one of the factors recommended for higher visibility in organic search results and to benefit mobile users searching nearby cakes.

### Feature 2:

To improve search visibility and sales, custom meta titles and meta descriptions can be added to every page. The meta title is the blue headline shown in Google results, and the meta description is the grey summary that follows (Engine Scout, 2023). The two links together act as a concise advertisement, guiding searchers to the most relevant link. Many current pages use generic labels such as "Menu," offering little detail on the cake or its location (Bustillos, 2024). The title of each product should blend product, brand, and city, such as "Raspberry Macaron Cake | Mona Cakes Melbourne," and a 160-character description such as "Vanilla sponge with raspberry buttercream". A strong appeal will be given to every listing by adding "Order now for next-day pickup in Melbourne. With accurate keywords, Google can better understand page content, boost ranking potential, and increase organic traffic, which results in higher click-through rates and increased online revenue for Mona Cake (Engine Scout, 2023).

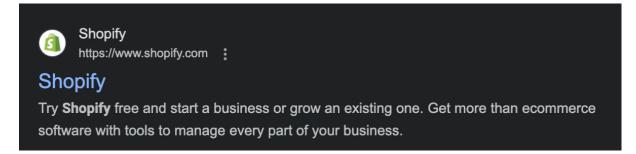


Figure 9: Example of meta title and meta description

### 5.0 Conclusion

Mona Cakes' newly redesigned website will likely be a success since each feature targets a clear business goal. The mobile breakpoints and the fixed bottom bar shorten the route to checkout, which increases conversion and reduces abandonment. By integrating server-side profiles and verified reviews, reordering becomes quick and reliable, significantly boosting repeat sales. By using an XML sitemap and keyword-rich meta tags, Google indexes a website faster and shows richer results, resulting in more qualified visitors. Although moderation occasionally requires staff attention, the enhanced credibility significantly outweighs this minor inconvenience. As a result, the site is well positioned to grow in traffic and revenue over time.

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