

Production Journal

Development Process

To begin development of the final site the first step was to setup the WordPress environment as per the assignment guidelines and install WooCommerce. Following this I focused on setting up the navigation bar and ensuring it displayed consistently across the site. This was a time-consuming aspect as it also involved attempting to understand how WordPress wanted to display items and the backend styles and logic that controls this.

Moving forward the next step was to create the landing page, the goal here was to have a short introduction to the site and feature some of the stores top selling products. The solution was brought about by creating a custom page template coupled with a custom-built plugin. As part of the development process I wanted to ensure that textual content throughout the site was available to be changed in the WordPress backend through the visual editor. This involved using the visual editor for these text items and adding in custom CSS classes so that I could style them appropriately.

Once the homepage and featured products section was complete the next part of the development process involved setting up the shop's items and store page. This proved quite challenging as the product layout I wanted was not what WooCommerce displays by default. By building upon some existing WooCommerce functionality and overriding the default CSS I was able to achieve my desired result.

Change Log

- 1 – Addition of popular products to homepage
- 2 – Improved header and menu contrast
- 3 – Removal of category pages in menu
- 4 – Removal of footer background colour

Change Log Rationale

- 1: Visitors will land on a shops homepage and will either know what they are after, or they will not. To take advantage of the homepage and help provide an entry point for viewers who do not know what they are after the addition of a popular products category was added. This enables the viewer to get a very quick overview of the potential products the site sells and may even result in them purchasing one of the featured items. (Harrison 2018).
- 2: Accessibility is an important issue in web design and often overlooked. In the initial proposal for the site the contrast between the header background colour and sites logo and text was less than desirable as highlighted by my tutor. This was addressed through a variety of methods, including lowering the background colours opacity, increasing font size, and adding a text shadow. These are techniques outlined in the web content accessibility guidelines. (WebAim 2018).
- 3: With the addition of the Shop, Cart and Checkout menu items, adding in four more menu items to represent each product category would have resulted in an overly cluttered menu. A better approach may be to add the product categories to the shop menu item in the form of a dropdown submenu.
- 4: The footers background colour was removed due to it detracting from the site's visual appearance. The footer is now a more seamless part of the site that fits in with the background.

Please note several planned features were not implemented due to the logistical complexities of implementing these features weighted against the scope, requirements, and timeframe of the assignment. These features included:

- Search Box
- Comprehensive Product Filters
- Mobile Friendly Design
- Redesign of sites colour scheme and branding
- Seamless page transitions
- Footer links

Critical Reflection

I believe that the strongest aspects of this site from a customer experience standpoint is providing a toolset for the client to change aspects of their site from the WordPress backend. This gives them the flexibility to update textual content, change the banner and add special offer text.

Overall, I found this project very challenging and got bogged down with just getting everything up and running and displaying properly. Due to this and my inexperience with the WordPress platform the sites visual design has suffered somewhat. I have implemented most of what was set out in the initial brief, but the site would benefit greatly from more time spent understanding the complex layout features WordPress has to offer. This could then be utilised in positioning elements in a more uniform manner as well as working on ensuring compatibility with a wider range of display sizes.

If I were to undertake this project again, I would try to approach it in a much more modular manner and try to utilise as many built in features as possible. I would also try to spend a lot more time with the visual aspects and the various CSS frameworks to create a more visually appealing product. After spending time on this project I have a much better understanding of how all these elements can work together and the potential power the platform has, but I feel that I still have a lot to learn to really harness this and bring about a truly congruent end product.

Site Overview (WordPress, WooCommerce and Plugin Integration)

WooCommerce integration follows the standard WooCommerce theme, the main differences being the “Custom WooCommerce Display” plugin that I created. This modifies how the products are displayed on the store page by showing the products short description. The plugin also overrides some WooCommerce styles to customise layout, notably adding vertical padding to the shop, cart, and checkout.

A third-party plugin “Content Aware Sidebars” was utilised to display the sidebar to the store page only. This sidebar contains a default WooCommerce widget that displays product categories allowing the viewer to select and product category and view all items within it.

A Custom homepage plugin was also created allowing backend users the ability to change the sites banner image, banner text and select the featured product category for the homepage. The plugin achieved this through interaction with the WordPress database and a custom homepage template.

A third-party plugin “Media Library Folders for WordPress” was utilised to create folders for the websites media such as product photos in the backend. This helped keep product photos organised during the creation of the store.

The final third-party plugin utilised for the website was “WPForms Lite” this was used to create a simple contact form for the contact page.

Custom PHP and SQL database query

Details of the data accessed and intended purpose.

The custom SQL query was used to display the top 3 products on the homepage from a shop category that can be selected through the custom homepage plugin I created.

Since we were not to use any built in WordPress or WooCommerce functions to obtain this data I have had to join multiple tables from the WordPress database.

The information that was required is as follows:

Product Title, Product Excerpt, Product Price, Link to view the product, Product Image and Units Sold.

All this information is stored in the WordPress database across various tables and in some cases multiple separate entries in the same table which lead to the wp_postmeta table being joined three times and the use of SQL aliases.

The conditions in the WHERE clause select the product category and specify the values we want returned from wp_postmeta (Image URL, Price and Total Sales).

Finally, the results are ordered by total sales. Due to the meta_value field being LONGTEXT type, we need to cast it as an integer for the ORDER BY to work correctly. The Limit field limits the results returned, in this case we get the top 3 bestsellers from the selected product category.

To display this on the webpage the built in Wordpress database object (wpdb) and the get_results method was used passing in our SQL query. A for each loop is then performed on the returned results array and output as HTML to the homepage.

Code snippet used to access and display this data on the site

```
SELECT wp_posts.id, posts.post_title, posts.post_excerpt, posts.guid, wp_posts.guid as image,
postmeta.meta_value




FROM (((((wp_terms
INNER JOIN wp_term_relationships ON wp_terms.term_id = wp_term_relationships.term_taxonomy_id)
INNER JOIN wp_posts AS posts ON posts.id = wp_term_relationships.object_id)
INNER JOIN wp_postmeta ON posts.id = wp_postmeta.post_id)
INNER JOIN wp_postmeta AS postmeta ON posts.id = postmeta.post_id)
INNER JOIN wp_postmeta AS postmeta2 ON posts.id = postmeta2.post_id)
INNER JOIN wp_posts ON wp_postmeta.meta_value = wp_posts.id)

WHERE wp_terms.name = 'Cat Food' AND wp_postmeta.meta_key = '_thumbnail_id' AND postmeta.meta_key
='_price' AND postmeta2.meta_key = 'total_sales'

ORDER BY CAST(postmeta2.meta_value AS UNSIGNED) DESC
LIMIT 3
```

Screenshot of final implementation of this data

Today's Top Products

<p>Felix - Kitten Pouches</p>  <ul style="list-style-type: none"> • 3 Flavours • Nutritious • Stimulates Growth <p>\$8.50</p> <p>View Product</p>	<p>Hills Science Diet - Kitten Tender Chicken</p>  <ul style="list-style-type: none"> • Promotes Growth • Boosts Immune system • Natural Ingredients <p>\$52.20</p> <p>View Product</p>	<p>Hills Science Diet - Adult Cat Dry Food</p>  <ul style="list-style-type: none"> • Adult Mix • Natural Ingredients • No Artificial Preservatives <p>\$119.50</p> <p>View Product</p>
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WordPress Media Library Folders

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Content Aware Sidebars

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WPForms Lite

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WooCommerce

<https://woocommerce.com/>.

All-in-One WP Migration

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