

WEB DESIGN

PROJECT REPORT

PROJECT TEAM	
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ReFurno – Upcycling Company

<https://refurno.surge.sh/>

Overview

The idea

ReFurno is an idea for a company I had where people can make some extra cash by giving their old furniture that they do not want or need anymore to ReFurno. ReFurno would then decide on the size of the piece donated and sell it for someone to upcycle it to something that looks brand new. Those donaters would then get a share of the sale.

Upcycler's would then be delivered the item by ReFurno so they can do what they want with it. If they like they can re-sell the item once its upcycled onto the ReFurno marketplace where they keep 85% of the profits.

I chose this project because I used to do this as a teenager to raise some extra cash. I would ask neighbours or extended family members if they wanted any furniture to be spruced up. A good sand, a lick of paint and some new handles on dressers and tables would give old dusty furniture a new lease of life.

This also has an impact on our environment, especially in today's world. Over 10 million tonnes of furniture is thrown out every year, and that's just in the E.U. By giving old furniture a new lease of life it prolongs its life and keeps it out of the dump.

The plan

I plan to create a system that demonstrates this idea. The site will allow a user to choose if they want to donate a piece of furniture or to sell a piece of furniture they have updated. Ideally I would like to create an admin system for items to come through to before they go onto the marketplace so I could decide how big or small the donated item piece is so a price can be applied to it.

From there, the user can view their item on the marketplace. If a user sees an item they would like to purchase, be it a donation or an upcycled piece, they can add it to their cart proceed to the checkout once they are happy.

Based off this I decided to create these pages:

- Homepage to choose to list item or view the store
- List item to marketplace
- Marketplace
- Cart
- Checkout
- Admin portal

Section 1: Design

Research / Investigation

Upon researching into this idea, I didn't come across much, if any, sites where their main focus was to upcycle furniture. Of course, sites such as Done Deal, Ebay & Etsy have sellers selling upcycled furniture. But, these sites are not solely focused on upcycled furniture.

The closest thing I found was a company who recycles outdoor furniture but users did not have the option to upload their unwanted furniture. <https://irishrecycledproducts.ie/>

Unfortunately, I could not grab idea's from sites but I tried to use Ebay to my advantage. I went through the process of uploading an item on ebay to sell. From there, I decided to follow the same page layout for providing information on the product the user is uploading as it seemed the most straight forward.

The image shows a screenshot of an eBay item listing form. The form is divided into several sections:

- Title:** A text input field containing "ps5 console disc edition bundle". Below the field is a warning: "Medium length. Don't forget to include details such as brand, colour, size, condition, etc. 3100".
- Description (optional):** A text area for describing the item. It includes a toolbar with options for font style (Arial), size (13), bold (B), italic (I), underline (U), and link. A "Show HTML editor" link is also present.
- Item specifics:** A section for providing details about the item. It includes a "Required" section with dropdowns for "Condition" (New) and "Brand" (Sony). Below this is a "Model" dropdown. A "Recommended" section suggests "Add as many details as you can" with a note "1.6m recent searches for these details". It includes dropdowns for "Platform" (Sony PlayStation 5), "Colour" (Frequent: White), "Storage Capacity", and "Region Code".
- Pricing:** A section for setting the price. It includes a toggle for "Auction" (set to "On") and a "Starting bid" input field. Below this is a "Buy it now" toggle (set to "Off") and a "More options" link.

Requirements & Technical Approach

Basic website requirement:

During the development phase, I decided what the basic requirements would be for the site. As to the brief, it's required to use HTML5, CSS and JavaScript as the underlying technologies on the site.

The purpose/objective of our website:

- All people to donate their old furniture and receive cash.
- To sell products online.
 - A feature to upload items will be implemented. Items will be stored in local storage for this project and not on a database as it is out of scope for the project.
- To purchase products online.
 - I will create the ability to add items to a cart and proceed to a checkout but the functionality to checkout will not be implemented as it is beyond the scope of this project.

Other website requirements

- Provide a clear site map and flow chart that helps increase the user experience.
 - The navigation provides a nice overall view of the site options. The footer provides a direct link to FAQ and other pages.
- The use of colour & layout to promote a welcoming experience
 - I decided to use a dark and light green for the primary and secondary colours with orange so small accents like icons or links.
- Minimise content
 - The pages were not overloaded with content. Provide an FAQ page to help those interested better understand the site.
- No pop-up messages or extra advertising – our customers do not like this.
- Simple, understated design

- Easy navigation on both mobile and desktop devices
- Slightly rounded corners on buttons and card elements
- Responsive across all devices especially mobile and multiple browsers
- Registration required
- Provide a footer – nice for mobile users
- Must have pages:
 - Home page
 - About
 - Contact us
 - List item for donation/sale
 - Market place
 - Checkout
 - FAQ

Project Approach

I approached the project first by designing some wireframes of what I hoped the website would be like. After my first round of wireframing I noticed one big problem. I originally had the idea of separate pages for donations and upcycled products. Upcyclers would then request to get the donations for free with the intention of upcycling that piece and re-listing it on the website on the upcycled page.

However, I felt this would give the upcyclers too much control over the site as they could just get the donated pieces for free and never re-list it on the site. That's when I decided that donated pieces will also be sold for a standard fee based on the size of the object. This will make the site more scalable and sustainable if it were to go into production.

Once I revised the wireframe, I was ready to begin development.

Design aspects:

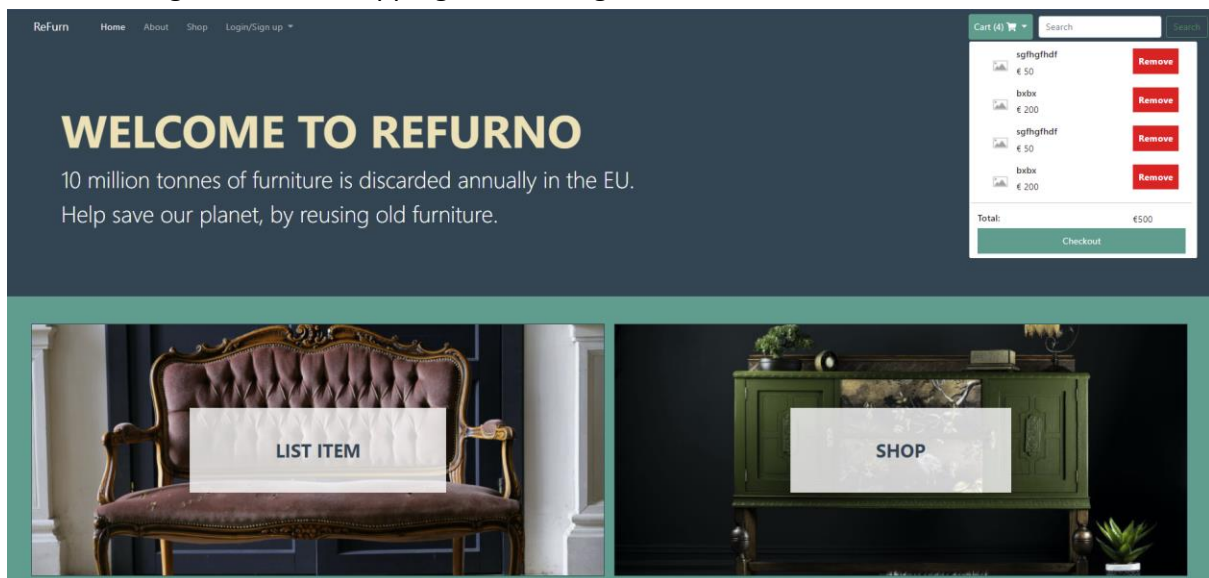
Design Heuristics & Structure

I based the site on best practices for search engines so that the design would be optimised for mobile devices as well as desktop devices.

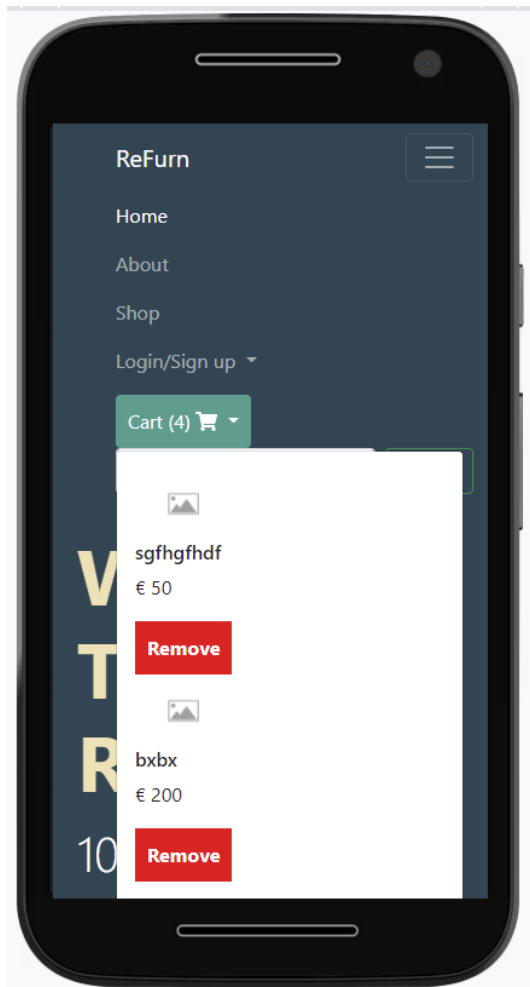
I demonstrated navigation using multiple techniques:

- Javascript button on navbar for viewing and managing your cart
- Navigation menu using hyperlinks to move to pages
- Hyperlinks in footer to go to lesser used pages like FAQ.
- Clickable Icons to view facebook, twitter pages etc.

The following shows the shopping cart for large devices:

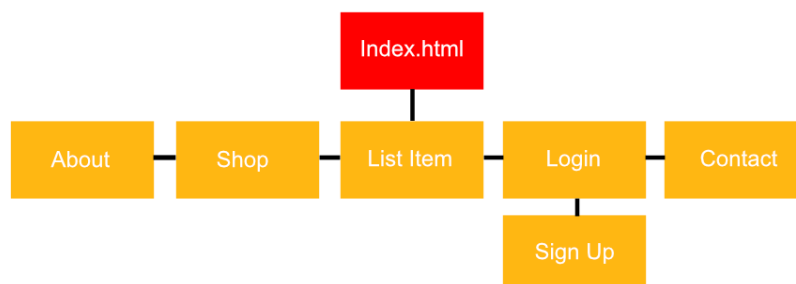


The below shows the shopping cart for mobile devices. Note the slide down hamburger icon.



Sitemap & Wireframe

Based on our design approach, we decided that the site should look like the following:



Homepage

Home	About	Shop	Login/Sign Up	Cart	<input type="text" value="Search"/>	<input type="button" value="Search"/>
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WELCOME TO REFURNO

10 million tonnes of furniture is discarded annually in the EU.
Help save our planet, by reusing old furniture.

LIST ITEM

SHOP

[Home](#) [About](#) [Shop](#) [Contact](#)

List Item (Donation)

[Home](#) [About](#) [Shop](#) [Login/Sign Up](#) [Cart](#) [Search](#)

Are you selling your item?

☐

Title

Item Specifics

Small ☐ Medium ☐ Large ☒

Description

[Home](#) [About](#) [Shop](#) [Contact](#)

List Item (Sale)

[Home](#) [About](#) [Shop](#) [Login/Sign Up](#) [Cart](#) [Search](#)

Are you selling your item?

☒

Title

Item Specifics

Small ☐ Medium ☐ Large ☒

Description

Type here

Price

Submit

☐

☐

☐

☐

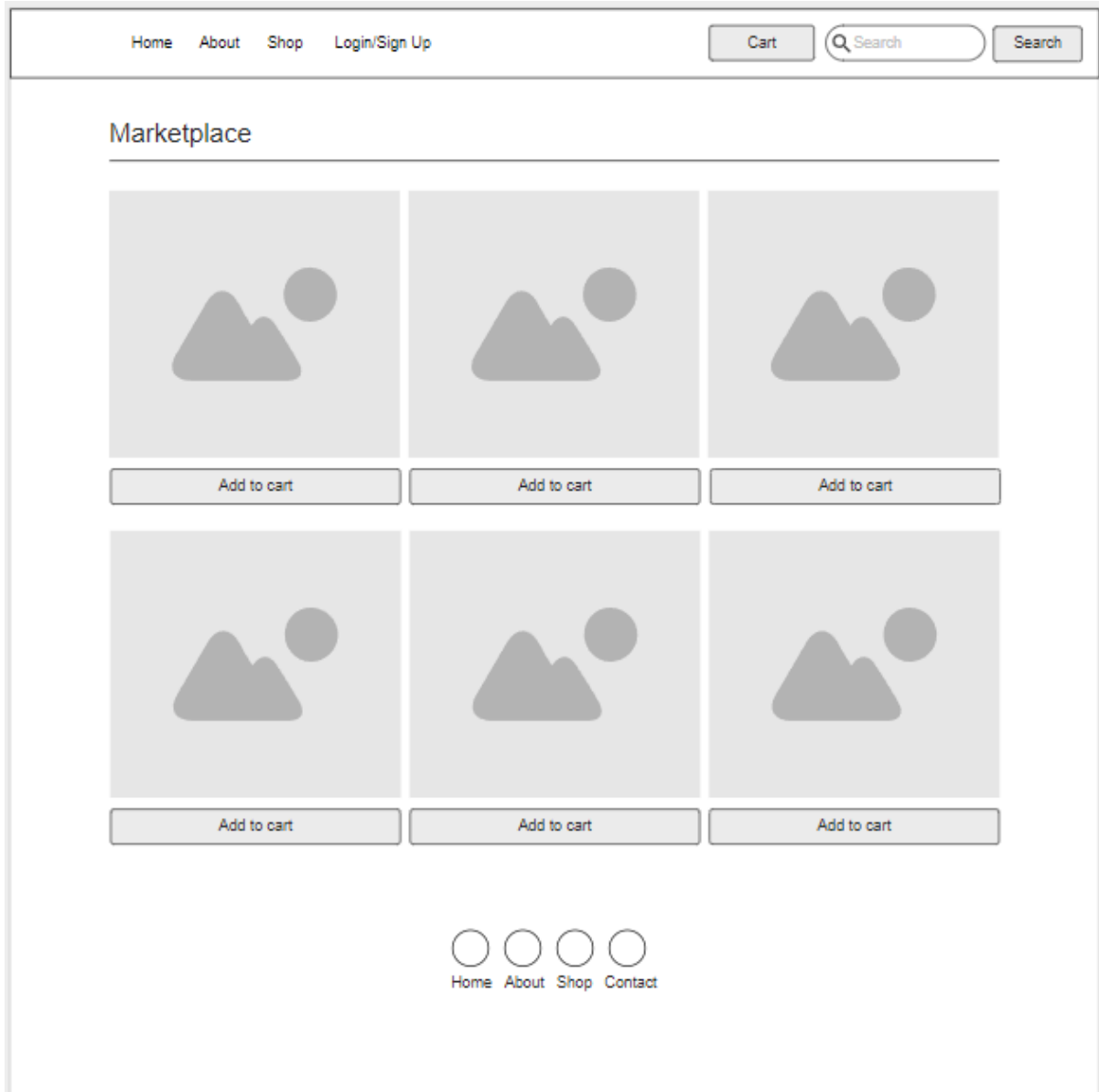
Home

About

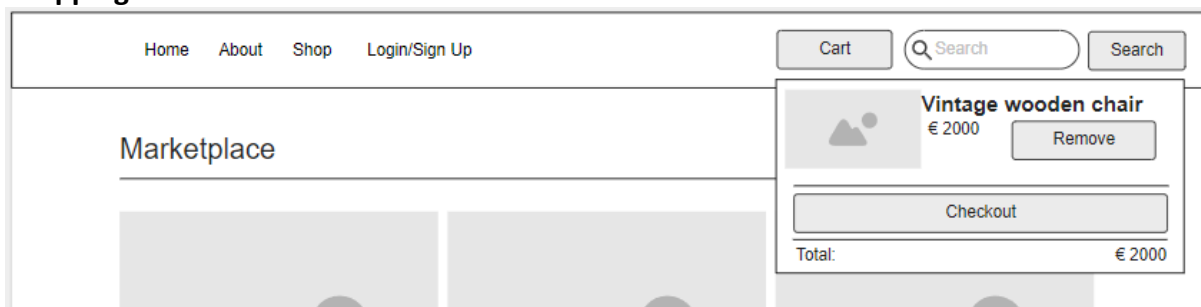
Shop

Contact

Shop



Shopping cart



Section 2: Development

Design Standards used:

Bootstrap

I decided to use bootstrap as a framework for this project. I used the code ideas for the navbar, grid-system and contact form.

HTML5 & CSS

I validated my HTML by using <https://validator.w3.org/nu/> and <https://jigsaw.w3.org/css-validator/validator> for the CSS

Validation & Errors

About.html

- Error** Bad value 80px for attribute width on element img: Expected a digit but saw p. Instead.
From line 61, column 21; to line 61, column 82
``
- Error** Bad value auto for attribute height on element img: Expected a digit but saw a. Instead.
From line 61, column 21; to line 61, column 82
``
- Warning** Section lacks heading. Consider using h2-h6 elements to add identifying headings to all sections.
From line 135, column 15; to line 135, column 65
`<section class="sec" id="faq" style="padding:45px">`
- Error** Stray end tag i.
From line 212, column 192; to line 212, column 195
`host"></i></i><a`

Error 1: I got rid of "80px" and replace it with just 80

Error 2: I remove the height attribute from the img tag

Error 3: I moved the h2 FAQ heading into the section tag

Error 4: I deleted the extra closing i tag

Document checking completed. No errors or warnings to show.

Used the HTML parser:
Total execution time 24 milliseconds.

Checkout.html

- Error** Stray end tag i.
From line 109, column 192; to line 109, column 195
`host"></i></i><a`

I removed the extra i tag

Document checking completed. No errors or warnings to show.

Used the HTML parser:
Total execution time 24 milliseconds.

Contact.html

1.	Error Bad value 80px for attribute width on element img: Expected a digit but saw p. Instead. From line 63, column 23, to line 63, column 84 <code></code>
2.	Error Bad value auto for attribute height on element img: Expected a digit but saw a. Instead. From line 63, column 23, to line 63, column 84 <code></code>
3.	Error Duplicate ID validationName. From line 119, column 13, to line 119, column 114 <code><input type="text" class="form-control" id="validationName" placeholder="Last name" value="" required></code>
4.	Warning The first occurrence of ID validationName was here. From line 110, column 13, to line 110, column 115 <code><input type="text" class="form-control" id="validationName" placeholder="First name" value="" required></code>
5.	Error Stray end tag i. From line 156, column 192, to line 156, column 195 <code>host"></i></i><a</code>
6.	Error The value of the for attribute of the label element must be the ID of a non-hidden form control. From line 109, column 13, to line 109, column 44 <code><label for="validationCustom01">First</code>
7.	Error The value of the for attribute of the label element must be the ID of a non-hidden form control. From line 118, column 13, to line 118, column 44 <code><label for="validationCustom02">Last n</code>
8.	Error The value of the for attribute of the label element must be the ID of a non-hidden form control. From line 130, column 13, to line 130, column 44 <code><label for="validationCustom01">Subjec</code>

Error 1: I got rid of “80px” and replace it with just 80

Error 2: I remove the height attribute from the img tag

Error 3: I changed this to validateFirstName

Error 5: removed extra closing I tag

Error 6 7 & 8: removed for = on all occurrences

Document checking completed. No errors or warnings to show.

Used the HTML parser.

Total execution time 24 milliseconds.

Donate.html

1.	Error Bad value 80px for attribute width on element img: Expected a digit but saw p. Instead. From line 63, column 23, to line 63, column 84 <code></code>
2.	Error Bad value auto for attribute height on element img: Expected a digit but saw a. Instead. From line 63, column 23, to line 63, column 84 <code></code>
3.	Error Bad value triangle-topright donate for attribute id on element div: An ID must not contain whitespace. From line 107, column 5, to line 107, column 55 <code><div class="wrapper" id="triangle-topright donate"></code>
4.	Error Bad value for attribute action on element form: Must be non-empty. From line 121, column 7, to line 121, column 22 <code><form action=""></code>
5.	Error Stray end tag i. From line 235, column 192, to line 235, column 195 <code>host"></i></i><a</code>

Error 1: I got rid of “80px” and replace it with just 80

Error 2: I remove the height attribute from the img tag

Error 3: removed id as I did not need anymore

Error 4: Removed action attribute as it was not needed

Error 5: removed additional closing I tag

Document checking completed. No errors or warnings to show.

Used the HTML parser.

Total execution time 15 milliseconds.

Index.html

- Error** Bad value 80px for attribute width on element img: Expected a digit but saw p instead.
From line 62, column 23, to line 62, column 84

```

```
- Error** Bad value auto for attribute height on element img: Expected a digit but saw a instead.
From line 62, column 23, to line 62, column 84

```

```
- Warning** Section lacks heading. Consider using h2-h6 elements to add identifying headings to all sections.
From line 114, column 5, to line 114, column 44

```
<section id="grid" class="secondary-bg">
```
- Error** Stray end tag
From line 137, column 192, to line 137, column 195

```
</i></i></a><a>
```
- Error** The aria-labelledby attribute must point to an element in the same document.
From line 44, column 15, to line 44, column 82

```
<ul class="dropdown-menu" aria-labelledby="navBarScrollingDropdown">
```

Error 1: I got rid of "80px" and replace it with just 80

Error 2: I remove the height attribute from the img tag

Error 3: I added the heading into the section tag

Error 4: removed additional closing I tag

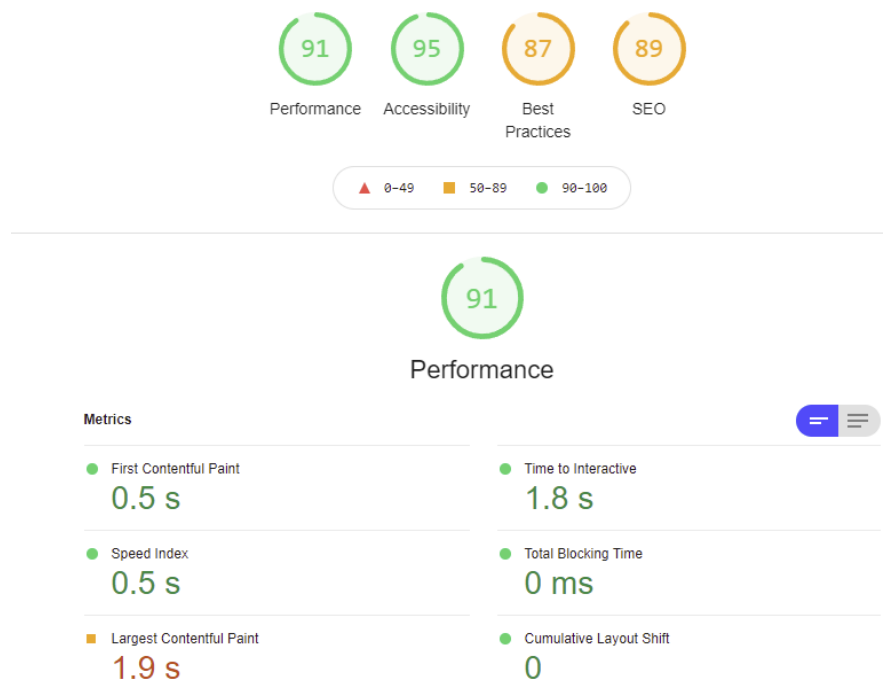
Error 5: removed aria-labelledby attribute

Document checking completed. No errors or warnings to show.

Used the HTML parser.
Total execution time 24 milliseconds.

All other html and css files were generated with no errors.

Google Lighthouse report



Section 3: Deployment

I used surge as the deployment method according to your instructions in one of our previous lectures.

The final website is hosted on: <https://refurno.surge.sh/index.html>

Section 4: Project Team

As I took this project on by myself I did 100% of the work.

Section 5: Conclusion

I would have wished my team stayed together but due to health reasons this was not possible. I didn't get to finish what I set out to do. I would have liked to add more to the aesthetic of the website, but I kept it quite minimal to save time.

Most of my time went into the development of the shopping cart. I am extremely happy about how the shopping cart turned out as I feel it works as intended.

I would have liked to develop single pages for products but again, to save time I kept it that you could only add the items to the cart for demonstration purposes.

Overall, I am still happy with what I achieved solely as it was a lot to take on as a solo project.

Section 6: References / Appendix

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