WEB DESIGN

PROJECT REPORT

PROJECT TEAM	
Student No.	**Student Names**
X21131635	**Robbie Malone**

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 wnat 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 todays 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 it's 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 see's 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.

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 HTM5, 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:

    o Home page

    o About

    o Contact us

    o List item for donation/sale

    o Market place

    o Checkout

    o 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:

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

The following shows the shopping cart for large devices:
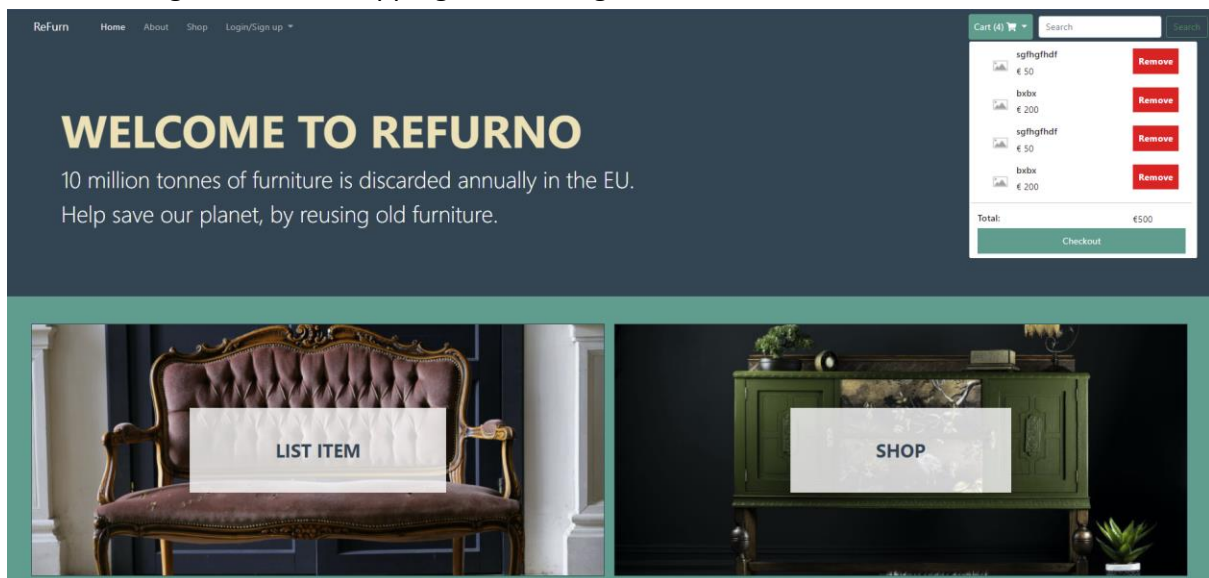
The below shows the shopping cart for mobile devices. Note the slide down hamburger icon.
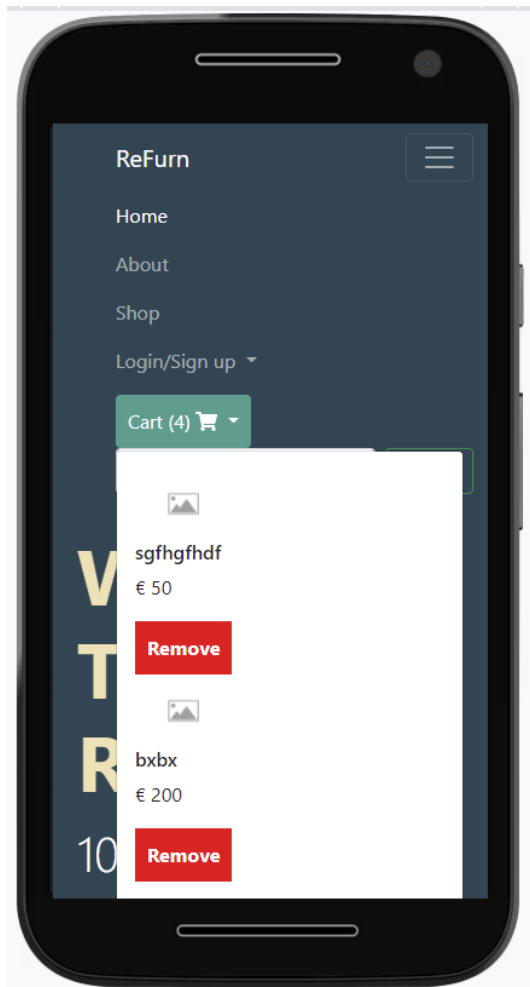
Sitemap & Wireframe
Based on our design approach, we decided that the site should look like the following:
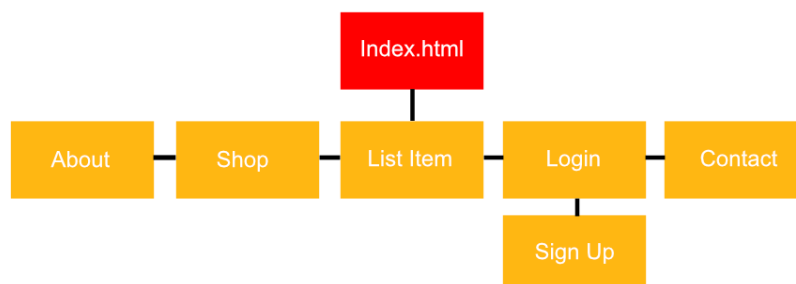
Homepage

Home   About   Shop   Login/Sign Up   Cart   🔍 Search   Search

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   Search

Are you selling your item?

◯

Title

Title

Item Specifics

Colour

Select Material

Select furniture type

Small ◯   Medium ◯   Large ◉

Description

Type here

Submit

◯ ◯ ◯ ◯
Home About Shop Contact

List Item (Sale)

Cart   🔍 Search   Search

Are you selling your item?

Title

Title

Item Specifics

Colour

Select Material

Select furniture type

Small ⬜   Medium ⬜   Large 🟢

Description

Type here

Price

Price

Submit

◯ ◯ ◯ ◯
Home About Shop Contact

Shop

Home   About   Shop   Login/Sign Up   Cart   🔍 Search   Search

Marketplace

Add to cart   Add to cart   Add to cart

Add to cart   Add to cart   Add to cart

○ ○ ○ ○
Home About Shop Contact

Shopping cart

Home   About   Shop   Login/Sign Up   Cart   🔍 Search   Search

Marketplace

Vintage wooden chair
€ 2000   Remove

Checkout

Total: € 2000
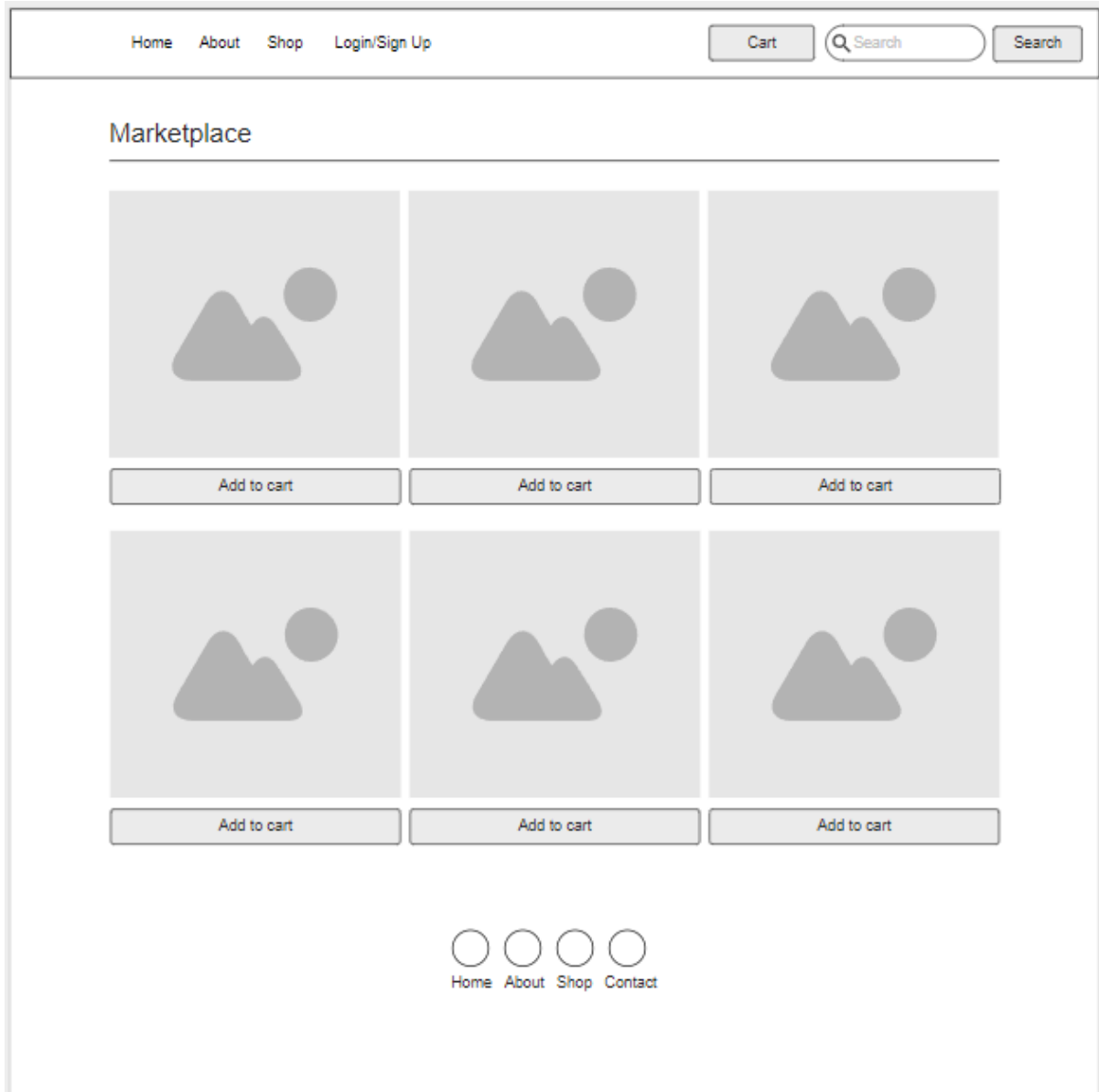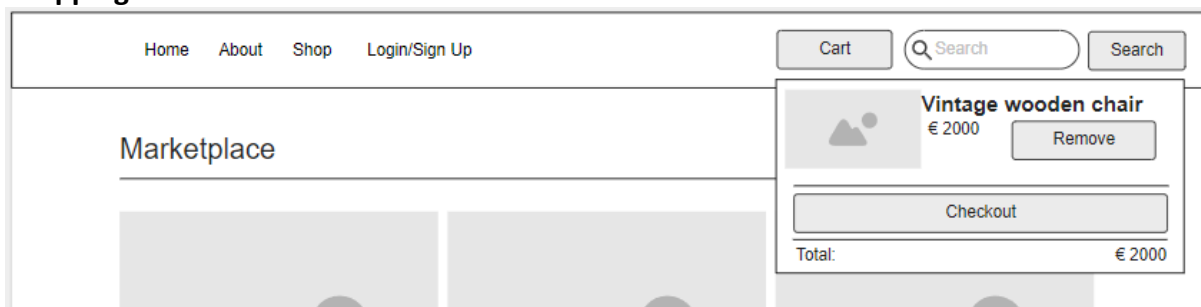
Section 2: Development

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 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

Checkout.html

I removed the extra i tag

Contact.html

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

Donate.html

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

Index.html

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
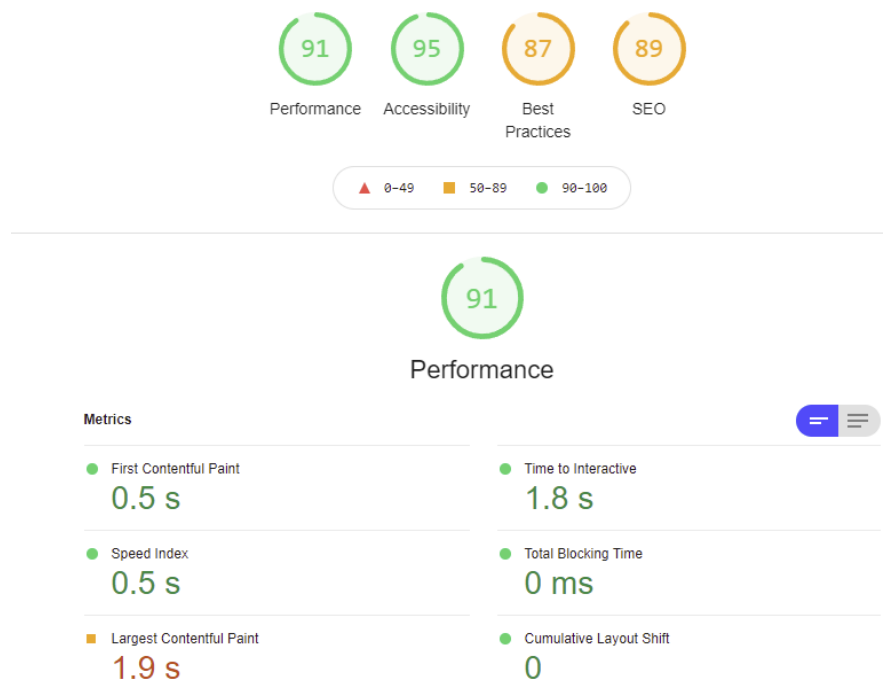Error 4: removed additional closing I tag
Error 5: removed aria-labelledy attribute

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

w3schools.com. 2021. W3schools Online Web Tutorials. [online] Available at:
< https://www.w3schools.com/howto/tryit.asp?filename=tryhow_css_switch/> [Accessed December 2021]

Validator.w3.org. 2021. Ready To Check - Nu Html Checker. [online] Available at:
<https://validator.w3.org/nu/> [Accessed December 2021].

jigsaw.w3.org. 2021.The W3c CSS Validation Service. [online] Available at:
<https://jigsaw.w3.org/css-validator/validator> [Accessed December 2021].

W3schools.com. 2021. How to create a toggle switch. [online] Available at: <
https://www.w3schools.com/howto/howto_css_switch.asp> [Accessed December 2021].

W3schools.com. 2021. How to create checkout form. [online] Available at: <
https://www.w3schools.com/howto/howto_css_checkout_form.asp> [Accessed December 2021].

Boostrap.com. 2021. Component forms. [online] Available at: <
https://getbootstrap.com/docs/4.0/components/forms/> [Access December 2021]

Boostrap.com. 2021. Component navs. [online] Available at: <
https://getbootstrap.com/docs/4.0/components/navs/> [Access December 2021]

Ebay.com. 2021. Sell item. [online] at: https://ebay.ie [Accessed December 2021]