Kaitlyn Welch - u3195855

Assignment 3 - Rational

Introduction

In this assignment we were to create a fully functional and responsive website using text and image files provided. I used the Tocomwal files for the purpous of this assignment and completed an accessibility audit further down in this document.

Inspiration

I started off this project by looking at other website inspiration on behance. I searched for responsive sites and looked at how the site layout was changed based on the screen size. I also looked into history and museum websites for color and layout inspiration as this website will be pretty text heavy.
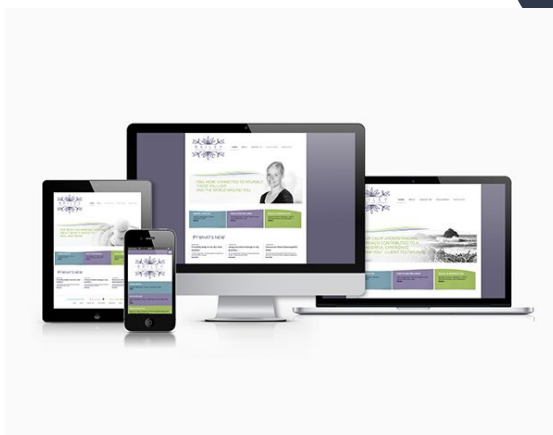
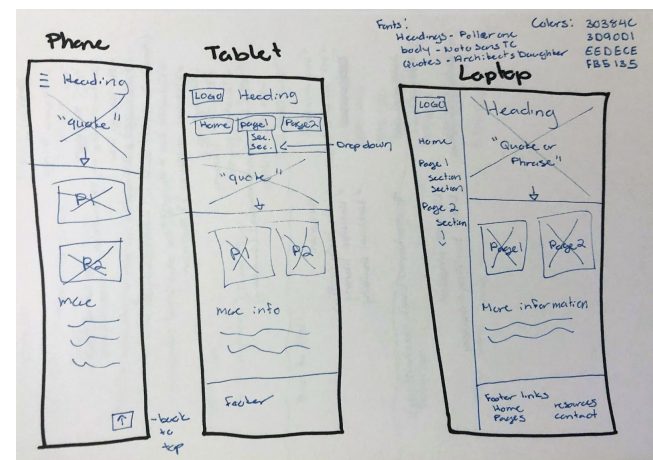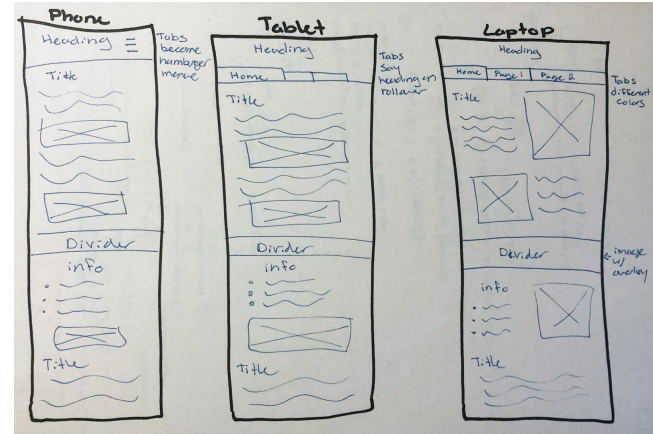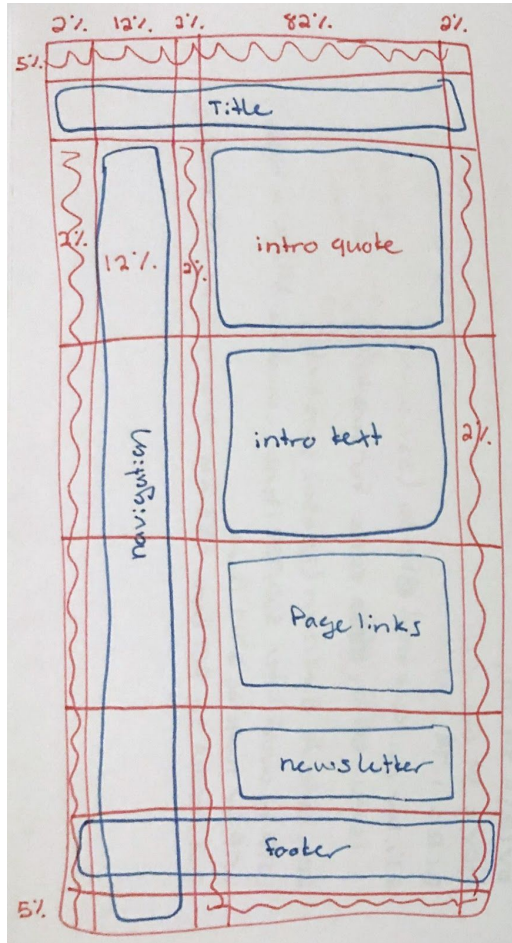**Approach & Design Decisions - Sketches**

After doing some research I sketched out a couple layout ideas

Approach & Design Decisions - Mock-ups

After deciding on which ideas from each sketch I liked the most I created a mock-up using Adobe Xd. I created one mock up for a desktop or laptop size screen and another mock up for a phone screen.

Approach & Design Decisions - Coding

When I started to code for this website I used some of the code from my first and second projects for the initial design. Because these websites were made to be static I then went through the CSS and changed all the set pixel measurements to percentages to make the website responsive to the screen size. I then went through and changed the styles to fit the mock-up I created for a computer screen. After this layout was complete, I started to look at how the site changes as the screen size shrinks. I found the spots where the design began to look a little weird or hard to read and set up media queries to solve the problems that were occuring. The main things that I changed were the placement and style of the navigation, columns in the text, and the size of the photo at the top of the home page.

The navigation bar starts off as a side panel on a computer screen size. I did this because I liked the aesthetic look of a menu on the side rather than along the top which seems to be the most common. There also is simply a lot of room to do this on a computer screen size because with a text heavy website you don't want extremely long lines of text because it becomes hard to read. The computer screen size also has two columns of text. I played around with the idea of having the navigation at the top and having three columns of text instead but found it to be unappealing. On a computer screen size the photograph in the background on the first page also must be a wide but short rectangle shape in order to fill the background of the quote and "learn more" paragraphs.

Once we get down to a tablet size screen the navigation moves up to the top of the screen. This allows more room for the actual content of the website and is necessary due to the reduced width. The two columns of text continues until about 730px width. Most tablets are a bit wider than this however some smaller tablets may have one column of text. The background photo becomes more narrow and long the smaller the screen size gets and must be changed for a tablet sized screen.

Finally for phone screens the navigation would ideally become a hamburger menu in the top right however I was unable to find a way to create a hamburger menu without the use of javascript and I don't know how to write javascript so for the purposes of this assignment it remains at the top of the screen. All text is reduced to single column and any images that were originally situated next to each other are now stacked on top of one another. The background photo becomes even longer and narrower to accommodate the quote at the top of the home page. The "learn more" link that brings you down to the next section of the home screen also goes away because it becomes irrelevant since you have to scroll down to see the full quote anyway. The newsletter sign up in the footer also disappears and the back to top button moves into the middle of the footer.

Challenges & Solutions

        I struggled a lot with keeping up with all the different classes and id's I was using in the HTML to manage specific elements in CSS as I used quite a few. To combat this issue, early on in my redesign of the website i renamed a lot of the tags to names that made more sense to me and related more to which page they were on. I also created a cheat sheet with all the classes and id's I had used and a description of what they relate to.

        I also ran into an issue of my h1 and nav being different sizes on my home page and archive page. It turns out that I had not included an important meta tag in the head of my home page or the photo gallery page. After adding the tag to these two pages it changed the sizes of everything slightly and I had to go back and change all the sizing again which was quite frustrating but an important lesson learned.

Accessibility Audit

        Accessibility is essentially allowing people who may have disabilities to use a website and obtain the same information as someone without those disabilities. It is the law in Australia that all websites be accessible under the Web Content Accessibility Guidelines (WCAG) below:

Pass/Fail	Guideline	Webpage Analysis
Pass	Non-text Content - Provide text alternatives for non-text content	All images have alt text
Pass	Info and Relationships - Logical structure	Content is presenting in a logical order
Pass	Meaningful Sequence - Present content in a meaningful order	Content is presenting in a logical order
Pass	Use of Colour - Don't use presentation that relies solely on colour	None of the webpage relies solely on colour
Pass	Audio Control - Don't play audio automatically	There is no audio on the page
Pass (mostly)	Keyboard - Accessible by keyboard only	Mostly Accessible by keyboard, checkbox in the newsletter sign up form in the footer does not work

Pass	No Keyboard Trap - Don't trap keyboard users	No keyboard traps
Pass	Three Flashes or Below - No content flashes more than three times per second	There is no flashing content on the page
Pass	Page Titled - Use helpful and clear page titles	Page Titles are helpful and clear
Pass	Focus Order - Logical order	Page flows in a logical order
Pass	Link Purpose (In Context) - Every link's purpose is clear from its context	All link are clear
Pass	Language of Page - Page has a language assigned	Page includes <html lang="en">
Pass	Parsing - No major code errors	Page uses semantic code and HTML pass is valid

While this website passes all the required accessibility criteria, there are some others that could be taken into consideration like screen reader specific coding or color blindness testing.

References & Helpful Links

Common Screen sizes: https://mediag.com/blog/popular-screen-resolutions-designing-for-all/
Help with all CSS questions: https://css-tricks.com & https://www.w3schools.com/cssref/
Inspiration: https://www.behance.net
Information on accessibility: https://uc-design.github.io/11056-front-end/module-3/3.1.html