

Culminating Excellence: Realizing Vision in a Capstone Project

For this Capstone project my key goal was to recreate a website design from scratch. This project took place during the UVU Fall 2023 semester. It involved viewing only the images of a website, and then using my knowledge to then develop that website and all of its functionality. The project utilized mostly an accumulation of HTML, CSS/Sass, and a little bit of JavaScript. The main focus on this assignment was putting into action knowledge previously taught without the use of any other guidance aside from my past notes I personally took and memory. Time constraints for this project were the end of UVU's Fall2023 semester.

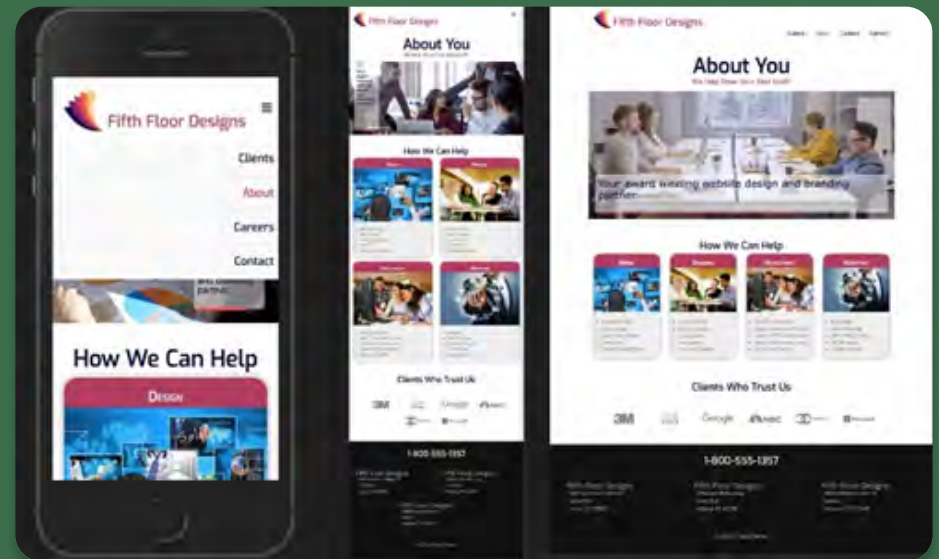
The projects main requirements are listed here:

Page Requirements

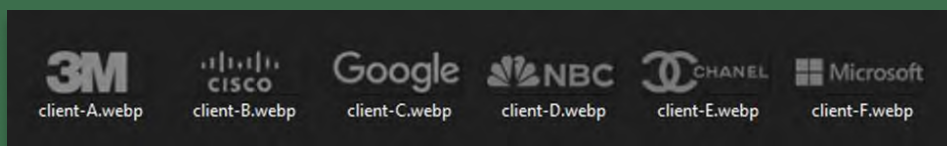
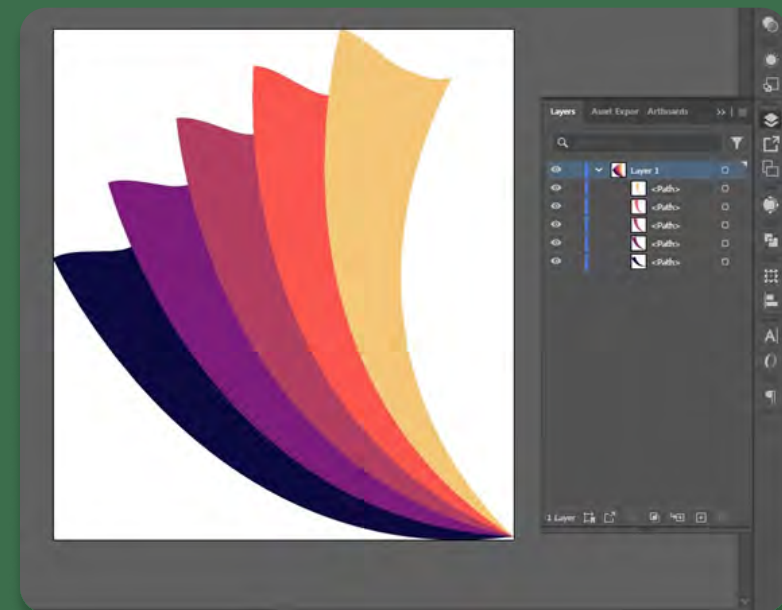
Your page needs to meet these requirements

- Page is responsive from 320px wide to 1600px wide with no horizontal scroll bar.
- Add a google font in the head tag appropriate to the target audience.
- Includes normalize, variables, small, medium, and large SCSS partial files.
- Media Queries are included in the styles.scss file.
- Implements a CSS Preprocessor.
- Demonstrate Contrast, Proximity, Alignment, Hierachy, Wayfinding, and Visual Tangent.
- Passes the [HTML5 validation test](#).
- Passes the [CSS3 validation test](#).
- Passes the [WAVE web accessibility](#) with no contrast errors.
- Initial page size is below 500k.

The breakdown is this – I was shown some images and only images of what the web page should look like when completed. I was shown images of each a small screen, medium tablet-sized screen, and a large desktop image. This was provided as a visual aid to help gain of what the site should look like exactly. I was required to create an exact replica of the site shown in the images.

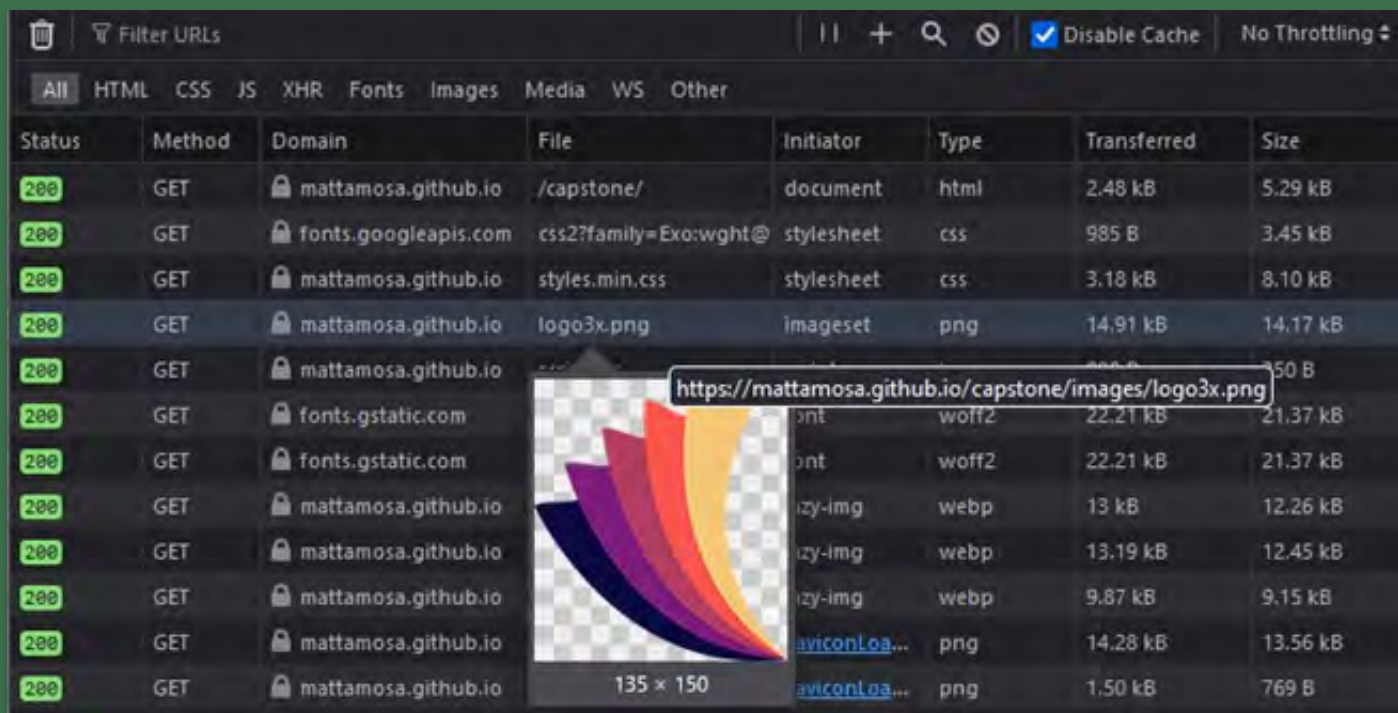


Fortunately, I was actually provided with the web pages assets that would be required to create the page. Assets such as an mp4 video for the hero video, some images of different sections as well as some images of different client's logos as well as the company logo for the site I was working on developing, the name of which is called "Fifth Floor Designs."



After analyzing the images in depth, I then formulated a plan moving forward to execute. I started by analyzing what exact features I would be required to code in the actual web page. I took note of features such as the hero video that would auto play on page load, the numerous cards that would be displayed throughout the page and how they should be laid out in respect to the browser's resolution. I specially made sure to take note of navigation layout for the various screen media queries.

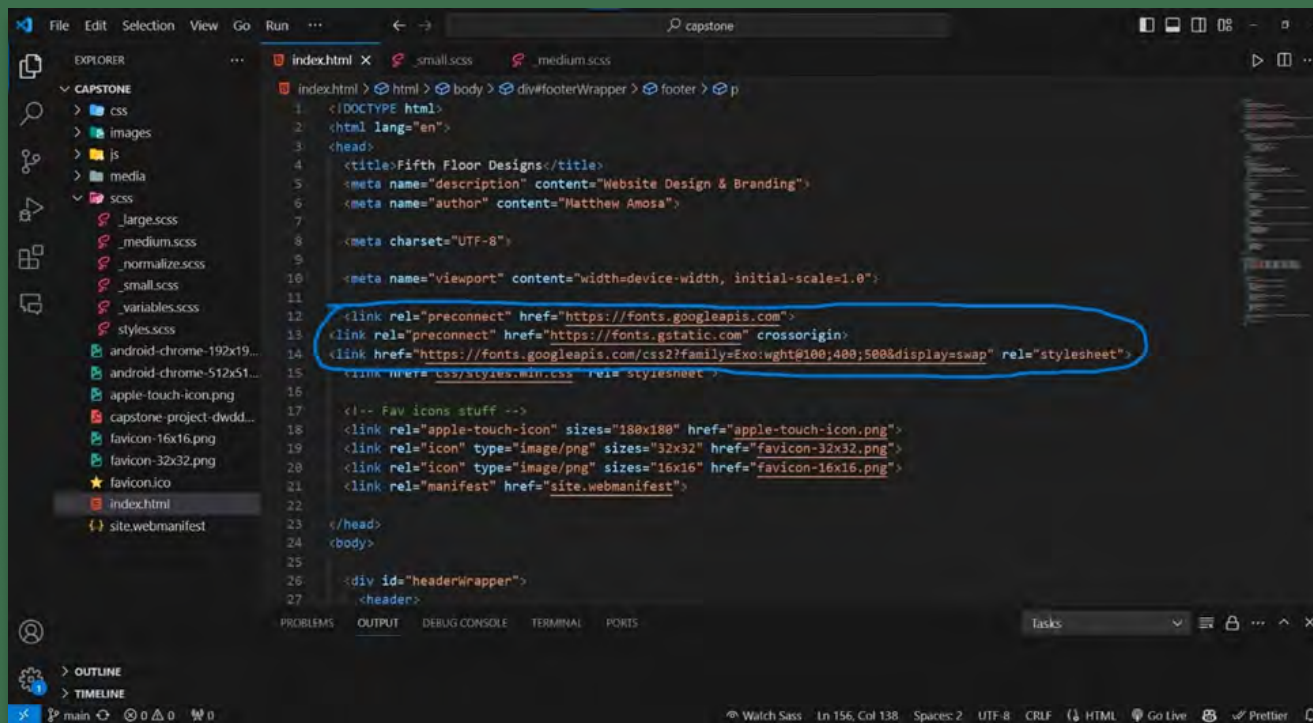
After taking a bit more time to understand the required features and general layout of the page I then began recalling past project that I had worked on the utilized of the very same, or similar features as well. I would recall different projects where I knew I could unitize a similar responsive navigation layout as what I would be required to use. A hero video with text overlaying the video from a past project, a detailed footer from a past project, and even company logos that would automatically adjust depending on the device's dpi/screen quality.



Status	Method	Domain	File	Initiator	Type	Transferred	Size
200	GET	mattamosa.github.io	/capstone/	document	html	2.48 kB	5.29 kB
200	GET	fonts.googleapis.com	css2?family=Exo:wght@	stylesheet	css	985 B	3.45 kB
200	GET	mattamosa.github.io	styles.min.css	stylesheet	css	3.18 kB	8.10 kB
200	GET	mattamosa.github.io	logo3x.png	imageset	png	14.91 kB	14.17 kB
200	GET	mattamosa.github.io				350 B	
200	GET	fonts.gstatic.com			woff2	22.21 kB	21.37 kB
200	GET	fonts.gstatic.com			woff2	22.21 kB	21.37 kB
200	GET	mattamosa.github.io		lazy-img	webp	13 kB	12.26 kB
200	GET	mattamosa.github.io		lazy-img	webp	13.19 kB	12.45 kB
200	GET	mattamosa.github.io		lazy-img	webp	9.87 kB	9.15 kB
200	GET	mattamosa.github.io		faviconLoa...	png	14.28 kB	13.56 kB
200	GET	mattamosa.github.io		faviconLoa...	png	1.50 kB	769 B

After doing some more planning, taking mental notes of requirements, and recalling recent work that would help assist me in creating the site then set of on coding up the actual web page. I would start by viewing the “small” image of the site I was tasked with replicating and developing take on “mobile first” approach in creating the site.

After implementing the basic page layout with HTML I then began working out different sections using CSS, more specifically, Sass (Syntactically Awesome Stylesheets). Sass is essentially just a language that is interpreted or compiled into Cascading Style Sheets. This is what would end up taking the most time – styling the website to be an exact match of the images that were provided to me. I worked tirelessly chipping away at the navigation menu, the hero video with text overlay, all while ensuring that every element within the page was an exact match. Speaking of an exact match, one thing I was not provided with was an exact font face and so I had to use my best judgement in adding in a font that I though looked most similar to that of the images using Google fonts.



```
File Edit Selection View Go Run ... capstone
EXPLORER
CAPSTONE
css
images
js
media
scss
  _large.scss
  _medium.scss
  _normalize.scss
  _small.scss
  _variables.scss
  styles.scss
android-chrome-192x19...
android-chrome-512x51...
apple-touch-icon.png
capstone-project-dwkd...
favicon-16x16.png
favicon-32x32.png
favicon.ico
index.html
site.webmanifest

index.html X _small.scss _medium.scss
index.html > html > body > div#footerWrapper > footer > p
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <title>Fifth Floor Designs</title>
5 <meta name="description" content="Website Design & Branding">
6 <meta name="author" content="Matthew Amosa">
7
8 <meta charset="UTF-8">
9
10 <meta name="viewport" content="width=device-width, initial-scale=1.0">
11
12 <link rel="preconnect" href="https://fonts.googleapis.com">
13 <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
14 <link href="https://fonts.googleapis.com/css2?family=Exo:wght@100;400;500&display=swap" rel="stylesheet">
15 <link href="css/xyaws.min.css" rel="stylesheet">
16
17 <!-- Fav icons stuff -->
18 <link rel="apple-touch-icon" sizes="180x180" href="apple-touch-icon.png">
19 <link rel="icon" type="image/png" sizes="32x32" href="favicon-32x32.png">
20 <link rel="icon" type="image/png" sizes="16x16" href="favicon-16x16.png">
21 <link rel="manifest" href="site.webmanifest">
22
23 </head>
24 <body>
25
26 <div id="headerWrapper">
27 <header>
```


After spending a lot of time creating the mobile layout and styling it, I then slowly progressed into developing the medium and large screens. Making the web page responsive was the tricky bit. I felt like the trickiest bit styling the page was ensuring that the hero video text overlay would not reposition off of the video when adjusting the screen size. Along with the hero video, one of the other tougher aspects I encountered was just ensuring the spacing of the cards and the text within them were responsive according to the images of different screen sizes that were provided to me.

In conclusion, I think that overall, the project was an amazing learning experience and it taught me how learning new technologies is important, but using the acquired knowledge is equally, or even more so important, especially when you are challenging yourself and trying to pry your mind in order to recall information that you know you have covered before. Practicing is essential to sharpening your skills and becoming better every day. You can be given all of the image and assets you could ever ask for, but knowing how to utilize them in an effective manner is crucial to success in the long run.



Completed Capstone Project
– <https://mattamosa.github.io/capstone/>