



TYPELAB.CO.UK PROJECT REPORT

MA Web Design & Content Planning

Web Thesis Research Report

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01

CONCEPT

Twitter Description

An introductory guide to typography on the web. Visual and technical elements explained with simple examples and illustrations (126 characters)

Project Origins

Inspiration for the Site

The inspiration for this project came about for two reasons. First, I've had a great love of typography since my undergrad when I started studying Graphic Design. I loved all the things I could do with type and the way fonts could change the feel of a page just with their style or the shapes of the letters. Both on screen and off, I loved experimenting with type; it became one of the best parts of being a design student and then professional designer because of its endless applications.

Secondly, this project's inspiration came when I started the Web Design Master's program and the definition of typography changed for me almost overnight. Working with type on the web changed the rules as I knew them. Suddenly, I was working with fluid, responsive layouts and new concepts like font formats and font stacks. The technical challenges that came with web type were a game changer in and of themselves. I had to learn how type behaved, how it moved and also how to deal with its limitations.

As I was learning and thinking of major project ideas at the same time, I realized I had the perfect opportunity not only to improve my own skills but to pass on what I had learned to others.

Elevator Pitch

There are so many things we can do with design on the web and immense possibilities when it comes to using typography on the web. Today's designers and developers have access to more tools than ever to work with type and use it to enhance their site's branding. Browser support

for embedded fonts is higher than ever and there are a growing number of web font services to help anyone download or embed custom fonts.

Even with all these tools and services available, it's not guaranteed those working with type on the web know how to use it effectively. Many working on web pages or site designs won't come from a design or front-end background and may struggle with visual or technical principles. Since a website is judged quickly by visiting users, every typographic choice—good or bad—can change a users' perception of the site. If sizing or contrast issues exist or if an incorrectly embedded font fails to load, the typography will cast a negative image of the site and call into question the site's credibility. Although there is a wealth of information available to those wanting to improve their web typography, a number of problems exist with many of resources available.

I want to solve these resource problems by providing a simple, comprehensive guide to anyone learning to use web typography. This site will be a useful guide to expand users' knowledge of type and its applications both visually and technically.

The Problem

There are a vast number of resources available to those wanting to learn about typography on the web. However, many of these resources are lacking in breadth, in completeness, or even in introductory content or visual appeal. This lack of resources could unfortunately hinder or deter those new to the landscape of web typography. Although there are scores of books, sites and articles for users to learn about type and web typography, almost no resources are at the same time comprehensive, introductory, visually engaging and, most importantly, located on the web.

While exploring resources online, I came across a multitude of reference sites dedicated to typography for either print or web, but few that covered both. The instructive sites I did find were lacking in quantity (a comprehensive look at the topic) or in material tailored to beginners. One source in particular seemed like the perfect place for learning about web typography. Webtypography.com is a web-based take on *The Elements of Typographic Style*, a book by Robert Bringhurst. Though it has great content, it only covers visual principles of web typography and leaves out topics on technical usage. It also lacks visuals to explain topics and lacks visual interest or organization. Reference texts on typography pose some of the same

problems. Many printed books focus either on the visual or technical side of web typography only and miss out on essential elements of the subject.

Two reference texts in particular, *Responsive Typography*, by Jason Pamental and *On Web Typography*, by Jason Santa Maria, are fantastic sources for learning about web typography. Both texts discuss the importance of typography and the impact it can make for any website. However, despite their incredible value as resources, both have clear downsides. *Responsive Typography* is complex and becomes exhaustive to read due to lengthy text and few visual examples. An introductory tone to the content would benefit a more novice designer. In contrast, *On Web Typography* is tailored to those with little knowledge of typography. This text is less dense but covers the visual side of web typography without much reference to the equally important technical side. Probably the most obvious downside to reference books on web typography is that they are limited to the pages of a book. Shouldn't a comprehensive resource for web typography exist on the web itself?

The Solution

Since there are problems with many current web typography resources, my site aims to provide solutions to users interested in learning the basics. While this topic has been covered many times in many formats, my site will fill a niche. It will focus on helping users—from students and non-designers to visual designers and developers—wanting a resource for web typography on the web.

This site will be comprehensive in its discussion of the essential parts of web typography—both the visual principles and technical usage. It will act as a reference tool on the quickly changing subject of web typography by providing learners with visual examples to explain concepts. The site will have friendly, approachable and visually engaging content, a well-designed user interface and an intuitive user experience.

Manifesto

The overall goal of this project is to create a useful online tool for users to learn both the technical and visual basics of web typography. The site should guide the user in building a solid foundational knowledge in both areas. The completed site will have a high level of usability and accessibility and should appeal to a range of users working with websites and

web typography. The site should have clear navigation, well-organized content and user paths, should appeal to introductory learners and should provide a great overall user experience.

If I can accomplish these things in the final website product and provide a useful resource to even a small number of users, I will consider this project a success.

02

RESEARCH PHASE

Business Environment

Web Font Interest and Expansion

Though it's difficult to find firm data regarding public interest and use of web typography, I examined trends of some of the popular web font services and browser support for font embedding to understand the current business environment surrounding web fonts. I also examined cognate competitor sites and related texts as well as non-cognate sites to assess the current writings, trends and interests in web typography.

Web typography's increase in popularity and importance is evidenced by the growing number of web font services, by the increasing availability of web fonts and by the growing browser support behind custom embedded fonts. When CSS was first introduced along with the font-family attribute (1996), it became possible to create webpages with built in 'web-safe' fonts. Since then, designers have sought higher levels of typographic customization with tools like sIFR (Scalable Inman Flash Replacement) and Cufón, which both allowed the use of alternative fonts but had significant drawbacks.

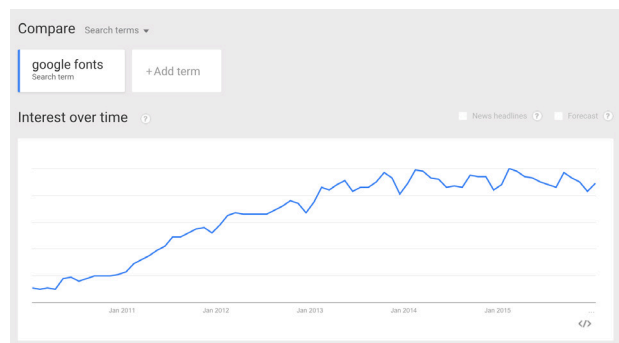
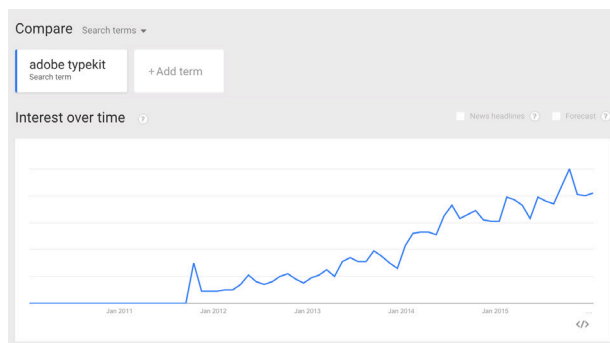
Then in 2007, @font-face emerged from a place of poor browser support and vendor licensing issues to the mainstream web. It was then the web reached a point where it finally had real typographic design options. With the inclusion of all four font-formats, (TTF, EOT, WOFF and

SVG) it is now possible for designers to easily embed and host web fonts for themselves.

Web Font Services

In addition to self-hosting fonts, numerous web font services have cropped to give users more font options and better font integration. Adobe Typekit, for instance, gives users the chance to subscribe to use high-quality typefaces and embed them with just a few lines of code. Similar subscription services like Google Fonts and Fonts.com also provide numerous options for using customized fonts on the web.

With solid hosting support and with tens of thousands of fonts available, font services have become a go-to option for many designers and developers. Google Trends shows a growing interest in web font sites and a clear rise of online searches for embedding services. Looking at the usage trends below, web font services clearly continue to have a high level of public interest as users seek more font customization on their sites. [1] Today, millions of sites subscribe or use font embed services like Google Fonts and Adobe Typekit. This high usage further confirms web type's popularity growth and the need for a reference site such as the one I have proposed.

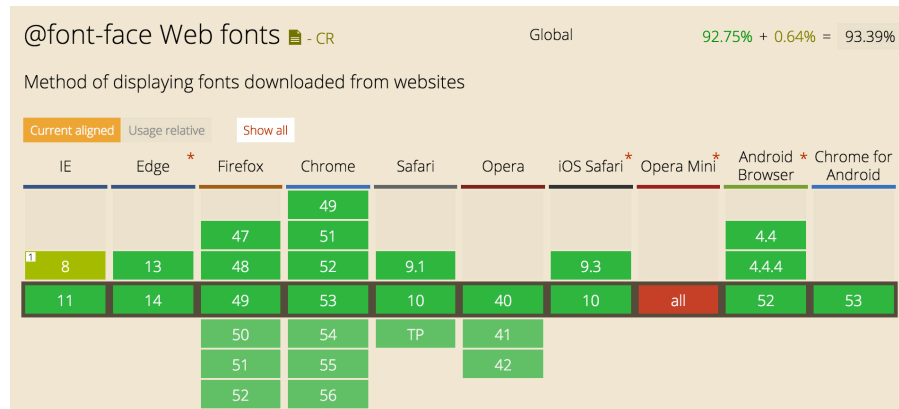


Growing Online Support

Currently, @font-face is viewable on over 93% of desktop devices. With tablets and mobile devices included, the number is closer to 98% according to font vendors such as Typekit and Fonts.com. These numbers show how high online support is for embedding web fonts and how this support might continue to improve in the future.

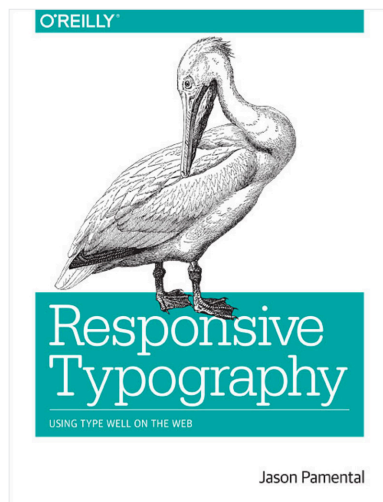
With increasing @font-face embed support and with an ever-increasing number of font services available, the future of web typography looks bright. Designers have more options

than ever for integrating typography and embedding custom fonts on their sites. [2]



Cognate Texts

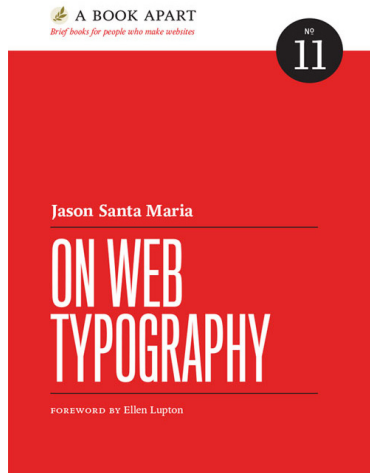
Though a different entity than cognate sites, looking at cognate texts helped me to initially to understand my website's overall business environment. Cognate texts, in the context of this project, are printed works related to the subjects of typography and web typography. In my early research, I identified a number of cognate texts and weighed the strengths and weaknesses of each in relation to my proposed website.



Responsive Typography by Jason Pamental

Jason Pamental's in-depth typography guide takes a look at typography and its critical importance in responsive web design. The text's strengths lie in its comprehensiveness on the subject of responsive typography. It covers both technical and visual sides of using type and is both an authoritative yet approachable source. Although a fantastic source for content,

Pamential's text does require a lot of previous knowledge of web design and typography. It is not as tailored for beginners as my own site will be. It is also exhaustive to read at times because the lengthy passages of text and the lack of visual examples. Its greatest weakness, however, is its format. It is a reference on web typography but in print rather than online.



***On Web Typography* by Jason Santa Maria**

Jason Santa Maria's book, *On Web Typography*, is a great guide to responsive web typography. With discussions on how to evaluate and pair typefaces, he teaches the essentials on how to effectively incorporate them into projects. Santa Maria's book is a thorough source on the importance of typography and its use on the web. Although it has information tailored to those without previous knowledge of the subject, it also has a number of weaknesses as a source for web typography. First, the book focuses primarily on the design side of web typography but misses a big element by excluding information on its technical usage. Similar to Pamential's book, *On Web Typography* also falls short as a web typography reference due to its print rather than online format.

Cognate Competitor Sites

I also analyzed at a number of cognate sites to assess the strengths and weaknesses of competitor websites related to my topic. I classified cognate competitor sites as those closely related to my topic. By examining each site's visits, page ranks, traffic sources, external links and social media usage, I was able to assess their popularity and success. I also looked at their business models, site commodity (content), firmness (technology) and delight (aesthetics and branding).

<http://nicewebtype.com/>

Monthly site visits 12.5K average

Google page rank 5/10

Traffic sources 21% direct, 58% search



Nicewebtype.com is a reference site dedicated to the betterment of typographic style and practice. The site's strengths lie in its focus on both visual and technical sides of web typography. It includes resources and tools for embedding fonts and is a good source for web typographers. Its weaknesses are a general lack of content, inconspicuous navigation and unorganized, messy page layouts.

Popularity and success: Nicewebtype's popularity and overall success can be measured by its high number of monthly site visits and by its mid-range Google page rank. 21.5% of web traffic comes to the site directly and 58% find the site by searching keywords. User engagement is strong with over 16.4K followers on Twitter and with over 600 linking websites. [3-6]

Business: This site utilizes a free business model, providing all content for free. The site does offer a site 'sponsorship', or donation model, in which related sites can donate and have their names linked on a secondary page. A donation link is provided on several pages.

Commodity: Content is text-heavy but sectioned into approachable blocks of content. The navigation, however, blends into the design and the structure of the site is perplexing.

Firmness: The site is responsive but difficult to navigate at mobile size. It uses JavaScript, jQuery and uses an AJAX API library.

Delight: The site of bland in terms of color, typography and layout. Though content is presented clearly, it lacks an overall visual appeal.

<http://www.thinkingwithtype.com/>

Monthly site visits 36K average

Google page rank 5/10

Traffic sources 42% direct, 44% search



[Thinkingwithtype.com](http://www.thinkingwithtype.com) is a reference guide site for designers, writers, editors and students. The site's strengths are a clearly defined navigation, well-written, authoritative content and lots of visuals to explain topics. It is lacking in content on the technical side of web type and therefore lacks a lot of important information on the subject. The site also has long blocks of long, unsegmented text,

making the text daunting to read and ill-suited for beginners.

Popularity and success: This popular site averages 36K monthly users and has over 980 backlinks. 42% of users reach the site by searching for it directly while another 44% find it through keyword searches. With this great amount of popularity, it misses some clear opportunities for user engagement due to its lack of social media. [3-6]

Business: The site uses a free business model, making all content is free for users. There is no apparent system for revenue as the site lacks a donation feature and is ad-free.

Commodity: The site functions as a thorough reference guide for anything and everything typographical. The content is in-depth but is overwhelming at times. The vast amount of content is saved by an excellent organization and navigation system.

Firmness: [Thinkingwithtype.com](http://www.thinkingwithtype.com) is not responsive and uses a fixed layout. Content is pushed off the page at too small a size. It uses JavaScript and jQuery along with a CMS and PHP framework. [7]

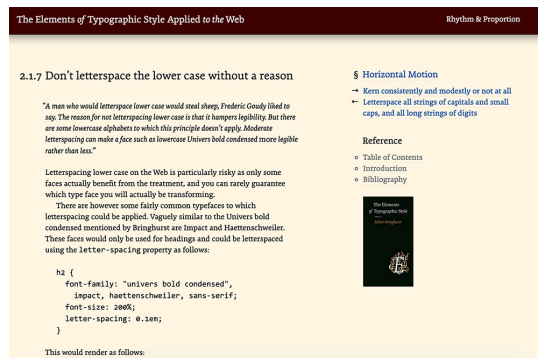
Delight: The site is beautifully designed and utilizes a simple, subdued color scheme, a simplistic layout and gorgeous typography.

<http://webtypography.net/>

Monthly site visits 18K average

Google page rank 5/10

Traffic sources 48% direct, 30% search



Richard Rutter's online guide to web typography based on *The Elements of Typographic Style*, by Robert Bringhurst. Its main strength is its authoritative tone and the breadth of information it provides on topics relating to web typography.

The site has a number of weaknesses, however. First, a crowded, lengthy navigation makes it difficult to locate and choose topics. Secondly,

the site lacks visuals to explain topics, making it difficult for beginners. The site also fails to discuss the technical side of web typography.

Popularity and success: Webtypography.net is a popular site with 18K average monthly visitors and over 2K backlinks. It has a mid-range Google page rank but might perform better with the utilization of social media. Over 48% of visitors come to the site directly and another 30% find the site through relevant searches. [3-6]

Business: The site utilizes a free business model, providing all content for free. The site does not have ads but instead uses a donation link and links to purchase the physical book.

Commodity: The site's content is knowledgeable but overwhelmingly text heavy, which wouldn't be great for beginners. The UX isn't approachable because the layout structure is lengthy and not well sectioned.

Firmness: The site is responsive but rather than columns jumping down at a breakpoint, they simply get narrower, making short lines difficult to read on mobile size. It integrates a PHP framework. [7]

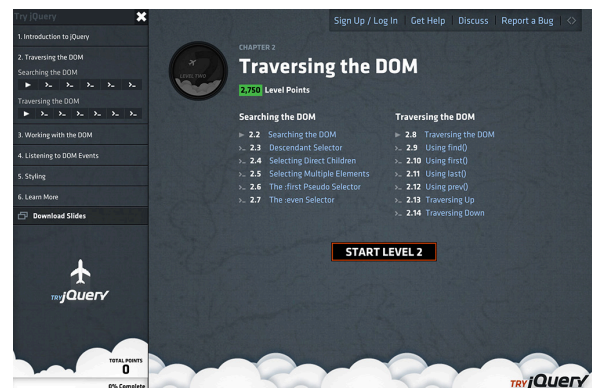
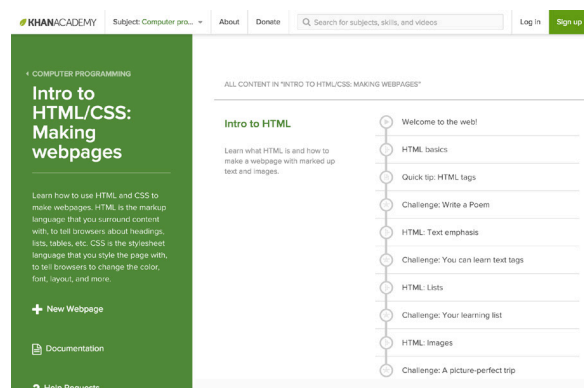
Delight: Visual design is reflective of the tone and the authority shown in the content. Colors are muted, images are scarce and though typography is well handled, the site is lacking in a lot of visual interest.

Non-Cognate Sites

After finding cognate texts and sites as references for my own project, I searched for non-cognate sites to see which aspects I might try to incorporate. For the purposes of my thesis project, I defined non-cognate sites as sites that functioned as teaching tools or resources for subjects other than web typography.

<https://www.khanacademy.org>

<http://try.jquery.com>



Both www.khanacademy.org and try.jquery.com are resources for online learning. They offer a wide selection of content from readings to interactive tutorials and videos. These sites cover a variety of topics and include multiple learning levels, from beginner to intermediate and so forth. Both sites have a number of elements I would like to utilize in my own project. For instance, both sources cover a breadth of topics and are comprehensive in their subjects (ex. from basic HTML and CSS to more complex areas of CSS and web developer tools). Both sites are accessible and provide intuitive user experiences. Additionally, content is presented clearly with lots of visual examples. The content tones are personable, yet informative and present information in a way beginners can easily digest.

KhanAcademy.org was the website most in line with what I wanted to create for my website. Though the scale and structure were much larger than what I planned, the website navigation and content organization were elements similar to what I wanted for my typography guide. The strongest aspects of this site, in my opinion, were the visual elements to help explain complex subjects. The code examples especially were visuals I hoped to mimic and apply to my site.

Market Niche Identification

Target Audience Identification

Despite a lack of resources available to pinpoint the exact audience of my project site, I can use data from Alexa.com on my competitor sites to make realistic guess at my users. Current suggested audience metrics indicate a wide range of users of both genders, of diverse ages and in diverse locations. [5] Like the users of my cognate competitor sites, I can estimate that my audience will be diverse with varied users accessing the site for different purposes.

Audience Reach

Ultimately, my project site is aimed at anyone seeking general knowledge of web typography and how to implement it effectively. Because the site covers topics on both visual and technical elements of web typography, I hope to appeal to a wide range of users and engage as many people working with web type as possible.

User Profiles

As stated above, my target market will be mixed. Diverse users will access the site for diverse purposes. I created user personas to show anticipated examples of users, their backgrounds and their goals in using the website:



Tim (41): Developer working on an ecommerce site

- Highly web savvy and uses the Internet every day
- Accesses web through his desktop at work and smart phone at home
- Has a strong development background
- Hopes to learn typography basics so he can better incorporate typography into his ecommerce site and improve the visual look



Joann (19): University student and avid beauty blogger

- Moderately web savvy. Uses the Internet almost every day
- Accesses the web through her laptop and her smart phone at university
- Background in English and writing. Started blog writing as a hobby
- Hopes to learn some typography basics and CSS tags to customize her Wordpress blog and improve the design of her site



Marc (28): Graphic/Web Designer at a startup company

- Highly web savvy and uses the Internet almost every day
- Accesses the web through his laptop at work and his tablet at home
- Has a strong design background and prior experience working with typography
- Hopes to apply his design knowledge to company's website by using custom web fonts. Hopes to learn embedding techniques in free time



Barbara (56): Photographer promoting her photography business

- Not very web savvy, uses the Internet weekly for email
- Accesses the web through her desktop at home
- Has a background in teaching but started a small photography business after her retirement. Recently started running her business full time.
- Hopes to create a polished website using a Squarespace template to increase her business's appeal to customers. Hopes to learn some visual basics to help her business stand out.

As I wrote my content and developed my site, I was constantly looking back to these user profiles and thinking how these example users would use the site and locate the topics they sought. I tried to build my site with these users in mind and account for their diverse backgrounds and varied needs and skill sets.

Project Value

Personal Value

The personal value of this project will be two-fold. First came the short-term value while I planned and executed the site; then the long-term value as I continue to review the site's analytics and improve the site in the future. In the short-term, the site generated a lot of personal value as I was able to increase my skill set and grow my experience as a web designer. This project helped me plan and work through the entire process of creating a website. I learned new technologies and had to overcome a lot of problems on my own to achieve the desired result. Hopefully, this will pay off in the long-term in employability as I have a solid piece to add to my portfolio.

I was also able, in the short-term, to learn a lot about the subject of web typography at the same time that I was trying to teach the subject and use it on my site. Researching my topic and using what I learned helped me become more confident in my content writing and made me a better authority on the subject.

Monetary Value

From the start of this project, my monetary aims were always secondary. Unless this site suddenly draws huge numbers of visitors with an increased demand, this site will take a non-profit business approach and will provide all the reference content for free. It might be possible to generate revenue in the form of user donations, but this method's success will be highly dependent on site traffic as well as on the quality and frequency of content updates. If the site proves popular after some time has passed, other options like relevant advertisements might be considered.

Unique Selling Point (USP)

- Site will be a comprehensive, web-based resource for typography on the web
- Content will strive for breadth and cover both visual and technical web typography topics
- Content will be tailored to beginners in both areas but will be authoritative and thorough
- Site will be well designed, with easy-to-use AI to facilitate learning subject matter
- Design will be friendly, engaging and have an overall fun look and feel
- Illustrated imagery will explain web typography concepts clearly

SWOT Analysis

Conducting a SWOT analysis prior to this project helped assess the current business environment's strengths and weaknesses along with my own. I found it was important to consider problems or threats that might occur as well as to identify strengths or opportunities that might arise.

Strengths

Internal strengths that might be advantageous:

- Some background knowledge of web typography in visual and technical areas
- Personal skills in web design and illustration
- Public interest in web typography continues to grow along with a growing availability of

tools and improved browser support

- Website targets a specific niche but will help users of diverse backgrounds enhance their typography skills
- Lots of potential for continued site growth and development

Weaknesses

Personal weaknesses to be improved upon:

- Learning new skills along with project development. Requiring lots of trial and practice with JavaScript, jQuery and PHP languages while building and testing the site
- Large amount of content imagery to create. Will require solid handling of image assets
- Lack of experience creating such an in-depth site. Requiring practice in content writing and visual asset creation
- Lots of existing articles and sources for subject matter. Requiring lots of time to find the best, most knowledgeable ones and research in order to write good content
- Development of technologies and new devices will continue to change how web typography works. Will require content updates as new developments occur and old ones become obsolete.
- Few monetary opportunities aside from user donations or inclusion or advertisements
- Compatibility and optimization issues still exist with font embedding

Opportunities

External opportunities to take advantage of:

- Lack of related web typography resources, therefore, not much direct competition
- Emerging opportunity to increase interest web typography among designers and developers
- Potential to help web designers with a useful, engaging resource
- Ability to promote site and generate interest on social media platforms
- Culture of sharing in the web design community and opportunities to network and discuss project with other designers and developers.

Threats

External conditions that could pose a threat to the project:

- Large amount of content to produce. Will be a difficult endeavor to undertake
- Difficulty generating awareness or initial interest in the site

- A lack of connection with the target audience may make it difficult for users to find the site
- Technical and programming challenges when creating the site as a novice web designer

03

DEVELOPMENT PHASE

1. Project Plan

The initial project plan began with the Virtuvian principles of Commodity, Firmness and Delight and with the non-Virtuvian principles of Business and Cultural Context. These principles helped me take an analytical approach to the major project. Each principle had different requirements which were applied both to my thesis website and to my analysis of cognate competitor sites.

Since the first principle, Business, occurred during the initial planning and research stages of the major project, it is covered separately in the Concept and Research sections of this report. The following pages will discuss the remaining principles, which evolved during the website's development stage.

Cultural Context

Cultural context was an important principle to examine early in my project's development because it helped situate my website within the larger trends of contemporary culture and society. Websites are not independent entities but rather a culmination of historical background with their own wider cultural context.

Background

From the emergence of written language in the cuneiform symbols of ancient Sumerians to the emergence of script writing in medieval Europe, typefaces and typography have played an enormous role in how civilizations communicate, commemorate and transmit information.

Early fonts were dependent on rudimentary tools and materials cultures had available and evolved rapidly along with improved writing tools and surfaces. Scribes in the middle ages, for instance, employed about 8–10 distinct styles of script, each of which had its own context and served its own purpose. [8]

With the advent of the letterpress printing method and movable metal type, print production became faster and easier than ever. Texts, and fonts along with them, exploded in number because of the ease in which they could be developed. Typography continued to take off as art movements and advertisements incorporated more decorative and individualized fonts. Today, hundreds upon thousands of fonts exist in every style imaginable. Everything from the earliest stone scratchings is owed to their creation and expansion into today's typographic landscape.

The Present

Eventually, fonts moved from print to the web and opened up new typographic possibilities. With the advent of CSS and the font-family attribute, designers longed to customize HTML markup to make their basic web pages more individualized. We owe early flawed customization attempts such as SIFR and Cufón to this desire.

Eventually, with the implementation of the @font-face method, designers were able to embed non-standard typefaces in HTML. After some initial browser compatibility issues, the @font-face method gained in popularity and is viewable now on over 92% of desktop devices. Additionally, today's web designers have even more customization opportunities due to the introduction of web font services, which provide fonts and font embedding options. These are hugely important for today's designers because of the immense number of possibilities for adding and working with fonts on the web. Despite these cumulative advancements and ever-increasing possibilities, many people working on the web lack understanding of how to work with fonts on the web. Thus the inspiration for my thesis project, in which I hope to help users trying to work with and understand type on the web.

Commodity

The next principle, commodity, was also important to consider in the context of this project as it dealt with the site's content and tone. Before writing one sentence, it was important to think about overall structure, what and how I would be creating it and how it would sound.

Content Creation

I knew from the beginning of the project that my site's content would be original and created completely from scratch. I wanted to maintain an overall consistency in the look as well as the tone. Writing and illustrating my own content would also be important to my learning process and will give me a deeper insight into the subject itself as I learned along the way.

The content was to be two-fold. Sectioned-out text would explain the visual and technical concepts and illustrated content and code snippets would provide clear visual explanations. The illustrations were to be created in Illustrator and embedded as SVGs to keep file sizes to a minimum and maintain a sense of consistency in design. Both the text and illustrations were completed during the last half of the semester and over the course of the summer.

Messaging and Tone

The aim of my project site is to instruct, educate, inform and encourage users new to the subject of web typography. The content needed to reflect this goal with both its subject matter and tone. In order to educate, yet maintain the users' interest, the writing needed to take an authoritative, yet friendly tone. I wanted to make the tone informal, but professional; guiding, but not patronizing; and engaging, but still maintaining an educational overtone.

In order to achieve this overall tone and for the site to demonstrate itself as a reliable resource, the language needed to be well-written, yet simple and avoiding complex technical terms. I tried to keep the writing and language consistent throughout the site and strove to explain typographic terminology in terms the average user would understand.

Content Structure

Along with being easy to understand, my content needed to be easy to find and navigate. For a user coming to the site for the first time, the homepage needed to provide an immediately obvious message as to the site and its content. It also needed to provide users with clear options to access deeper content. This was done in two ways on the homepage—first with the navigation and secondly with the three module tiles, which give a title and information as to their contents. Upon coming to the site, I hoped users would select one of the modules and continue on to the page of content in their interest.

Although the primary sections of content were to be located under the 'Type Modules' navigation tab, users would also be able to find out more information about the site under the

‘About’ tab; more information about terminology under the ‘Glossary’ tab; or more information about tools and references under the ‘Resources’ tab. Together, these four would lead users to secondary pages containing the bulk of the site’s written and illustrated content.

Firmness

The next principle important to the development of this site was Firmness. Firmness took into consideration the technology used to create, operate and manage the website. Prior to building my site and writing my content, it was important to consider both the front- and back-end technologies I would use to construct my site.

Client-Side Technologies

On the client-side, I needed my site to be designed using structurally semantic HTML5 to make use of new HTML5 tags like `<header>`, `<nav>`, `<section>`, `<article>` and `<footer>`. I wanted the code to be future-proof, yet backwards compatible and so I would use fewer divs and id tags in my code. I used CSS3 along with media queries to make my site fully responsive and accessible across devices. JavaScript and jQuery were also be incorporated, although minimally. The JavaScript and jQuery were used primarily for drop-down menus and to aid in responsive design. I aimed to keep the site as accessible as possible for devices and users and attempted to keep the visual design mostly coded in CSS.

Server-Side Technologies

On the server-side, my site is fairly simple. It utilized PHP minimally to add things like contact forms and includes within my code. Since I had limited PHP experience when I began the project, I didn’t try anything overly complex, but I did try to challenge myself as much as I could. I hoped at least using PHP includes would cut down on my site’s file sizes and improve its overall performance.

Content Management System

I had originally planned to use a CMS to edit and organize my site’s content but ultimately decided against using one. While a CMS would have been a big help in organizing my content, helping with functionality and providing useful things like SEO plugins, I decided to prioritize other tasks. The decision was a difficult one to make, but one I feel was necessary for my site and the conditions in which it was built this summer.

I knew from the beginning the design and content were the most important things for me regarding my site. I wanted the site to look the way I had mocked it up and I felt this might be more difficult if I was navigating around a CMS template. I also knew the content writing and illustration would take up a significant portion of my time and I feared learning to use a CMS and then implementing it would take up too much time for me to focus on what was most important. Finally, I considered my site's functionality and decided it was simple enough I would be able to code it myself.

Site Functionality

The list of functions my site needed to perform wasn't a lengthy one, but it was important to identify the functions required of my site before development got underway to determine how users would interact with the site's content. I wanted users to be able to search the entirety of the site for typographic terms and topics. I used Google custom search to achieve this in my site and placed the search bar prominently at the top of each page for easy searching. Secondly, I wanted users to be able to provide feedback and give criticism on the site. To achieve this, I included a simple PHP contact form so users could email feedback and comment messages directly. Additionally, I needed the site to handle a large number of SVGs. I initially looked for a CMS that would support them, but without one, I was able to simply embed the .svg files into my assets folder.

Delight

The final principle considered prior to the development of my site was Delight. Delight related to the aesthetic design of the site, from the colors, fonts, symbols and associations. Delight began as merely a idea board of images and colors and developed eventually into the site's brand, mood and overall finalized look.

Research and Inspiration

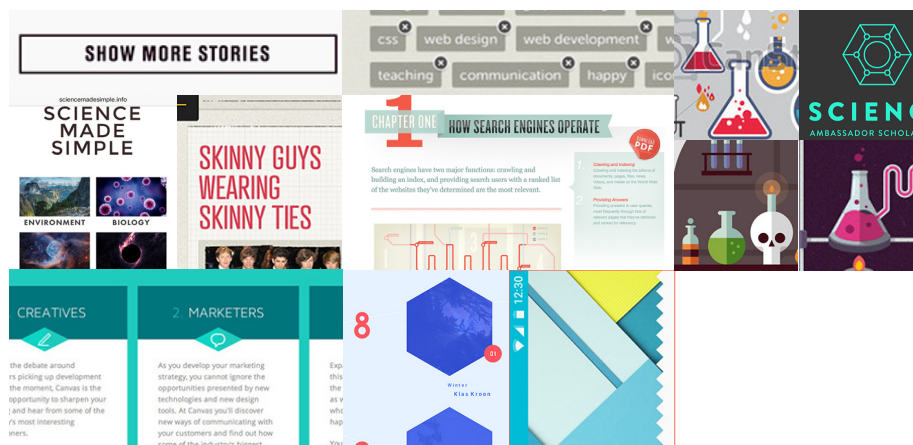
Since I had begun my research at the beginning of the year alongside the Vitruvian development principles, I had some inspiration for my site's theme early on. While reading through cognate texts one day, I came across Robert Bringhurst's book, *The Elements of Typographic Style*. In the book he said something that stuck with me ever since. He said that like the scientific stuff of plants and animals, the science of typology involves precise measurement, close analysis and the careful use of technically descriptive terms. [8]

This got me thinking about typography in the same terms as other sciences and how it could relate to different scientific topics. For example, like the content on my site, I realized most sciences have two sides—first a creative, experimental side and also a more technical, notational side. It's a loose interpretation, but the idea of referencing scientific motifs and themes in the project seemed to fit the framework of an educational resource website. It was for these reasons I decided to call my site Type Lab and base the design around this scientific theme. When shaping my site's content and design, I always thought back to Bringhurst's quote and this initial idea.

Design and Style Concept

I looked back to my cognate competitor site analysis when starting the design on my own site to decide what worked and what didn't work. My biggest grievances about a lot of cognate sites were either their disorganization or an overall lack of visual interest. While the typographic systems of most were sound, a lot of the overall designs and color schemes were bland, unfriendly, or overly academic. A site lacking in visual interest, particularly a site about design, would fail to engage users and will quickly lose their interest. I tried to counter these flaws in my site by designing a strong, user-friendly architecture, a friendly, positive color palette and a typographic system that was both legible and readable.

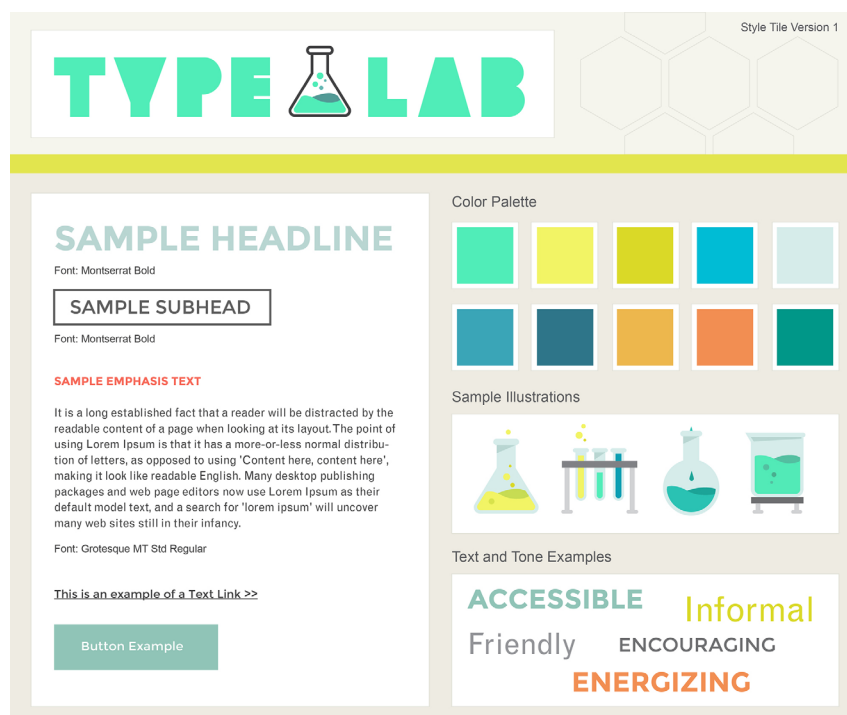
Once I had general design goals in place, it was time to start collecting visual design elements. I browsed blogs, app designs and sites like Dribbble and Behance to find visual elements, shapes and colors I thought I could incorporate into my own site. Scientific images like chemistry sets stood out to me for the illustrations and a number of shapes, layouts and color palettes stood out as well. I simply pulled these together and referred to them as I moved forward with my designs.



Style Tiles

Because my target audience is aimed at a wide variety of ages, backgrounds and genders, I tried to make my site's design appealing to a broad assortment of users. I wanted the design to be fun and friendly but still professional, instructional and trustworthy.

The site needed to establish a strong, recognizable brand that would provide an overarching consistency and style. This initial design step was taken through the creation of several style tiles, which helped plot out initial colors, icons and typographic ideas.



Although the tile above was one of my first attempts, I found my prototype and final site stayed pretty true to this initial look and feel. Here, I played with a bright accent colors on a muted background, a flat, modern style and understated typography accentuated by color and boxy outlines. I also created a few 'science-y' looking icons I hopes to incorporate to get an idea of the illustration style I would use.

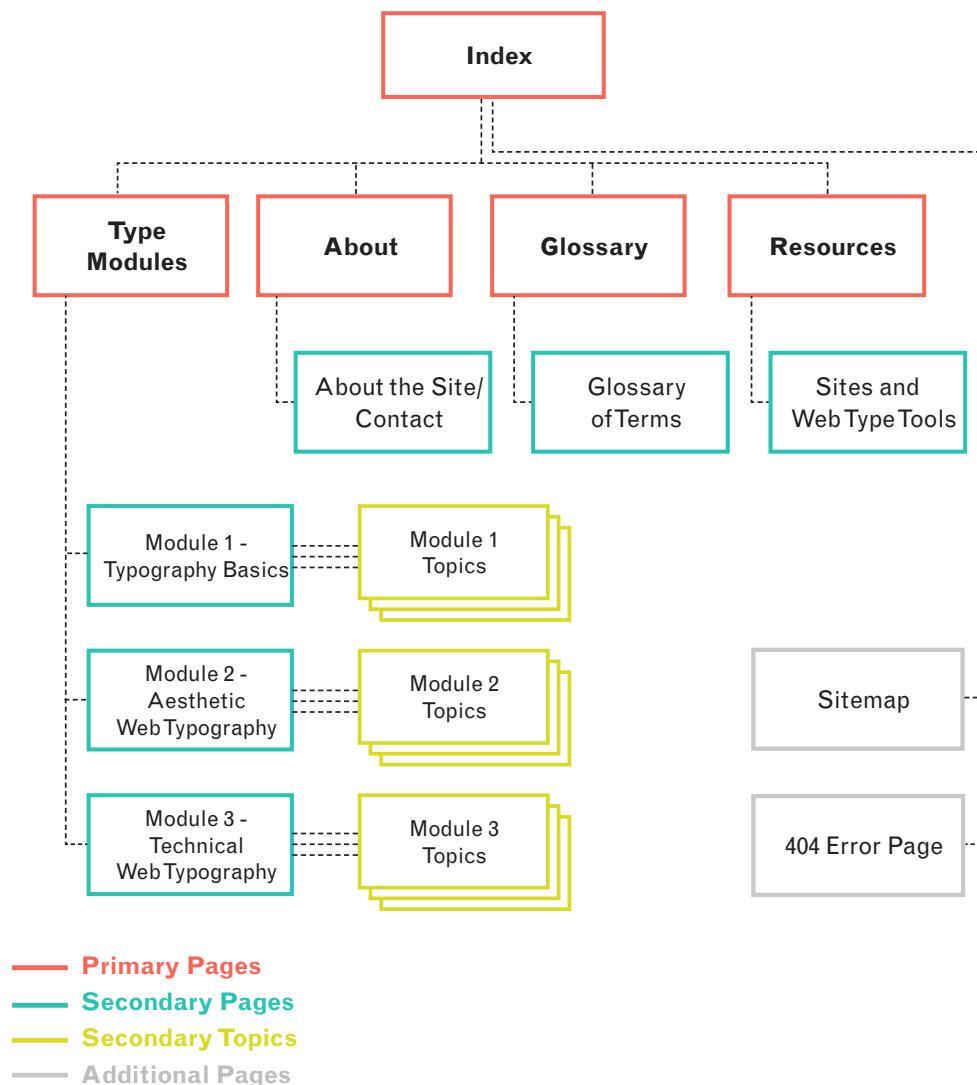
I also came up with a number of keywords that would encapsulate the content's visual and written tone. I used words like 'accessible', 'informal', 'friendly', 'encouraging' and 'energizing', which were all things I wanted to the site to emote and users to feel. These words encapsulate my design and brand values but also had influence over my site's content and layout.

2. Designing the Site

After refining the project plan and the essential principles of the site's development, it came time to actually design the site. This process also came in a number of stages, beginning first with the site's information architecture and wireframes, progressing through the initial prototype and ending with the final implementation. Each step occurred in sequence after lots of initial sketches, revisions and moments of questioning. For this part of the project's development, it was especially helpful to have a well-defined initial concept and project manifesto to refer back to.

Website Architecture

The first step in the site's design was mapping out the site's information architecture in a simple site map.



My site needed to be easy to navigate and I tried to mimic my site's content structure in the layout structure. Since my content is divided into three main sections—Typography Basics, Aesthetic and Technical Web Typography—I wanted to divide my module pages into three to keep the total number of pages to a minimum. I created just a few supplemental pages like the About page, Glossary of terms and Resources page for additional important content.

Homepage

From the homepage, users are able to access the navigation from the five main tabs or from the three main module panels or additionally, from the complete site map located in the footer via an accordion menu. Site map is also linked in the footer as well as a 404 error page when things go wrong.

Type Modules

Module 1 Typography Basics: When the user arrives on this page, he or she can access specific subjects such as the basics of typography, why typography matters, type classifications, type anatomy, etc. via scrolling or by anchor links under a 'What's on this page?' header.

Module 2 Creative Web Typography: Like the Typography Basics page, this is accessed from the homepage and the user arrives to see a secondary navigation and page topics. It includes info on how to effectively use web fonts, css text properties, responsive typography and rgb vs. hex colors.

Module 3 Practical Web Typography: Like the other module pages, this can be accessed via the homepage and the user arrives to see a secondary navigation. Links within this topic include web font services, self-embedding web fonts, browser support and performance considerations.

About

Users can find out a bit more information on the project, on me, the site's creator, and can also access the full list of sources I used via my Bibliography page. A simple contact form allows users to send questions or comments directly.

Glossary

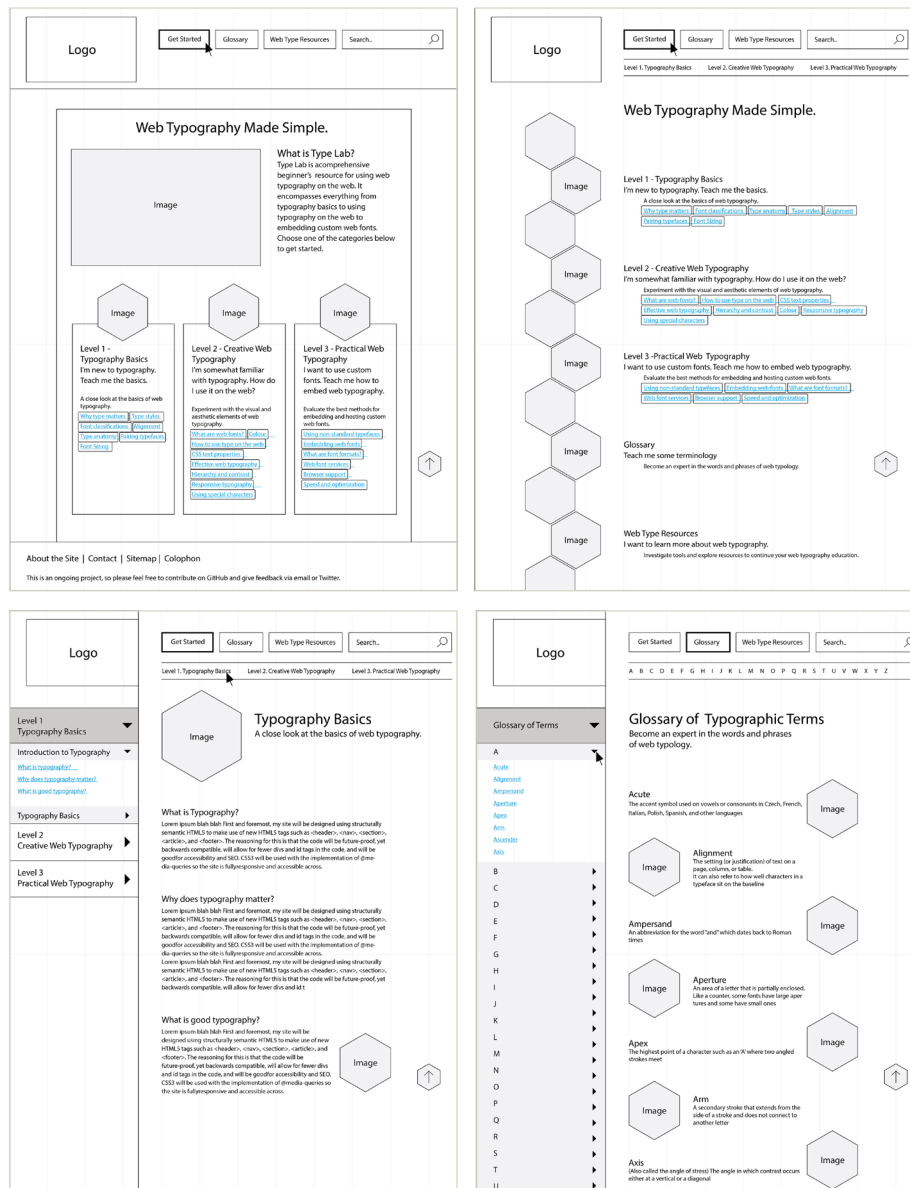
This page includes a glossary of typography and web typography terms, some with illustrated explanations. This list can be filtered alphabetically by characters at the top of the page.

Resources

The Resources page provides a list of good reference tools and articles I've found to be helpful.

Wireframes

After mapping out my project site's information architecture, I took some of the content I had written and started working to create wireframes to represent the framework of the website. Below are two initial attempts at a homepage layout, a module page and an initial glossary page. Though still in the early stages, it was incredibly helpful to have had some content written to get an idea how much space areas would need and how things would start to fit together.



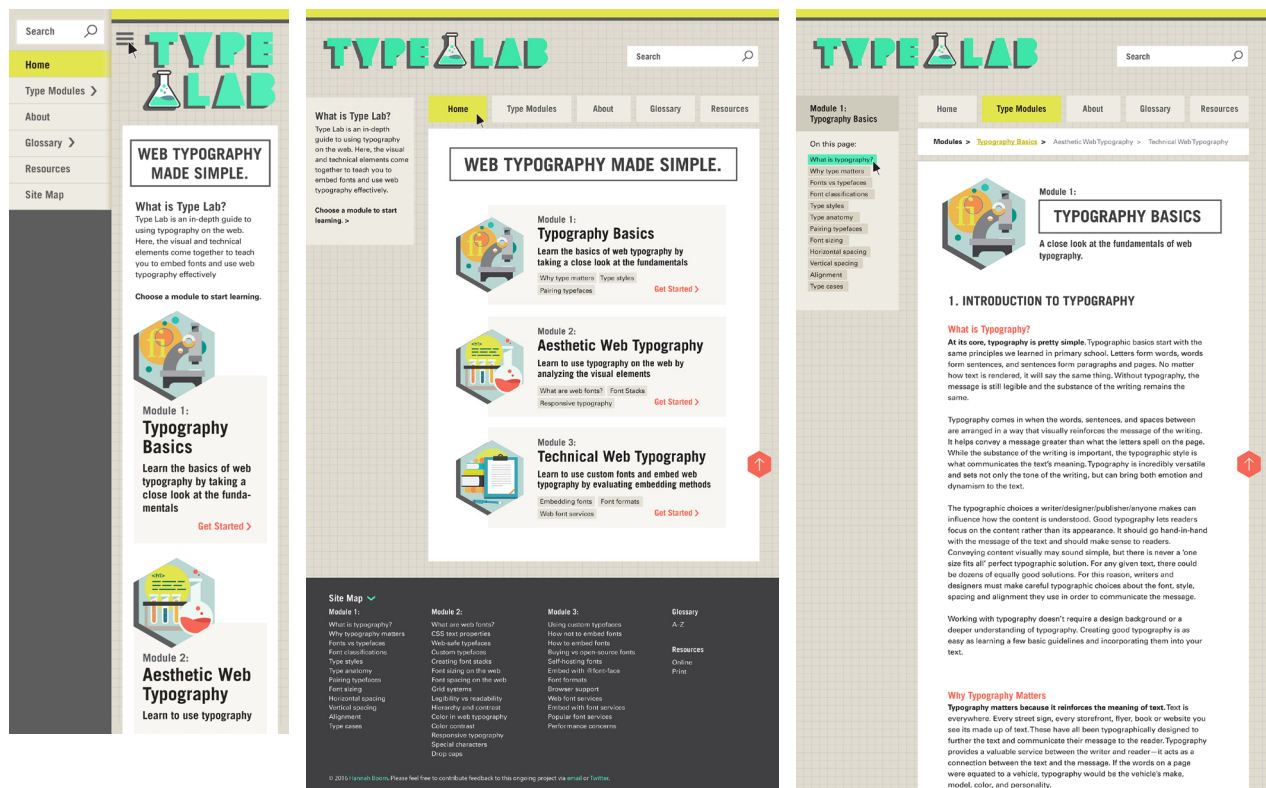
Prototype

The final step in the site's design before actually building the site was to create a prototype. This prototype incorporated all the colors, icons and typographic styles I had been developing during the last part of the semester. I'll go into those in-depth when I discuss specific design elements within the final website.

Prototype Mockups - Version 1

My first prototype version is fairly similar to the final iteration of my site. I had initially tried out an open sort of clipboard look, which showed a lot of the background texture and gave more space to the header and navigation. This version incorporated a fixed column on the left side for a secondary navigation.

Although I did pull a number of elements from this prototype, I ultimately decided the layout needed to be less narrow vertically and needed to feel more grounded on the page. I also felt the logo got lost against the background and decided to try a darker, more bold header look in the second prototype.

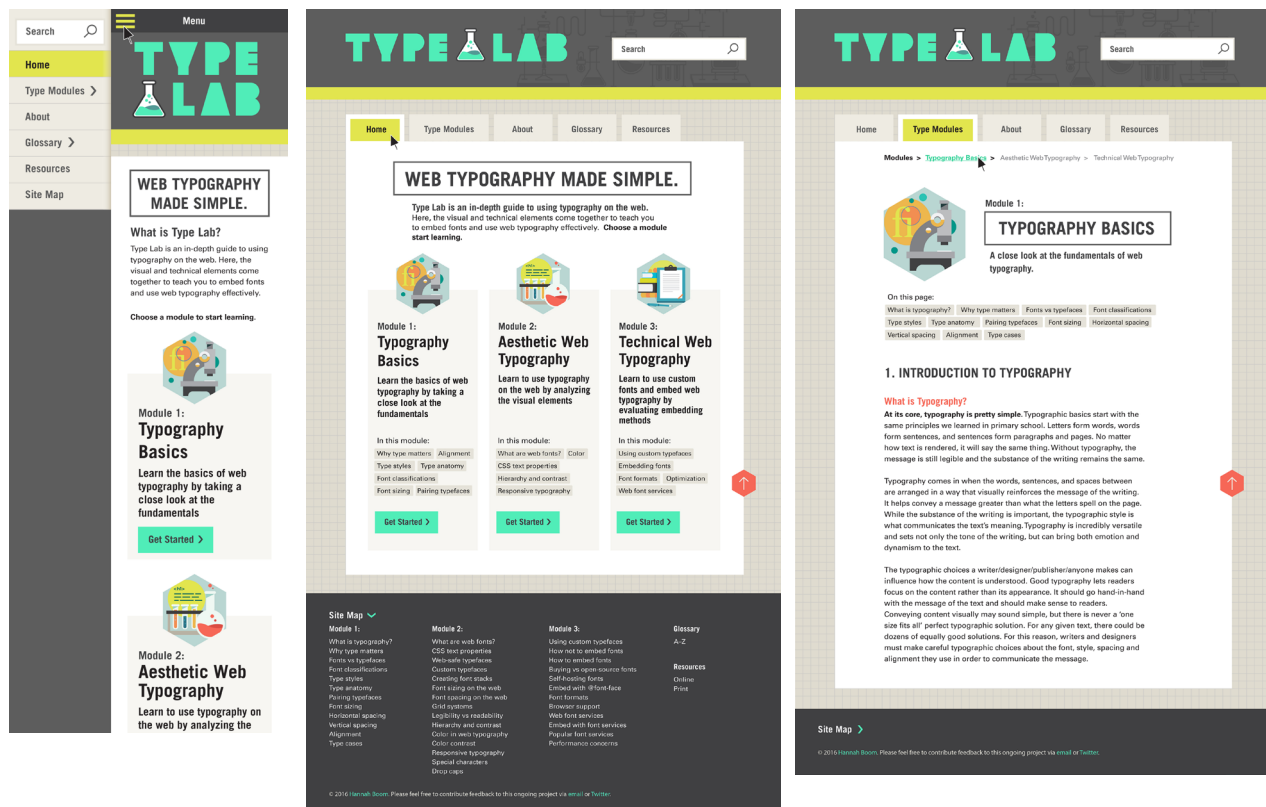


Prototype Mockups - Version 2

The second prototype, on the other hand, looks almost identical to my final implementation of the site. I ended up very happy with both the mobile and desktop versions and referred to them constantly during my site build.

This prototype version had a fuller, more weighted look than the first version, which felt more academic and definitive. The logo and search bar were given a place of their own in the header and stand out much more on the grey background. The navigation buttons were fixed to the main content block, which gave it a file folder appearance and a stronger presence on the page. Since the background texture played more of a secondary role and the page widened horizontally, the text became the focus and was therefore easier to read.

I also felt this prototype version better encapsulated the tone and brand laid out in my original style tile. I looked back to the tone words I had used (accessible, informal, friendly, encouraging, energizing) and decided this prototype seemed to fit all of those perfectly.



Implementation

After spending months designing the site's architecture, wireframes and prototypes, it was finally time to start building the site. I had been conducting content research for months, had written a few sections and had completed the logo and header illustration. Though not much to start with, I felt I had enough content in place to start coding the main structure and functionality of my site and then continue to add in content as it was completed.

Stages of Implementation

Following the prototype presentation, I started by making an on organized to-do list. I listed in full the sections of content I wanted to write, the topics I wanted to illustrate and the steps I would need to take to build my site. I also included a functionality list with site must-haves, nice-to-haves and if-time-would-like-to-haves. My main goal was to create a balance between content creation and development so I could equally conquer my task list without neglecting one area or the other.

During the later half of the summer, I wrote, illustrated and developed the site in tandem because I would start to panic if I neglected one area or another for too long. Things went slowly but steadily as I stumbled over technical issues and second guessed my content writing ability. In the end I was able to conquer my task list and all my planned content and functionality.

Content Creation

I knew from the beginning my content would be the most important part of my site. I started systematically, writing sections on the basics of typography followed by the illustrations I had planned for this section. Then I began writing on the aesthetic elements of web typography, followed by these illustrations. After a mental break and completing the glossary sections, about and resource pages, I completed my site's illustrations. Finally, I began the sections on technical typography to complete my site.

Creating so much content proved a major challenge since I'm neither a quick nor a confident writer. I had completed my research and defined my topics early on but I second guessed myself every step of the way, which led to a lot of frustrated rewrites. Somehow though, I was able to push through and have come out pretty happy with the final product.

Site Development

Since I had a very specific image in my mind of the site's functionality, the development started pretty slowly as I figured out how to make that vision a reality. The navigation's mobile functionality and the CSS accordions were big challenges in this respect. It took a lot of trial and error to figure out how to make these elements look and function as I had planned in my prototype.

Once I had these things figured out and working the way I wanted on mobile, it was just a matter of building the site up responsively by following my prototype designs. These initial mockups helped immensely as it was just a matter of implementing the colors, layout and spacing of elements to get things finalized with my media queries.

Site Launch

I launched a rough version of my site on August 24th. I call it a rough version because the content was incomplete and a couple of technical issues arose. The design was more or less finalized but I had a long way to go in the few weeks before the final presentation. I would have liked to wait to launch the site, but it was necessary to start tracking analytics and begin the final review stage of the project.

3. Design Elements

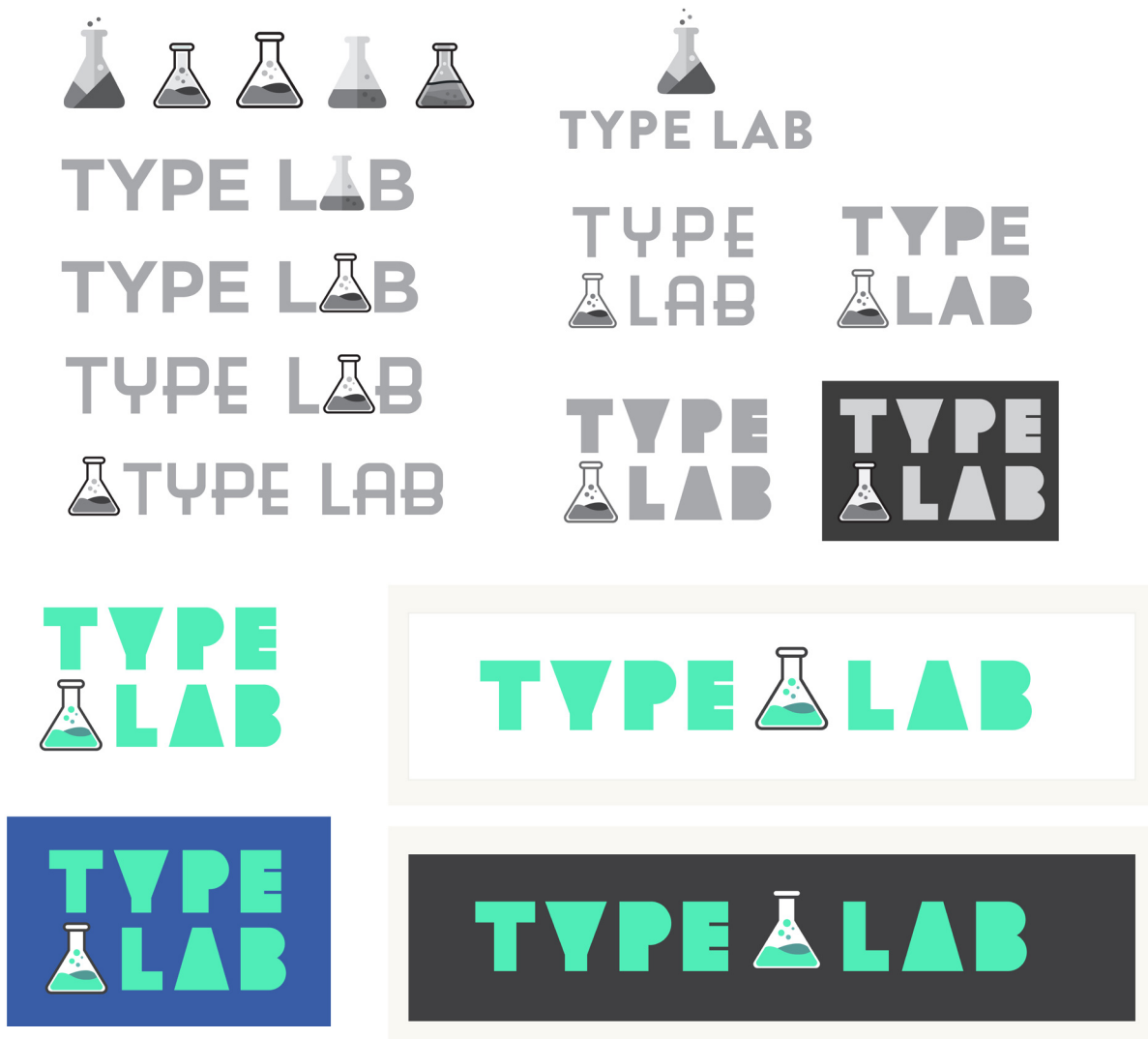
Unlike the content writing and coding portions of my site, the design and visual elements were developed quickly and easily. Since I'm a much more visual person and have had experience using the Adobe programs, I didn't have much of an initial learning curve. I had more or less a clear image in my mind of the aesthetic I wanted to achieve and then just had to experiment to make that happen.

This portion of the project happened early on in the semester and continued through the creation of the two prototype versions. To stay true to my original project inspiration, I would refer back to Bringham's quote, my mood board of design elements and my style tiles.

Logo Development

When it came time to begin designing the site's logo, I landed almost immediately on a concept I liked. I drew a few laboratory flasks in different styles and worked to incorporate them with

different fonts. I wanted a logo that was bold and playful but still in keeping with a professional look and feel. I wanted a mark that was simplistic and could work with the other illustrations on the site. I found bold fonts and tweaked them in Illustrator until I landed on a combination I liked. I tried a few colors and landed on a bright seafoam green, which seemed both calm and energetic at once and gave the logo versatility and adaptability across color palettes.



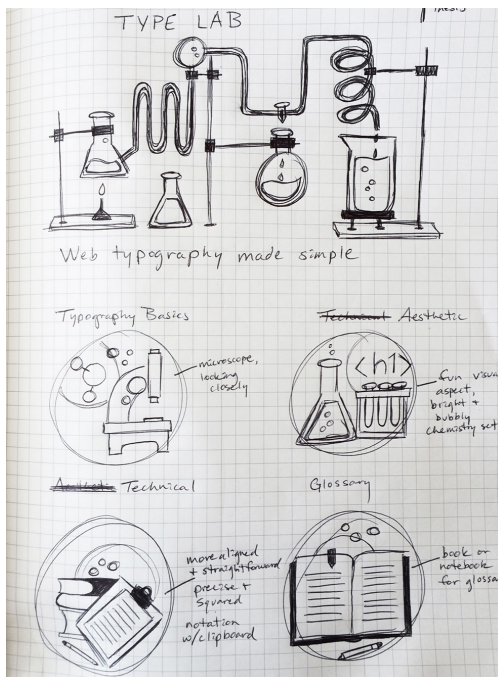
Graphic Elements

Since I was well-versed in Adobe Illustrator, I planned create simple illustrations to help explain typography topics and to provide figurative illustrations connecting the typography and science themes.

Image Development

Header Images

Since I separated my content into categories, or ‘modules’, I wanted to create page header illustrations for each of the categories. I sketched out some basic ideas in keeping with the science theme and worked up a first iteration in greyscale. I wanted these to be unique but still in line with the logo and able to tie in to the website’s brand.



The microscope image represents the idea of examining or ‘looking closely’ at typography and its elements. I used this icon to depict Typography Basics as this module included topics such as type anatomy, which is about examining letterparts.

The chemistry set and round flask represent a more fun, creative, experimental side of typography and topics such as hierarchy, color and drop caps. It was designed for the Aesthetic Web Typography module.

An open book image represents the idea of looking up information, such as with a dictionary of terms. This icon was used as the header for my Glossary page.

Finally, the clipboard and textbooks stand for a more precise, practical and technical side of web typography, like that of Technical Web Typography. This module contains the practical information needed to use type correctly on the web.

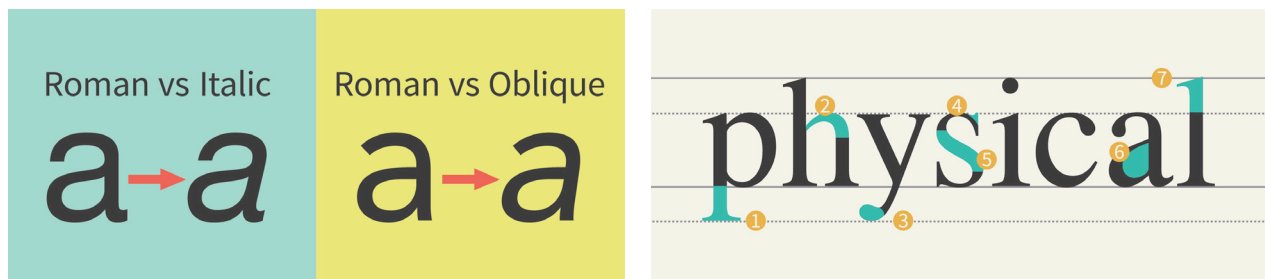
Glossary Images

Simple illustrative icons like these were created for every item in the glossary to give visual explanation to terms. The images below are for the terms (left to right) pixel, acute, CMYK, barb and axis.



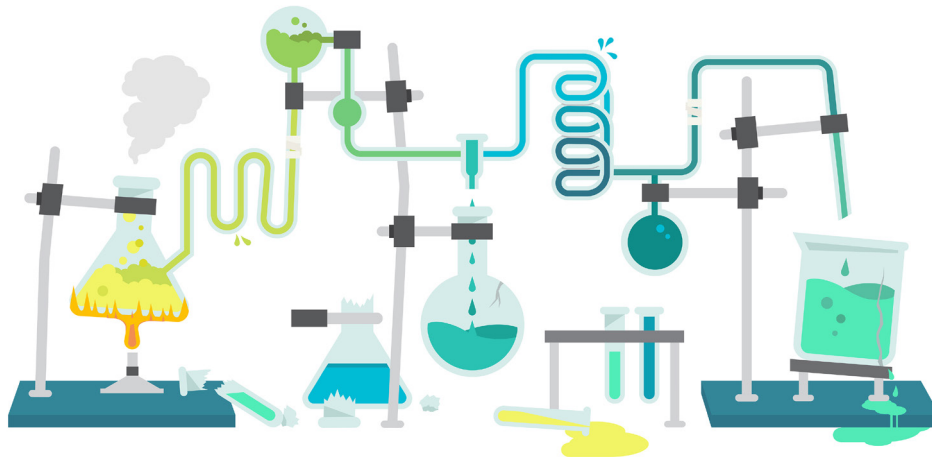
Module Images

Each of the three module pages contains a number of images like these to help explain topics. The thought was that beginners would benefit from seeing examples of the topics and the images themselves would help break up each pages' text into more manageable chunks. The first image illustrates the difference between italic and oblique typefaces and the second shows a sample of anatomical letterparts.



Other Images

I also produced a few extra images to further my site's scientific theme. I created a laboratory image for my About page and the image below for my 404 page as a fun way to show a site error had occurred.



SVG Performance Concerns

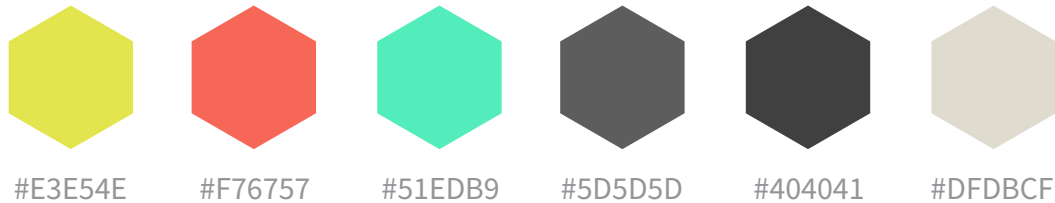
I knew early on my site would be illustration-heavy and for this reason, I decided I would need to create simple SVGs to minimize file sizes and page load times. However, as I began creating more and more images to illustrate topics on the site, my SVGs grew more complicated and my pages took longer to load. To combat this problem, I looked into what I could do to maximize my site's performance despite the vast amount of imagery. First, I minimized the SVGs as much as I could using [SVGO](#), a minimization tool by Jake Archibald. This drastically decreased my SVG file sizes and helped speed up my website. Later on in the site's development and with help from several site analyzers ([gtmetrix.com](#), [www.site-analyzer.com](#)), I implemented browser caching and GZIP compression for SVGs in my .htaccess file. After re-testing my website with these tools, I saw immediate improvement in my site's page load speed and overall performance grade.

Color Palette

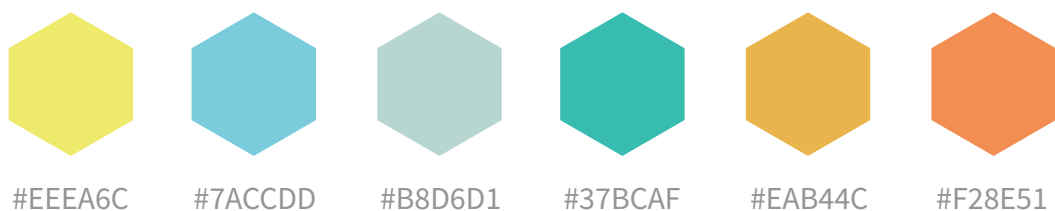
After experimenting with an initial color palette on my style tiles, I refined the colors a bit to create a primary color palette for my site and a secondary palette I would use more for illustrations. I wanted the colors to be bright and energetic, but maintaining a sophisticated feel. The colors needed to evoke positive emotions to engage users and maintain their interest. The site itself is made up of neutral tans and dark greys with lime green, coral and seafoam

green accent colors. The professional feel of the neutral tones helps to balance the wildly bright colors. The secondary color palette incorporates bright colors as well but with more muted tones.

Primary color palette



Secondary colors



Typography

Above any other design elements on my site, my typographic system needed to be solid. My type needed to be neat and minimalistic without being too bland. In addition, the fonts I chose needed to be both legible and readable across large blocks of text and had to be interesting without taking away from the content's message.

I went back and forth on the fonts and weights I would use within the site, but went with Roboto Condensed for my header elements and buttons and Source Sans Pro for my body text and secondary elements. I felt these two fonts worked well together as they provided a good amount of contrast but still worked harmoniously across the site. I worked hard to create solid font stacks in case my Google Font embedded fonts should fail to load. I included four or five backup fonts and tested my design with each to make sure the sizing and spacing was consistent.

The large amounts of written content made it necessary to break up my text into manageable chunks. I worked to create a solid hierarchy to denote the start of sections and subsections

and make it easy for users to find content. To achieve this, I used a variety of cases, weights, sizes and colors to help titles and subtitles stand out.

Navigation

Though my site isn't large in terms of the number of webpages, it's moderately big in terms of the amount of content contained. There are three dozen content topics between three module pages and over 90 glossary terms. For this reason, it just as important to provide a solution to help users find the content they seek as is the actual content.

Ways of Finding Content

To ensure a user would be able to find the specific content he or she wanted, I implemented breadcrumbs on each module page and internal links along with a highly visible and straightforward navigation. The breadcrumbs allow users to jump from Module 1, 2, or 3 without having to go up to the main navigation and select from the drop-down menu. It's a simple solution, but one I hope will encourage viewers to explore and visit more pages that the first one they landed on. Each of the three module pages also has a 'What's on this page?' section with anchor links so users can quickly view the page's topics. With these links, users will know exactly which topics are covered on each page and they can click to jump ahead to the selected section.

The main navigation is prominent at the top of the page on desktop devices and accessible via a pull out button on mobile. In a mobile size, a toggle menu will slide out from the left side and provide access to the same content topics as the responsive desktop size.

Another way users can easily find content is by using the site map accordion contained in the footer of each page. This site map was created to list every typography topic on every page so users would be able to select one, click it and jump immediately to the desired topic. It can help users discover new or related topics. This site map also toggles open or closed at the click of a button so it won't clutter the page but so users still have easy access.

Finally, users can find content on the Glossary page with the alphabetical filter function. With a long list of typographic terms, users might not want to scroll all the way through. Filtering gives them the ability to choose a letter and filter the entire list to just a few typographic terms. This could be helpful for finding desired terms or discovering new content at the same time.

REVIEW PHASE

Development and Changes

While the design of my thesis site remained relatively unchanged from the prototype stage through the final product, there were a number of changes in the initial development plan. At the end of the semester I had a detailed to-do list and a schedule for content and development. Once the reality of summer hit though, most of my plans were pushed back by weeks or months as circumstances changed and thesis problems arose.

Changes and Variations

CMS Decisions

The most major change from the site plan was the exclusion of a content management system. I went back and forth for a few months on whether or not I would use one in my site's implementation or not. On one hand, a CMS would have been a big help with organizing my content and helping with my site's functionality. It would have been helpful to have things like SEO plugins to help with the findability of my site as well as with things like contact forms, but I ultimately decided against it.

It was a decision I felt was necessary for my site and the conditions under which it was built this summer. I knew from the beginning the design and content were the most important things for me as far as creating the site. First, I wanted the site to look the way I had mocked it up and I felt this might be more difficult if I was navigating around a CMS template. I also knew my content needed to be the priority to for the site to be successful in my mind. The writing and illustration took up a significant portion of my time and I feared having to learn my way around a CMS and then implement it would take up too much time to focus on what was most important. I chose to spend my time and focus on writing and illustrating before trying to implement a CMS so it moved from the 'must-have' column of my to-do list to the 'if-time-would-like-to-have'. It's possible I'll decide to implement a CMS in the future if the site grows beyond its few pages, but for now, I tried to make the best decision I could to go it alone.

Content Creation

Another major change from my site's plan to its implementation was the timeline and sequence of my content creation. I had the best of intentions early this summer to have everything completed by the end of June so I could focus just on the site's development. However, these intentions proved flimsy against my own project insecurities. I completely paralyzed myself into thinking I wouldn't be able to do the writing justice that I sometimes struggled to do anything at all. Those fears may actually be the reason my site is so image heavy; when I tried the need to work on content but lacked the confidence to write, I would turn to Illustrator and work on the visual content instead. I'm embarrassed to admit how much I struggled with the writing, but it was my perfectionist nature that hindered it more than anything.

Midway through the summer I started panicking because I was still slowly plugging along with written content and had barely anything by way of a site design. It was at this point I decided to take a break from writing and illustrating to get going on my code and began working on both in tandem. Eventually, a more fully developed site and a nearing deadline helped me sort of snap out of my paralysis and I was able to refer back to my original content outline to get things rolling.

Implementation Problems

When I launched my site at the end of August, it was more or less a polished, but incomplete version of the site. In the days following the launch, I was still adding in content and there were things needing to be reworked in my site's code. Some of the main issues are outlined below and have been reworked since this initial launch.

Site Performance

My site's performance was initially problematic. I tested my site along the way with tools like Google PageSpeed and Pingdom, but I could see it getting slower every time I added in more SVG illustrations. The SVGs were an important part of the site and I needed to figure out a way to optimize them further or figure out a way to speed up my site. So I checked out a number of website analyzer tools and received a number of possible recommendations to improve my site's performance. A number of sites suggested I leverage browser caching and enable gzip compression in my htaccess file so compress my assets and cache them for users returning to the site. Though it took some research and a bit of trial and error to get right, incorporating

browser caching and gzip compression took my site from fairly slow and heavy to something much faster and lighter.

JavaScript Backups

Finally, I needed to work on my JavaScript backups. Since development is a weaker point for me and I'm not well versed in this language, I wasn't able to write my own JavaScript but had to rely on source code from others that I heavily adapted to suit my purposes. However, the downside of this was a lack of adequate JavaScript backups on a few key features. I used JavaScript to create the toggle functionality of my mobile navigation and the filter function on my glossary. On testing my site way after they had been incorporated, I realized users without enabled JavaScript wouldn't be receiving the same experience. With my limited knowledge for now, my solution will have to be a 'JavaScript not enabled' warning. This is something I worked to remedy in the final weeks and hope to solve in the future.

Search Engine Optimization (SEO)

Site SEO

Like any website, the content on Type Lab had to be well-written and keyword rich. I found this to be actually the only easy part of writing content. Fortunately, topics like aesthetic typographic or glossary terms naturally lent themselves to being keyword-rich. I found I was able to naturally include keywords in titles, alt tags, meta tags and in link names because of the nature of the subject. I tried at first to use tools like Moz Keyword Explorer, but found keywords were included most authentically when I just wrote about my typographic topics and terms.

As far as other on-page SEO strategies, the numerous page header tags, image alt tags and links with keywords provide a lot of opportunities for bots to crawl and index my site's content. I did my best to include strong keywords on file and folder names, my index paragraphs and my meta tags. Hopefully, the site's keyword quality and density will word together to make the site easily findable for users and indexable for search engines.

Other Marketing

One area I could definitely improve on is in my site's off-page SEO. Since the site isn't affiliated with an organization, a Facebook or a Twitter page didn't seem appropriate or necessary. So far, the site has no recognition nor inbound links; hopefully this will improve over time if the

site's content proves to be good and people continue to visit. The one thing I was able to do was to manually register my site and site map on popular search engines like Google and Yahoo/Bing. This will hopefully increase my findability and increase my site's reputation.

Usability Review

Accessibility Considerations

In order for my site to be as accessible as possible, I took steps to ensure it could be accessed and used effectively by all users and on all devices.

The first step to ensure accessibility on all browsers and devices was by using lean, semantically correct coding. I did my best to minimize my code and to make sure it was correct. I took a mobile-first approach to building my site and made it fully responsive. My text, images and containing elements were coded with ems and percentages so they would scale smoothly and effectively. I also made sure to include alt tags on all images for SEO purposes and for browsers that might not render as quickly.

Accessibility Testing

Besides creating an accessible website for devices, I also needed to create an inclusive site for users. I tried to provide well-written, well-organized content so users could find and understand my topic's content. I also ran my site through a number of accessibility review tools to ensure it was accessible. Sites like Nibbler.com, WAVE.webaim.org and Checkmycolours.com were incredibly helpful tools and helped me correct any accessibility issues I was having. I was able to check my content, visual design and text colors to ensure alt tags were in place, tonal differences provided high enough contrast and to make sure my code quality were accessible.

Site Testing

Site Validation

During and after my site's development, I repeatedly tested my pages using W3C's HTML and CSS validation to make sure my code was correct. HTML validation brings up some errors, but on investigation, are caused by my PHP includes and because of Google font and search embedding.

Browser Testing

I also routinely tested my site in a variety of browsers to ensure users on different systems would have the same site experience. I switched between Chrome, Firefox and Safari while developing the site but used online tools like crossbowser.com to check variations of my site on browsers like Internet Explorer and Opera. Cross browser testing fortunately indicated that the site displays well across a large number of browsers, as well as Mac and PC platforms.

Google Analytics

In the weeks following my site's launch, I checked Google Analytics intermittently to see how the site was doing and monitor how the numbers changed as I continued to make improvements on the site.

Analytics Reports

In an initial analytics report, from 27 August, Type Lab had been live for something like 36 hours. When I actually launched the site, I still thought it was pretty rough. My content wasn't complete and there were a number of functions that I hadn't quite fixed so I assumed it would negatively impact my analytics. However, I was quite pleasantly surprised at my initial Google Analytics report when I discovered a few dozen people had visited my site and actually spent a significant amount of time on it.

Initial Analytics Report

Date	Sessions	Page Views	Pages/ Session	Avg. Session Duration	Bounce Rate	New Sessions
27 August	48	293	6.10	00:07:12	27.08%	68.75%

I had expected maybe a handful of visitors, a high bounce rate and few page views per session. However, as the data showed, my site had 48 sessions—48 periods in which users were actively engaged with the site—and a few hundred page views. Although repeated page views are counted in pages/session, users of the site were visiting an average of 6.10 pages per session and were staying on the site for an average of 7:12 minutes. Later analytics reports would look further into the numbers and things like user journeys through the site.

Finally, I was surprised in the initial report at how much lower the bounce rate was than expected and how much higher the number of returning visitors. With 68.75% of new sessions, this meant that over 31% of visitors had returned to the site at least once. Hopefully, this meant my content had provided something useful and meaningful to some users.

Recent Analytics Report

In a report taken a few weeks later, I was also surprised at the data. Although I made a number of improvements to the site in the weeks following the launch, I expected my analytics numbers to stagnate or drop off after the first few days. Instead, I was pleasantly surprised to see a slow but steady increase in sessions, page views and average session duration.

Date	Sessions	Page Views	Pages/Session	Avg. Session Duration	Bounce Rate	New Sessions
15 October	271	1,421	6.26	00:07:31	26.02%	64.21%

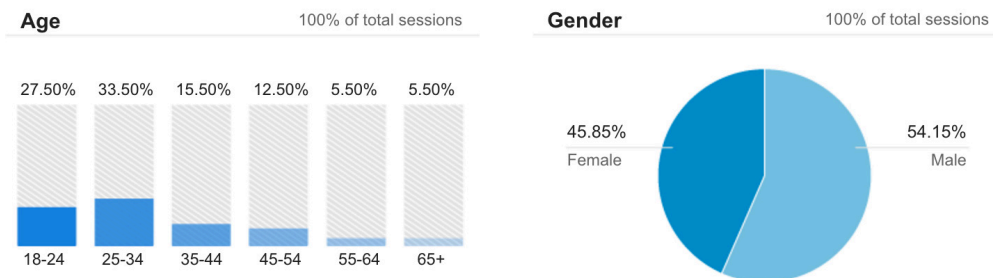
From late August to mid October, the number of sessions in which users were actively engaged on the site rose to 271 and the number of page views crept up to 1,421. After the site's finalization, it was exciting to see these numbers had risen, even if just slightly. The number of pages visited per session is slightly higher than the initial report, but remained somewhat close to the initial number. The average session duration also increased to 07:31. I can't be sure, but I hope this means users are spending more time on the site reading content. Additionally, the bounce rate went down ever so slightly and the number of new sessions stayed relatively consistent. Hopefully this means indexing bots have been working and have been helping new users find the site through organic searching.

Overall, I'd say my site's performance has exceeded my expectations. Although the site has had a slow start and a lot of the sessions and page views were from me testing the site, I didn't have initially high expectations about users visiting or spending any significant time on my site. My goal from the beginning has simply been to create a site that is useful for others learning typography. If even a handful of people visit and benefit from the site, I will have achieved my goal and be happy with the result. It may take some time and a lot more refinement to reach a larger audience, but I believe the analytics data indicates I'm slowly, so slowly on track to achieve my initial goals.









User Demographics





It was interesting to look at the user demographics of the site because for the first time I could get a definite picture of the people accessing Type Lab. A breakdown of demographics revealed the relative ages, genders, languages and countries of my site's users.

Though the ages of users vary quite a bit across the site, the highest percentage of users are between 25–34 years old. Users in this age bracket make up 33.50% of the users on the site. The next largest bracket is 18–24 year olds with 27.50% of users, followed by the 35–44 year old bracket with 15.50% percent of users. This data indicates users accessing Type Lab tend to be younger and are possibly students or young professionals. The gender data for my site, on the other hand, is less varied. There are roughly equal percentages of men and women visiting the site. With 45.85% female visitors and 54.15% male visitors, this split could mean the site appeals to a range of users without being exclusive to one or the other.



A language and location analysis revealed over 78.90% of users accessing the site had their systems set to English (either UK or US) and another 16.51% who accessed the site had “Not Set” as their system language. This makes sense given the site is hosted within the UK and uses a .co.uk domain name. As for the country and cities, it makes sense for Spain and Turkey to show up quite high on the list because these were both places I was living while accessing the site over during its development. It's highly likely all the sessions recorded on Google Analytics in these locations were simply me looking at the site. It's evident that my real users—people coming across the site organically—are accessing from the US and the UK.

Country	Sessions	% Sessions
1.  United Kingdom	52	 47.71%
2.  Spain	24	 22.02%
3.  Turkey	15	 13.76%
4.  United States	7	 6.42%

City	Sessions	% Sessions
1. London	33	 30.28%
2. Barcelona	24	 22.02%
3. (not set)	23	 21.10%
4. Izmir	15	 13.76%

Technical Demographics

In addition to the age, gender and location demographics of my site's users, Google Analytics helped me learn about the technical demographics as well. Knowing which browsers and operating systems people are using to access the site is important so I can understand how different users are experiencing the site.

Google Analytics reveals the majority of my site's visits have been made using Firefox, Chrome and Safari browsers. While a many site visits have just been me testing the site on different browsers, 174 new users have used these browsers to visit Type Lab. Visits from Chrome browsers make up 73.06% of total visits, visits from Safari make up 10.33% and visits from Firefox make up 9.59% of total site visits. Because there don't seem to be any outlying browser visits so far, I can assume most users have had more or less the same experience in visiting my site. This doesn't mean I will neglect browsers like IE or Opera, but for the immediate future, I can assume my audience tends toward the more common search browsers.

This current analytics report also reveals quite a bit of information about the operating systems being used to access Type Lab. The data shows the majority of my site's viewers are Mac users. 41.33% of users accessed the site via Mac operating systems compared to 36.90% which accessed with Windows systems. Currently, 90.41% of the site's total sessions have been via desktop computers compared to 7.75% of sessions via mobile and just 5 sessions via tablet. Of the mobile site sessions, 46.15% were completed on iOS systems and 15.38% on Samsung devices.

Acquisition

The current analytics report also surprised me with how people are accessing the site. Though my family, friends and course mates probably account for most of Type Lab's direct searches, 189 new users have come to the site directly. The data shows 56 additional users reached the site via organic search and 25 who reached the site via referrals. Hopefully this means the site's

Suggested Site Changes

Page Content Divisions

Coincidentally, all the feedback I was given and all the changes suggested were things I had considered reworking for my site's final implementation. It seemed like I was at least on the same page about the site's weaknesses as my professors.

One of the most repeated suggestions for change on my site was to break up the content on the main module pages into more approachable sections. At this point, I have my content divided into three pages with several lengthy topic sections on each page and the content is just too long at times. This is something I considered more and more during my site's development but didn't happen in this iteration. I think future work on the site will separate pages for each module topic, making pages much more readable for users.

Secondary Navigation

Another suggestion that was made a few times after my presentation also concerned the layout of the main module pages. In my original prototype, I had played with the idea of a secondary navigation so users could easily see what was on each page and choose from a selection of anchored topics. Since I couldn't get the layout quite right, I ditched the idea and instead included my secondary navigation at the top of each pages' content. Users can still see a list of section topics, but the list is hidden off-page as soon as the user scrolls down. I'd also like to revisit this idea in future iterations. For the time being I got rid of the accordion function that hid the page topics and have tried to make them more obvious to users.

Other Feedback

Other feedback I received about my site concerned only small things. It was suggested I make the main navigation text bold so it would stand out more. In addition, I received only positive feedback about my choice not to use a CMS. Though I was worried, I agree and feel I made the right decision in focusing on the content rather than CMS implementation.

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CONCLUSIONS

Learning Outcomes

As I stated in my original manifesto, the overall goal of my project was to create a useful online resource for users wanting to learn about web typography. It's too early to tell if this site is something that will become more popular or if it is actually a helpful resource for users. It's possible though to look at early and recent analytics reports and see that, yes, the site is gaining in page new users and page views. Depending on future analytics reports, it will be possible to see whether this goal has been achieved.

My own personal goals were to become more of an expert in using web typography, to become a more proficient web designer and to come out with a solid piece for my design and development portfolio. After completing this project and looking back on all the research, project development and challenges along the way, I can assuredly say I may have achieved all three. The research I completed on typography and web typography helped immensely with the first goal. I'm certainly not an authority in talking about web typography, but have written and tried to explain concepts to others helped me learn the subjects themselves and made me more confident to share what I know.

As far as becoming a more proficient web designer, I feel this goal was achieved by having to plan, design and execute every step myself. True, I received an immense amount of help and feedback from my classmates and professors, but there were many times when I had to be self-reliant when making design decisions or working through technical problems. In the end, it feels very rewarding to have worked through things and solved problems under my own ability. I became much more comfortable working with PHP and JavaScript and also learned a lot more about working with CSS-only functions like accordions and rotating arrows.

Though there are still improvements to make on my site, I also feel confident in adding this site to my portfolio. The final product matched my expectations for the visual piece I wanted

to create and exceeded my expectations for the technical piece I wanted to create. Building Type Lab has been a hugely insightful and rewarding experience. I can be proud of the piece I created despite the challenges I faced creating it.

Future of the Website

Overall, I feel I have achieved most of my initial goals for the project and have left myself in a good place for further work in the future. In the near future, I plan to continue to monitor site usage and analytics. It will be important to continue to monitor user behavior and interactions on the site to help me make decisions about future improvements.

In the ‘not immediate, but very near future,’ I plan to solve the readability problem presented by the vast amount of content on my module pages. I plan to rework some of the sections and break up content into separate pages or more manageable chunks. I would also like to rework the secondary navigation on these pages so users can immediately see and select from available topics.

Finally, I would like to work on Type Lab’s social media presence and off-page SEO to generate more inbound traffic and links. By continuing work on the site, the content and layout organization, I hope to increase its reputation and trustworthiness among users.

APPENDICES

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