

A Mindful Web:
An Education on Trauma-Informed Design for Web Designers

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Master of Fine Arts in Design and Technology

The New School – Parsons School of Design

May 2024

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You can find this project in full at <https://charogerz.github.io/AMindfulWeb/>

The What

People connect through digital spaces now more than ever before. As designers for these digital spaces, we must be conscious of how the work we generate and push online will affect the people who see and use them. Accessibility requirements truly only reach the bare minimum for a lot of users, so many have advocated for going beyond that. This push has been the foundation for new frameworks, like trauma-informed design and others, that are working to set a new norm for digital products and who we as designers are considering when we work towards our goals.

“A Mindful Web” supports designers through the process of trauma-informed designing by providing a comprehensive resource for them to reference while designing websites in consideration of an audience that might have experienced some form of sexual or relationship trauma in their lifetime. It is a website I designed and built to house a series of videos with explanations and examples of features, as well as a list of external resources I have collected in my research for designers to read more or see how others are sharing their progress through open-source code.

The Why

I decided to become a designer because I wanted to use my skills in visual art and digital development to help people. I have previously been trained to help people in other ways during my years as a peer educator creating and leading workshops on consent and healthy relationships, working on the technical teams at nonprofit organizations, and volunteering for community organizations that work with survivors of sexual trauma and provide resources. These two parts of myself together – the designer and the advocate – have helped define many of the questions I wanted to explore at the beginning of this project.

In the spring semester of 2023, I completed a project in my Major Studio II course that explored print resources for survivors of sexual violence in North Carolina – how to keep them unbiased, non-retraumatizing, and approachable without feeling as sterile as many of the medical brochures that are a common part of the resources handed to survivors. I finished this project as a zine that explored the questions that a survivor might ask following their trauma, shared some of the resources that might be helpful in their healing process, and was printed using colors and paper that would stand out from the stack of paper resources around them in a medical or crisis center office. It was created in partnership with peer educators and coworkers of mine from my undergraduate years and was ultimately even shared to be used as a resource within a collection of others recommended to survivors. This successful project inspired me to look this year during my thesis into a similar concept in digital spaces; trauma-informed design.

Trauma-informed design is a very new framework, really only being defined and showing up in academic articles since 2017. Similar frameworks have been discussed previously, but using various terms not agreed upon by the entire community and largely only in physical design (i.e. architectural and interior design) spaces. It is currently being defined as a design framework that centers on the six principles of trauma-informed care outlined by the Substance Abuse and Mental Health Services Administration (SAMHSA), in collaboration with the CDC's Office of Readiness and Response (ORR): safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment and choice, and cultural, historical, and gender issues (Centers for Disease Control and Prevention). Trauma has been defined in many



The 6 principles of trauma-informed care as outlined by the CDC and SAMHSA, adopted by trauma-informed design researchers and educators

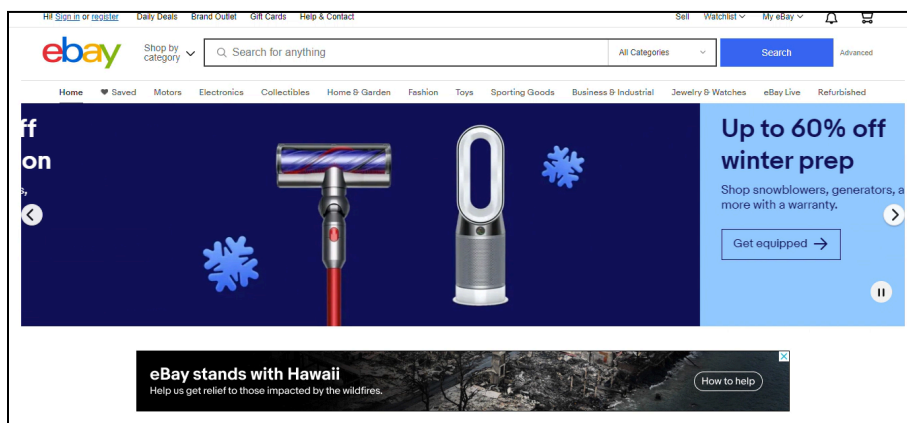
different ways by different groups but in my thesis project I worked with the definition of trauma I found to be most inclusive of “the result of events, systems, and situations experienced as harmful by people – including online digital experiences” (Eggleston & Noel, 6). I created a collection of resources that support designers in using these principles of trauma-informed care more in their practice and help them to better understand the importance of implementing this framework in different contexts. The website and videos created share knowledge that I have gained and found helpful in my research on the topic and the resource section remains active, growing in length as I find new sources or am given new suggestions. This is a topic that researchers are building on and learning about more every day, so having everything in one place to refer to felt like a helpful contribution to the space, even if it is specific to one type of trauma and one type of design.

Trauma varies a lot from person to person. It has such a broad range of effects on different identities, so I chose to narrow my focus for this project specifically to sexual trauma. This was helpful because I have a certain amount of pre-existing knowledge on this subject and I only had one year to complete this. Expanding more into other types of trauma would have created too large of a spectrum of information to be able to properly address without generalizing too much. However, I envision this project in its most complete form as something that could be adapted to fit different populations with different types of trauma.

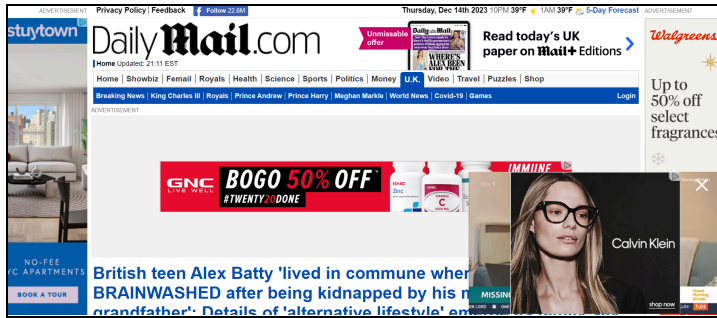
I had to begin with a lot of research into the aspects of web design that made any page more or less accessible and trauma-informed to understand where I wanted my project to go. Elements of web design have been identified as inaccessible for years – things like text that is too small, colors that are too low in contrast in relation to the text on them, and images and videos not having reasonable alternative text (alt-text) attached to them that screen readers could access. These inaccessible design choices can create a retraumatizing effect on people just in the way they cause people to struggle online to access what they need or want. Even if a

web page does meet the minimum requirements for web accessibility, that does not mean that it is not triggering in some way to a person who has experienced trauma previously.

Web design features and elements that can be triggering and potentially retraumatizing, especially for those individuals that I am focusing on in this project who have experienced some form of sexual trauma and interpersonal violence (IPV), include videos and advertisements that autoplay, images that feature negative or potentially harmful elements, and the implementation of updates or redesigns with limited information or warnings beforehand to users. Some designers argue for some of these elements' importance given the context of capitalist company websites trying to sell you things, but I have found in my research that this does not have to be the case. "[C]apitalist incentives around technology development... are likely to lead to violation of trauma-informed principles" (Chen et al., 9). There are examples of this on popular pages across the internet, but it is very much possible to avoid these elements in a page's design, even in the context of retail and consumerism, and still achieve the same desired effect of selling items or services well. YouTube, one of the largest video-sharing websites, does not autoplay its videos upon reaching the homepage but offers the option to hover over something to see a portion of any video before selecting it. On the other hand, popular news sites like Daily Mail and retail websites like eBay feature autoplaying ads and images that cycle through on their own without input from or warning to the users.



eBay homepage with advertisements cycling through automatically



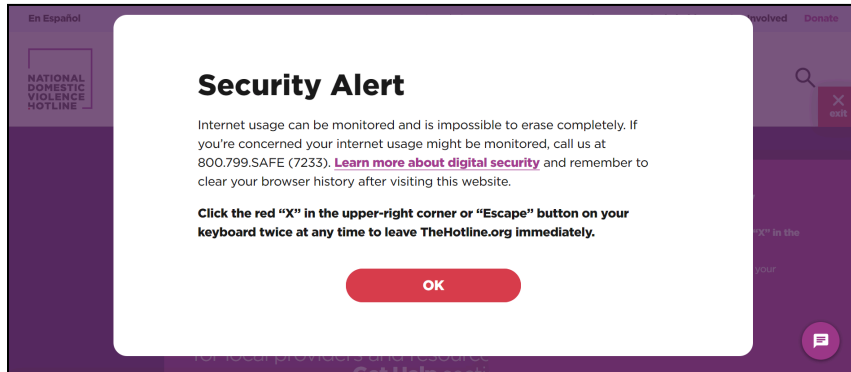
The homepage of the Daily Mail, covered in auto-playing advertisements and pop-ups upon visiting

When it comes to updating and redesigning websites, something that is often seen as positive progress, designers and developers should keep in mind that “if someone is hypervigilant or anxious about hacking,... unexpected changes in the appearance or behavior of an interface can be frightening” (Chen et al., 11). Those users who have experienced some form of stalking or other forms of trauma might find quick, major changes that they are not given warnings for or the option to opt out of leaving them feeling anxious and unsafe. All of these specific website examples so far reach the minimum web accessibility requirements and even offer more accessibility options on top of those required of them, but they are not always approaching their designs with trauma in mind. That is what creates problems for those traumatized users and leaves them finding these websites difficult to nearly impossible to navigate and use.

Not all websites are bad at applying trauma-informed design principles. Many of them do not even think about the fact that they are being trauma-informed in their choices because they are focusing more specifically on overlapping concepts like privacy, content moderation, and ease of navigation. All of these things also add to a website’s ability to be trauma-informed. Elements and design choices that are often implemented and are more trauma-informed include quick exit or “escape” buttons, content warnings, and clear privacy information, especially regarding location and other personal data collection. It is, of course, important to include things like content warnings and privacy notices, but equally important is considering how clear you are making these messages. Are the details all visible without having to click away from the

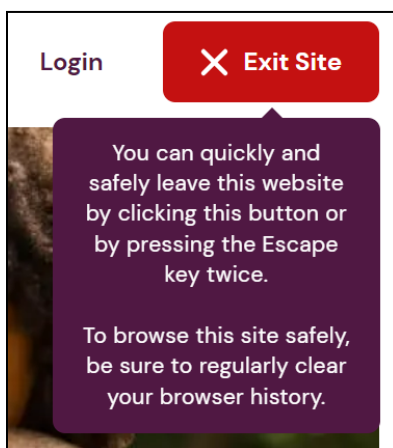
site? Is the language easy to understand? When are you presenting these messages?

Thehotline.org has a good example of this when you navigate to their site and an immediate “Security Alert” appears, informing users of the fact that their internet usage could be viewed and providing resources to view to take safety precautions to continue using their site. When thinking of quick exit buttons, often used on domestic violence and other survivor



Security Alert seen on thehotline.org homepage upon visiting

resource pages, there are a lot of conversations and research efforts that continue to be made to decide on the best way to design these and the best usability mechanisms for these buttons to use. The benefits of a quick exit feature on any site that handles sensitive information, though, are clear for all users but even more specifically for users who are experiencing domestic violence. It presents an easy way to navigate away from a page that might have information that would put the user in danger should others see that they are accessing it (Hutchings & Turk). Domesticshelters.org does a great job of this by including its “Exit Site” button at the top so that it is always visible and adds a message explaining what the button



Hover message over the domesticshelters.org “Exit Site” button

does as you hover over it before clicking. Adding these things to your site adds to the user's ability to trust the page and feel safe using it, and adds to the page's relation to those other trauma-informed principles that ultimately benefit all users.

Designers should keep trauma and traumatized users in mind when designing any digital space. The Design Justice Network outlines a great way to do this in their second principle, "We center the voices of those who are directly impacted by the outcomes of the design process" (Design Justice Network). However, this does not mean that designers should reach out to anyone directly and ask about their trauma as this is directly asking someone to relive a situation that was extremely difficult for them. Sensitivity when approaching design support and research surrounding trauma is key to creating careful interactions and conversations between the designed page and its potentially traumatized user (Birdcall). Defaulting to the best privacy and safety settings and moderating content thoughtfully while taking care not to censor certain voices or topics unequally is also a great practice to support designers who are working to become more trauma-informed (Decker).

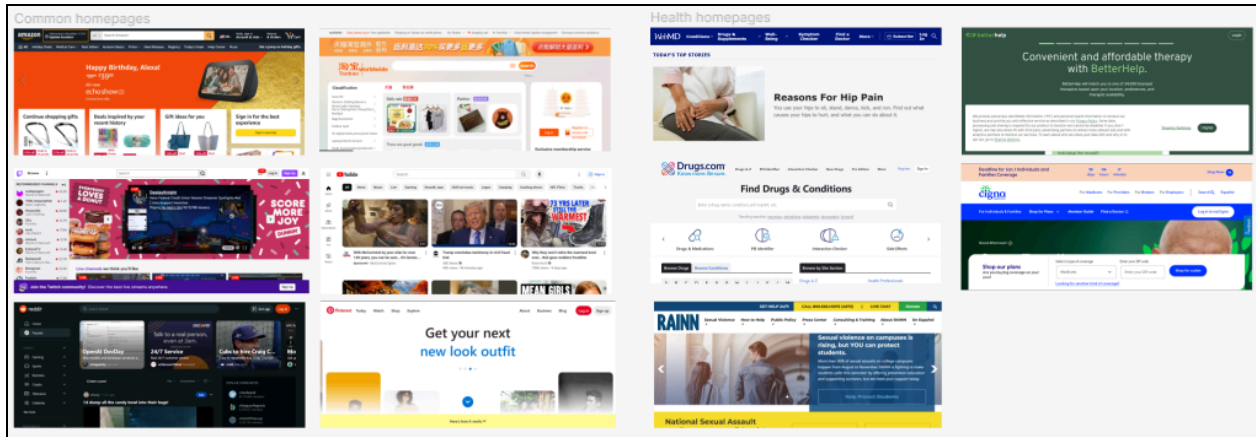
Implementing trauma-informed design practices supports the empowerment and safety of all users across any website. I want this project, the content I create, and the educational information I provide to support designers in starting to better their practices. There are already great resources available to help designers in this way (Randazzo, Social Design Sydney, and The Consentful Tech Project), but I hope to provide my additions to these existing resources that take a closer look at the specific population of young survivors of sexual trauma and highlight how they are differently affected by digital elements than users that have experienced other forms of trauma. It is impossible to design the "perfect" page that intercepts all potential triggers, but it is our job as designers to be sure that our work is doing the least amount of harm possible to any possible user. A great way to be sure of this is to keep in tune with how your users are responding to what you have created, making the changes necessary to better your

work, and are therefore always improving your product or whatever you have created and put out into the wide web.

The How

Mapping out my ideas and visualizing their outputs is an essential early step in all of my design projects. I met with experts – researchers, professionals, and educators – who framed their work around trauma-informed design and decided, while in an academic design program and knowing my pre-existing skills, that a website of organized educational materials was the best way for me to complete my goals for this year. I began by sketching, taking notes, and prototyping in Figma to help guide my plan for the year.

I started my user testing with a few surveys. I asked my peer designers what their preferred methods of learning were, how they would describe their own positive and negative experiences online, and what factors of a webpage made them specifically disinterested in its content. I also used this early stage to give some visual examples to help me gauge how these same surveyed people would feel when presented with the pages compared directly to one another in front of them. I largely received similar feedback, but this think-aloud method of ranking pages and explaining their choices helped me to better understand their thought processes as designers. It also helped me to compare what they were saying to observations I had read about in previous trauma-informed web studies to feel more certain that the information I was planning to discuss in this project was generally true.



Screenshots of webpages I printed and had surveyed individuals compare and discuss

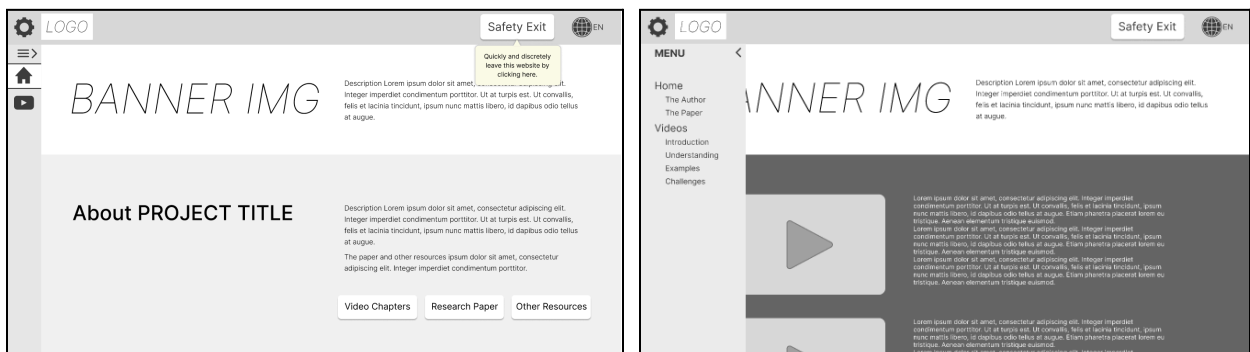
From this point, I moved directly into outlining my content. I wanted to organize everything I needed to communicate about this topic without making things too long or over-explaining in a way that would make any one point too confusing. I used my skills as someone who used to create and run educational workshops to find a good flow for this information and then asked peers how they felt about the layout. I had to be sure it felt approachable, as not all educational content is. It also helped me when beginning to ask how

<p>Intro</p> <ul style="list-style-type: none"> What is trauma / sexual trauma? Trauma responses & re-traumatization Why is this important to designers? Design Justice framework <p>Understanding the Principles as Digital Designers</p> <ul style="list-style-type: none"> Safety Trustworthiness & transparency Peer support Collaboration Empowerment, voice, & choice Cultural, historical, and gender issues <p>Examples and Applications</p> <ul style="list-style-type: none"> Ex1: Social media Ex2: E-commerce Ex3: Entertainment Ex4: Health portal <p>Challenges and Opportunities</p> <ul style="list-style-type: none"> Measuring impact Co-designing Universal design & its limitations 	<p><i>Initial outline written to organize my discussion points for this project's videos</i></p>
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these videos should look in length, number, and visual layout generally before having anything written and edited. I received some really helpful feedback during my spring midterms about this

piece that eventually pointed me in the direction of shorter videos that focused more on the examples and using my time wisely to explain them to folks who were only quickly scanning through my website. I worked on this and moved to use the video content as a way to highlight and explain specific contextualized examples, while the more generalized framework explanations, expansions, and external resources lived in print on the website for those who became more interested in the content and had more time. This gave me more time to be sure that the videos I produced were finalized to the standards I felt they needed to reach to live online for all to view.

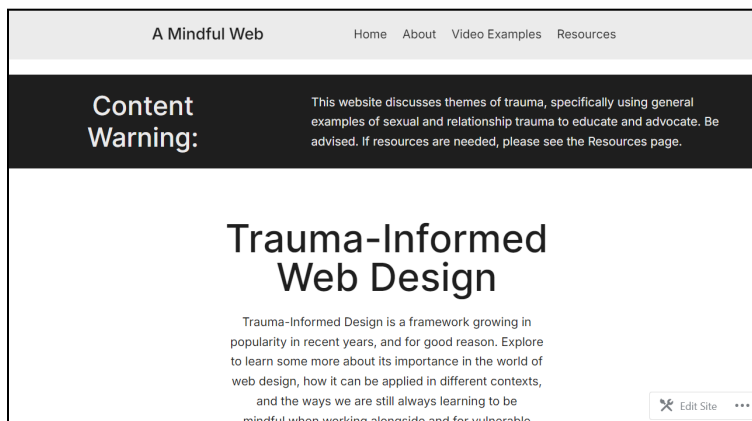
The next important steps for me to start were writing the script for these sets of videos and setting up some basic designs for how I felt this website should ultimately look. In addition to being sure that my design was accessible, trauma-informed, and approachable, I referenced many other popular educational websites to see what I could include to improve upon my imagined layout and navigation. Resources that I have used myself in the past, like LinkedInLearning and Khan Academy came to mind first to explore and take notes on. These notes were focused on navigation, organization of external resources, and generally how I should be applying UX research conclusions to my design given examples from popular sites like these. I started laying out a prototype with Figma to play around with features to include and



Images from the Figma file I worked on to create a working initial prototype for my website

frame my thoughts. After completing this, I was able to get some good notes and some even more helpful references that included the Nielsen Norman Group and non-educational but well-organized websites like the Good Food Institute has. I was urged to consider things like including fewer separate pages and instead have more of a smooth-scrolling continuous page with sections. I was also advised to be sure that my landing page had language clear to all, not just my intended audience, as I built this out. Using layman's terms is so important to being trauma-aware and inclusive, even when my project is as research-heavy as it is and could be driven to only appeal to a specific audience.

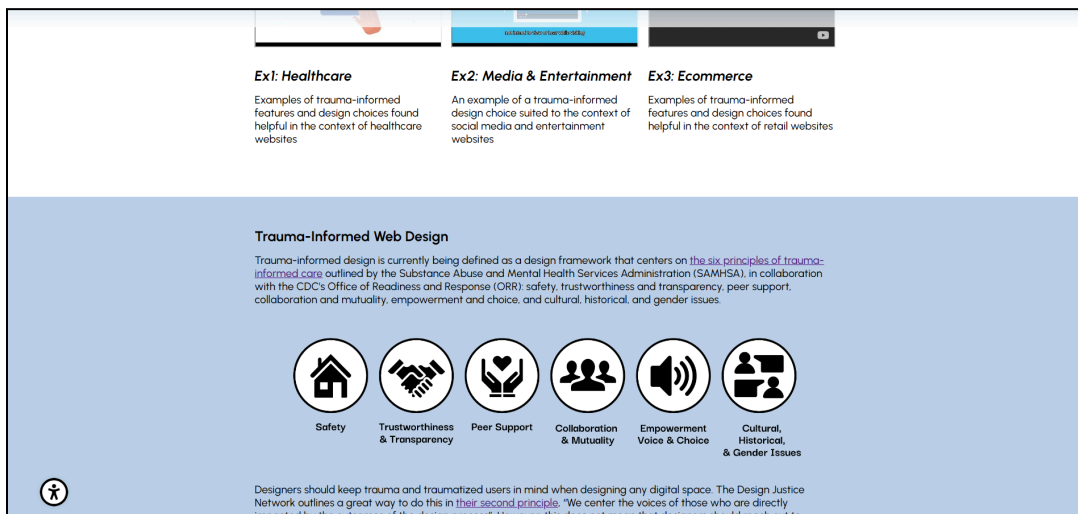
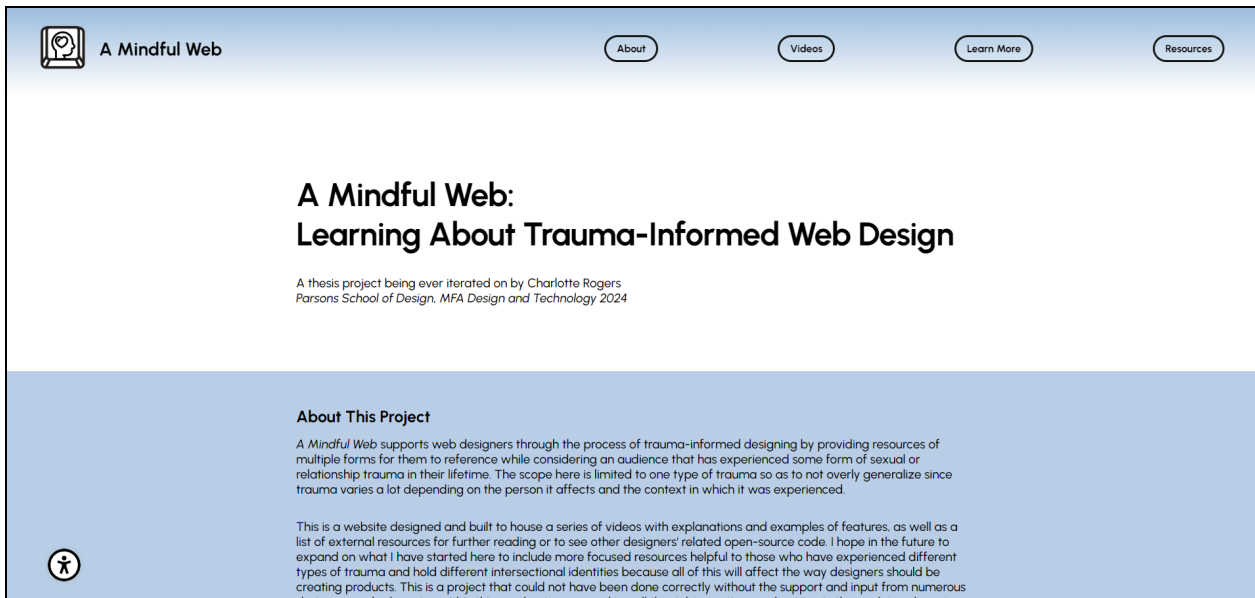
I worked on the videos using a combination of Microsoft's Clipchamp for clip editing and Adobe's Premiere Pro for more clean video editing and processing. My voice was recorded reading the script using my phone since that was the tool I had the most access to and found to be the clearest to edit. My website gave me some more trouble, as I started in WordPress and later found that this was not going to work for me unless I wanted to pay for the proper features.

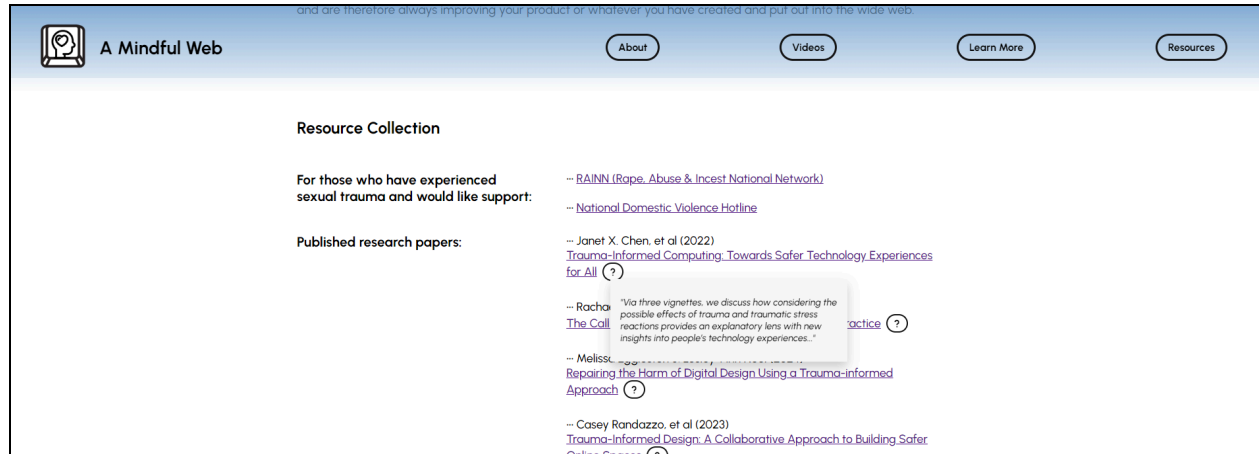


A screenshot of my WordPress site before switching out of this templated form

However, it gave me some more working feedback when I showed it internally to my peers to go into Visual Studio Code with and start from scratch myself. I was confident this would be the best way to get the product I wanted as I have enough experience with HTML, CSS, and JavaScript to make it work and look the way I wanted it to. I also had plenty of time at this stage in the semester to work without templates.

The ultimate web product, cropped and documented below, featured a calming blue and rounded-off style, utilizing the Google font Urbanist by Corey Hu and a logo of my own design. The images featured on the site are designed by myself in Adobe Illustrator and were used as part of my printed work during Parson’s thesis show. The code is all open source and available on my GitHub page, as well as listed in the project’s own “Resource Collection” section. I tried my best to leave comments on everything for clarity, instruction, and citations as needed. I was able to implement an accessibility tool that assists with text, color, and image hiding on the page, as well as test the code on mobile and with a screen reader. All of these things made my website feel effectively accessible while remaining trauma-informed all the while.





Parts of my final web design, highlighting the landing, the navigation bar, the video and graphics content, the learning material, and the resource section with its hover capabilities

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You can find other relevant resources not utilized in this particular paper on my full project page:

<https://charogerz.github.io/AMindfulWeb/>