



Noroff

School of technology
and digital media

Technical Report

Semester Project 1 – Community Science Museum

Ida Katrine Presttun-Brekken

Word count

Summary: 303

|

Main text: 1984



School of technology and digital media

Table of Contents

1. Summary	3
2. Body	4
2.1. Introduction	4
2.2. The process	4
2.2.1. Project management	4
2.2.2. Working through the design stages	5
2.2.3. Building the site	8
2.2.4. The finishing touches	11
2.3. Conclusion	11
3. References	12
4. Acknowledgements	13



1. Summary

This report focuses on the process behind building a website for my semester project. I will explain my fondness for using a Trello board as a way of managing my project, and I will disclose as many of the thoughts, feelings and choices that occurred along the process. I made a sketch and a mood board to start the design process, and moved on to making a prototype. The prototype was not finished before I decided to move on, which is why I ended up finishing the prototype before I finished the actual code for the website.

The process of building the website was long and tedious and took a lot of work. I had a hard time choosing a fitting colour scheme, and did not feel comfortable with the way my site looked because of this. I also had a lot of trouble having the header look the way I wanted, and I struggled to have the footer fit the information I needed. I also swapped from using CSS grids to present the main content of each page, to using Flexbox instead, deeming it more appropriate for the mobile version to work properly.

The hamburger menu did not work properly for a very long time, and I ended up having to remove it and build a new one with JavaScript. After having struggled with this for a bit, I finally got it to function like I wanted. I also had a hard time figuring out how I wanted the event-pages to look, but after some trial and error I finally found a style I was somewhat happy with. There are a lot of small changes I would make if I felt I could, but for now I feel like my result is good enough given my level of skill especially.



2. Body

2.1. Introduction

This report will focus on the process behind building a website for my semester project. Since most of the planning and project management was already done in preparation to receiving the semester project task, I quickly started working on the actual process of designing and creating a website. Since I already had made a Trello board, starting the process was simple and straight-forward.

2.2. The process

2.2.1. Project management

My Trello board was a great tool for support and management. It was much easier knowing what to do and when to do it since I had already made a timeline for myself to work within. I made some changes to the board according to my previous report; I had originally planned to work on my project during Christmas break but realized soon that I would not have the time to do much work. I made changes to the dates and timeline to reflect this, and to make sure I left enough room for me to work on each task on my board. I also added some tasks during the building process to remind myself what I had already done and what I thought would make my site and work process more efficient.

I believe my process was made a lot easier because of my Trello board. It felt secure and comfortable to have somewhere to write down all my notes, and it



made it easier to jump back into working on the project between sessions. It also allowed me to more easily determine what tasks to prioritize.

It was also good to have my GitHub Repository and Netlify Site Deployment ready for when I started the process of coding my website. I do not think it would have made a big difference if those were not prepared beforehand, however it did allow me more time to focus on the design and building process. There was nothing else to do other than making sure my site worked properly, my code was clean and semantic, and that the codes were added to the repository and further deployed.

2.2.2. Working through the design stages

I started off the design process by researching a lot of different museum sites. I will credit the ones I did use for inspiration in my Acknowledgements. After having made up my mind about how I thought I wanted my site to be, I started making a very simple sketch of my idea in Photoshop.

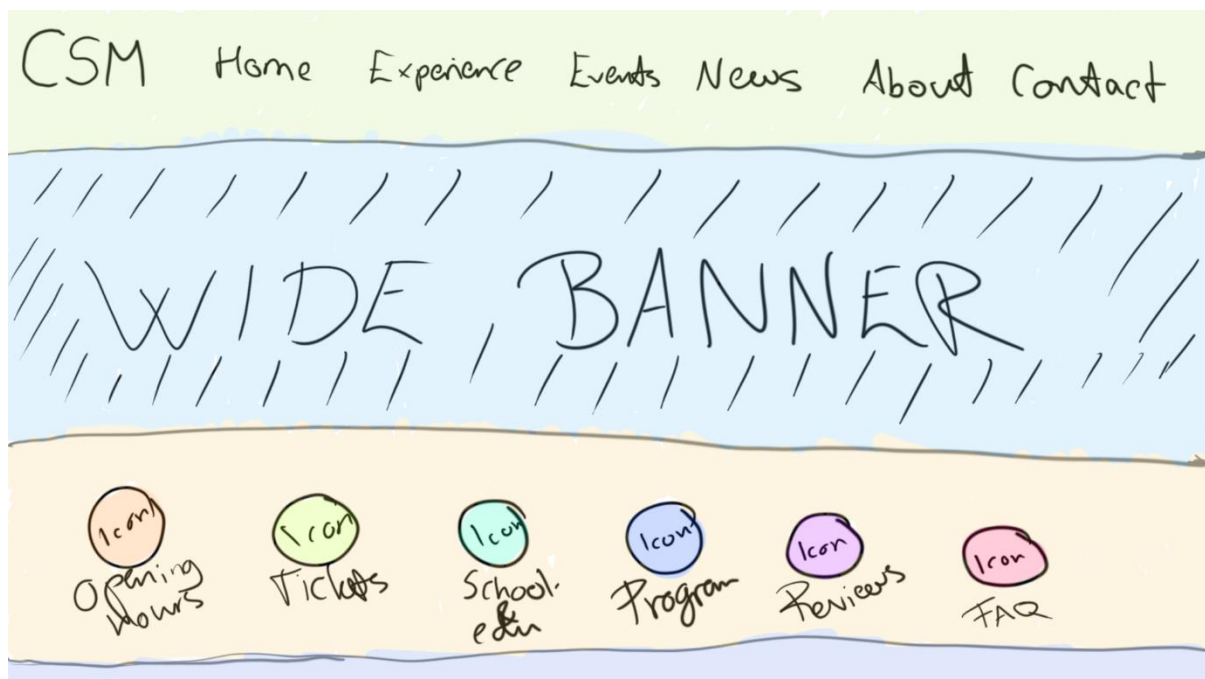


Figure 2.1 – First sketch of my website design

I was very unsure about what theme I wanted for my colours, but I knew I wanted to use colours I had not already used in earlier projects. This is probably the element I have been making the most changes to throughout the building process, as I had a very hard time finding colours that felt proper to my site in addition to me enjoying the colours.

Once my sketch was done, I had a little trouble getting all my thoughts conveyed clearly to myself by only looking at it, so I also decided to make a very simple, mostly text-based mood-board to explain myself. This way I did not have to clutter my sketch further, while also getting the chance to write out my thoughts on what I wanted for my website. This was also made in Photoshop.

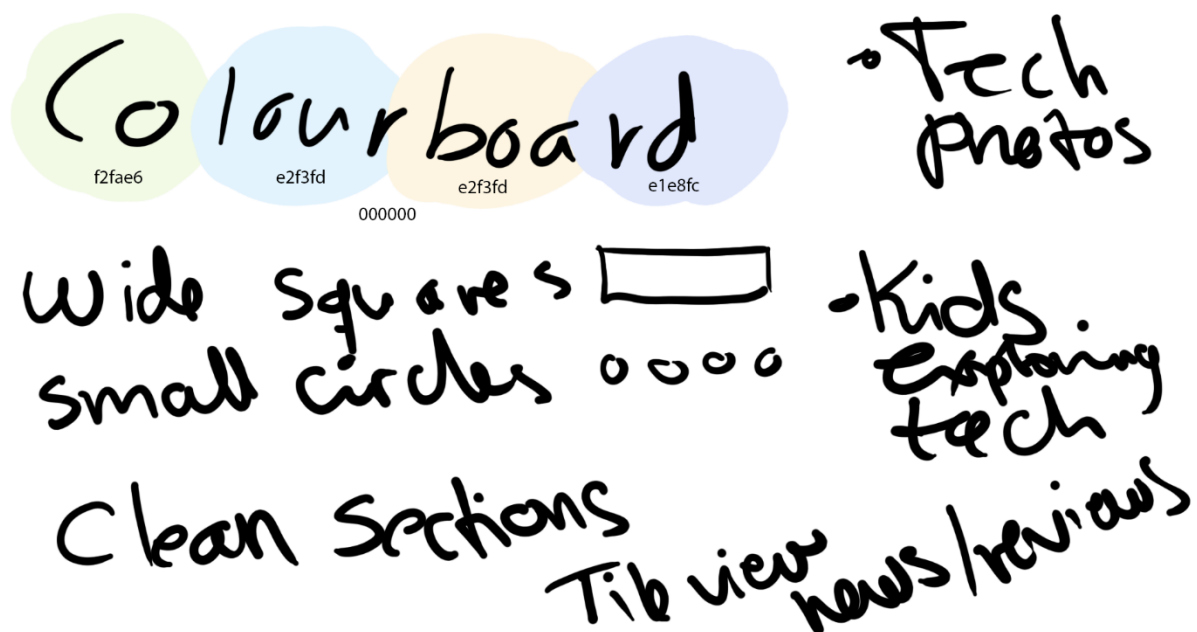


Figure 2.2 – A quick mood board

Both the sketch and the mood board were quickly and easily thrown together in a moment of inspiration and extra time. I let them both do their work inside my mind before working on a style tile. I decided I wanted to make the style tile for two main reasons: I wanted to practice as many of the processes I have learned during this study programme, and maybe the style tile would be what I needed to bring my sketch and my mood board together nicely.



Figure 2.3 – Style tile

Once I felt I had some idea of what I wanted, I started building a prototype in XD. This took me a long time, and ultimately, I did not finish the prototype properly before starting to write my code. I knew that this was probably not a good idea, but I was starting to feel bothered by not having started to build my code. This also resulted in my website being quite different from my prototype; first I had some ideas for my prototype that did not feel good once I started building my code. Secondly, since I had not finished my prototype, I



only had so much to base my design upon once I was building the site. This is probably my biggest regret during this process; I should have finished the prototype before I started building the site. Even if I do enjoy my final design a whole lot more than my design for my prototype, I still feel like doing things out of order made this process less efficient and more troubling for myself. I finished my prototype a while after having finished building my site and decided not to update the design of the prototype according to how the actual website ended up looking. I wanted to keep true to the initial idea the best I could.

2.2.3. Building the site

I started building the site by adding the basics: I added the html-files I thought I would need, as well as one css-file for the styles. I was considering if maybe I needed more than one css-file, but I realized there was little chance I would need to have more than one. I then added the head-section to my different html-pages and made the necessary changes. I also added a readme.md-file containing information about the project, as well as delivery requirements and other chunks of information that I felt would be interesting for me to keep easily accessible.

Once the basics were finished, I started adding information to my html-files, as well as my css-file. I decided to add the header and footer first, as these are elements that will be repeated for each page and only changes slightly. I then started adding the content to these elements. At first I had both the header and the footer stick to the top or bottom of the page so they were always visible even if you scrolled up or down the page.



For the header I went for the classics: logo image, logo text, and navigation. I also tried to have the navigation hide behind a hamburger menu for smaller screen sizes but had real trouble getting to work the way I initially wanted with only html and css. I could move the hamburger menu icon from the left side of the page to the right, but the actual navigation would not be moved, no matter how many ways I tried to force it. I tried for a while to leave the navigation, and have it stay visible no matter the screen size. However, I realized quickly that I would have to get back to the issue and find another way to fix it, since the navigation made the page look very messy and unprofessional if I did not have it hide the navigation at smaller screen sizes. After a while I mustered the courage to try out different ways to fix my problem, and after some trial and error I finally found an article and video that helped. This fix required html, css and some JavaScript. I have never used JavaScript before, so it took a few attempts before the codes worked together the way I intended, but once they did, I was very pleased with the result. I kept the header fixed to the top to always have access to the navigation. I also decided to use flexbox for the navigation.

For the footer, I first only added a copyright claim. After a while I decided I thought it looked inefficient and started adding contact information. I had some trouble fit all the information in properly without having the footer take too much space on the screen. Since I wanted most of the screen to be focused on the actual content of the page, I decided against having the footer fixed to the bottom of the active screen. I positioned the footer at the bottom of the actual pages. This way I could add more information without obscuring the main content of the page completely. I also spent some time organizing



the footer content in a way that felt tidy. I decided to use flexbox for the footer.

I also wanted each page to have a main content section. I had the actual pages use a gradient for a background, but added a solid, light background to contrast the text for each informational page. This way I felt each page had a touch of colour without being overwhelming and obscuring the actual information on each page. I also had all informational text be a dark colour, while all headers were given a blue colour. This also added a touch of colour to each page, as well as giving the headers a distinctive look. Once all the copy was added, I added images to some of the pages. I was initially planning on not have images on all pages to save me some time, but once I had finished adding copy to each page I felt that some of the pages seemed very plain and empty without images. I then decided I would spend some time resizing and looking for different images so I would have something for almost all pages.

For the event page, instead of adding images, I decided on creating a calendar. I initially tried to add an actual calendar with clickable dates, but it took up too much space and I struggled with having it properly resized to fit smaller screen sizes. I instead created simple buttons linked to a page for the event list of the corresponding month and decided that would have to do for this project. I also decided to only add events for January, February and March, as I had some trouble making up enough events to fill a whole year.

I had first decided on having all the informational pages organized by using CSS grids. However, I realized that my design was not great for CSS grids on



smaller screens, so I changed it to Flexbox. This worked much better, and felt more appropriate for the way I had laid out the content of each page.

2.2.4. The finishing touches

To finish off my project, I went over the requirements for the assignment and tried to make sure I met them all to some degree. I finished the prototype and tried to tidy up my CSS codes. I revisited my Trello board to make sure I had done everything I had written down for myself to remember, and I made sure I added all the links I used to guide me through this process to my references or acknowledgements. I also had a few people look at my website to make sure it made sense and felt like a proper website. I also spent some time changing the colour scheme of the site, as I had a hard time finding colours I felt fit the theme.

2.3. Conclusion

To conclude I would like to say that I enjoyed the process of this project, even if I had a lot of struggles and did get properly frustrated more than one time. I had a lot of realizations that I hope will help me to become a better front-end developer in the future. I also realize I still have so much more to learn, even if I made some progress through the process of this project. I am especially looking forward to learning more about JavaScript, and hope this will help me create even more accessible and efficient websites.



3. References

MDN Web Docs, "CSS Grid Layout": https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout

MDN Web Docs, "flex":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex>

MDN Web Docs, "flex-basis":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex-basis>

MDN Web Docs, "flex-direction":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex-direction>

MDN Web Docs, "flex-flow":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex-flow>

MDN Web Docs, "flex-grow":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex-grow>

MDN Web Docs, "flex-wrap":
<https://developer.mozilla.org/en-US/docs/Web/CSS/flex-wrap>

MDN Web Docs, "Flexbox": https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Flexbox



MDN Web Docs, "transform": <https://developer.mozilla.org/en-US/docs/Web/CSS/transform>

MDN Web Docs, "transition": <https://developer.mozilla.org/en-US/docs/Web/CSS/transition>

MDN Web Docs, "Using CSS custom properties (variables)":
https://developer.mozilla.org/en-US/docs/Web/CSS/Using_CSS_custom_properties

Nagy, A. November 7th 2021, "Responsive Navigation Bar with mobile menu using HTML & CSS", Dev.to, last accessed February 11th 2022,
<https://dev.to/javascriptacademy/responsive-navigation-bar-with-mobile-menu-using-html-css-2hpd>



4. Acknowledgements

Design was inspired by:

<https://www.vilvite.no/>

<https://www.universitetsmuseet.no/nb>

<https://www.kodebergen.no/>

Most images and most of the copy was provided in a .zip-file, and I made use of whatever I saw fit for my project.

Images not provided to me were downloaded from Unsplash:

“Professor” – Sigmund, <https://unsplash.com/@sigmund>

“Telescope” – Kieran Manion, https://unsplash.com/@kieran_manion

“Turbin” – Nazrin Babashova, <https://unsplash.com/@kurokamio4>

Fonts were downloaded from 1001 Fonts:

Fabrik - <https://www.1001fonts.com/fabrik-font.html>

Ostrich Sans - <https://www.1001fonts.com/ostrich-sans-font.html>

A special thanks to my supporting and encouraging classmates and study partners:

Nikolaos Digalakis

Mariusz Rozycki

Bavy Ado

Joakim Tveter

Thanks to my aunt to volunteering to look at my website and give feedback:

Linda Knapskog



Thanks to my friend for helping me in the difficult choice of colour scheme:

Michael Brynildsrud Værnor

And lastly, thanks to my husband, Tobias Presttun-Brekken, for giving me input when I ask for it, giving me space when I need it, and encouraging me in striving to do my best.

