A screenshot of a cell phone

Description automatically generated

# Project Exam 1

Marie Lowzow Morland

<https://innovation-coach.netlify.app/>

Summary

This report will go through the process and reflections I made while making a blog. The blog is a student project where I will show my abilities to create a user-oriented product by applying the knowledge I have gained over a school year. Rapporten will explain how the design has been developed and what the main obstacles were, as well as the solutions I implemented and the thoughts behind them. The main focus is the responses on the user tests, and how these valuable feedbacks found problems with the site and led to an improved user experience in the end. The task description we have been given has had a part with mandatory requirements, and a part with optional extra tasks. Some of these extra tasks have been tackled, but instead of completing all the optional tasks, I have in this project chosen to go deeper into accessibility and WCAG. Not just because the site should be legal, but to create a good user experience regardless of any disabilities. In order to strive for a perfect site in terms of accessibility, I have had to acquire more knowledge in the field, gain a user understanding of user groups with user experiences that are very different from my own and acquire completely new users for testing.

Introduction

The task is to put into practice the skills learned over my first year of studies while creating a blog site. The task starts with the development of the design, the use of adobe XD to create a prototype of the website. Furthermore, I have set up WordPress on my web host and added blogs on the admin panel. In this way, the content for my website is stored on WordPress and used as a Headless CMS. The website is built using HTML, CSS and JavaScript, and by making a call to the WordPress REST API to fetch data. The end result is displayed through a GitHub repo, deployed to Netlify. Along the way, the page will be tested by users and be adjusted based on their feedback. This report will cover the process I have had during the project, choices around design and technology, how user feedback has contributed to a better user experience on the site, and how I have strived to create a good site in terms of accessibility. At the end of the report, I will discuss the challenges and questions that have arisen along the way.

# Process

- Hvordan gikk jeg frem, valgte tema, hva tenkte jeg og planla før jeg startet, hvordan ble prosessen endret underveis. Hvordan har jeg tilnærmet meg oppgaven og disponert tiden (f.eks design -> prototype -> spør om feedback -> wp -> GitHub -> netlify-test -> design iteration -> frontend 1. version -> …)

The topic I have chosen for my blog is innovation and entrepreneurship as I teach in the subject on the university and have earlier considered to write a book on the subject. I already had some self-made illustrations that I use in my teaching that would be nice to use. This and the assignment description from Noroff form the base for this project and this report.

The first week I started looking at blogs, searching for pintrest, and looking at websites for inspiration. I used this to make a design and a prototype for the page. One prototype was made for mobile and one for desktop. These were sent to a test group of 5 people on messenger to get feedback. In the meantime, I set up github repo, netlify and wordpress. I also started setting up the folder and file structure for the page in Visual studio.

Midway through the first week I got with the support of the response to the prototype landed navigation and layout on the content. While the design still had a lot to go on when it came to colors, mood, main image and other details.

Eneste endring i navigasjonen er at jeg i begynnelsen hadde jeg også en samle-side som het «Tools and links» som skulle inneholde verktøy som f.eks ulike canvas og templates og nyttige lenker til nettsider rundt tema. Men ettersom jeg fikk tilbakemelding på at man ikke nødvendigvis visste hvordan verktøyene skulle brukes, og hvordan dette skulle kombineres med søk, så besluttet jeg å fjerne siden og heller behandle verktøyene som temaer i postene.

While waiting for feedback on my design from my test users, I started setting up WordPress, creating an API, and structuring html, css, and js files. As I have become more confident in CSS, I see that I test different small design possibilities to a greater extent directly in devtools. Before I have committed code, I have tested the code with Wave and Google Lighthouse continuously. This has ensured that I have picked up errors in the code relatively early. On the other hand, it has also led to me coming across something else in the code along the way. This has meant that each commit can consist of several quite different changes. I have to admit that I also get a little carried away and forget that I have not committed yet. Although you can easily divide file changes into different commits afterwards, it is worse if you have visited the same file for two different reasons, and not worth the effort to divide. Therefore, the various changes are described in github as bullet points. If I had worked with others on the same code in github, this is probably a habit I should put down.

Design and technology foundation

- Initial Design

- XD prototype

- Wordpress og serveroppsett

- Først commit til GitHub -> netlify

- Revised design ( a bit about design feedback )

 First web version

- folder structure

- templates

- api-calls

- contact form

-search(?)

-carousel

- modal

- loader

User feedback:

Who and how

## Design changes

The only change in the navigation is that in the beginning I also had a collection page called "Tools and links" which should contain tools such as various canvases and templates and useful links to websites around topics. But since I received feedback that one did not necessarily know how to use the tools, and how this should be combined with search, I decided to remove the page and rather treat the tools as topics in the posts.

Functional changes

HotJar

- heatmaps - button in forms

- surveys

- videos - people «forget» to scroll down in the main page

Findings and solutions

- theme change

- layout change (video learnings for i.e iOS)

- desiding colors

- contact form verbose

- positioning and sizes problems («sun» to lang down, carousel not showing everything etc..

- redesign dom order (search in top, showing previous search)

- empty state (no search hit)

- don’t repeat first post in carousel

- post summary on each post on top (user didn’t find search keywords)

- …

# Accessibility

Why all the effort

- sites with inspiration - uutilsynet, w3c, blogg, uu-podcast ( key takeaway to make the site easy to use )

Testing:

wave + lighthouse ( filed an issue )  keyboard

screen reader

- engaging a facebook forum

- user test with blind test subject

## Findings and solutions

- skiplinks

- «reduced motion» (ikke impl)

- lange a-tags

- farger

- aria-labels

- aria-current

- aria-live (carousel and contact form)

- menu close after list (not implemented(?))  -modal should not tab outside, and be keyboard accessible

- html structure (header before date and images)

- custom focus

-…

Last round of feedback:

- Solveig marie

- Kenneth

- Nina/Gustav?

Discussion

(på norsk kjent som drøfting) - talk about choices made, and if they were correct

- focus more functions vs accessibility

- file structure ( i.e two «post.js»)

- alt text for images in carousel or not

- what should be page headers?

- code structure/design (when should something live in its own js/css-file(?))

- separated user feedback and form js file

- header for homepage vs other pages (reuse code vs duplication)

- general function vs specific (carousel can only have own (?) while I can have multiple forms on same page, yet only ever have one)

- mention lack of error handling(?)

- css selectors (went from single «nav» to two, problems in styling and js selectors that relied on selection «nav»)

- setting up development enviroment ( vs-code extensions (live-server, es6-template, test from actual mobile in network)

Future work

(?) -ideas and plans that were scoped out

- next / previous post

- comments

- alternative «all posts» layout, with local storage to remember what you’d like (pictures or not)

# Conclution

- sum up finding and experiences, how good is the end result? Key learnings (wow, there is a lot to thing about in accessibility, and users don’t always agree! Would’ve though there would be easier to find «this is how to do it in a user friendly and accessible manner» - examples/tutorials