A screenshot of a cell phone

Description automatically generated

# Project Exam 1

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Word count

## Design

### **What went well on the project**

As usual, I began working with hand-drawn wireframes first. This has proven to be a good route for me to go, as I often find I get ideas faster than I can create them in Adobe XD. Once I had a wireframe to go off, I began compiling a sort of style-tile, keeping in mind the color palette I wanted to use as well as the general layout of the project. Overall, I’m happy with the end result of the prototype as well as the finished website. I feel like my planning helped me create exactly what I envisioned from the start, with some necessary tweaks which I’ll get into below.

### **What was difficult/didn’t go well on the project**

First and foremost, finding a suitable color palette wasn’t that easy. I luckily got some help from my girlfriend in finding the perfect color palette which suited my plan to create a food blog. From there, I wanted to create a grid layout for my blog-list page, but this turned out to be very difficult to begin with when I got into coding. Eventually, I was able to create code which would allow me to use such a grid set up, but this made images stretch and warp to an unmanageable degree. This pushed me to go for a simpler layout, since I didn’t want to also have to play with the image resolutions even more than I already had to - especially considering I’m still not proficient in Photoshop outside of some simple cropping and resizing.

### **What would you do differently next time**

I’m not so sure I would do that much differently when it comes to the design process. In the end, I ended up with a project I’m quite satisfied with and I think that’s due to the process I made sure to go through in the planning and development phase. Perhaps I would’ve liked to be better at using software such as Photoshop and/or Illustrator, but that’s for another time. Perhaps next time I’ll plan more according to my own skills and capabilities, but I feel like I did that this time around to a pretty good degree. The only noticeable change I had to make was that grid layout, and that’s more due to the imagery than anything else.

## Technical

### **What went well on the project**

Overall, I feel like most of the technical things went quite well. Alot of trial and error, Googling and other troubleshooting measures went into creating the code for this project. I’ve also taken a look at previous projects in cases where I couldn’t remember how to do a specific thing and supplemented with StackOverflow or MDN links to create most of the functionality of the website. I feel like I have a pretty good grasp on APIs and their documentation from before, having done quite a deep-dive into RAWG API documentation for my cross-course project, which in turn helped me alot throughout this project exam. WordPress REST API is difficult to work at times, but knowing how to read the documentation well has been an important skill throughout this process.

### **What was difficult/didn’t go well on the project**

As I mentioned above, I feel like everything in the assignment brief went pretty well in the end, but there were definitely some difficult aspects. To begin with, I had a lot of issues creating a post structure on WordPress which I could work with. I briefly re-explored regEx expressions to format the HTML output the way I wanted, but this was extremely inefficient and time-consuming. Luckily, Connor O’Brien mentioned two WordPress plugins which could help alot. I found Advanced Custom Fields to be extremely useful, which is what I’ve used the most for my WP content.

Additionally, the carousel proved to be a quite difficult task. Luckily, I found a great video showing a very nice carousel variant, which I was able to follow and edit to my liking. I opted to drop the progress bar used in the video since I felt like it could potentially clutter the carousel section a bit. I still wanted the infinite scroll, so I spent some time getting that to work, since the video I found ties the infinite scrolling feature into the progress bar.

I experienced the most issues with the WordPress REST API itself, since it returns content in a way we’ve not previously seen in the course. Especially the part with embedding the content to the return in order to get proper image URLs or using ACF and Custom Post Type UI to create returned content the way we normally would’ve received it in for example external APIs or WooCommerce. I also found it very difficult to work with the native search feature in WordPress, and didn’t manage to find any plugins which improved upon it. I tried using the ID the API supplies to get the images, but ran into a CORB error I wasn’t able to fix when passing it directly into a media URL. From there, I gave up on fixing the issue for a while, until just recently when I set up a separate fetch within the for loop to get the images. This has turned out to be an acceptable solution, although it does load the images slightly slower than the content itself. I can live with that though, if it means I don’t have to edit any more of the native PHP scripts WordPress uses.

Another difficult aspect of the assignment was how I wanted to handle the “View more” button on the blog list page. To begin with, I wanted to use a grid layout to place the cards in a more interesting way, but I ran into a lot of issues with image scaling and stretching which ultimately led me to drop the grid layout idea. The original idea, however, pushed me to split the incoming results array into smaller arrays of 10 each in order to create the view more button. I also wanted to future-proof the solution I came up with since this could potentially be a permanently available website which some of my friends might want to continue to add recipes and tips to. This is why I ended up splitting the array, which wasn’t as easy as I had thought.

Lastly, I had some trouble with both posting comments and sending contact form data to WordPress. I received a tip from a fellow student to add the fetch information to Postman and it would help me along the way. This proved a very useful tip, as it led me to a working solution after a good bit of trial, error and Googling.

### **What would you do differently next time**

Next time, I want to really sit down and plan my features before I do them to a larger degree than I did now. Hopefully this will save me some time on code cleanup once I’m done. I also want to spend more time going back to both this project and my cross-course-project and clean up the code to the best of my abilities since I feel both sites have a tendency to be slightly bloated, increasing load times significantly. I want to become better at writing more repeatable code, but I’m not quite there yet, but practice makes perfect!

## WCAG guidelines, content management and SEO

### **What went well on the project**

I feel like overall I’ve gotten a decent grasp of how to make sure my site is accessible through previous projects. I’m always making sure my design fits the concept I want to go for, while keeping color contrasts in line with lesson material and WCAG guidelines, and adding hidden text for accessibility where it seems fitting/necessary.

I also made sure to use tools such as WAVE validation tool and Adobe Color Contrast Analyzer in order to check for any potential WCAG issues. I also used the W3Schools HTML Validator to check for errors.

These tools showed I only had an issue with the original text color for the navigation (orange on white), and some repeated image ALT tag text. WAVE reported an error, and I double checked with Adobe Color Contrast Analyzer. What I like about ACCA is that it also shows you alternatives if your colors aren’t contrasting enough. I used this in order to get a darker orange color, which is in line with WCAG 2.1. I opted to remove some of the redundant ALT text, but kept it in other places as looking at it from a screen-reader point of view, the remaining alt text seemed to have some potential importance to the understanding of the site.

When it comes to content management, I feel like this, for the most part, went well once I knew which plugins to install. Advanced Custom Fields is, in my opinion, a must have when working with WordPress as a headless CMS. The vanilla returned JSON is extremely hard to work with, especially the content blocks, making a plugin like ACF or Custom Post Type UI a definite must have. Once these were installed, content management went like a breeze. I really feel like these should’ve been included in the lesson material…

In terms of SEO, I did my best to ensure that all pages have unique descriptions to the extent possible to my knowledge. I also made sure the site tags are specific for this project and tried to include key search terms in posts where possible and reasonable to do so.

### **What was difficult/didn’t go well on the project**

Content Management wasn’t too easy to begin with. As I mentioned above, I encountered a number of issues with content loading when trying to use vanilla WordPress. I’ve gotten very used to exams being quite strict in public universities here in Norway, and thus felt like going outside of the tools provided almost feels a bit like cheating. Because of that, I didn’t really look into plugins until Connor O’Brien mentioned CPT and ACF. I know this is a silly mindset to have and something I’m working to get rid of, but it’s not always immediately obvious what is considered “cheating” and what isn’t when it comes to these projects. I realize Bootstrap at this stage is frowned upon, but that’s about where the obvious rules stop at least in my mind. I would’ve liked a more detailed run-down of how to go about solving these issues other than “Tutor support will be limited”.

### **What would you do differently next time**

Next time, I will do more research on possible tools to use. I want to get into JavaScript Libraries, but didn’t find any which would’ve been good to use with this project. I’ve previously been given feedback on certain topics to look into following a project, which I tried to do this time around. I still feel a bit like I don’t quite know how or when to use these kinds of tools, but it’s slowly getting there. I do feel like I have made a project I can be proud of though, and definitely a project which has challenged me and my abilities - and in the end made me a better developer.

## References

(place references to websites, books, forums etc. that helped you in the project)

* <https://color.adobe.com/nb/create/color-contrast-analyzer>
* <https://webdesign.tutsplus.com/tutorials/how-to-build-flexible-modal-dialogs-with-html-css-and-javascript--cms-33500>
* <https://stackoverflow.com/questions/4550505/getting-a-random-value-from-a-javascript-array>
* <https://codereview.stackexchange.com/questions/176809/sorting-an-array-of-objects-by-a-property-which-may-be-missing>
* <https://www.youtube.com/watch?v=yq4BeRtUHbk>
* <https://www.javascripttutorial.net/javascript-array-reduce/>
* <https://stackoverflow.com/a/37826698>
* <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/reduce>
* Noroff lesson material
* Many, many other StackOverflow threads and MDN articles which provided partial solutions to problems
* Tutor Connor O’Brien, who has nudged me in the correct direction several times when looking at problems
* WAVE validator extension for Chrome
* <https://validator.w3.org/>