SEMESTER PROJECT, FEU2 Oslo

# **ASSIGNMENT REPORT**

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### 1. Introduction

For this semester's assignment we have been tasked to create a board with the goal "to create a board game and show the skills you have learned from CSS Frameworks, JavaScript 2 and Design 2.

In the context of this semester's CSS Frameworks course that means utilizing either Stylus, LESS, SASS or SCSS. In the context of this semester's JS2 course it means advanced DOM manipulation and better interactive solutions through JavaScript, and finally in the context of this year's Design2 course it means to utilize advanced design philosophies, as well as better SEO and marketing tools.

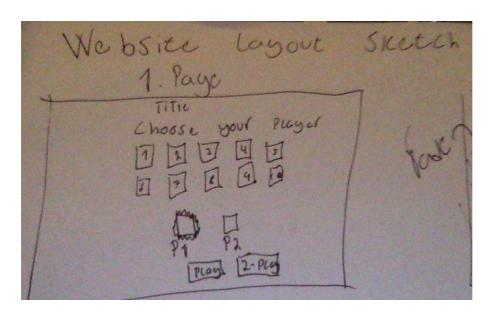
The project itself will be built using HTML, CSS and JavaScript as well as incorporating a specific API with data related to the theme of the board game, *Game of Thrones*.

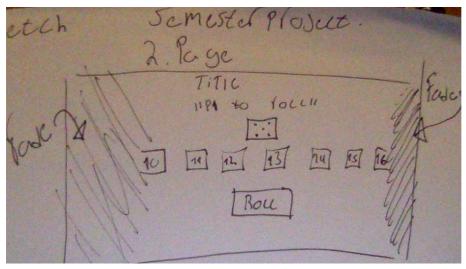
I have completed this task and the full repository with the full code and mark-up is available at <a href="https://github.com/OAMPfed/agolas">https://github.com/OAMPfed/agolas</a> and a working and live version of the game is available here: https://www.oamp.dev/game.html

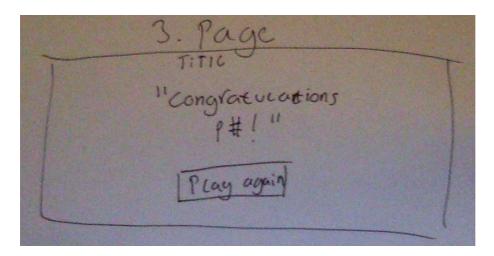
## 2. Design choices

The design itself is quite minimalistic. A video game should naturally be aesthetic, but the project is still a board game. I've taken a decisive choice to pick simple designs to focus on the game itself. As I am not a designer by vocation, or by study, it's better to instead focus on the technical parts of the project.

Initially the design was hoping to be a title at top, some interactive text below based on actions in the game, and then a dice with the correct number of eyes showing, and then a board sliding from right to left as the player moved to the next suitable tile, always keeping that tile in the middle. Below all of this was the roll button. Below are some simple paper sketches that were drawn for the first initial design.



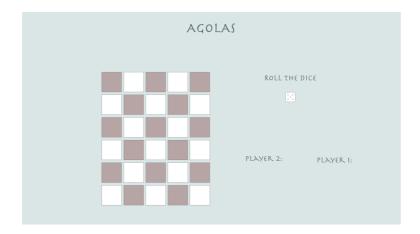




A second iteration was made quickly on Adobe XD which looked quite different. Below are a few screenshots of that XD project.

A GAME OF LADDERS AND SNAKES

AGOLAS
PLAYER I, CHOOSE YOUR ALLEGIANGE
HOUSE ALCOOD  CONFIRM



The live project shows that the design is still rooted in the same design as the XD project, but instead of having a multipage website, it is now a single web-page application with interactive text areas and proper use of DOM manipulation.

#### 2.1 Colour choices

There has not been a specific decision to use any specific colour other than to keep typical matt or flat colours to make sure the user's eyes are relaxed while playing the app.

The background is a very light blue-whiteish colour, and the text is entirely black. The board game itself has tiles with a thin, black border and an alternative background colour of white and browngrey. This makes for create colour contrast which aids with accessibility, but it also doesn't create an intense colour contrast that vibrates and irritates the eyesight.

The board game pieces use colours that correlate with the weapon crest of the given Houses from the TV show as they are depicted in the books or TV shows. These are too many to mention.

#### 2.2 Font choices

The fonts used are sans-serif, but quite decorative. The font used for the game's title and interactive elements is called 'MedievalSharp' and is cursive. The rest of the webpage uses the font 'Lemonada' which is also cursive.

The font sizes range from 40px at most (the title) to 15px as a baseline (general bodytext).

These fonts mesh nicely into the theme of fantasy rooted in the medieval period, and with the above colour scheme are quite easy to read and remain accessible.

#### 2.3 Interactive elements

The only interactive elements are simple buttons, one link, and some icons that have been designed. The icons are hoverable which scales the icon up with a short transition period of 0.1 seconds. The buttons and the links also have a short transition period of 0.1 seconds when hovered, but these go from having the same background-colour as the webpage, to turning black showing a clear button or link, with a cursor pointer and turning the text from black to white. The images below have not been resized and shows how the interactive element scales up.

Before being hovered.

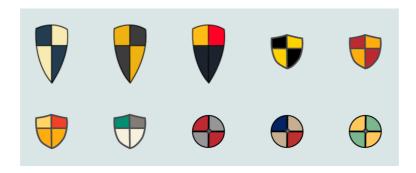
GET STARTED

After being hovered.

GET STARTED

#### 2.4 Icons

The icons below are traced from real pictures of shields and then simplified. When hovered they show the name of the House that the shield represents, and then a quote below which is the House's motto. Clicking this shield picks this House as the player.



## 3. Work process

The work process has been scattered but can typically be explained as following the waterfall workflow, focusing on one part of the project at a time. Throughout the weeks of this project I've written down pseudo code for how different solutions can be solved for DOM manipulation, or creating logic that completes the Snakes and Ladder game.

Most of the time spent writing code has been writing JavaScript as the project itself is interactive in nature, so relying on DOM manipulation to create a one-page application without having a HTML document that is mostly disabled mark-up was preferred. Therefore, most HTML is written in the JS and injected into the HTML document as the user navigates through the application. As a result of this the coding has been written in an order of HTML -> CSS -> JS -> CSS -> JS -> CSS -> JS -> CSS, and rinse repeat. The JS was initially heavily commented, but under guidance of the tutor this was simplified to one-liners that explain what the functions do.

## 4. Summary

Finally working on an interactive project which includes plenty of logic has been exciting and challenging. Having to write functions and variables that are going to work with the rest of the functions and variables requires planning and carefully writing code so that one doesn't lose oversight of what the code does or where it fits in.

Writing pseudocode and describing the logic of game is important so the developer can always have a point of reference and expectations of what code is supposed to do at all times.

Being a one-man development team is frustrating when important aspects like design are clearly made worse by a lack of skill or

intuition. Therefore the project has a greater focus on the technical and logical aspect.