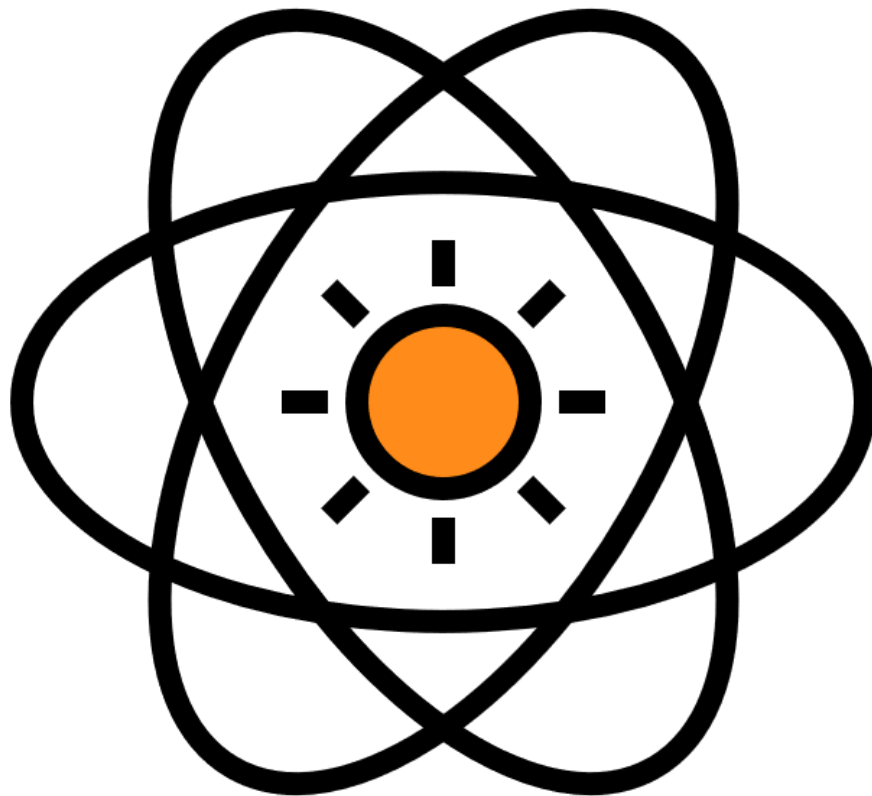


# Semester Project 01

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## 1.0 Introduction

In this report I will highlight my process of creating the website. I will touch on points from the planning phase, research phase, design phase, development phase and the testing phase. My main points will be why I have done the things I have done them.

## 2.0 Body

### 2.1 Planning

On the first day of this project I started a mental lay-down of how I must use my time after reading the assignment text. I found that in my plan there are four phases with each their own milestone. First phase was the planning phase with the and its milestone was delivery of the schedule document and gantt-chart.

Next came the research and development phase, which includes researching what pages I wanted and drawing up rough sketches, reviewing provided assets and creating supplements, create the layout markup for both handheld devices and computers, then implement all elements. And at the end concluding the phase with the completing development milestone.

Then came the testing phase, testing the website on real devices and chrome developer tools. For this phase the plan is to get fresh eyes on it letting a college look at it and explore the site. If everything checks out okay, the phase is concluded with the milestone “upload website to web-host”.

The phase of the project is writing the report, the plan was to take notes during the whole process, so it would be easier to write the report in the end. The fourth and final milestone is to submit the report with attachments and the link to the webpage.

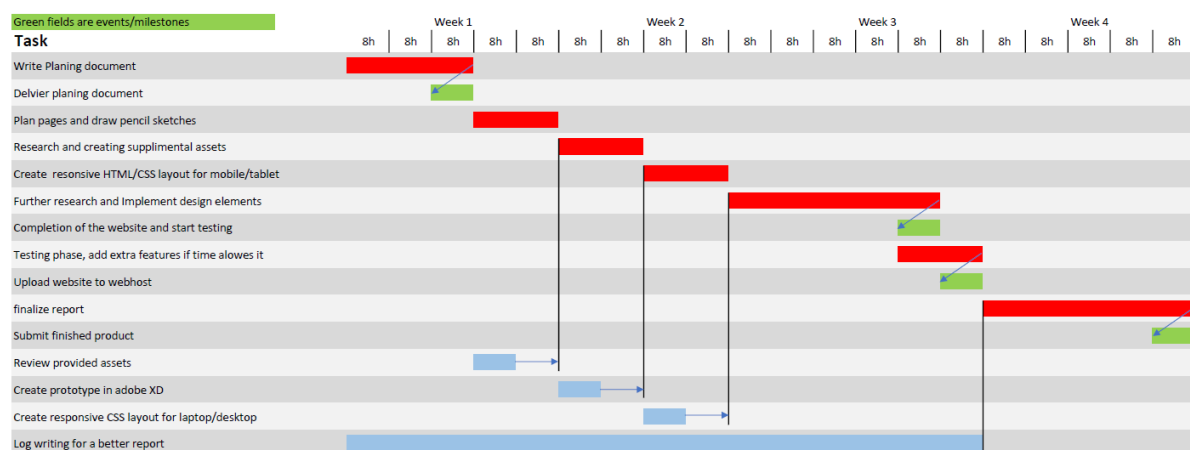


Fig. 1 Gantt-chart

A more comprehensive version of the plan is provided in the attachments;

Gantt-chart: 2019-11-02\_semproj1\_SondreLjovshin\_FP01.pdf

Schedule document: 2019-11-02\_semproj1\_SondreLjovshin\_FP02.pdf

## 2.2 Research

During the research phase I decided on what pages I wanted on the site and the colors I wanted to use.

### 2.2.1 The pages

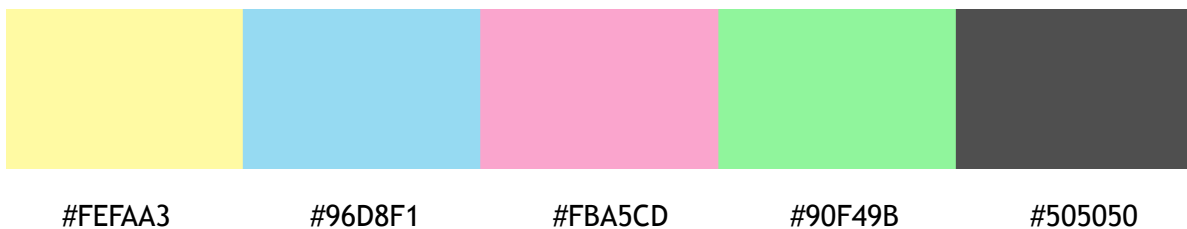
First thing I did when considering research was looking at the provided text document. By looking at the text I figured out what pages I wanted in my project and how I could use the text. Based on that I decided that I wanted to make an about us, exhibitions, pages for four exhibitions, events and a visit us page. I did not find too much text suited for a home page so that I had to do myself.

After deciding on the pages, I looked at the images to decide on what exhibitions to include on the webpage, I found some nice images for most exhibitions and decided on going with cosmology, evolution, biology and ecology.

### 2.2.2 The color scheme

When the pages were done I had to decide on my color scheme, I knew I wanted some diversity and something that was fitting for the exhibitions I chose to highlight on the webpage. Its was also important that the colors appealed to children. I wanted a yellow and orange mix, a blue, a red and pink mix, a green and grey. And of course, white and black.

These are the colors I decided on:



### 2.2.3 The Sketch

This section is a short one, mainly because I did not find the process particularly helpful and I struggled to find inspiration for the sketch work. But I did draw something, during this process I found the general layout of the main viewports. As displayed below:

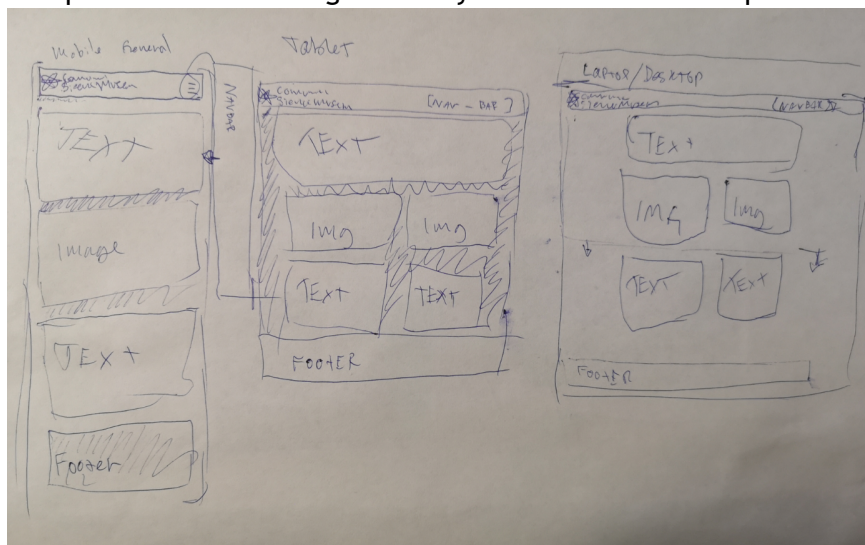


Fig. 2 sketch work for general layout

## 2.3 Design

In regards of design my main focus has been usability and user-friendliness, in this section I reason why I have made the different design choices.

### 2.3.1 The navigation menu

I knew from the moment I read the assignment that I wanted different menus on the mobile viewport and the bigger ones. I knew that if I wanted a sleek and user-friendly design for that number of pages on a mobile device I needed a navigation menu that was vertically aligned, and off screen when not prompted. I decided on a menu icon in the top right corner with a slide-in menu. Also, to make the whole website more accessible for mobile-users I decided to put in a menu item for the individual exhibitions as well as the item for the exhibitions page. On desktop there is no menu icon, but a horizontal navigation menu on the top right. On the desktop and tablet version I did not include the menu items for the individual exhibitions, because unlike the mobile version all “exhibition badges” are visible without scrolling on the exhibitions screen. And that concludes the decision making for the navigation menu.

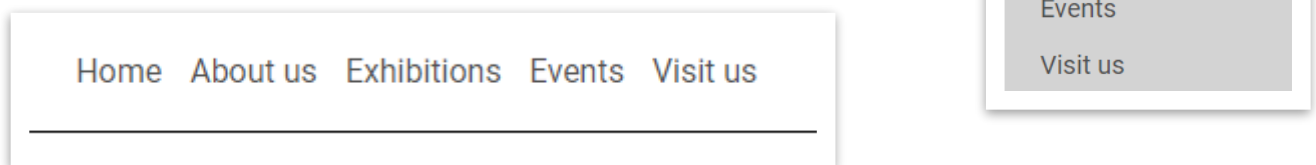


Fig. 4 Navigation menu for larger screens

### 2.3.2 The content containers

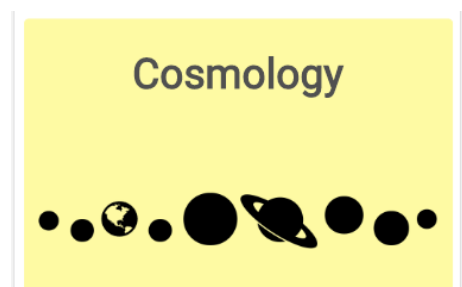
I wanted to keep the design simple and with repeating shapes and styles throughout the website. I decided to try out a container almost all content could go in to, I played around in adobe XD, and found out that a container that is about 94% of the width of the screen and as high as the content inside needs it to be with slightly rounded corners. Also tried the same for images with the same principles for width and height.

I tried a few different approaches on containers, with and without a background color, with and without padding on the inside. Then I thought the repeating shapes and styles throughout. I incorporated the color scheme in to the containers and alternated them randomly on every page.

I think it ended up looking quite clean, dynamic and interesting.

### 2.3.3 The Exhibition badges

During my planning phase I decided that I wanted a page for the individual exhibitions, and a exhibitions page to create a page where the user can browse the exhibitions. I wanted to use something keep using the same style everywhere, so I decided to create a template badge to use as links.



### 2.3.4 The mockup

For this project did the whole mockup in Adobe XD, I think Adobe XD is extremely efficient as a mockup tool when compared to Photoshop or Illustrator.

I started by throwing all the different elements I knew I wanted to use on to the artboard and created the header and footer. Then I created the content container template and found all the next elements I wanted to use. I pasted all the text in to the containers and fixed the colors.

On mobile the mockup was a quick, seeing that it was just all the different elements stacked on top of each other. The tablet version was a different story, I had to decide on how to move the elements and what goes where. I just tried a lot of different things without any actual plan or vision of how I wanted it to be, but I am happy with the result.

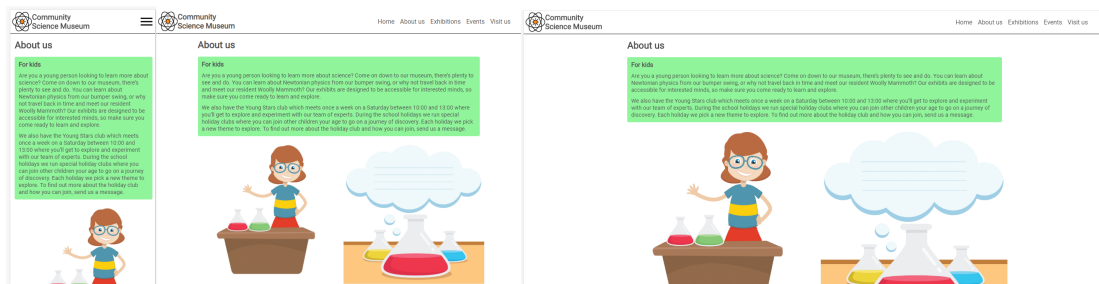


Fig. 7 Mockup example for mobile, tablet and laptop

## 2.4 Development

This section describes the development phase of the project, main points of this section is the challenges of making the mobile site responsive to tablet and desktop, and how I organized my stylesheets. I also briefly mention JavaScript that is used for a vital feature of the website.

### 2.4.1 HTML

I started out the mark up for this project by creating all the elements that are common for all the pages, header with navigation bar, footer and the slide inn navigation bar. Used my first day on trying to make an exiting front page, but I absolutely no inspiration to make it, so that first day of development, nothing at all happened. The next day I had regrouped and decided to skip it for now and do the other pages. I ended up starting with the about us page. The mark up for the site was done in about 20 minutes, but this complicated things when I started on making it responsive on tablet and desktop. At this point I am missing the mark up needed to make content move as the screen become wider. To solve this challenge, I started by finding breakpoints and added the mark up needed as I went.

At the end of the mark up process I found some SEO keywords for the “alt” tag on images and the meta tag for the different pages. And that really concludes the mark up and this HTML section.

### 2.4.2 CSS

In earlier projects I have struggled with losing overview of my CSS file when it becomes long. So, this time I made sure that I made all the comments I needed. Also, to counter the problem with losing overview I made four CSS files, «master.css», «main\_style.css», «header\_footer.css» and «sidenav.css». Master.css contains all the global properties for all sites and imports the other stylesheets as well as the font used on the website. The

«main\_style.css» contains all the styling for all the pages, divided in to sections with comments. «Header\_footer.css» contains as the name implies styling for the header and footer sections of the page. And the final stylesheet called «sidenav.css» contains the styling for the slide inn menu for the mobile version.

#### 2.4.3 JavaScript

Since JavaScript was not a part of this project I will keep this part brief. Because of the design choice of using a slide in navigation menu for the mobile viewport, I used JavaScript to make it appear in from the side. It does this by changing the width from 0 pixels to 200 pixels when the menu button is clicked and reversing the effect when clicked again. The same reverse effect is also applied to everything on the screen that is not a menu item.

#### 2.5 Testing

During testing I found a few things in regards of the layout I wanted to change. On the exhibition pages the images are way to big on larges screens. Other than that, I am very happy with the look and feel of the website also the responsiveness of the site. Another thing that I had forgot about when I got to this phase was the file size of the images, some of the images took way to long to load. I took a mental note when I reviewed the images during the research phase, that I needed to edit the images to lower their file size. Thanks to teacher Cameron and the testing phase I realized that I had forgotten to do this crucial task. I also discovered that the exhibition badges broke when I got weird screen dimensions.

#### 2.6 Corrections

After the testing phase I started correcting the issues that were found during the testing. First of all the layout of the evolution expedition had to be changed. The image ended up being very large and making the user have to scroll very much to see the bottom. I ended up placing the bottom text and image side by side instead of on top of each other. This change made the page easier to look at. Second thing that needed fixing was the image file size, some of the images was as big as 6000k, and that is well above the max 250k size limit. I imported all files to illustrator resized them too much smaller and fitting sizes and exported them as assets. Last big issue I had during testing was the exhibition badges that broke on the different screen dimensions. By setting minimum and max height on the elements that makes up the badge it kept its form as it should.

### 3.0 Conclusion

In conclusion, this is the most challenging assignment this far, but I have had a lot of fun while working on the project. I feel like I have learned how to make a website responsive regardless of the viewport. I have never been very interested in design, but I this project I feel like I have made something that appeals to the audience, is nice, clean and neat, with some teasing information about what the museum offers to its visitors. I hope you like the result as much as me.