

# Project Report

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Noroff Exam - "SpaceFeed"

Finished Product : <https://johnherman.no/Exam>

Github Repository : <https://github.com/Th0massen/Noroff-Exam>

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# 1. Introduction:

The purpose of this report is to show in details how the different phases of planning and development for this project was executed, how research was done and the targeted audience, and how the entire project went.

The assignment was to create a microsite for SpaceX to raise awareness about space program activity and events around the world, giving the audience an easy way to stay updated on the space company's future plans and achievements so far.

## 2. Planning:

Things started off with the completion of the Gantt chart, estimating how much time i would need to complete each step towards the final product, this was to have a solid schedule and a clear goal to work towards each week. After the chart was completed the functional specifications had to be filled out, showcasing a detailed description of the requirements for the requested microsite, and explaining system constraints, interface, behavior and interactions with external sources.

When the chart and the functional specifications were in place i started on the product plan, containing decisions, steps and tasks that will be necessary to develop a successful product.

## 3. Research:

Late first week / early second week i created a few personae, fictional people representing the general users who might use the service in development, showing some of the interests and fields that this project would be interesting towards.

After the personae i created a couple of storyboards, displaying a few of the scenarios where the service might come in handy, and how it would be used by the end user, before i started on the research. I started by looking into what i would need on my website, what would be required on the website, what API's i would need to use and inspiration from different sources, as well as to what the competition had in common.

Later i started on the design, planning how the website would look and behave, colors and the websites “atmosphere”, and what design trends were relevant to my project.

I first created a simple wireframe, deciding where certain elements would go, how the footer and navigation would look and behave, and how the different websites would look before i started designing a High-fidelity prototype to see a representation of how i planned the website would look, and assist me in the development of the final product.

## 4. Structure and Style:

I first started on the mainpage, developing the navigation, header and footer of the website, before i started to place the content i would have on the first page. When i had a good base to work with i started styling the navigation and header, completing the placement of navigation elements, and what should be displayed at the header, before i started on the footer, since i needed the header, navigation and footer to appear and behave alike on all subpages they got priority.

Once i was pleased with the result i started on the placement of the actual content on the site, created a card design system with some form of navigation on the middle to the different subjects and area of the platform, and created a local git repository that i pushed to github once i had a solid start on the first page.

I then created all the files of the planned subpages i would need, and placed the navigation, header and footer on each of them, added the links in the navigation and on the homepage, and started placing the different elements each page would need and started styling them in the proper colors and placements, I also found a video to have in the background of the website, and trimmed unwanted elements out of it before i placed in to the website.

## 5. Javascript:

Once i had designed what i could and added it to my git repository, i started on the functionality of my project, fetching the different api's i would need in order to make the planned elements to work. I started with the api from [open-notify.org](https://open-notify.org/), because i wanted a map with live updates of the location of the ISS, it both looks cool and is very interesting to see where the ISS is currently located, but it required some time.

I originally wanted a map from google to be displayed, but google had a strict coordinate system in place and would not accept the values given from the api, so after arguing with the map for a while i ended up using a map template from the [openstreetmap](#) website. It being more developer friendly and easier to get to work, with the assistance of the leaflet api, which is a open-source JavaScript library for mobile-friendly interactive maps, and jQuery i managed to get a working map that display the ISS location in real time, updating every 5 seconds.

I then fetched one api to display how many people were in space, and a different api from spaceX, displaying information about their rockets, before i started to design the different elements created from the api, and moved on to the next subpage.

After the live-feed subpage was completed i started on a page to display upcoming launches, and originally i wanted some sort of calendar to display what happens on a given date, with the possibility of clicking on any given date to receive information about what happens that day, but it quickly became to much work for my time schedule, and i could not get google calendar to work with any of the apis containing launch information, so i ended up creating a list displaying the upcoming missions, with some information about them, and displaying how many days until the mission starts.

Once the launch subpage was styled and completed i started on a live stream page, giving the user a possibility of watching live news from SpaceX on the platform, a place they stream their launches live, as well as a live camera stream from the ISS, and scripting the possibility of switching between the streams on the click of a button, and once i got that to work i developed a contact form for the contact us page, and got the email validation working.

## 6. Conclusion:

Once everything was working and displayed good, i published it to my website, and started testing it on mobile and for bugs. The finished product would have been a little bit better if i had gotten the google maps and calendar apis to function alongside the other apis, but in the end, i am happy with the end result, i think it looks good, it contains everything important without looking stuffed, and at the same time does not look naked either. It has elements that could definitely make people with an interest in space and technology return to the website, and delivers a clean and easy update on the upcoming launches and events SpaceX has in store.