# newspacetechnology

New microsite, including next launches from NASA

Final Report By Carolina Fjäll

## **Content**

Introduction Interpretation of the task	3
Research and Analysis	3
Inspiration	
Work process	3
Project plan, Functional Spec,	
Gantt chart, Prototype, Target audience	
Style tile, Construction of the site, testing	
Final Design	4
Graphic design, HTML/CSS,	
SEO/Content Strategy/WCAG,	
Interface Design, JavaScript,	
Implementation/rollout	
Conclusion	5
<b>Sources and References</b>	5
<b>Mockups and Links</b>	6
Microsite and Github	

### Introduction

This report contains information about the process and result of creating a microsite with API sources and images from NASA.

#### Interpretation of the task

The biggest challenge with this project was to add JavaScript to the site and make the content look interesting but still easy to read.

I knew that JavaScript would be difficult so I had plan extra time to read and learn more about how to add and style JavaScript on a site.

### **Research and Analysis**

#### Inspiration

I looked at different sites on Pinterest to find a style and layout I liked that could fit the site and the content. The pages I found with space content felt very outdated and they had very much content without any type of structure, so I wanted to make a site with a good content hierarchy

#### **Work Process**

#### **Project Plan**

The first part of this project was to make a project plan and functional specification. I spent a lot of time on decide what type of content and tasks I needed to finish the site. It really helped me calm down later in the process and do all the steps in the process properly.

The biggest change in the plan was that I removed the about us page because it felt like it was unnecessary having a lot of information about the company when the site most contains articles and information from NASA.

#### **Prototype**

When I knew what the site should contain, the next step was to identify the target audience so I could make the site easy to use for their needs, with content they will be looking for.

I tested fonts, colours and images and put it all together in a Style tile to get a better overview of my design choices.

I started to sketch the layout and made Wireframes in Illustrator to get a nice and clear base layout for the site and a Sitemap to see how I should be linking the pages. After the layout was ready I started with the UX/UI Plan, content strategy and selected the API sources I should use.

When the design development was ready I made a prototype in Adobe XD to get an overview how the design and links works together so the user easy can find what they are looking for. https://xd.adobe.com/view/b3do23c4-9e44-487e-9895-1658642cd4aa/

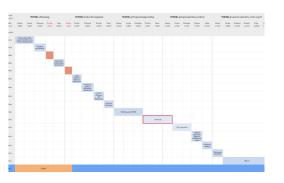
#### Construction of the side

I built the site in Dreamweaver, I used flexbox because it is easy to use and works well with the site layout I had chosen. I used one stylesheet on the pages so they should look the same and different JavaScript files on the different pages because no one was containing the same and it would only make the site slow if all the pages should contain all the codes.

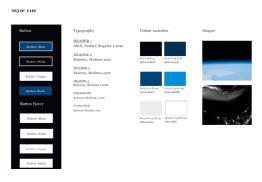
#### Testing

I tested the site on Quirktools to see how it looks on different devices and I checked for error in the code on a checker. I also tested the site on different mobile phones, tablet, big screen, and my own laptop.











### **Final Design**

#### Graphic design

#### Design principles

This site has a lot of with a lot of white space, the columns are the same sizes and aligned so the whole expression for the site feels balanced and trustful and it is comfortable to read the articles. I chose to go for a darker style on the design, with images, colours that gives the site an interesting and informative expression.

#### Typography

#### Heading 1 Abril Fatface

To make it easy for the user to understand that this page is a microsite to NASA with special content, I wanted the logo to match the name New Space Technology. I chose to use Abril Fatface because it feels modern and creates a good contrast with the other fonts.

Heading 2-5, Navigation and Paragraph Raleway Medium Raleway is an modern and popular sans-serif typeface family that is easy and comfortable to read on screens, but

family that is easy and comfortable to read on screens, but it still got some special character that gives the text block a nice look.

#### Colours

Since the site contains a lot of dark images I used darker colours, and 3 shades of blue, brighter colour would be distracting and the site can get an expression of not being so trustful. The blue colour is more relaxing than black and lights up the site a bit. I saw some interesting colours in one of the images so I uploaded it on colour adobe and got a nice blue colour that would fit the content on the site.

I used blue background and white text on the shorter text blocks and Gray and #333 on the longer so it will be easy and comfortable for the eye to read the text.

#### *Images*

I looked in NASAS image archive and found some interesting images that fit god together and will increase the interest for first time users so they are curious and want to see more on the page.

#### HTML/CSS

#### Composition, Layout and Grid

On mobile devises (max-width 720px) I used a one column layout with a 5 column grid. I used 80% of the screen and 10% around so it will be easy to read the content and find information.

On larger devises (min-width 1279) I used 90% of the screen and 5% around the articles in the sections.

On tablets and smaller screens (min-width 721 to max-width 1279) I used the same layout but 100% of the screen and 5% on the articles inside the sections.

I used 1/2 + 1/2 column to give the site a nice and balanced content hierarchy.

#### **Content Strategy**

I used technical articles from NASAs Techport, because that's what the target audience is mostly interested in.

#### WCAG

I have thought of different disabilities people may have that would visit the site such as visual problems, therefore added description of pictures, buttons and links as well as used address, mail and phone tags.

#### **SEO**

#### Keywords description (head)

I used a short description on each page that will be visible when the user finds the site on a search engine.

#### Keywords

To reach out to the users that are searching for "New space Technology" articles I used the words "New Space Technology" in H1.

In H2 and H3 I used other keywords people might use like, "Launch", "NASA", "Event", "Space station", "Humans in space" "New article" and I used H4 on the names on the articles

#### **Interface Design**

#### Navigation

To help the user to know which page they are at I put a thick line under the currant page in the menu. I put the menu on the top so it would be easy to find and use.

#### **Affordances**

I used my story board to figure out how users will use the site, what type of content they are interesting with, where they are and what devices they mostly will use.

The target audience is technical and they have used similar sites before. The first thing the user will see when opening the site is a link to new space technology because it is probably what they are looking for.

The buttons looks like typical buttons with a thick frame around and hover effects.

I have tested the site on mobile to make sure there is a enough space between the buttons and that they are big enough so it is easy to tap with a finger.

I used a check-mark when the user fill out the forms so they will know that it is filled in correctly and error message when they type something wrong.

#### Persuasive techniques

To increase the credibility of the site, I have a text block with information about the organization.

To get social proofing I used "most viewed article" This gives the new users a sense of security that someone else liked the content in that article.

Increasing early engagement, Already on the first page, you will find interesting information about space.

I use the scare technique on "New articles" this one will disappear so you better reading it now.

#### **JavaScript**

I used JavaScript to fetch content from NASA's API sources, save some space on the pages, make a calendar that updates automatically after which date it is and validate contact form.

#### Implementation/rollout

I uploaded the entire site, tested on different devices and after I solved all the problems and tested the site again, I updated all links and tested the site one last time to see that everything is working properly.

## **Summary and Evaluation**

This was a educational project that ended were well for me. I had lost the motivation to work with web design because I felt very helpless and I did not understand anything. But ultimately I finally understand how the base for JavaScript works, so now it feels very good again.

I have found a good setup that gives me time to make everything properly, I trust my plan, which means I can relax more and enjoying the different steps in the process.

I am satisfied with the result and it feels like I have shown that I can combine JavaScript and design and make a site that is user friendly and easy to navigate on.

Now I'll start my first real summer vacation in years, and I hope you will get some vacation too!

Thank you for reading this and I hope you liked my work.

## **Sources and References**

#### **API sources**

https://api.nasa.gov/techport/api/projects/92065?api\_key=rf4C3OLbTGk4509s8DhUIXZgmZwI4i5WXDugW1q1

https://api.nasa.gov/techport/api/projects/33080?api\_ key=rf4C3OLbTGk4509s8DhUIXZgmZwI4i5WXDugW1q1

https://api.nasa.gov/planetary/apod?api\_ key=rf4C3OLbTGk4509s8DhUIXZgmZwI4i5WXDugW1q1&count

http://api.open-notify.org/iss-now.json

http://api.open-notify.org/astros.json

#### **Images**

https://techport.nasa.gov/file/33095,

https://api.nasa.gov/techport/api/projects/33080?api\_key=rf4C3OLbTGk4509s8DhUIXZgmZwI4i5WXDugW1q1

https://www.nasa.gov/sites/default/files/ styles/full\_width\_feature/public/thumbnails/ image/9805325555\_6315123835\_o.jpg,

https://www.nasa.gov/multimedia/imagegallery/iotd.html

https://techport.nasa.gov/file/27870, https://api.nasa.gov/techport/api/projects/92709?api\_key=rf4C3OLbTGk4509s8DhUIXZgmZwI4i5WXDugW1q1

https://www.nasa.gov/sites/default/files/styles/full\_width\_feature/public/thumbnails/image/northamerica\_vir\_2018111 lrg.jpg,

https://www.nasa.gov/multimedia/imagegallery/iotd.html https://www.nasa.gov/sites/default/files/styles/full\_width\_feature/public/thumbnails/image/insight\_solar\_array\_panel\_main-full.jpg, https://www.nasa.gov/multimedia/imagegallery/iotd.html

https://www.nasa.gov/sites/default/files/styles/full\_width\_feature/public/thumbnails/image/iss055e043612.jpg,

https://www.nasa.gov/multimedia/imagegallery/iotd.html

#### **Pages**

https://www.theverge.com/space

https://www.space.com/

https://no.pinterest.com/carolinaa\_f/project-exam-2018/

https://www.nasa.gov/multimedia/guidelines/index.html

https://api.nasa.gov/index.html#about

https://api.nasa.gov/api.html#techport

https://techport.nasa.gov/home

https://images.nasa.gov/docs/images.nasa.gov\_api\_docs.pdf

https://code.nasa.gov/?tag=API

http://quirktools.com/screenfly.

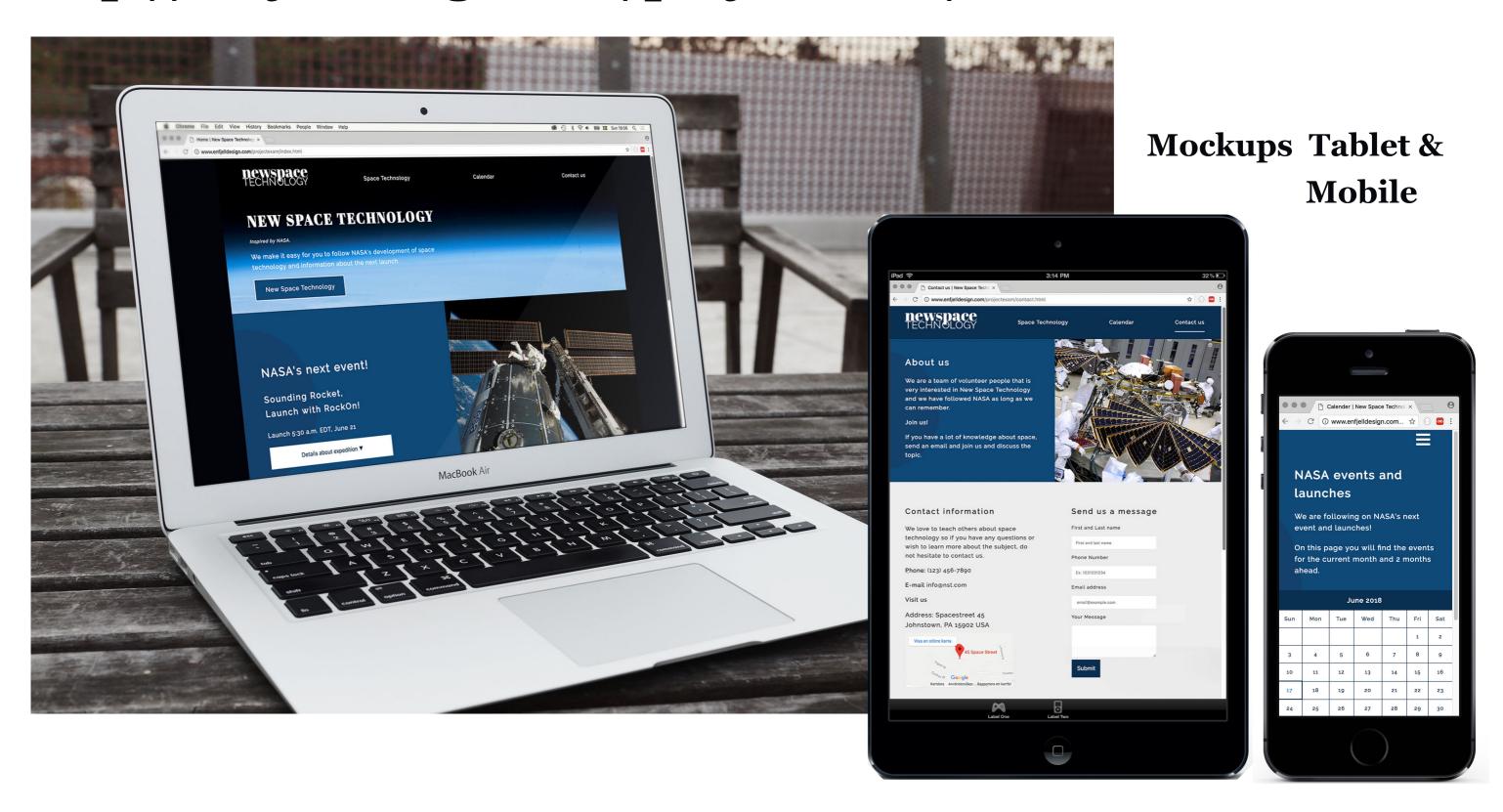
https://achecker.ca/checker/index.php

#### Books

HTML and CSS: Design and Build Websites, *Jon Duckett*, *Wiley (2011)* 

4 Project Exam 2018

## http://enfjelldesign.com/projectexam/index.html



# https://github.com/enfjell/projectexam

6 Project Exam 2018