Functional Spec

Project exam 1. Christian skilbred Larsen Noroff 2020
SpaceX Microsite

This Functional Specification Document is a document that provides detailed information on how the Microsite will function and the requested behavior.

Project Scope:

The goal for this site is to educate astronauts and space program employees. To raise awareness about the space program activities around the world. The site should appeal to a specific target audience, and provide links to view more information. Should be a place for them to have a "calendar" that shows what is happening in the future, when it comes to plans for launches and useful information around the activity at the space station. The site should be easy to use and navigate. Think about the interaction design, and don´t overwhelm the user with options and information. It is vital when designing the website, that we are clear in what we want to communicate. It should be that the interaction is so seamless that users instinctively know what to do. Important information needs to be easily accessed on the main page, with links to more information. This site should also be a platform where the user can send in questions through a contact form, at a dedicated contact page.

Requirement specification:

The site should get the information from the different provided API´s. This is very important, so that when the information changes in the API, the site should change its information accordingly (dynamic content).

- User should easily interact and navigate throughout the site. Using a recognizable navigation layout.
- Navigation is required to show the current page that the user is on. The text also needs to be highlighted on hover.
- Clickable logo in the top left corner of the header, that takes the user to the home page.
- It needs to be a **responsive site**, that will work on a variety of platforms. (computer, tablet and phone)

- Must have at least **4 html pages**. (Home, contact, about and activity)
- **Must** be an HTML5 contact form at the contact page, with JavaScript validation. (length, email, uppercase and lowercase letters + at least 1 numeric digit) this includes a field for name, email, message, and a submit button. Must allow the user to input text.
- **Important** to follow WCAG standards for this project.
- **Needs** to have a feature that show live coordinates of the international space station, and the count of people currently in space. (home page)
- **SEO!** find appropriate meta tags, and the title should be Space program.
- The total cost for this project is _____, **-**
- Deadline is 24.05.2020 23:59.

Design/layout:

The main page will have the recognizable logo (SpaceX), a familiar title (Space program), easy to understand nav-bar. The Nav-bar need a hover effect to indicate witch button is currently active and selected. Should use familiar space colors (black) maybe stars/space texture/pattern. Also blue is important! Location, contact info, services, social media, newsletter should be in the footer. The body of the main page should capture the user, needs to have a unique layout, interesting information like launches, dates, space count, and it should link to more information on the matter.

- **How the site should be organized:**

The site should be as simple an easy to use as possible, but at the same time we are a site about "space" so we want the site to be futuristic and exiting. It will need to take the users attention, get them exited, make them be on the page as long as possible, and not to make them frustrated with lots of fancy animations etc… Contact info should be in the footer. Permanent navbar at the top of page, this will be useful for users that is familiar with the page, so they don't have to scroll down the page to find the links that go where they need to go. (This can be changed during the development)

Header:

Picture of space/stars/cosmology with the SpaceX logo. When the logo is clicked, it will take the user back to the Home page. Home page, contact page, about page and activity page, this should be included in the navigation.

Main:

- Home page: interesting information about some launches, with links to more information (link to the activity page) the count of people currently in space, and the space station location. news/interesting information about the space program.
- Contact page should be an easy page with recognizable contact form. With name, email, message box and submit button.
- The about page should give the user information on successful missions, history of the space program, location and when it was founded.
- The activity page should be the "calendar" this is where all information on activities for the future will come. Like launches, meetings and educational stuff.

Footer:

- Button to get back to the top of the page.
- Sign up for newsletter field.
- Copyrights.
- Links to the other pages (same as in the nav-bar)
- social media icons with links to their social media accounts.
- Contact information (number, mail, location)

Project Planning

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SpaceX Microsite

The red in the Gantt-chart is weekends, and should be time off, but can be used for work when needed

"Referring to key words in the Gantt Chart"

Week 1:

1.1 Planning the 5 weeks:

This period should go to reading and understanding the exam. Planning for the first delivery, which is 26.04.2020. this delivery will include the project planning, functional spec and a Gantt-chart. This means that you have to get a good look on the task, understand it, and start planning on what needs to be done, and in what order.

1.2 Start with report:

This time you have to start writing the report from the start of the project. This will make it easier for you to remember in more detailed what you have done, what you have changed etc... write a little every day, or a minimum 1 time per week.

1.3 – 1.4 Project planning document & Gantt-chart:

First you need to plan on what needs to be done. It can be helpful to write down on paper first, and then sort out what needs to be done, when and for how long. When you have a rough idea of the project you can start implementing it to your Gantt-chart. Your Gantt-chart, and project planning document is kind of a 2 for 1. You will make key words in the Gantt-chart, also with start and end date. In your project planning document, you will explain in more detail about the keywords.

1.5 Functional Spec:

In your functional specification document, you need to explain in detail the different functions that the site needs to have. This document should be like a blueprint for the developer/s and the team working on this project.

Should include:

- Scope of project – What are the goals, feature, tasks, deadlines, cost?
- Requirement specifications – what should the product/site do?
- Design/layout – needs to give an idea of what the customer wants, in form of layout, functions, colors, fonts and so on.
- Risks – What might affect the functional design?

1.6 – 1.7 Overview and delivery week 1 & making git repository:

This is the last day of the week, and it should be used for finishing all of the tasks made for week 1, from 1.1 – 1.5. this should then be delivered. The delivery date is Sunday 26.04.2020 at 23:59. So you also have the weekend to work, if this is needed.

Also make 1 git repository dedicated for all of the files, and everything else that is used, and is going to be used during the 5 weeks on this project exam 1. This repository should be updated along with the project.

Week 2:

2.1 Target audience:

Find your target audience. This means discovering people that are most likely to be interested in this site "space" space program and space related information. Here is a list that can help you find an audience:

- Gender
- Age
- Profession
- Location

The audience will mostly be astronauts, NASA/SpaceX employees. its open for everyone who is interested and will also focus on schools and students interested in space. And to inspire and get people interested.

2.2 Personas and Storyboards:

After finding you target audience, you can start making some personas. These personas can include age, title, location, education, goal, motivation and pain point.

Picture below can give you an idea of a persona (Picture is from interaction design module 1 lesson 1.3)

Elizabeth
"What did we do before the Web?"

For Elizabeth, the Web is a library, post office, and town hall. Between working part time and spending time with Justin, her 5-year-old son, she's always rushing. But once she has the house put to bed at night, she can go back to being a gadfly and local activist.

Her most recent campaign is an effort to get her whole town designated as a Wildlife Zone. She's done all the research on the Web, and she's ready. She's written an article in her town newsletter, posted on the town forum, and set up a Facebook page.

She's looked up all of the businesses in town on the Web, and is planning to email all of them to see if they will support her. She'll write to them this weekend, and then on Monday, she and Justin will pay a visit to all of them, and see if they will put up a sign.

After that, she's going after support from everyone on the Borough Council. She's already looked up their emails, so she's ready.

About Elizabeth:
- Age 32
- College graduate
- Married
- Works in an office

Goals:
Information I can use.
Communication on my schedule

Usability Needs:
Efficient: Give me a search box and I'll tell you exactly what I want.

Bookmarks:
- Town government site
- Wildlife World
- Son's school

After, when the personas are done, you can make some storyboards. We want to map only the important actions and functions. The focus with the storyboards is how a persona achieves their goal, using the product/site.

2.3 Research:

This means you need to find out about the different API that are included in the project. witch API to use, and what information that is relevant for this microsite. What images/pattern/textures and logo to use, finding a good color palette, finding font/fonts. Find good, interesting information to use. And finding ideas for design. You also need to think about WCAG standards and SEO. This is very important.

2.4 & 3.1 Wireframe and Prototype:

Create a wireframe sketch of the SpaceX microsite. This wireframe should include the home page, contact page and also the look on phone screen size.

Now we should have all of the information gathered and be able to make a prototype in adobe XD. Follow your wireframe, and implement it with content, images and so on. This should be as close to the finished product as possible. This way the prototype can be used as a guide when

writing code for the microsite. Making a prototype as close to the finished product as possible is also a god way for the costumer to see a visualization of the site, and to come with feedback, if they don't like the outcome. Then this is the best place in the project to do adjustments.

Week 3 and 4:

3.2 – 3.3 & 4.1 – 4.3 HTML, CSS and JavaScript:

This is where you have most time at your disposal, so take the time you need, and be organized in the code, it is important to have good structure. Start with your index.html and make a "template" this means that you write only the code that will be the same for all pages. Should be the same header and footer. Then you do the same for the CSS. Then you have a good start when implementing the rest of the content for the different pages. JavaScript should be used on most of the content, so that it is updated whenever the API is updated. The form on the contact page needs to have a form validation using JavaScript.

Week 5:

5.1 – 5.2 error fix, repair and finalize:

The microsite should be close to finished by now. The last week is dedicated for small changes, fixing eventual error, double checking everything, and making sure everything works as it is supposed to. Also, that the site is working on different screen sizes. Make sure everything is coming through, through the API calls. Any error at this point is not acceptable.

5.3 Finish report:

Last thing you do, but also important. Make sure you have written down all the time during the 5 weeks, reflect on your opinion on this project. Was there any struggle? What was god, did you learn something, what was challenging, and how did you solve the problem.

! VERY IMPORTANT !

Delivery **Must** be in PDF and **Must** be named using the standard: Date-assignment-name format.

Project Exam 1

Create a microsite for SpaceX

Project Start Date: 4.20.2020 (mandag) | Display Week: 1
Project Lead: Christian Skilbred Larsen

		Start	End	Days
1	**Week 1**		-	-
1.1	Planning the 5 weeks	man 4.20.20	fre 4.24.20	5
1.2	Start writing report	man 4.20.20	fre 4.24.20	5
1.3	Project planning document	tir 4.21.20	ons 4.22.20	2
1.4	Gantt chart	tir 4.21.20	ons 4.22.20	2
1.5	Functional spec	tor 4.23.20	tor 4.23.20	1
1.6	Overview and delivery for week 1	fre 4.24.20	fre 4.24.20	1
1.7	Make git repository	fre 4.24.20	fre 4.24.20	1
2	**Week 2**		-	-
2.1	Target audience	man 4.27.20	man 4.27.20	1
2.2	Personas/Storyboard	tir 4.28.20	tir 4.28.20	1
2.3	Research	ons 4.29.20	tor 4.30.20	2
2.4	Wireframe & Prototype	fre 5.01.20	fre 5.01.20	1
2.5	Report	man 4.27.20	fre 5.01.20	5
3	**Week 3**		-	-
3.1	Wireframe & Prototype	man 5.04.20	tir 5.05.20	2
3.2	HTML	ons 5.06.20	fre 5.08.20	3
3.3	CSS	tor 5.07.20	fre 5.08.20	2
3.4	Report	man 5.04.20	fre 5.08.20	5
4	**Week 4**		-	-
4.1	HTML	man 5.11.20	fre 5.15.20	5
4.2	CSS	man 5.11.20	fre 5.15.20	5
4.3	JavaScript	man 5.11.20	fre 5.15.20	5
4.4	Report	man 5.11.20	fre 5.15.20	5
5	**Week 5**		-	-
5.1	Finalize	man 5.18.20	tor 5.21.20	4
5.2	error fix/repair	man 5.18.20	tor 5.21.20	4
5.3	Finish report	tor 5.21.20	fre 5.22.20	2
5.4	Deliver	fre 5.22.20	fre 5.22.20	1