

# **Technical Report**

Project Exam 1

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## **Document History**

Date	Version	Document Revision Description	Document Author
23.04.2020	V1	Project planning document	Therese Lybo
03.05.2020	V2	Target audience, personas, storyboards, wireframes, prototype. Edits in use cases	Therese Lybo

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## 1. Summary

To be implemented



## 2. Body

## 2.1 Introduction

## Project scope

For my first project exam the objective is to provide either NASA or SpaceX with a microsite which will contribute to raise awareness about space program activity. The microsite will be made up of at least four responsive pages, among other things consisting of a timeline to display launches, a JavaScript validated contact form and links to provide more information. These elements will be described further in 2.3 Functional Specifications.

Moving forward from the current stage of delivering a project planning document, I plan to dedicate the upcoming week to do analytical research, delve into the target audience and create suitable personas, storyboards et cetera. I then intend to move on to design and development, which will be described as I move on to those phases. The planned process will be presented in 2.2. Gantt chart.

This project is a personal project exam, with myself as sole author and creative resource.

## Purpose of document

The purpose of this document is to record the progression of the project from the planning phase to submitting the final product. I will discuss the experiences I have and possible issues I might encounter, as well as decisions made along the way.



### 2.2 Gantt chart

The following segment contains an overview of the project broken down into milestones, in the shape of a Gantt chart. This chart shows the order in which I plan to execute the tasks as well as the amount of time I plan to spend on each task.

As per the exam brief I have mainly aimed to do the planning this first week, research and design next week, and then move on with the development after that. I have however adjusted the schedule slightly and decided on a time frame based on experience from previous assignments.

For instance my speed has improved when it comes to planning, however writing functional specifications is new to me, so I dedicated two days to work on that specific section. I have nevertheless aimed to finish the project planning in four days and thus have an extra day for research during the first week.

I am also starting to find myself quite potent in writing HTML and CSS. Where I have previously planned on spending five days doing so, I now strive not to spend more than three days and rather have a few more days to implement JavaScript, as that is still somewhat new.

Other than that I expect the time management to be relatively straight forward, spending about a day or two on each task.



	APRIL									MAY												
TASK NAME	WEEK I				WEEK 2				WEEK 3					WEEK 4					WEEK 5			
	20	21	22	23	24	27	28	29	30	1	4	5	6	7	8	П	12	13	14	15	19	20
lan	_																					
Project planning																						
Gantt chart																						
Functional specification																						
Planning document																						
esearch																						
Analytical research																						
Target audience																						
Personaes/storyboards																						
Choose API and other content																						
Information architecture																						
esign																						
Design research																						
Wireframes																						
Style tile																						
Prototype																						
uild	_																					
HTML																						
CSS																						
JavaScript																						
Cross-platform and cross- browser testing																						
Bug fixing																						
Validating																						
aunch																						
Final refinements																						
Report																						
Submission				İ																		
Presentations																						

## 2.3 Functional Specifications

In the following section I will specify and describe required functionalities and features the website must include, as well preferred ones the website should include. I will also present a selection of use cases based on some of the features which might be prominent for the result of the project. Further features might be added at a later stage.

## **Features**

Feature	Description
Essential	The user shall be able to gather a certain amount of information
information	about space program activity
Links to more	The user shall be able to navigate to other sites for further
information	information about space program activity, such as NASA and SpaceX
Timeline of	The user shall be able to see a timeline or schedule of upcoming
launches	launches. This shall be implemented using API.
Newsletter	The user shall be able to sign up to a newsletter and get information regularly
Contact form	The user shall be able to contact SpaceX/NASA through a contact form. This shall be validated with JavaScript.
Cross-platform functionality	The website shall be responsive and function well over a variety of platforms
Contain 4 pages	The website shall include a minimum of 4 pages
WCAG adapted	The design of the website shall conform with WCAG standards

## Use cases

User Story/Use	As a user I can read the essential information and navigate						
case	easily to other						
Primary Actor(s)	Visitors						
Benefits	To inform user about space activity and NASA/SpaceX in particular						
Trigger	User hears something about the space program and wants more						
	information						
Scenario	<ol> <li>Does Google search on NASA/SpaceX</li> </ol>						
	2. Enters website						
	3. Reads through the primary information provided on the						
	landing page						
	4. Finds and follows link to NASA or SpaceX						
Feature(s)	Essential information						
	<ul> <li>Links to NASA/SpaceX</li> </ul>						
Priority	High						

User Story/Use case	As a user I can submit a question to ask SpaceX a question						
Primary Actor(s)	Visitors						
Benefits	To make it easy to get in touch with SpaceX						
Trigger	User has a question to which they have not yet found an answer to						
Scenario	<ol> <li>Has a question</li> <li>Navigates to contact page</li> <li>Fills in contact form</li> <li>Submits form</li> <li>Gets automated answer about how we will get back to them soon</li> <li>Gets answer to their question</li> </ol>						
Feature(s)	<ul><li>Navigation</li><li>Contact form</li></ul>						
Priority	High						

User Story/Use	As a user I can look and read through the timeline to lea						
case	about the upcoming launches						
Primary Actor(s)	Visitors						
Benefits	To inform user about the launches so that they can be better informed						
Trigger	User hears about upcoming launch and wants to learn more						
Scenario	<ol> <li>Hears about upcoming launch</li> <li>Enters website</li> </ol>						
	<ol> <li>Navigates to correct page</li> <li>Sees timeline/schedule</li> </ol>						
Feature(s)	<ul><li>Navigation</li><li>Timeline of launches</li></ul>						
Priority	High						

### 2.4 Research

### Market research

After finishing the planning phase I moved on to market research. To get the most accurate result possible I figured I had to decide on whether to focus on NASA or SpaceX, and landed on the latter.

Doing the research I found that SpaceX is a corporation which focuses on reasonable space transportation. They work to revolutionize space technology, and their ultimate goal is to enable people to live on other planets.

I found that some relevant stakeholders would be corporations and organisations with an interest in space affairs, as well as any people interested in space activity in general.

Now, given that the assignment brief stated that the microsite should contribute to raise awareness about space program activity, I came to think that these large organisations already are quite enlightened about the field in question. With this in mind I figured I would aim the content towards an audience who might not already have too much expertise in this field and landed on targeting students and youngsters in particular, and in general anyone curious about the subject.

It is quite a wide target audience, but the main objective is to make the information engaging and interesting, we would not want it being too technical and formal. Anyone who would want to immerse themselves further into the topic will be easily guided to the SpaceX website.



## Personae/storyboards

Using the information from the market research I created a few personas representing user groups probable to benefit from the microsite, to improve the system according to their needs and thus create a better user experience. These personas are obviously based on assumptions as we do not have insight into web analytics. The results are nonetheless presented below, followed by storyboards to provide a visualization of how the system might be used.



#### **IMAGE**



#### DESCRIPTION

Polly is an elementary school pupil who is interested in space. She likes to learn but is easily distracted.

#### **NEEDS**

- ▶ Understandable language so she is not discouraged
- ► Fun and engaging content
- ▶ Easy navigation

#### AGE

12

#### **GENDER**

**Female** 

#### **TECHNICAL PROFICIENCY**

Medium-low

#### **SCENARIOS**

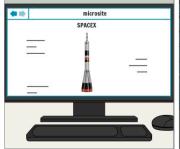
- Uses site for school projects
- Uses site for day dreaming

#### **BEHAVIOR**

Doesn't read through large blocks of copy









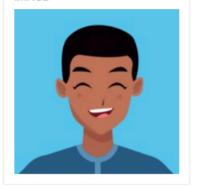
Polly has a school project where she is asked to write about something that interests her.

Perhaps something about space travel? She does a Google search and finds the microsite

Polly browses the site and finds fun information in an uncomplicated language, presented in an engaging way

She makes her project, is happy with the content and is excited to share her findings with the class

#### IMAGE



AGE

21

**GENDER** 

Male

MARITAL STATUS

Single

TECHICAL PROFICIENCY

High

#### DESCRIPTION

Stan is a tech-savvy engineering student. He is interested in anything tech related and is fascinated with advanced space technology. He doesn't mind if the language is too advanced, but he is still a little boy at heart and would enjoy a fun system to interact with.

#### **NEEDS**

- ▶ An entertaining, yet informative microsite
- Interesting facts
- ▶ Mobile responsiveness

#### **GOALS**

- ▶ To learn more about space technology
- ▶ To have some fun

#### **SCENARIOS**

Uses site for own personal interest

#### **BEHAVIOR**

Examines site thoroughly but effectively







Stan is having some free time one evening. He is browsing the Internet on his phone and comes across the SpaceX microsite

Stan reads some interesting facts about space technology, all the while having fun and not feeling as though he is reading a Wikipedia article

Stan is left feeling well informed and amused

#### IMAGE



AGE

45

GENDER

Male

MARITAL STATUS

Married

**TECHICAL PROFICIENCY** 

Medium

#### DESCRIPTION

Bob is an educated, well-informed business man. Doesn't need a website to be pretty as long as it's practical.

#### **NEEDS**

- ▶ Information
- ▶ Intuitive layout
- ▶ Links to more informative sites

#### **GOALS**

To be able to discuss the topic in detail

#### **SCENARIOS**

Uses site to gain more knowledge

#### BEHAVIOR

- ► Examines site down to detail
- ▶ Looks for ways to gather more information
- ▶ Impatient









Bob has overheard a conversation during his lunch break the upcoming space launch. He is annoyed not having enough knowledge about the subject and decides to read about it

Bob stumbles across the SpaceX microsite but finds the jargon a bit too simple for his taste.

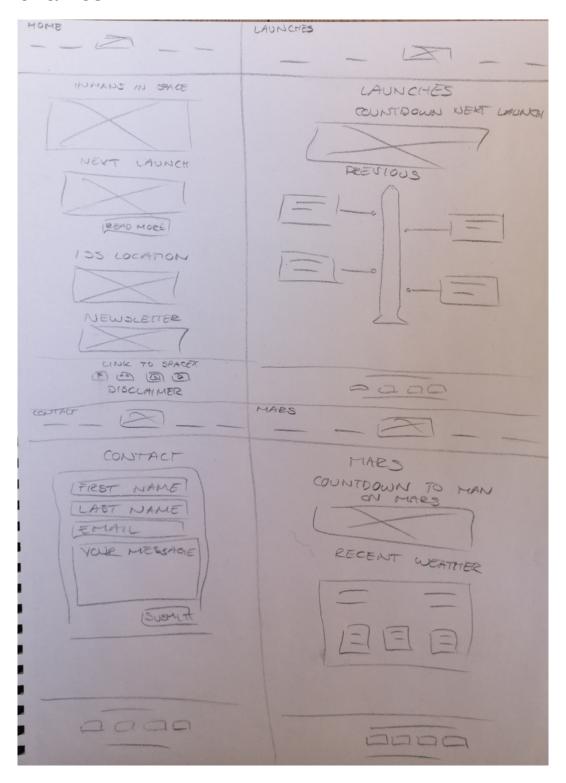
He sees several links leading him to, among others, SpaceX's own website, which he finds a better choice for his purpose

Bob now can show up to work well informed, and up to the task of challenging his colleagues in a discussion

## 2.5 Design

Discussion about the design will be implemented

### Wireframes



## Prototype

Link to prototype: <a href="https://xd.adobe.com/view/db4c2963-4fcd-414c-">https://xd.adobe.com/view/db4c2963-4fcd-414c-</a>

728e-b97e517b1078-ad7d/

## Design inspiration

Link to personal Pinterest board:

https://pinterest.com/thereselybo/project-exam-1/

Other sources of inspiration:

- https://av-spacex.surge.sh/allpayloads
- https://mars.nasa.gov/insight/weather/
- https://www.spacexstats.xyz/
- https://spacexmissionwatch.com/
- https://mars.nasa.gov/
- https://spacecoastlaunches.com/

## 2.6 Content

To be implemented

## 2.7 Development

To be implemented

## 2.8 Conclusion

To be implemented



## 3. References

Various lessons in courses from FEU1

## Files provided

- Technical specification template
   <a href="https://cdn.discordapp.com/attachments/701704694048882774/7">https://cdn.discordapp.com/attachments/701704694048882774/7</a>

   01744479689900142/Technical specification Template.docx
- Functional specification document template
   <a href="https://cdn.discordapp.com/attachments/701704694048882774/7">https://cdn.discordapp.com/attachments/701704694048882774/7</a>
   O1741707405951026/FRS Template Module Assignment.docx

### **Tools**

- TeamGantt excel template Manual Chart
   https://www.teamgantt.com/free-gantt-chart-excel-template
- Smaply personae tool
   <a href="https://www.smaply.com/personas.html">https://www.smaply.com/personas.html</a>
- Storyboardthat storyboard tool
   <a href="https://www.storyboardthat.com/">https://www.storyboardthat.com/</a>

## Images and graphics

- https://www.freepik.com/free-vector/family-set-cartoonscollection 4889886.htm
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- https://www.freepik.com/premium-vector/space-rocket-cartoonset-icon-spaceship-isolated-cartoon-set-icon-illustration-spacerocket-white-background 7718328.htm
- https://www.freepik.com/premium-photo/astronaut-deepspace 6961829.htm
- <a href="https://www.freepik.com/premium-vector/vector-wi-fi-icon-with-globe-center-from-polygon-dot-connected-line 4228587.htm">https://www.freepik.com/premium-vector/vector-wi-fi-icon-with-globe-center-from-polygon-dot-connected-line 4228587.htm</a>
- https://www.flickr.com/photos/spacex/40143096241/

### **Articles and Websites**

- Wikipedia, "SpaceX". Internet:
   <a href="https://en.wikipedia.org/wiki/SpaceX/">https://en.wikipedia.org/wiki/SpaceX/</a>. [Accessed 26-April-2020]
- Laura Brandenburg, "What Goes Into a Functional Specification?". Internet:
   <a href="https://www.bridging-the-gap.com/functional-specification/">https://www.bridging-the-gap.com/functional-specification/</a>
   [Accessed 27-April-2020]
- Laura Brandenburg, "Requirements Templates: What To Do When You Must Start From Scratch". Internet: <a href="https://www.bridging-">https://www.bridging-</a>



## $\underline{the\text{-}gap.com/requirements-templates-start-from\text{-}scratch/}$

[Accessed 27-April-2020]

 Michael S. Malone, "From Rockets to Electric Cars: Marveling at Musk", 2008. Internet:

https://abcnews.go.com/amp/Business/story?

id=4912259&page=1 [Accessed 01-May-2020]



## 4. Acknowledgements

To be implemented

