Technical Report

Project Exam 1

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Word count

Summary: 2105 | Main text: 1835

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1. Introduction

In my Project Exam 1 my task is to build a microsite for companies as NASA or SpaceX. As we know, microsite is an individual web page or pages that act as a separate entity for a brand. Some companies using microsite for a specific campaign or target specific buyer personas, promotere some products etc. So, my goal is to make a microsite for some special auditory or to show something special. I find this task interesting and entertaining, because I like all about space and space technology, especially now it is very relevant, when all the world watching a rocket launch, organized by NASA, SpaceX and Launch America.

Having received the assignment, my first idea was to create a microsite that would be interesting to children. This site should combine some information from NASA, SpaceX and school books. It does not have to be boring. The site should attract children's attention.

2. Body

2.1. Planning

After I received the assignment for the exam, I opened the NASA's website and the first that I thought was that the website have a lot information and is very complicated for kids. They can to lose their interest very fast. I think that it is not easy to find information in simple form and language. Therefore I want to make the microsite that would be easy to read, with nice and responsive design, with clear Call To Action buttons, with big and nice images, video etc.
My plan is to make 4 main HTML pages and 4 article-HTML pages:

1- Home page (big images, short information and button to next html-pages):
   a) Article "Our place in The Universe"
   b) Article "Space"
   c) Article "Planets"
   d) Article "Beginning Of The Universe"
   Every articles should have their own HTML, same logo and menu as Home- page. Here I want to have some text- information, questions and fun facts about the topic, images and videos about topic.

2- NASA page. Here I want to get images and information from API NASA. I got my API-key to make web service requests, so I can use it there.

3- SpaceX- page. Here I want to take API from SpaceX about Tesla Roadster in the space and about the rockets. I will to put videos about that as well.

4- Contact-page. It includes contact form with Javascript validation. In the bottom I want to add google-map with placement of NASA and SpaceX on the map.

Here is some examples of images and my colour palette (see Appendices IMG 1. Paragraph 2.1)

2.2. UI Design

Fonts: Montserrat (for the articles) and Gotu (the main one).
I got them from https://fonts.google.com/
Colour palette: dark, galactic, contrastly.
I used HTML colour panel, HEX, from https://htmlcolorcodes.com/
Photos and videos – as much as possible, microsite should be visual, should add meaning, make the site interesting and exciting. I got images from NASA's Instagram https://www.instagram.com/nasa/ and changed them in Adobe Illustrator (size, background, placement of objects, quality).
Here is some examples of images and my colour palette (see Appendices IMG 2. Paragraph 2.2)

2.3. Functional spec.

1. Theme

To increase interest in reading of topics

Epic
Feature – to make large and beautiful images and video.
User story - As a user (schoolchild), I want to have information about space, planets, NASA to be stated easy.
User story - As a user (schoolchild), I want to look at image so I can to understand topic by visual.
Epic
Feature – use NASA's astronomy picture of the day, that will be another one every day.
User story - As a user (schoolchild), I want to see something new on the site so I will open it every day to check it .

2. Theme.

To build informative microsite with information for kids of various ages in an accessible user form.

Epic
Feature – make separate short pages with just one title, not all articles to read on one page.
User story - As a user (schoolchild), I want to have a little text, so I can learn the most important things and it will not take too much time and effort.

2.4. Gantt chart

I had 5 weeks to complete my exam.
1st week – planning, research, Gantt chart.
2nd week - personae/storyboards, wireframe/sketch
3- 5th weeks – coding, complete design, validators, updates, delivery.

Here is my Gantt chart (see Appendices IMG 3. Paragraph 2.4)

2.5.Target audience

Before a creating content I have to deside who is my audiense is. Great content tends to naturally attract an audience. That helps me focus not only on creating great content, but creating right content.
For the correct determination of what I will need to do, I choose some points:

1. Who is going to read my website?
I choose kids as my potential audience. They are norwegian children about 10-12 years old (4-6 class).
2. Why my website deserves to exist?

I think at kids in Norwegian school (4-6 class) don't learn much about space, space program activity around the world, space technology. I will make this microsite to give opportunity for kids to read and learn more about this topics.
3. What my website is doing?

My microsite can give lots information in easy and fun way for children that like astronomy, space technology.
4. How I can to make my website better?

I can add a lot of interesting and informative topics to the website, colorful photos and videos, question and interesting facts. I want to make a website that will attract the attention of children. I want to make my website intellectual and easy to use.
5. Why my audience should choose my website?

Microsite for SpaceX/NASA creates content to help and inform children so they can learn better and easy find information about space technology.
6. How does the content meet the interests of my potential audience?

I need to have focus on question I know my audience commonly asks. Kids are curious and they want to get answers on their questions.
7. How my potential audience does know what they should do next on the webpage?

Website have to be easy to use, special if it concerns kids.
I want to make a clear call to action buttons and keep them under the fold. That way I can convince someone to convert if they see my call to action buttons right away.

It was delivered Personae and Storyboards in my "Project Exam1 – Week 2", but I will add all in the Appendices.
Personae (see Appendices IMG 4. Paragraph 2.5).
Storyboards (see Appendices IMG 5. Paragraph 2.5).

2.6. Sketch.

I was not sure how my design should looks like. Therefore I made sketch, but they are little bit different from my wireframing.
Sketch (see Appendices IMG 6. Paragraph 2.6).

2.7. Wireframing/prototyping

Wireframing (see Appendices IMG 7. Paragraph 2.7).
(see Appendices IMG 8. Paragraph 2.7).

Prototyping (see Appendices IMG 9. Paragraph 2.7).

2.8. Implementation

After all that processed I started to make first pages.
First I founded photos that I liked the best. After I changed them to size and quality I needed. I make a logo, using Adobe Illustrator. After that I choose some fonts and tried them. I had an idea to use black background from the beginning.
Bellow I want to write a little bit more about the whole process:

2.8.1. HTML

As I told before, my microsite consists of 4 individual HTML pages. But 1st page have additional 4 HTML pages, so in total I have 8 HTML pages in my project. I decided do not write those 4 additional pages in the menu, because they will be able to read just from the home page, as continue of relevant article. I tried to make my pages semantic, added all meta viewport that needs, using meta description, unique pages title, one h1 and alt attributes for images.
I checked all my HTML pages on the validator.w3.org and I don't have issues.
(see IMG 10. Paragraph 2.8)

2.8.2. CSS

In my CSS -styles I tried to have consistency with spacing and padding in my project.
I have 4 CSS pages:

master.css for all HTML pages (I used images as background on the home page with position: relative, that allowed me to put images and text with buttons behind each other

and to control size and position on the page. On the mobile version I used background-position in order to display the part of the image I need).

menu.css for menu (used for nice and responsive menu both on the full version screen and mobile version).

articles.css for 4 additional pages (I used flex and for put on the right places images and text through whole pages.

spacex.css for pages which are using API (I used display: flex for make pages flexible and responsive).

I tried do not duplicate styles in media queries, and to delete parts of code that repeated or didn't worked (f.eks. paddings, margins, colours etc.)

2.8.3. Javascript

I have 5 JS pages:

api.js – page for dynamic data and construction HTML from API SpaceX about rockets. Here I had issue- error in console, and 1st rocket does not have an image in API, just two links to the website. I fixed the error by using ratingValue in js page. First I used placeholder as an image, but I changed it to image from my image-map, because I know which rocket's image is missing. And I added alt property by using the names of the rockets.

contact.js – Javascript validator to the form, checking if all properties are filled correctly. This js page is styling CSS as well, with using style.display.

menu.js – allowing to use mobile.menu with using event ang click, stylling style.width (for to show and to hide mobile menu).

nasa.js – getting information from NASA API, with using of my API-code. This is "Astronomy picture of the day" is changing every day. I think that is an interesting idea to have it on my minisite, it is cool to see every day which image is now.

roadster.js – getting information from API SpaceX about Tesla Roadster and adding that information in my HTML basis.

2.9. SEO/ WCAG

Test in Appendice
(see Appendices IMG 10. Paragraph 2.9).
(see Appendices IMG 11. Paragraph 2.9).

2.10. Content Stratergy

One of the most important thing that I wanted to finish in my project exam is menu for mobile version (burger-menu). I began to work with it from Portfolio-task, but I did'n get it working before.
I looked at options for how developers make menus on https://codepen.io/. I didn't wrote anything from here, but I got an idea that I can to do it my self with using event and click. After I read trough again lesson on the Moodle about events and how to use them. After some tests I got my mobile version working. I'm not sure that is right way to do it, but it was that I could do for now.

3.Conclusion

It was an extensive and very interesting work. I very hope that I completed all the tasks and showed a sufficient amount of knowledge for whole year.

Links:

My work: https://exam.y-ferreira.eu/

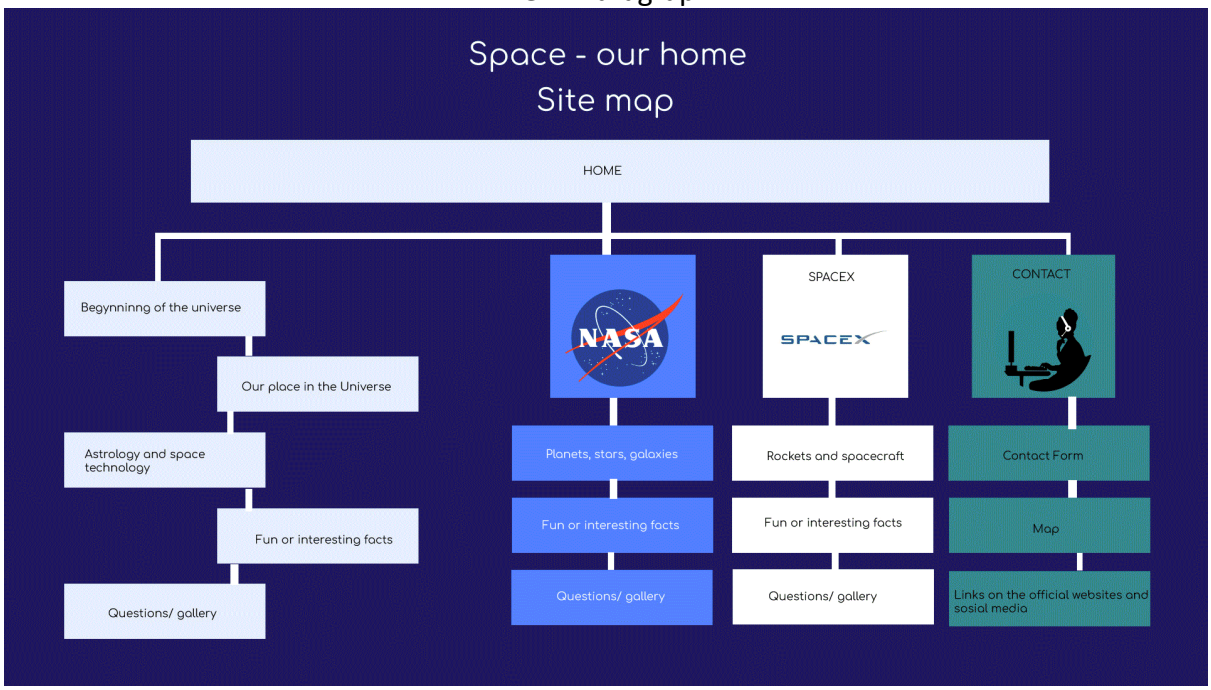
Git hub: https://github.com/Noroff-Fagskole/exam-project-exam-1-Yuliiaferreira

4. References

https://student.noroff.no/s/ - read trough lessons
https://validator.w3.org/ - validate my HTML
https://fonts.google.com/ - fonts
https://htmlcolorcodes.com/ - colours
https://www.instagram.com/nasa/ - images
http://open-notify.org - API
https://api.nasa.gov/index.html - API
https://github.com/r-spacex/SpaceX-API/wiki -API
http://www.spacex.com/media - images
https://nasasearch.nasa.gov/search/images?affiliate=nasa&query – different info
https://pixabay.com/ - images
https://prod.teamgantt.com/ - Gantt chat
https://dev.w3.org/html5/html-author/charref - symbols for HYML
https://www.ouruniverseforkids.com/ - text for Articles
https://www.kidsnews.com.au/ -text for Articles
https://www.nasa.gov/ - official website NASA
https://www.spacex.com/ - official lwebsite SpaceX
https://www.youtube.com/ -video for my microsite
https://www.wikipedia.org/ - text about NASA and SpaceX
https://www.nationalgeographic.com/ - video
https://codepen.io/ - idea for using “click” in js for menu

5. Appendices

IMG 1. Paragraph 2.1

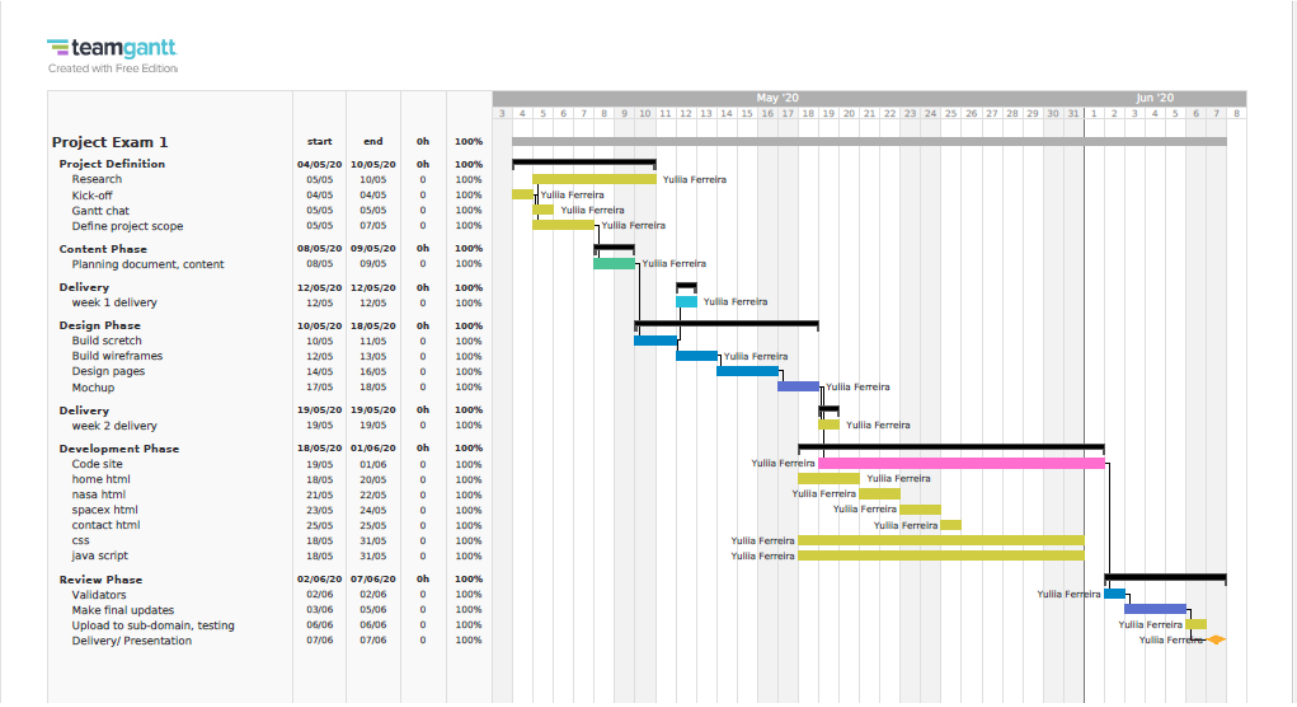


Site Map

IMG 2. Paragraph 2.2

To The Moon And Back (colour palette and images)

IMG 3. Paragraph 2.4



Gantt chart (completed)

IMG 4. Paragraph 2.5

Personae

Name: Arne

Age: 11 years

School: Fana School

Class: 5 A

Hobby: Fishing

Interests: nature, biology, astronomy

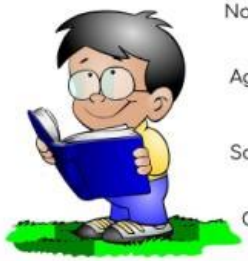
Favourite school subject: Science

Activity: cycling, skiing

Internet Use: online games

Personal qualities: good learning ability, tolerance, kindness, respect

Personae



Name: Per

Age: 12 years

School: Lonevåg school

Class: 6 B

Hobby: Astronomy

Interests: astronomy, maths, books

Favourite school subject: Mathematics

Activity: reading, football

Internet Use: online games, youtube

Personal qualities: good learning ability, smart, curios, mobility

Personae

Name: Angelika

Age: 12 years

School: Valestrand school

Class: 6 B

Hobby: sewing, knitting

Interests: astronomy, books

Favourite school subject: English

Activity: reading, cycling

Internet Use: online games, youtube

Personal qualities: good learning ability, curios, mobility

Personae

Name: Sigurd

Age: 11 years

School: Fotlandsvåg school

Class: 5 B

Hobby: aquariums

Interests: astronomy, fishing

Favourite school subject: Gym

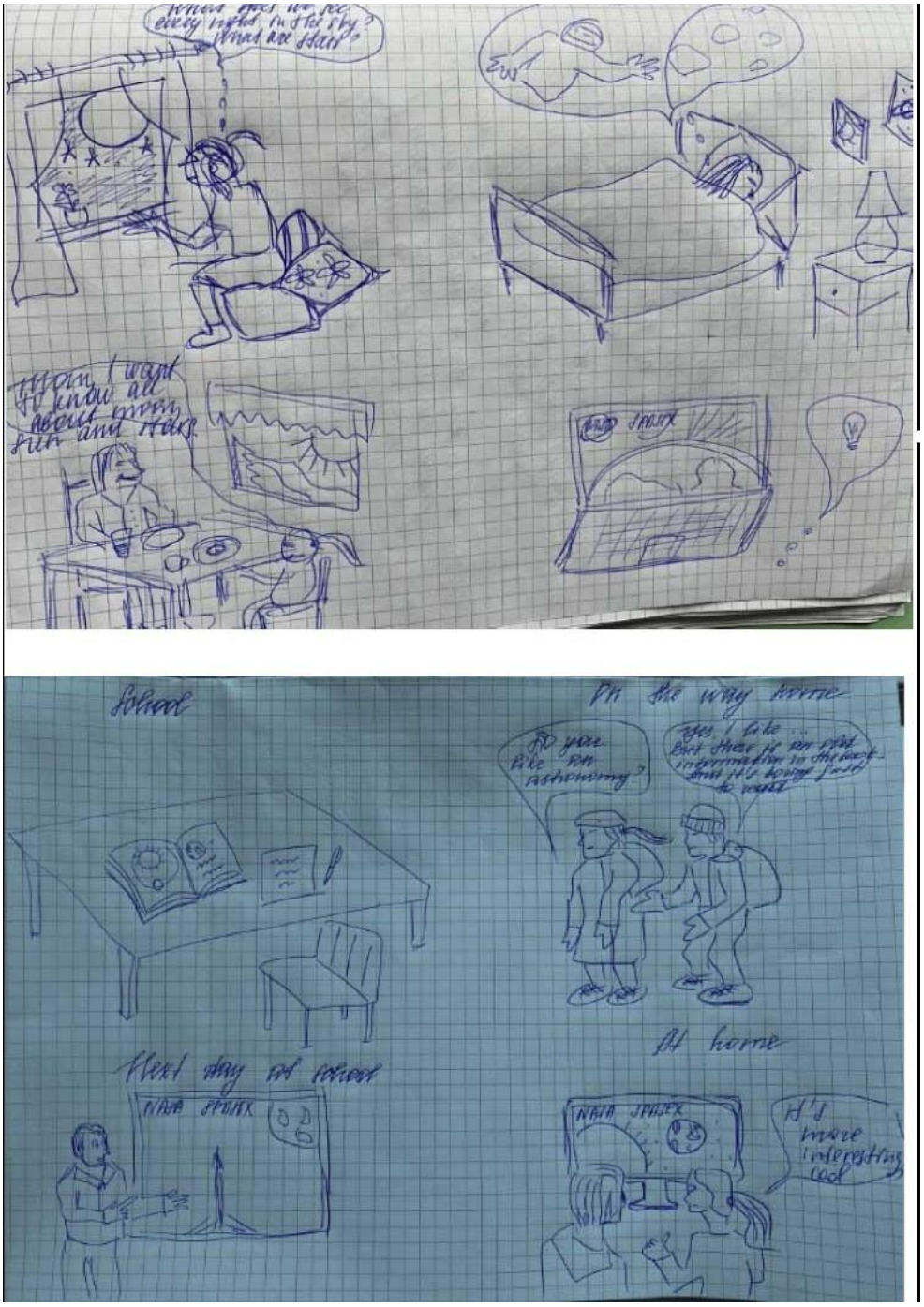
Activity: cycling, volleyball

Internet Use: online games, youtube

Personal qualities: good learning ability, curios, mobility

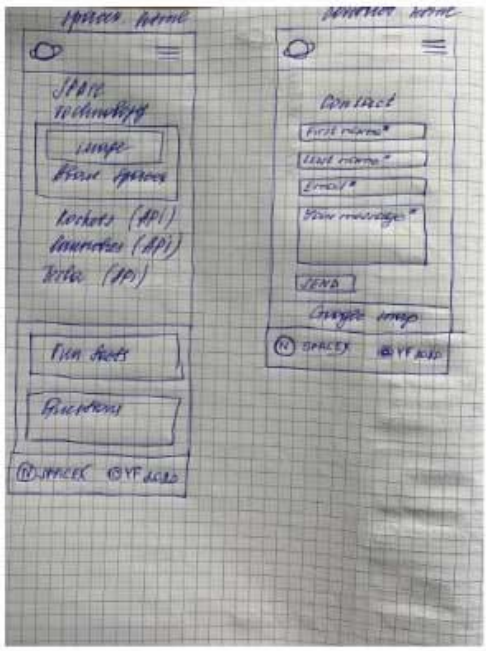
Personae

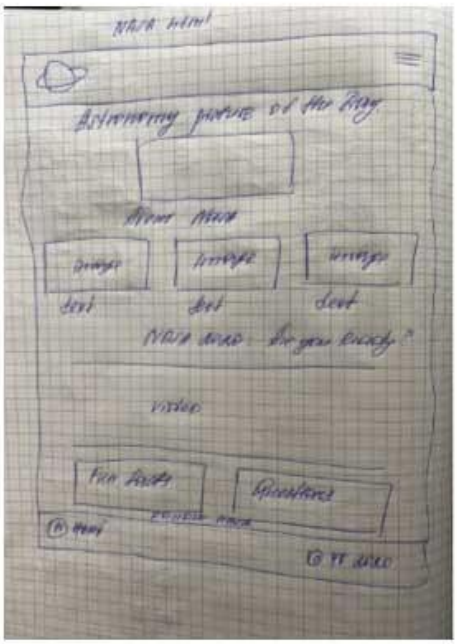
IMG 5. Paragraph 2.5

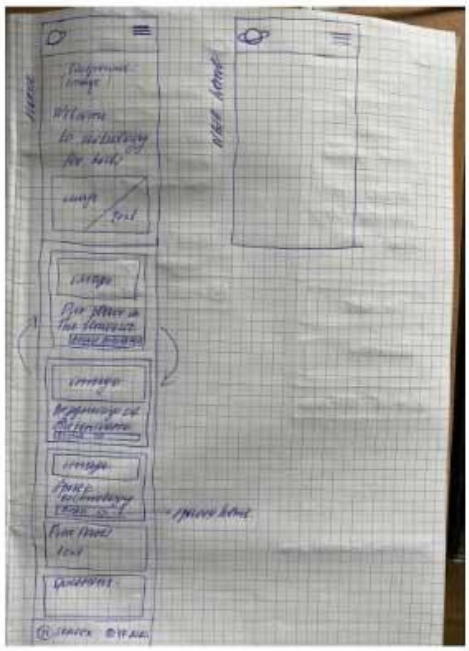


Storyboards

IMG 6. Paragraph 2.6

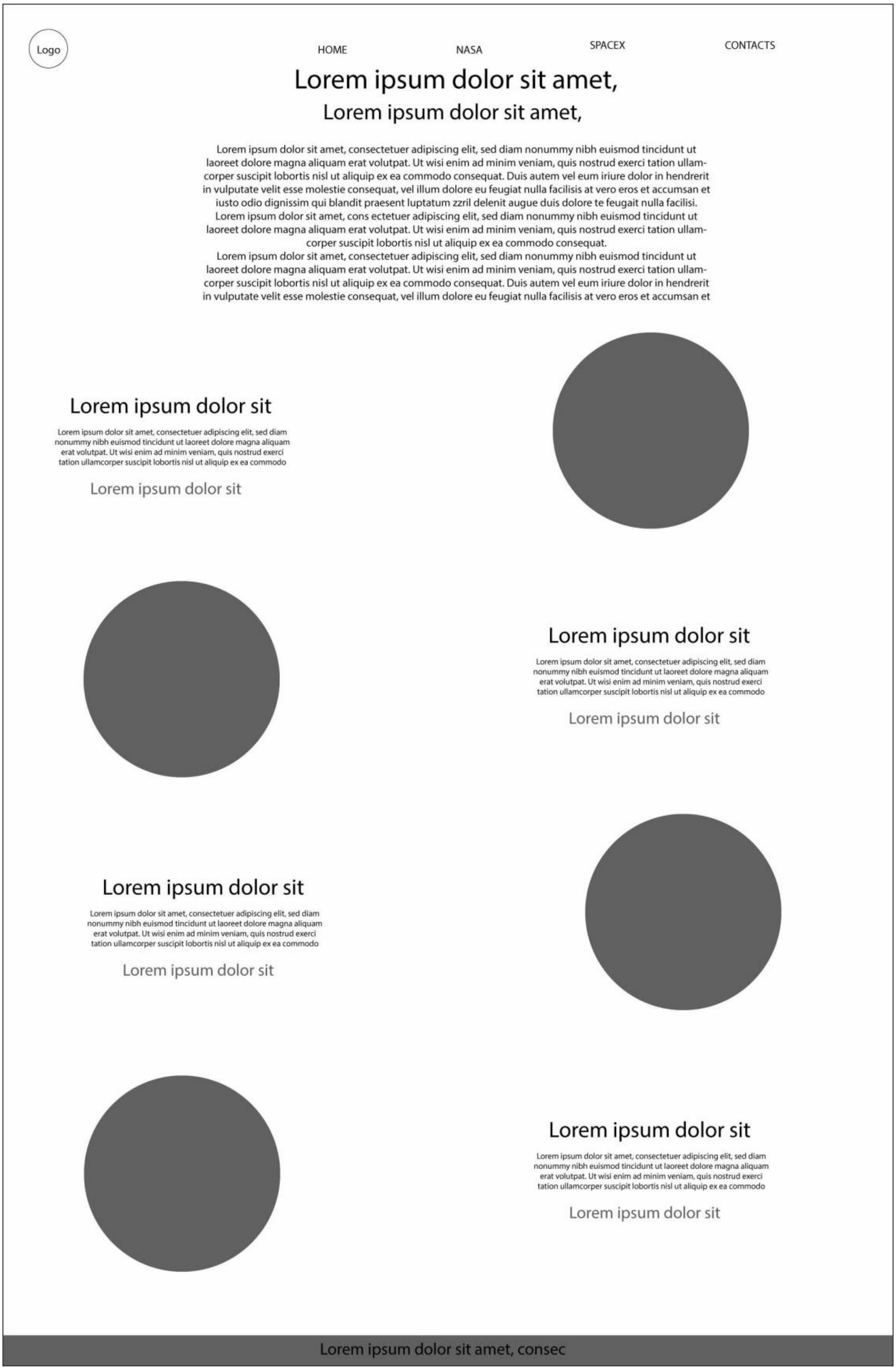






Sketch

IMG 7. Paragraph 2.7

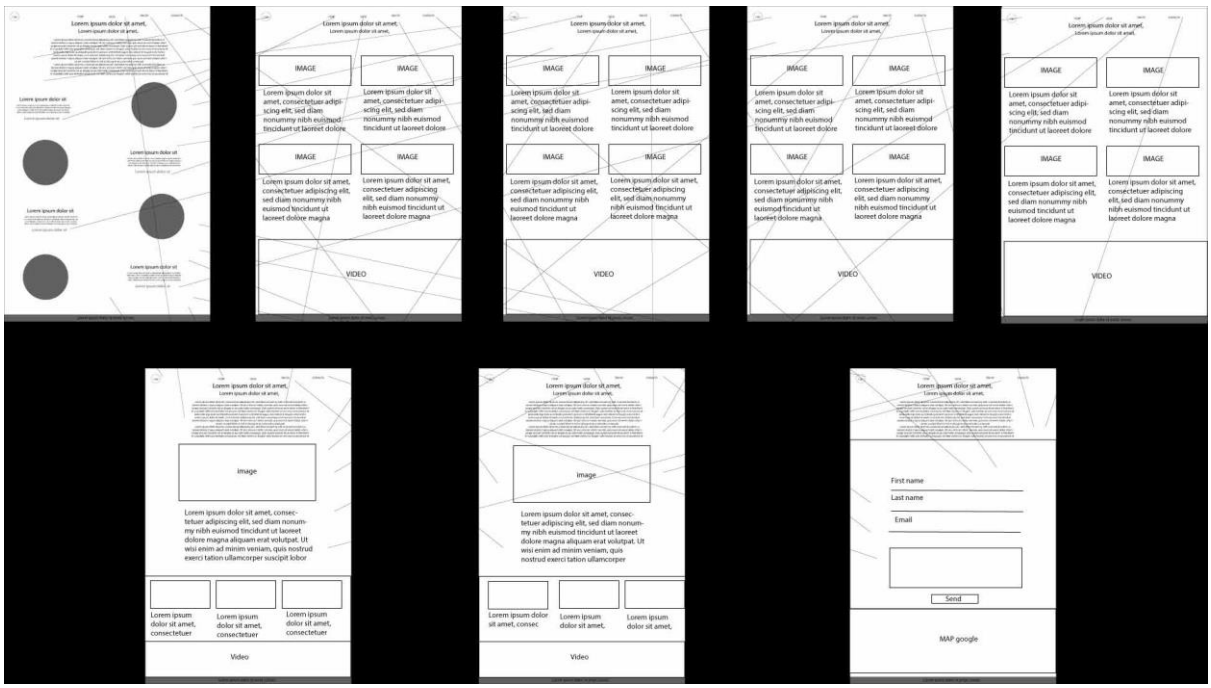


Wireframing fullscreen version

IMG 8. Paragraph 2.7

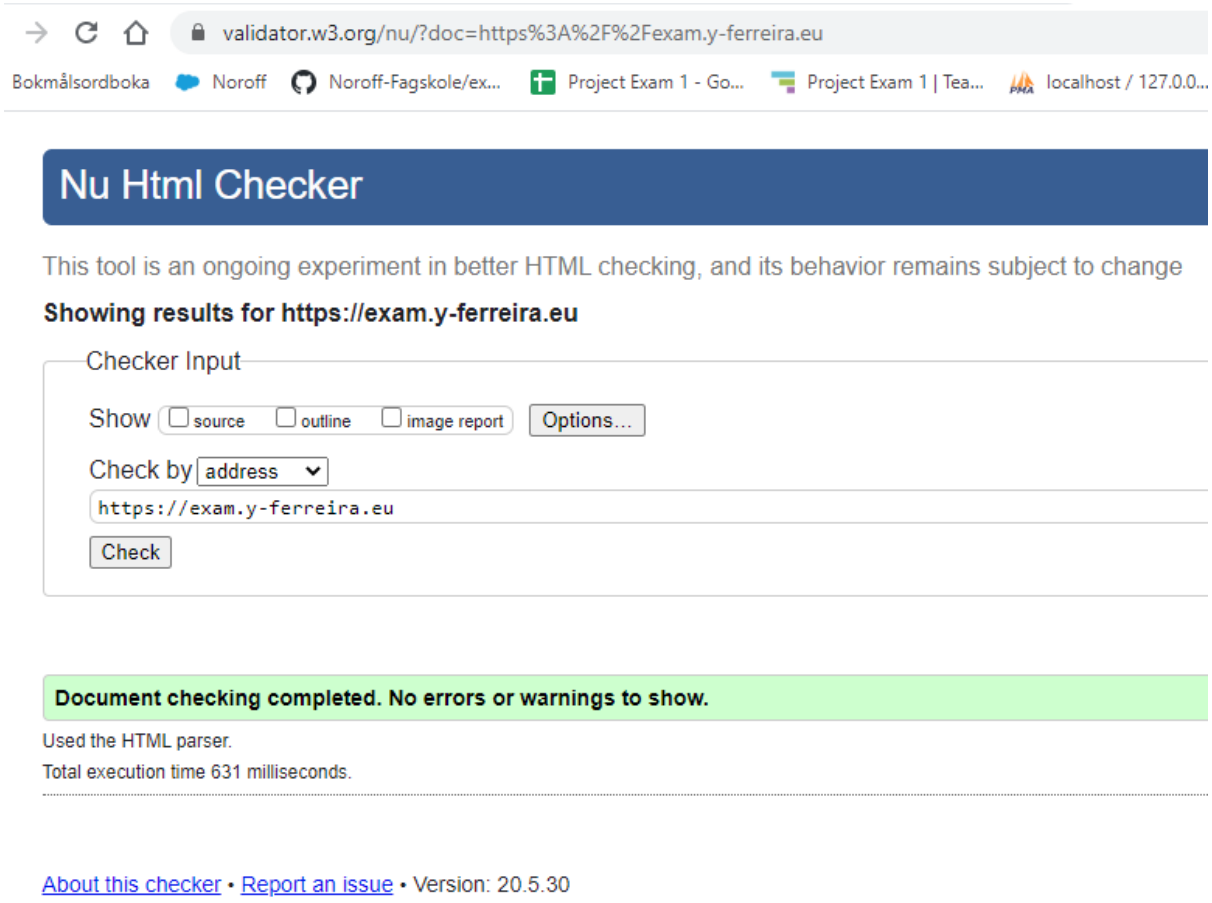
Wireframing mobile version

IMG 9. Paragraph 2.7



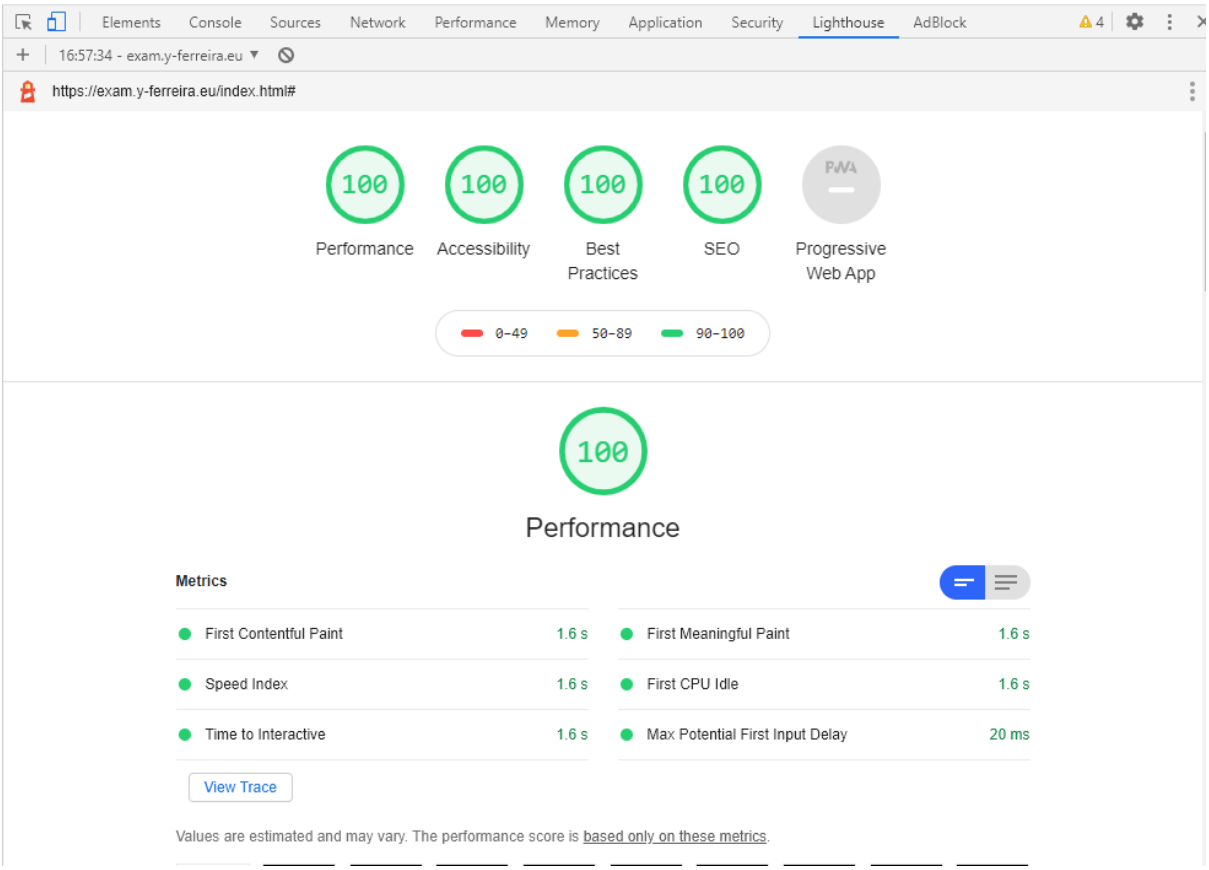
Prototyping

IMG 10. Paragraph 2.8



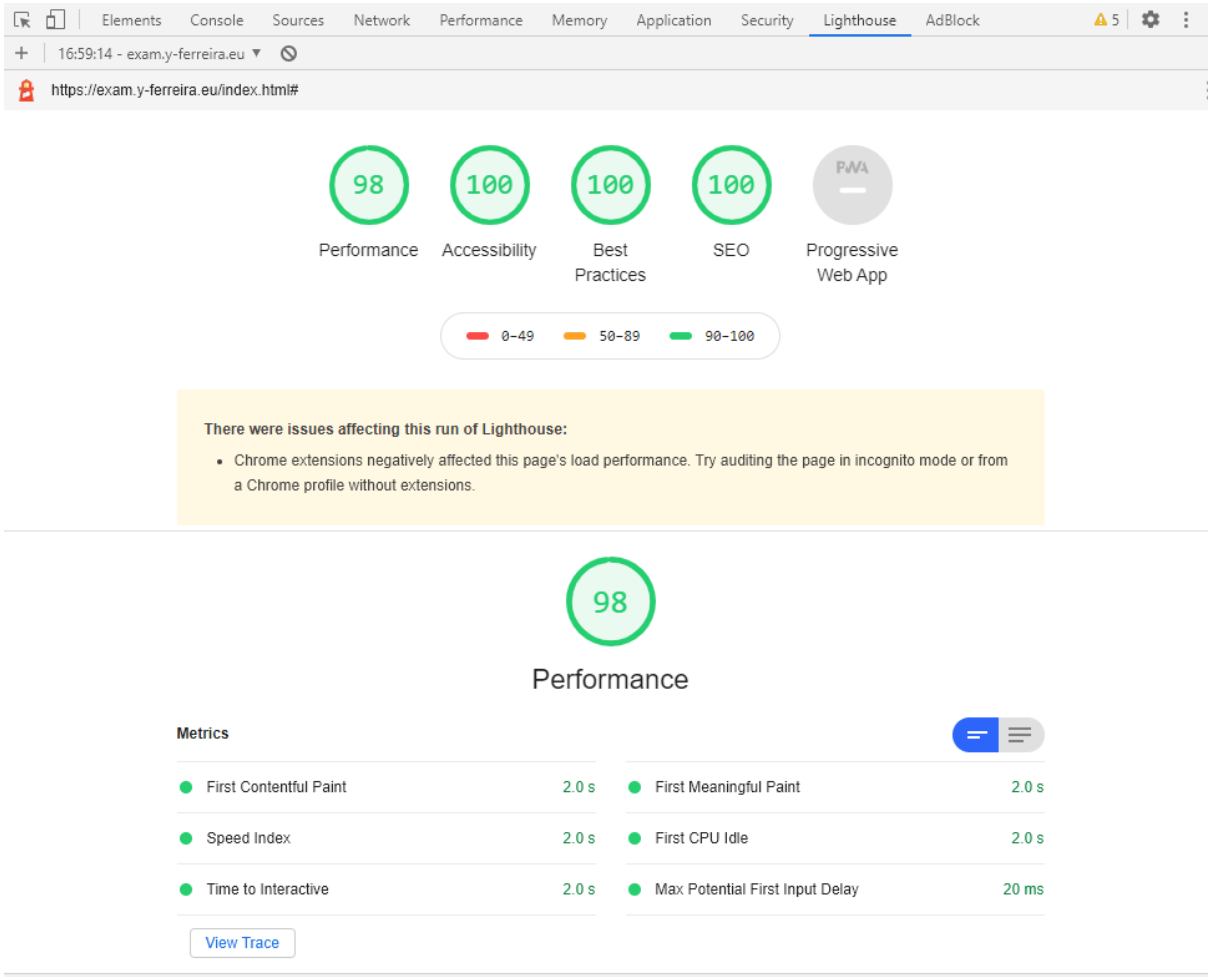
Validator

IMG 11. Paragraph 2.9



SEO, Accessibility test- mobile version

IMG 12. Paragraph 2.9



SEO, Accessibility test- desctop version