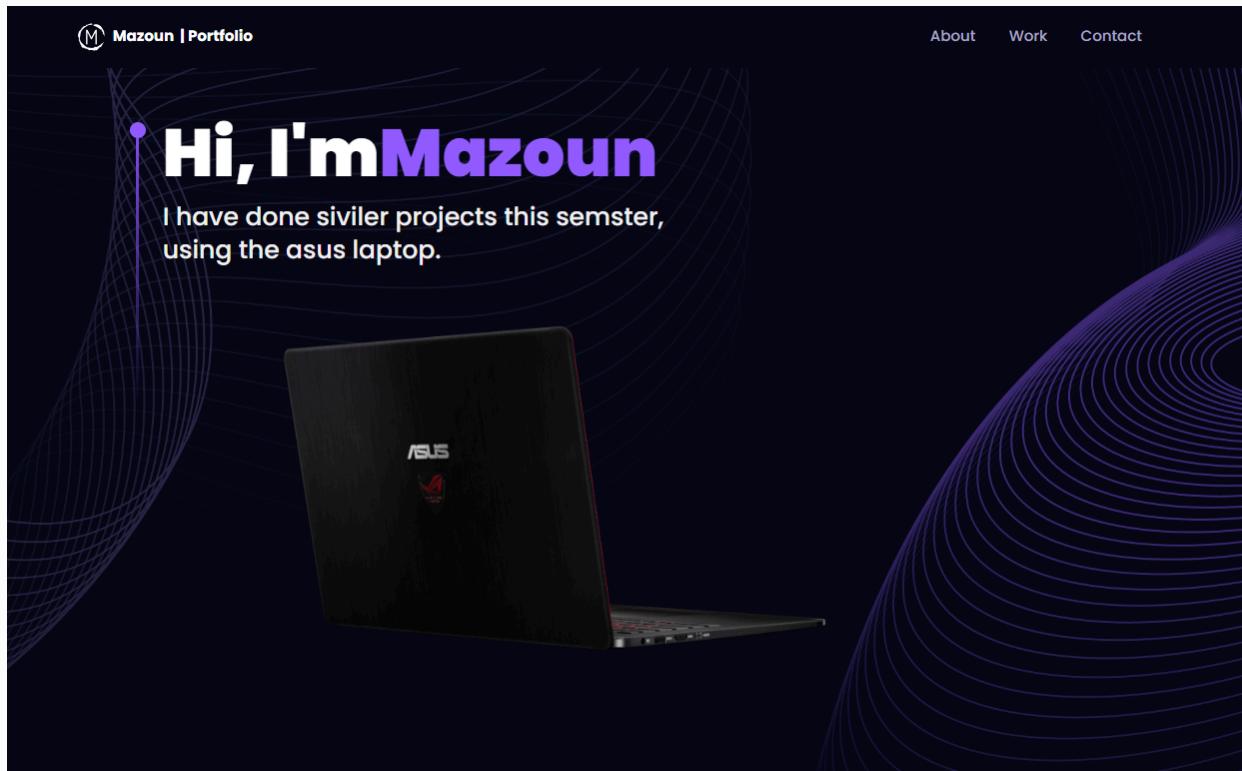


# RESEARCH REPORT PORTFOLIO

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**Name:** Mazoun Al Habsi  
**Student Number:** 437904  
**Email:** m.alhabsi@student.fontys.nl

**Date:** 11/01/2024

**Version:** 4.2

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## Version control

V	Date	Change
1.1	19/09/2023	Created the layout, filled out the project definition, created the research questions, and filled out the risk assessment.
1.1	24/09/2023	Answered Two research questions
1.2	29/09/2023	Changed the research questions; there are 5 questions.
1.3	13/10/2023	Answered two more research questions.
2.1	04/11/2023	Created new research questions based on the design thinking method; there are 12 questions.
2.2	09/11/2023	Updated the project definition section and aligned the previous answers to the new sub-questions.
2.3	10/12/2023	Deleted three sub questions, sliced the Content Strategies sub question into two, answered sub question 4.
3.1	14/12/2023	Deleted one sub question, answered 2 sub questions, added the reasons for choosing the methods and method setup (which was by the name of Collected information) for 4 of the sub questions, enhanced some of the conclusions.
3.1	15/12/2023	Continued to add and update the method selection, method setup and resining with some adjustments in the results and the conclusions. Fixed the APA references style.
4.1	06/01/2024	Rewrote the way of working, arrange the research questions into categorize, rewrote some of the conclusions and added two research question, one about the requirements and the other one about the structure.
4.1	07/01/2024	Continued answering sub question 10
4.2	10/01/2024	Fixed the method setup based on the feedback for the first 5 questions
4.2	11/01/2024	Continued to fix the method setup, rephrased the 6 question to better match what I want to research and added more details in the results as well fixed its conclusion. Additionally, answered the last sub question and added a conclusion to the main question.

# Project Definition

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## 1.1 Project Subject

The portfolio is a website that I made to showcase the projects and tasks I have done, the workshops I attended, and courses I participated in during semester 7 (advanced media). The initial idea is that this website is made for my assessment and for hiring employers to view my skills, but it is also a chance to upgrade my knowledge in the programming field.

## 1.2 Project goal

- Create an engaging and user-friendly portfolio website.
- Showcase my learning outcomes and skills gained during the semester.
- Learn React through few short courses
- Achieve a fine balance in content presentation for both teachers and hiring agents.

## 1.3 Expected result

A modern, user-friendly portfolio website completed projects, attended workshops, and courses. It will offer a visually appealing, straightforward display of my skills and achievements.

## 1.4 Way of working

I have rewritten this paper due to the wrong structure. I will be using the CMD methods to address and answer the research questions that are going to answer my main question. I will also use the Design Thinking method in different phases of the project and will show the use of it later on the portfolio website.

## 1.5 Main Research questions

**How can I as a programmer design a modern and user-friendly portfolio website that effectively incorporates the latest web design trends of 2023 while ensuring a smooth user experience and achieving the desired website goals?**

To answer the main question, I have created the following sub questions.

1. What are the latest web **design trends of 2023?**
2. How to ensure that the website is **user-friendly**?
  - 2.1. What insights can be drawn from feedback collected and analysed from three selected websites that have different navigation structure?
  - 2.2. How can the website be tested in which, what is the best testing method?
3. What should be the layout and structure of the website? How can information be organized for easy navigation?
  - 3.1. What should be the design of the website?
  - 3.2. How can I further improve how I visualize the structure of the portfolio?

# The Results

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## 1. What are the latest web design trends of 2023?

### Method selection

For the research on the latest web design trends of 2023, three primary methods were chosen:

- A. Library: Literature Study
- B. Library: Trend Analysis
- C. Library: Design Pattern Search.

### Results

#### 1.1 From the Literature Study

##### Why

I asked this question to collect information of the design trends of 2023. I chose this method to find an overview of anticipated trends based on by design experts, articles, and reports.

##### How

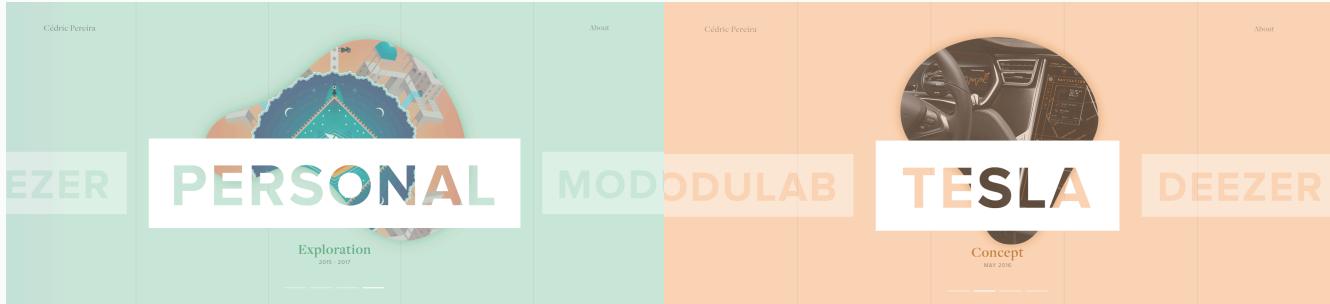
**Literature Study:** I used search keywords such as "website design trends 2023," "website design trends 2023 medium," and "top website design trends 2023" to learn more about the trends in website design for 2023. The article "The 29 Dominating Web Design Trends for 2023" was written by Karla Hesterberg and released on March 07, 2023. Karla is the Director of Content Marketing at HubSpot, who contributes experience in data analysis and marketing content. In the article, she references the websites that exemplify the design trends she talked about.

##### What?

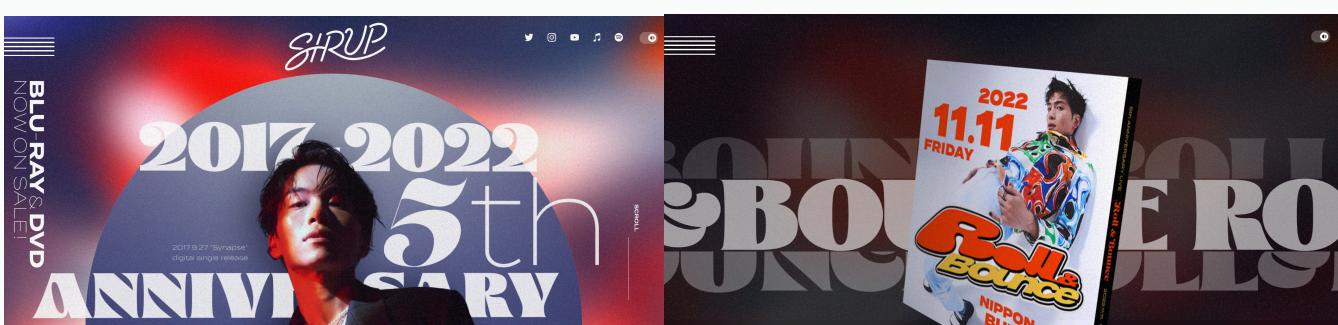
There are many web design trends in 2023. I have presented some of the trends I like from looking into an article written by Karla Hesterberg by the name of "What are the most important web design trends for 2023?". The trends are:

- Pastel Colours

- According to Hesterberg (2023), in a recent article discussing web design trends. Pastels are bright, warm, and powerful reprieve from the bleakness of the early 2020s. This portfolio created by Cédric Pereira reveals exactly how visually impactful pastel colors can be.



- What I like: The colours, the animation, the hover effects, and the style of the website.
- Layering
  - Layering images, colours, shapes, animations, and other elements add depth and texture to a site that doesn't have a lot of text (Hesterberg, 2023). Below is a stylish example from the singer-songwriter SIRUP.



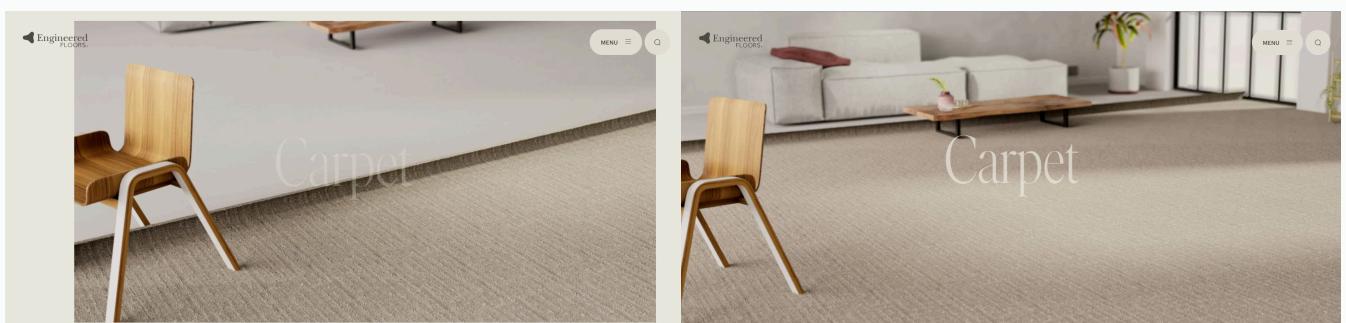
- What I like: The layout, the ability to turn music on or off, the vibe of the website, the colours, the font, the whole design of it.
- What I dislike: I would say the way the CDs were presented, I don't know the artist, therefore the way they showed them wasn't very helpful for me.
- Drag Interaction
  - Drag interactions are designed to mimic an actual, physical action. They essentially allow visitors to pick up and move objects on the screen. This type of gesture interaction is gaining momentum with more websites.
  - Take Robin Mastromarino's portfolio site as an example. In addition to clicking on the controls of the homepage slider, you can drag and drop the different slides to browse his featured projects (Hesterberg, 2023). The page transitions and animations are based on drag speed to give users a sense of control over these effects.



- What I like: The overall look of the website and the drag effects.
- What I dislike: At the end of a page, if I scroll a bit more, it gets me back to the titles. I sometimes don't want to view the titles again but want to see the end of a page.

- Scrolling Effects

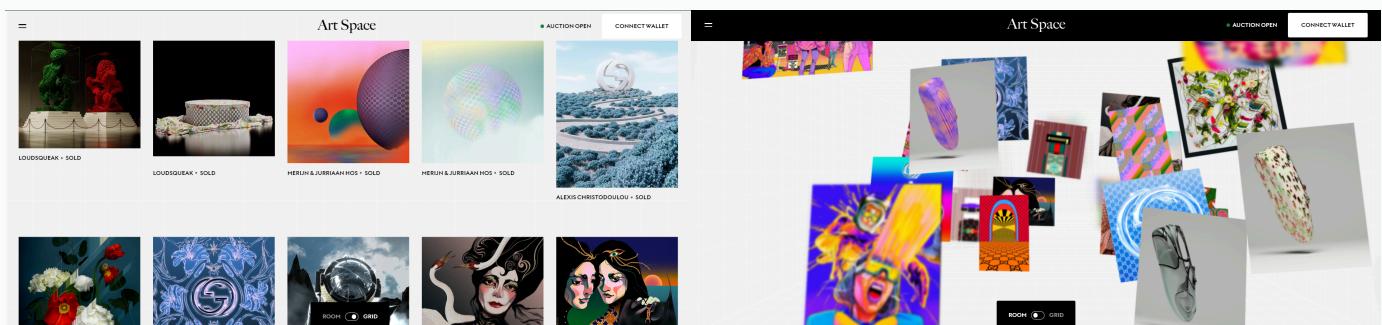
- Scrolling effects—animations triggered by scroll action create more dynamic web experiences, which is why they're arguably one of the most popular trending web design elements this year, according to Hesterberg (2023). These are increasingly used on interactive websites to intrigue readers to keep scrolling, signify a break in content, and create a three-dimensional experience.



- What I like: The animation, the way the carpet moved when navigating through the website, the colours and the used typography (font).
- What I dislike: I did not dislike anything in particular.

- Scrapbook Aesthetic

- Today's scrapbook aesthetic is an updated, buzzy version. In some cases, like this Gucci website, it's interactive (Hesterberg, 2023).



- What I like: The way of viewing the website element with the room aspect, and the vibe of the images.

What I dislike: I think I don't like that I can't code this yet.

- Gamified Design
  - Gamified design is everywhere in 2023, making it one of the most prevalent website design trends this year. Gamification is an excellent idea because it adds an element of human emotion for visitors (Hesterberg, 2023).



- What I like: Mostly everything, the vibe, the ability to move with the keyboard, all the animations and different ways of presenting information on the portfolio.
- What I dislike: The website is too long to navigate through, viewing the contact for example requires me to go through everything on the websites including the waiting for the air balloon to go up.

## So What?

According to the literature study, the current web design trends of 2023 involve a preference for pastel colours in order to develop visually attractive and appealing websites. The technique of layering images and objects is employed to create a sense of depth, while drag interactions provide users greater flexibility. Animations and designs triggered by scrolling attract users, while the scrapbook aesthetic, provides content in a distinctive manner. These themes collectively demonstrate an emphasis on user involvement, interactivity, and aesthetics. What I like the most is the pastel colours.

## 1.2 From the Trend Analysis

### Why

I asked this question to collect information of the design trends of 2023 from different resources. I chose this method to actively observe and analyse websites, portfolios, and case studies to check out what's really being used and preferred among designers.

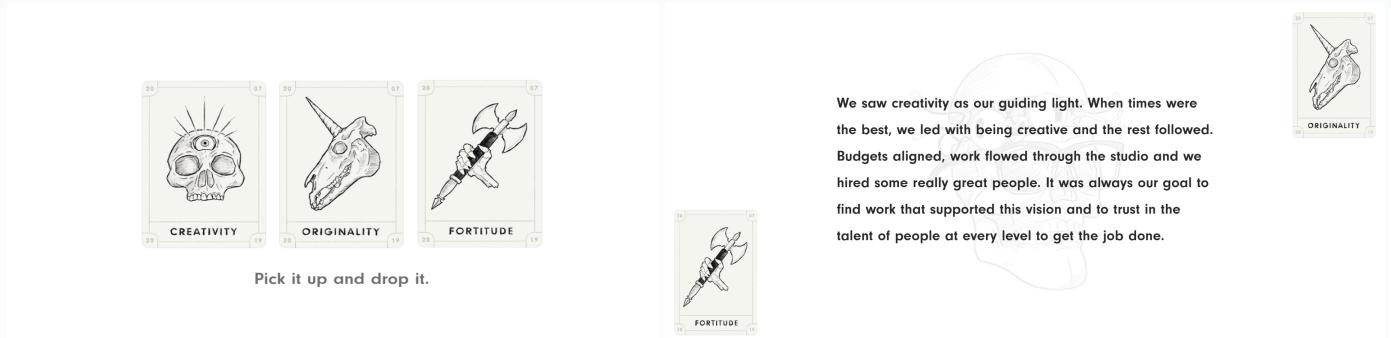
### How

**Trend Analysis:** for this method, I watched two youtube videos by Gary Simon, which were published on May 17, 2022, and July 7, 2023. The first video is called "Top 7 Websites of Spring/Summer 2023," while the second video is titled "8 Developer Portfolios that Potentially Score 10/10." The videos provided an insight on current web design trends, observed via an analysis of consumer behaviour. Gary showed a summary of the websites trends emphasising significant design aspects, functionality, and new approaches demonstrated in the featured websites and portfolios.

### What?

Following the literate research, this is the second research about the design trends. This time the resource is from youtube video, from an expert. the two YouTube videos were from the same person, Gary Simon. The first video was by the name of “Top 7 Websites of Spring/Summer 2023 ” and the second was by the name “8 Developer Portfolios that MIGHT be 10/10's?! ” and was published in 2023. The trends are:

- Ultra Minimalism
  - Taking classic minimalism to the extreme, some designers and agencies defy conventions of what a website needs to look like, displaying just the bare necessities. This trend of web design, known as “ultra-minimalism,” can be great for the user experience and load times (Gary Simon, 17 May 2022, 10:05).



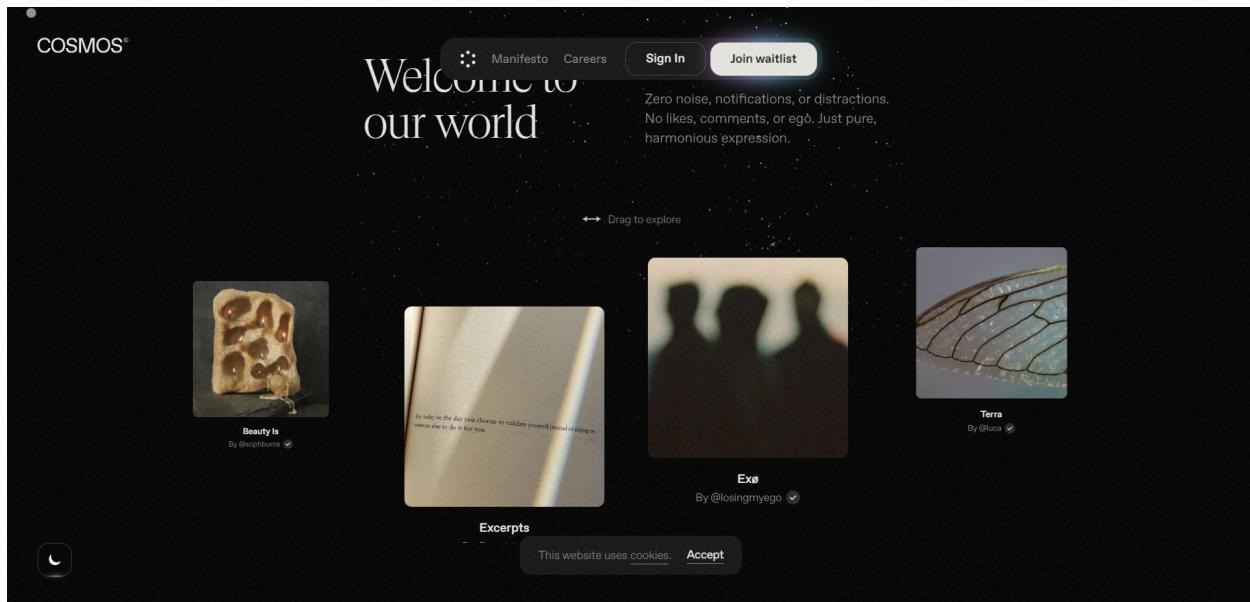
- What I like: The Ultra-minimalism vibe. The way the website positively impacted my experience and feeling about it.
  - What I dislike: The website is very small, it barrel holds information about who did it and for what. I wish there were more pages, so I can feed my eyes with its beaut.
  - Link: <https://www.legworkstudio.com/>
- Minimalism
    - The site from Brittany Chiang is centred around a CV and little information in a very simple style with a dark colour scheme (Gary Simon, 17 May 2022, 2:00).

The screenshot of Brittany Chiang's website features a dark blue background. At the top left is a hexagonal logo with a white letter 'B'. The top navigation bar includes links for '01. About', '02. Experience', '03. Work', '04. Contact', and 'Resume'. The main content area starts with the text 'Hi, my name is' followed by 'Brittany Chiang. I build things for the web.' Below this is a bio: 'I'm a software engineer specializing in building (and occasionally designing) exceptional digital experiences. Currently, I'm focused on building accessible, human-centered products at Upstatement.' There is a button labeled 'Check out my course!'. On the right side, there is a section titled '02. Where I've Worked' with a table showing her work history. The table has two columns: 'Position' and 'Company/Role'. The first row shows 'Lead Engineer @ Upstatement' at 'Upstatement' from 'May 2018 - Present'. The second row shows 'Scout Studio Sherry Muller' at 'Scout Studio' from 'July 2017 - Present'. The third row shows 'Upstatement' at 'Upstatement' from 'July 2017 - July 2018'. The footer contains social media icons and a copyright notice: '© 2017 BRITTANY CHIANG | CV'. The URL 'v4.brittanychiang.com' is also visible.

- What I like: The grid style, the minimalism vibe, how she fits everything on one page, and the way she presented the work experience.
- What I dislike: I would say nothing wad disliked by me.
- Link: <https://v4.brittanychiang.com/>

- Broken Grids

- A broken grid layout is a web page layout that defies some standard of a traditional grid layout. This could mean adjusting column width and/or row size, overlapping and stacking elements, animations, or other techniques beyond what a grid system dictates (Gary Simon, 2023, July 7, 10:18). Which make it so cool.



- What I like: The style, the colours, the vice of the website, and the selected images.
- What I dislike: I would say nothing was disliked by me.
- Website link: <https://www.cosmos.so/>

## So What?

After watching the two videos, I was able to conclude that the ultra-minimalism emphasises clarity and quicker loading speeds, as seen by the website of Legwork Studio. The portfolio of Brittany Chiang illustrates minimalism, employing dark colour schemes and simple layouts to achieve a visually pleasing and simple approach. Cosmos showcases broken grid layouts, that break traditional design rules by enabling innovative modifications and overlaps. I liked most Brittany Chiang website.

## 1.2 From the Design Pattern Search

### Why

I asked this question to collect information of the design trends of 2023. I used the method to find common solutions and some design patterns.

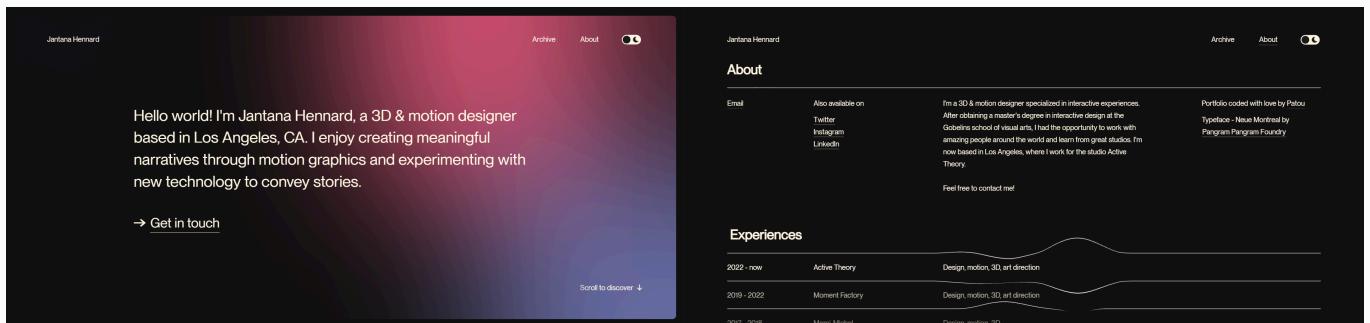
### How

**Design Pattern Search:** I explored various websites for analysing design decisions, usability, and aesthetic choices. I made note of my personal preferences and noteworthy features observed in each trend.

### What?

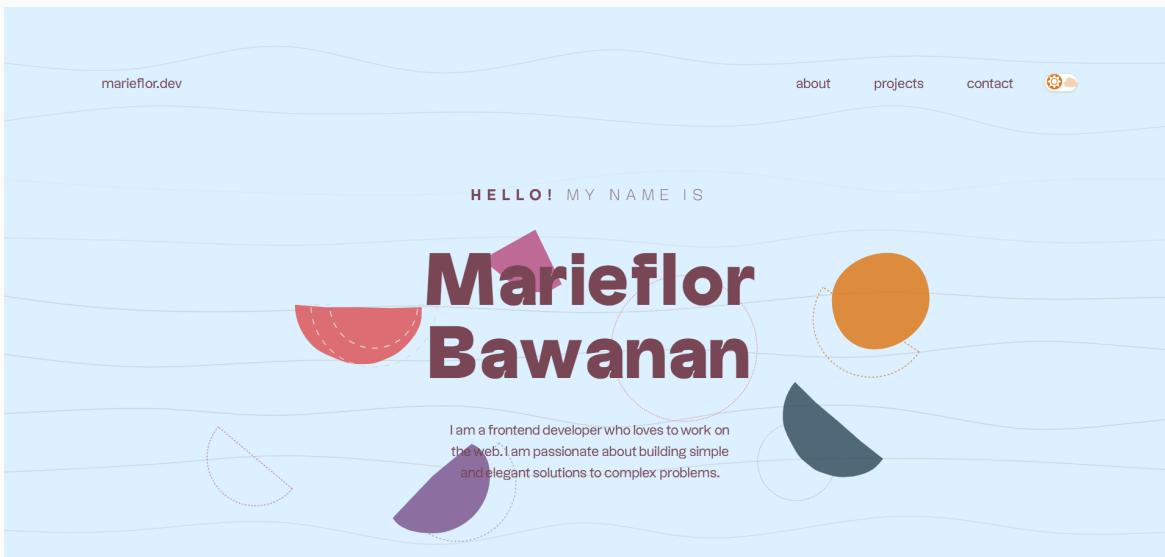
Going through the internet, I was able to find the trends below. Why did I say they are trends? Basically, when I was doing the literature research, I was able to identify some of them.

- Text animation
  - The site from Jantana Hennard is centred around a CV and little information in a very simple style with a dark colour scheme.



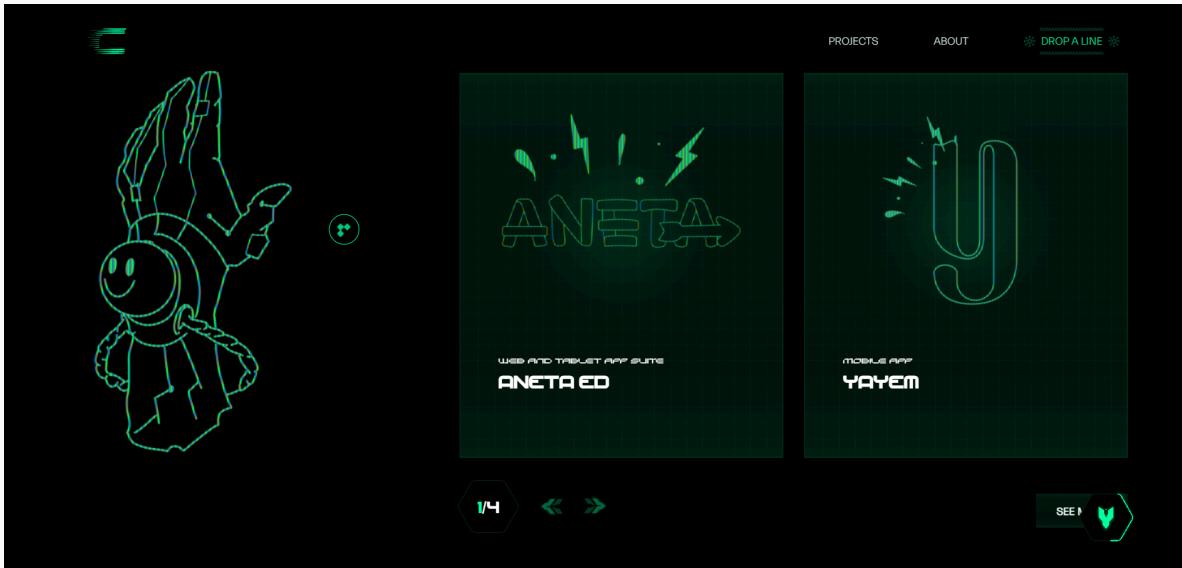
- What I like: The animation of the lines and text when hovering with the mouse, it is so cool.
- What I dislike: although the animation was cool, it was a bit distracting and annoying sometimes.
- Link: <https://jant.fr/>

- Minimalism
  - The below website show a minimalism design with a nice choice of colors and a cool animation that is triggered when mouse moves.



- What I like: That it is possible to switch to night mode, the animation, the font, and that it is possible to view the codes.
- What I dislike: The page refreshes when the user goes to other pages.
- Link: <https://marieflor.dev/>

- Gamification
  - The developer have created the website in a way like old games we used to play. With a cool animation and way of presenting the info using that.



- What I like: The used color, the used icons and images, the mouse, and all the details that have been put into this.
- What I dislike: It is a bit hard to navigate to the projects.
- Link: <https://www.codercraftsmen.io/>

## So What?

Going thought the internet to discover more websites, I was able to discover more cool website that integrated some of the design trends in abetter way than I seen before from the videos and the literature research. The Text animation, as demonstrated on Jantana Hennard's website, presents engaging line and text animations that are triggered by hovering the mouse. The website of Marie Flor demonstrates minimalism, characterised by its elegant design, ability to switch to nighttime mode, and captivating animations caused by mouse movements, however intermittent page refreshes occur when navigating. Finally, the implementation of gamification on Code Craftsmen's website evokes a sense of nostalgia through its design that draws inspiration from gaming. The website incorporates attractive colours and images. Overall, even if the developers follow the trends, this doesn't mean that the website is perfect.

## Conclusion

In conclusion, the research of web design trends in 2023 through the literature study, trend analysis, and design pattern search got me to identify a wide range of design trends. Including a preference for pastel colours, layering for depth, drag interactions for user control, scrolling-triggered animations for engagement, scrapbook aesthetic for unique content presentation. That Ultra-minimalism emphasizes clarity and loading speed advantages, while minimalist designs like Brittany Chiang's portfolio and innovative broken grid layouts as seen on websites like Cosmos demonstrate creative approaches.

However, I don't think all of these trends can be all together on my website. Because having many beautiful things does not mean that the end result will be beautiful, it can also mean it will be ugly. Therefore, I have chosen a few of these trends to be in my portfolio making, such as the pastel colours, and some animations.

## **2. How to ensure that the website is user-friendly?**

To answer this questions, I decided to look at the following:

**2.0 What can I conclude from testing pre-selected websites on the matter of the layout and structure and more?**

**2.1 What should be the layout of the website?**

**2.3 How I visualize the structure of the portfolio?**

**2.4 What is the best testing method?**

Designing the website will allow me to create a prototype, the visualization of the website will allow me to assess the structure of the website where from that I can assess the design prototype. After which, the best testing method can ensure me that the design website is user-friendly or not.

### **2.0 What can I conclude from testing pre-selected websites on the matter of the layout and structure and more?**

#### **Why**

I asked this question to know what kind of website I can make, what is the layout and what the target group prefers. I chose the usability testing method because I can collect a lot of feedback and opinions, which I believe is going to be very valuable.

#### **How**

**Usability Testing:** In an early stage of this project, I engaged peer students and teachers to review three selected websites, aiming to collect diverse feedback on interface, design, usability, and overall impression. I asked some to think aloud. At the end, all the testers were asked to write shortly what they think of each website if it was my portfolio.

## What?

Based on the results of the research, sub question 1 (What are the latest web design trends of 2023? ) I was able to decide some of the criterias of what is considered as a good website to be selected on the testing.

The goal of the portfolio is to serve as a showcase of my achievements in the semester as my goal to show the coding skills and abilities to learn and to secure a graduation internship for the final semester. The process of selecting the websites wasn't just about choosing them, but it was about finding platforms that resonated with my goals, design preferences, and coding capabilities. There is a full document about how did I select the website, you can find a link below or view it from the portfolio.

Selected Website:

A. Code Bucks:

- a. This website caught my attention due to its innovative design elements and enthusiasm for showcasing coding skills and layout of the home page, specially for the headings. It is true that the navigation posed challenges, affecting the overall user experience to me and to the others, but despite this, its uniqueness and coding-centric approach were aligned with my portfolio goals, intending to highlight technical skills.
- b. Link: <https://react-portfolio-sigma.vercel.app/work>

B. Cali Castle: (website is in Chinese, please use the translator on the website)

- a. This website presented a clean layout and certain design elements that initially seemed promising. However, the website's formal design and functionality made it looked boring, but it served - in my opinion - the minimal requirements for the teachers. Despite these drawbacks, its attempt at structured layouts and specific pages like the blog page with my portfolio's goals, to show the research for example. Therefore, it was not a bad choice.
- b. Link: <https://cali.so/projects>

C. React Portfolio : (React course)

- a. Among the choices, the React Portfolio stood out for its simplicity and potential to show coding skills effectively and most important, the 3D elements. The site is not built to showcase what is learned but to get a job, showing the history of the person's work, the languages he knows and a contact page with an impressive background and 3d element of an earth that is spinning slowly. Choosing this website as the layout will mean that there is a lot to do and fix, but I am ready for the challenge because it looks so good.
- b. Link: <https://project-portfolio-6i7c.vercel.app/>

## The testing results:

Participant Name	Participant Role	Code Bucks	Cali Castle	React Portfolio
Hajer Al Kindi	Student	I liked the design	Too formal, simple, and nothing unique	Overall, I liked the simple and neat design. I would write more information about myself in the beginning (just a short description)
Megin van Herk	Student	I hate it, its too confusing, there are directions or familiar navigation options. Everytime I click on something it opens another tab. This makes me want to leave the website.	Nice hover animations, the login is a bit weird for a portfolio, I would prefer anonymous comments as the reactions you can add.	Maybe indicator that there is a 3d thing, or already move it. Maybe make the text bigger, or less. No external links pls.
Negin Bokaei olmousavi	Student	The icons are confusing (power off button-playing music icon looked like hamburger menu) the scroll chain is well designed and gives feedback to the user.	The information architecture is good I can find information- The picture are not well selected because they are not personalized - I liked the emojis next to the blog- some pages are not necessary for example message wall.	I liked this one the best. It is minimal design and I can easily fine information. I like the micro animation. The time line helps alot with navigation

Participant Name	Participant Role	Code Bucks	Cali Castle	React Portfolio
Kim Oppers	Student	I think the website is a bit messy. There is a lot going on but I think the idea is very original. The navigation is confusing for me because I don't know where to click on. Where is the navigation?? Left, right?? It's confusing for me but I like the music and animations.	I really like this website. The 'blog' page has a nice overview with pictures. The homepage is clean, and I know how to navigate. It's a clean website.	I really like the website. I like the animations for the cards and 3d model. Very interactive.
Presiyan Penev	Student	Interesting way to structure the menu, I like that it is a bit more unique. Definitely original way to represent their portfolio	Better than the first website I saw, very well organized and clean, I like how images are organized and it is easy to navigate throughout the website. I really liked the testimonial page and that every page had a clear call-to-action button	The thematic is fitting in my opinion together with the colors, the animations I found really cool. The 3d animation was cool as well, but didn't know it was moveable in the beginning, think of a way to indicate that it's interactable, overall it's a really nice looking and easy to follow portfolio

Participant Name	Participant Role	Code Bucks	Cali Castle	React Portfolio
Stan Oers	Teacher	<p>I've got a couple of small bugs. That is not a nice start for a front-end developer.</p> <p>Overall experience is all over the place. Though the soundbar was the menu.</p> <p>However! Although this website is imo technical and design wise super messy. I do see his enthusiasm about code and animations. And I like that.</p> <p>I would hire him for an internship to see if he would grow technically towards a junior.</p>	<p>Design feels outdated. Although there is cohesion.</p> <p>In terms of him as an app developer it makes sense. It is very structured. You can easily find his projects and his code is hosted on github.</p> <p>His code on github is clean. Good validation, structure is a bit meh.</p> <p>Junior/Medior backend/app/plug-in developer?</p>	<p>Love the 3D! I would say maybe try to integrate it more with the website. E.G. I would not have the laptop on the hero. But animate the lines in the background instead.</p> <p>I would swap the timeline with the projects since it is more relevant.</p> <p>Also put your contact information in the hero (above fold). Plenty of times potential clients will go to your website just because they forgot your email.</p> <p>Or they saw the website closed it and after talking about it with other people decide to send you an email.</p> <p>The ending with the contact is really cool.</p>

Participant Name	Participant Role	Code Bucks	Cali Castle	React Portfolio
Paul Reekers	Teacher	<p>The horizontal scrolling is weird, there is no clear understanding why it needs to do that.</p> <p>Social media icons on the left disappears into the white background.</p> <p>Power button in the middle with a green hover is weird and not clear why its there. The menu structure is all over the place.</p> <p>He wants to show his skills, but now it's too much of all the different elements.</p>	<p>Design is a bit simple, not that special or outstanding. The projects could use more information/image. First tile (zolplay) is a broken link. The hover effect makes the text unreadable.</p>	<p>I get errors Access to script at 'file:///src/main.jsx' from origin 'null' has been blocked by CORS policy: Cross origin requests are only supported for protocol schemes: http, isolated-app, brave, https, chrome-untrusted, data, chrome-extension, chrome. main.jsx:1 Failed to load resource: net::ERR_FAILED /logo.svg:1 Failed to load resource: net::ERR_FILE_NOT_FOUND</p>

## **So What?**

Analysing the feedback from participants and teachers, it is evident that each portfolio website had its strengths and weaknesses. Code Bucks stood out for its unique menu structure and design, although it faced issues with confusion and technical bugs. Cali Castle, while well-organized, lacked originality and was perceived as formal. React Portfolio received positive feedback for its simplicity, micro animations, and helpful navigation elements.

In light of this feedback, I have decided to base my own portfolio website on the React course template, integrating the positive elements identified during the user testing. By incorporating clear navigation, personalized content, and interactive design features, I aim to create a portfolio that effectively showcases my skills and projects while providing an engaging and user-friendly experience for visitors.

## 2.1 What should be the layout of the website?

### Method selection

- A. Workshop: Sketching
- B. Stepping Stones: Design Specification (Wireframe)
- C. Workshop: Prototype

### Why

I asked this question to decide upon the design of the website, to first see the need from the users and also to do the testing later on.

### How

**Sketching:** With my notebook and the pen, I drew different designs and ideas. The resulting sketches give me different possible ideas.

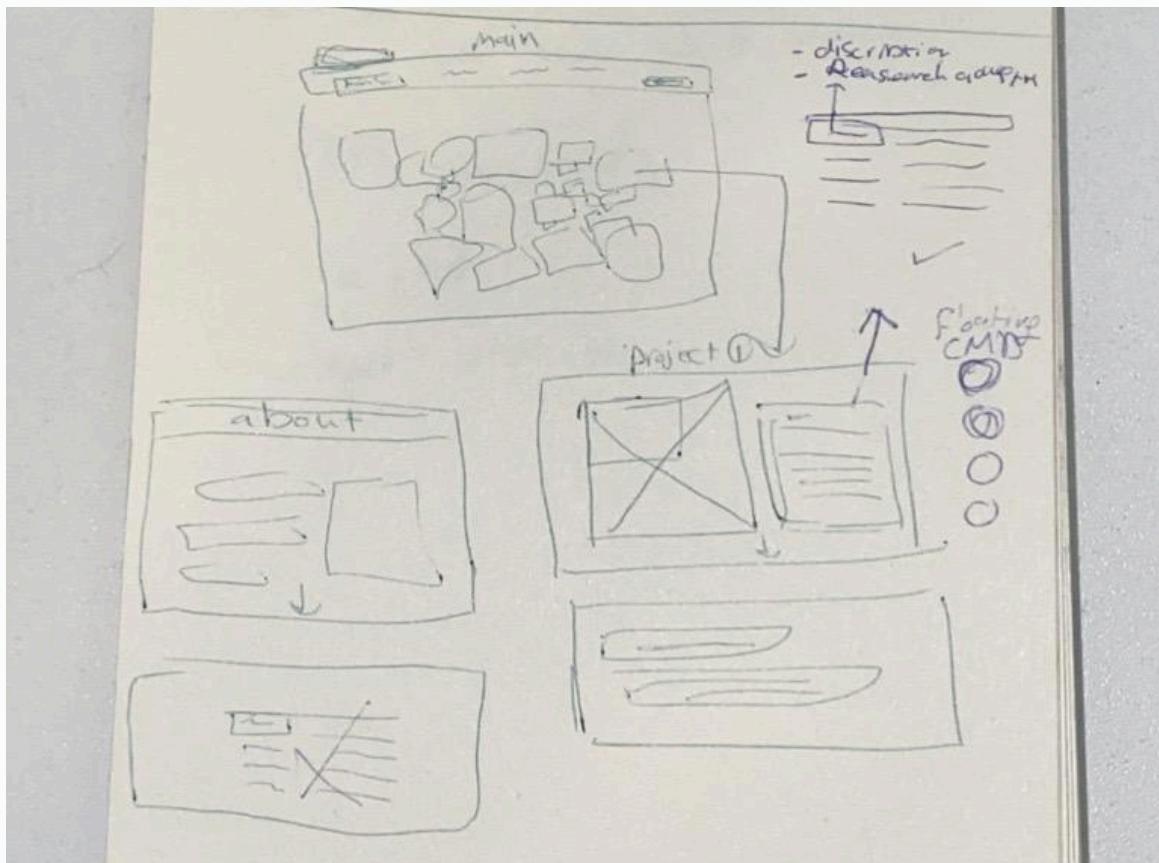
**Design Specification (Wireframe):** I have had an eye of the look of the website and some design choices that I made, therefore I decided to communicate that by creating a wireframe to verify them and remember them later on if changes to occur.

**Prototype:** After going through iterations it was time to determine one design. Therefore the challenge I was trying to solve I changed from wireframe and design choices to creating a high fidelity prototype, the digital prototype.

## Results

### First Sketch:

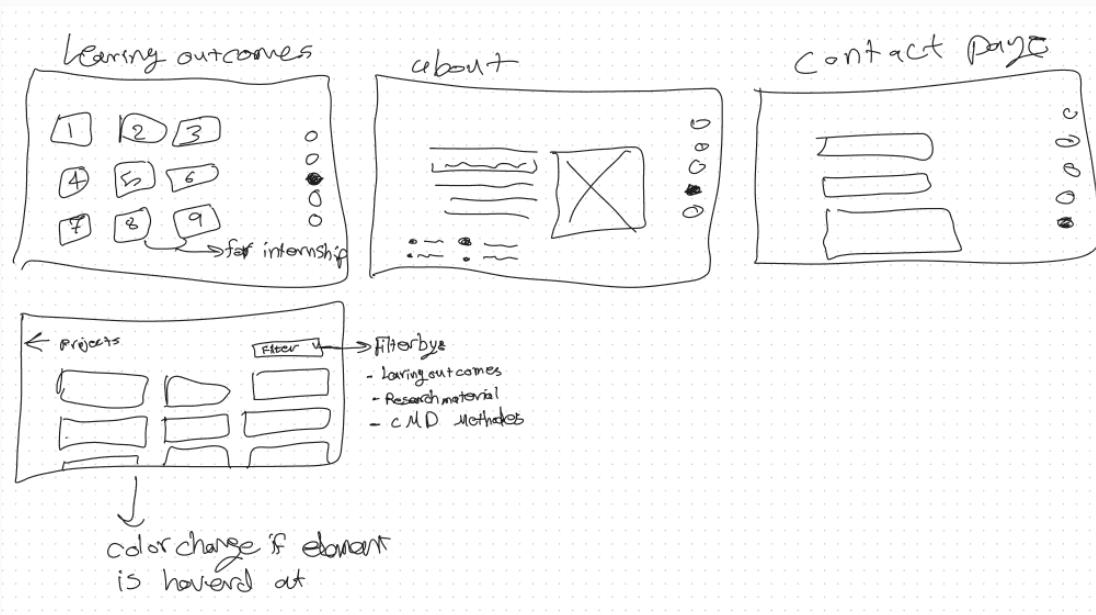
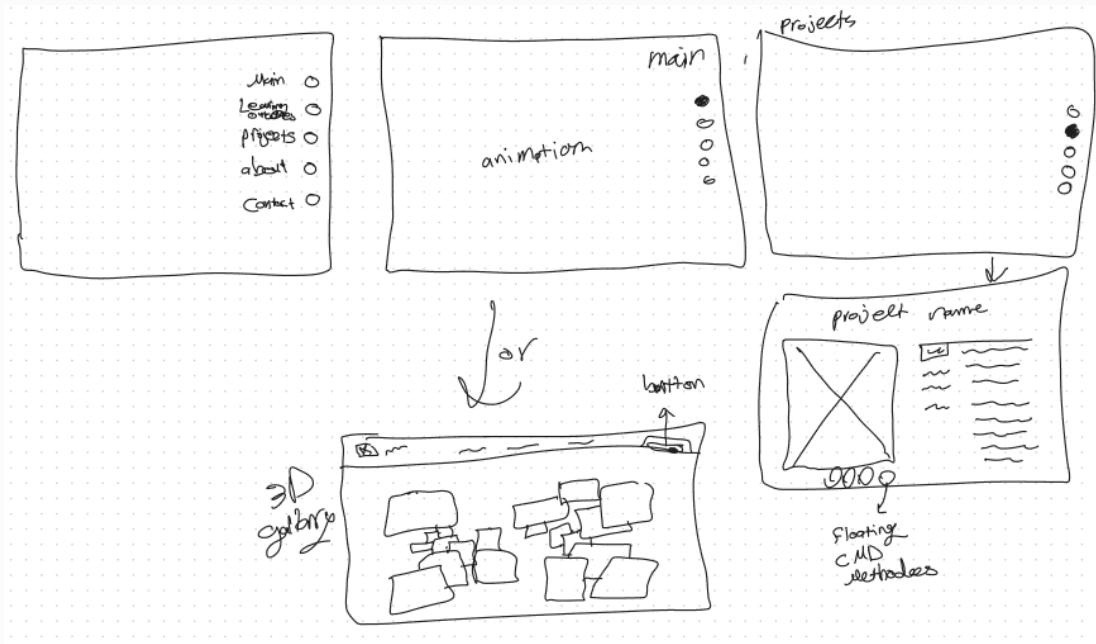
The design was made using a pin and a paper.



It consisted of some ideas like floating CMD methods to give motion to the boring part of the website which is about reading of what are the sub questions and projects.

## Sketch:

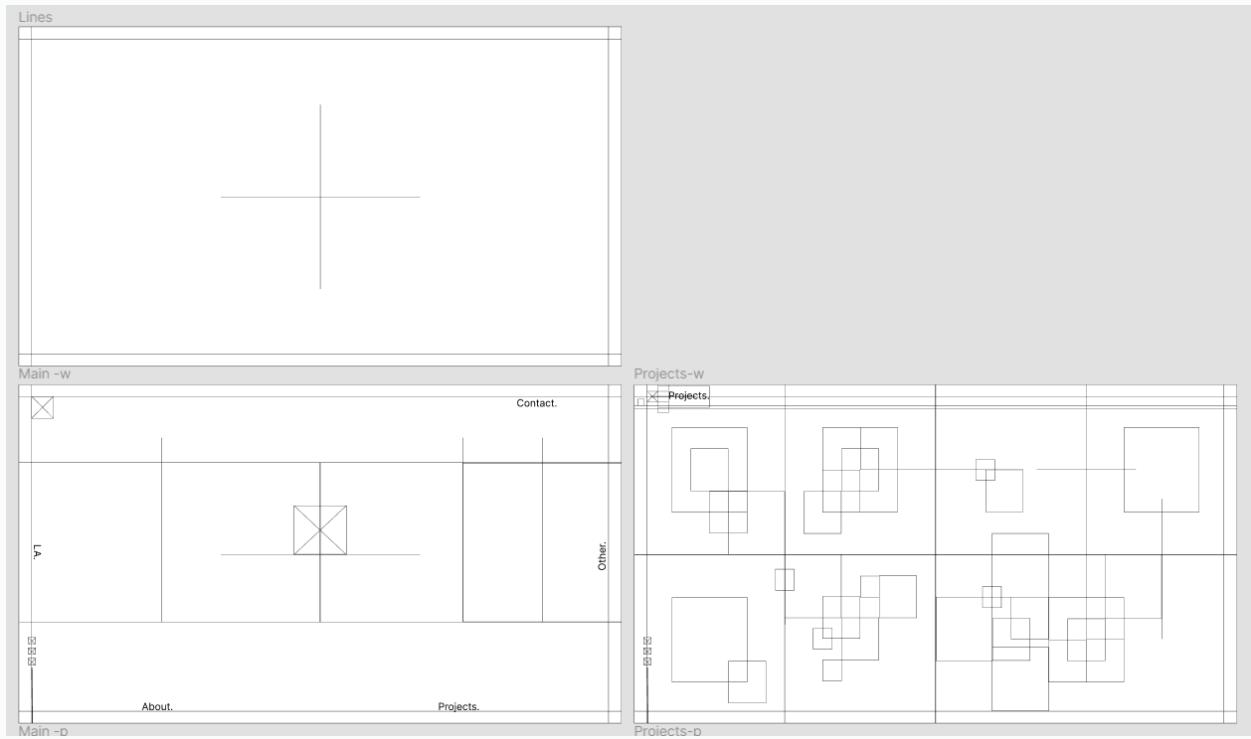
The design was a better look of the website, it was design on Figma on the iPad.



As can be seen, shows 5 different pages, and some alternatives to the project page. The idea behind the sketch is to have one pager website with the ability to go throughout sections with a click on the right of the screen. It also had a spirit page to show all the projects and a filter to find them faster. There is also a button to change the way the person can look into the projects, either with a good alignment or with a look and feel of a museum like the Gucci website did, this is presented on the first sub question.

## First wireframe:

The design was based on 2 website that I found online, it was design on Figma on the laptop.



The home page design was based on portfolio website that is called Code Bucks, while the second page shows an artistic view of the projects, it was based on Gucci website I found on the trends research. There is also a mock-up of these pages, however the idea was changed because I did testing for Code Bucks website and found out that having the titles all over the places is not user-friendly. While for the project page, I couldn't find the code to do such an illusion and illustrations, therefore I cancelled it.

## Mock-up:

The design was based on the website that had the most positive testing results, it was design on Figma on the laptop.

Landing Page

MAZOUN | PORTFOLIO

About Work Contact

Hi, I am Mazoun

I have done few projects this semester, using the ASUS laptop

Overview.

This website was done using JavaScript, React, and Three.js. It is meant to show my skills in 3D websites and motion. This is extra text for now, just to fill up this paragraph until I see what I can do. Thank you for taking time to read this!

User interaction

Software design and realisation

Future-oriented organisation

Investigative problem solving

Goal-oriented interaction

React Course

September 2023 - December 2023

Project company

September 2023 - December 2023

WeyWeyWeb Malaga

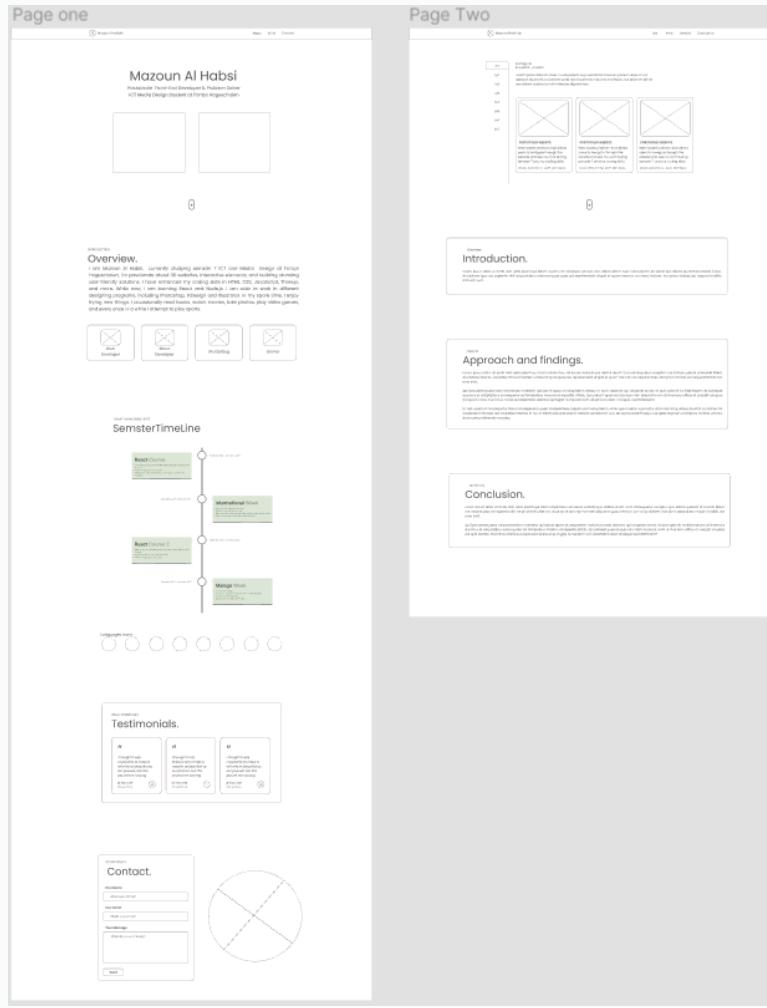
September 2023 - December 2023

International Week

This design has similar layout of the website that had the most positive testing results. However, it has different colour theme. The colours weren't matching the research I conducted, therefore it was decided to be changed.

## Wireframe:

The wireframe was design on Figma on the laptop, it was based on the previous iterations and websites testing.



The wireframe as can be seen looks similar to the previous mock-up. But it has most of the components that the portfolio should have, with two pages, one for the teachers and the hiring against together and the other page for the teachers to view it.

## Mock-up:

This mock-up was design on Figma on the laptop, and it is an extension of the previous wireframe.



It can be seen that the boxes and the circle are represented with visuals that are either icons, images or 3D objects which give a clearer overview of the final look of the website. There are three 3D objects, where the first two takes the users to the reading guide or the projects page and the third object is just an effect and a design to give life to the portfolio. The used colours are from a pastel colour palate with a black shade.

## So What?

Overall, having multiple sketches and prototypes is not bad. Either if the new designs are update or new concepts, as long as they work in favour to create a better version of the final layout. But there must be some considerations to know when to stop and why to create another version, some of these considerations or limitations are time. As this semester is not that long and the website is also serving me the props of landing a graduation internship.

## 2.3 How I visualize the structure of the portfolio?

### Method selection

- A. Joker: C4 model.
- B. Workshop: Sketching.
- C. Workshop: Prototype.

### Why

To improve the structure of the portfolio that will ensure that the portfolio is user friendly.

### How

**C4 model:** I started by reading what is the c4 model and how it helps, then I looked at a article by the name "The C4 model for visualising software architecture" also the "Understanding the C4 Model for Software Architecture Documentation" that was published in 26 October 2021 by Sheldon Cohen. I was able to find a website to create the diagram by drawing it, the website is called "visual paradigm", also found another website that draw it with codes, the "Structurizr" website. Then I created the structure with both website by identifying the key elements of each level, the context and the relationship. At the end I compared the two diagrams and found out they are both valuable and have different things.

**Sketch:** With the iPad, I drew a newer design.

**Prototype:** In this last iterations, it was time to determine the final design. Therefore, I created a high fidelity prototype, the digital prototype from the sketch and the brand guideline.

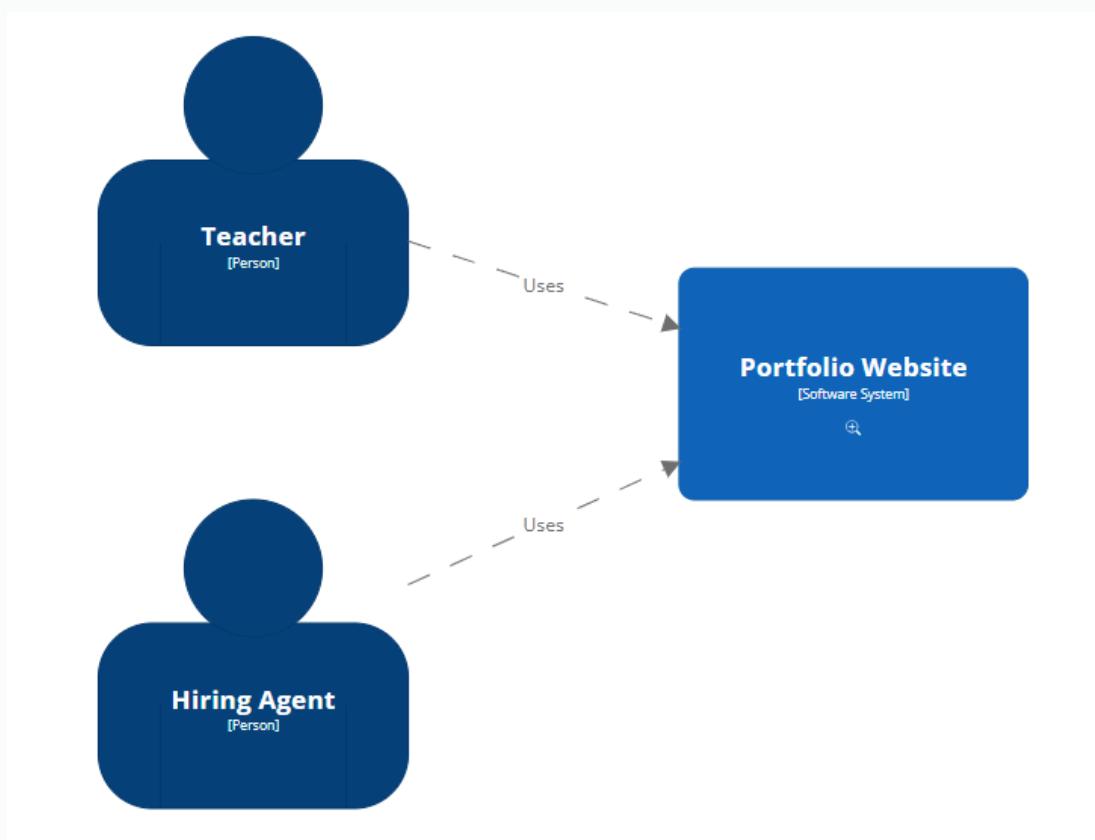
## What?

The C4 model is about visualizing the architecture of a software system. The C4 model contains of the Context, Container, Component, and Code. There's a full document about the creation of the C4 model, however, I will only show some information of level 1.

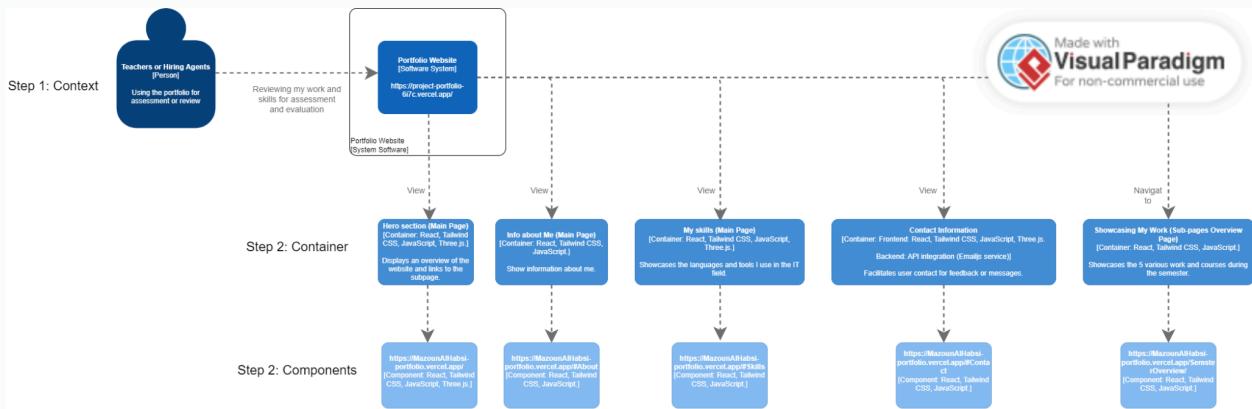
### Context (Level 1)

To have a broader view and see the bigger image. Drawing and documenting a software system can be initiated with this stage.

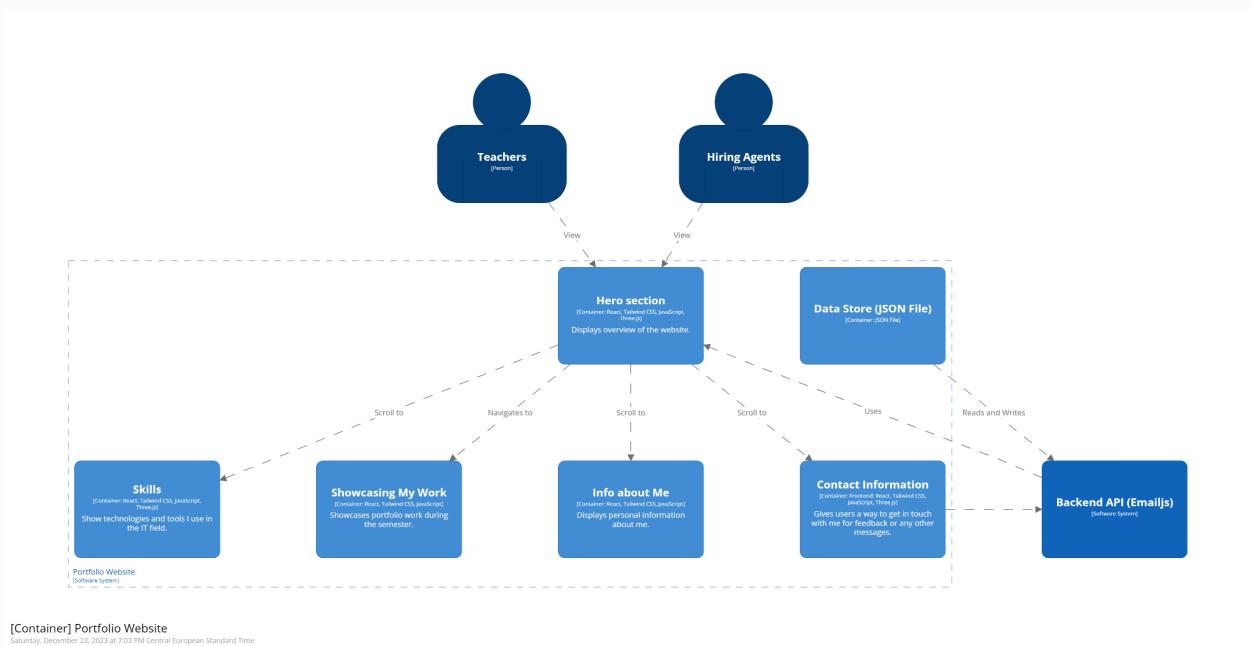
1. System: My portfolio website.
2. Actor: Users (Teachers and hiring agents)



The below image shows the C4 model that I draw in the website:

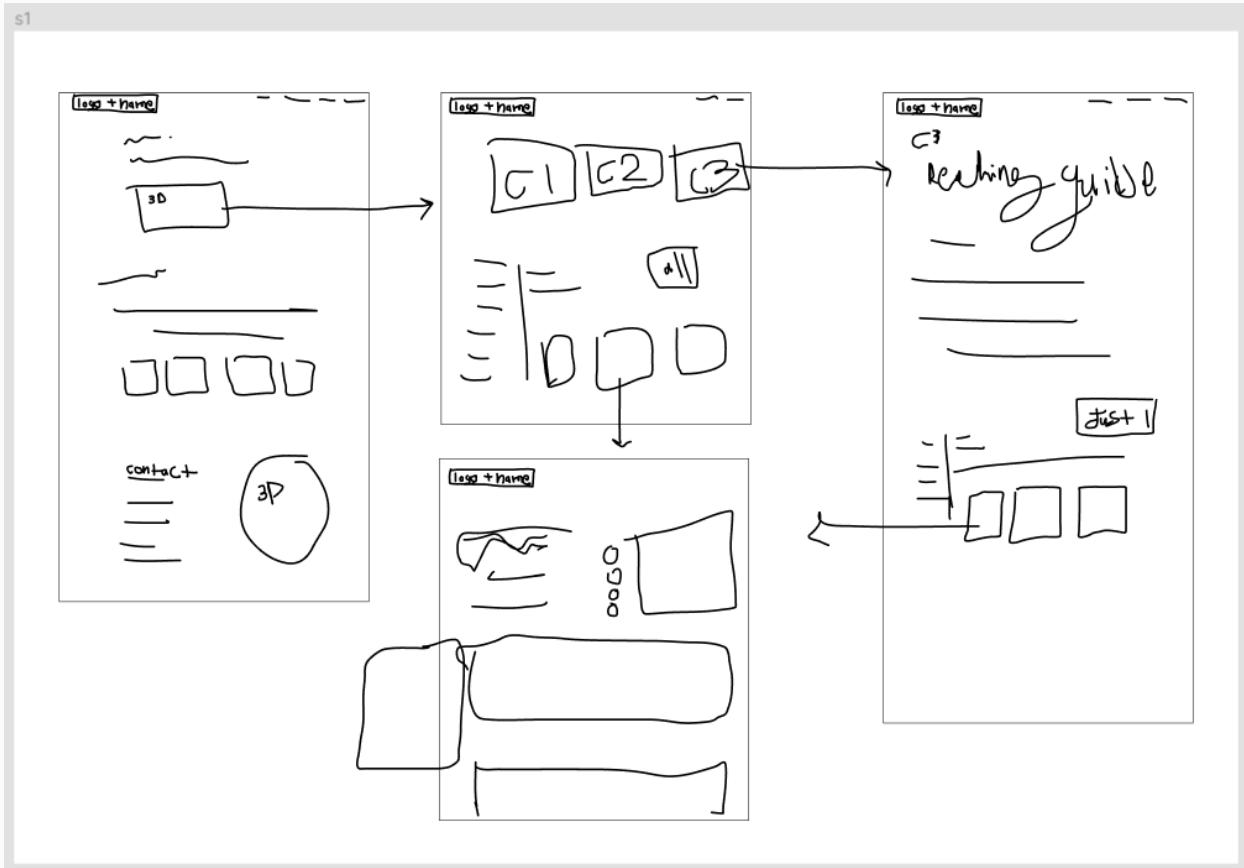


While the following image shows the structure with the coding website:

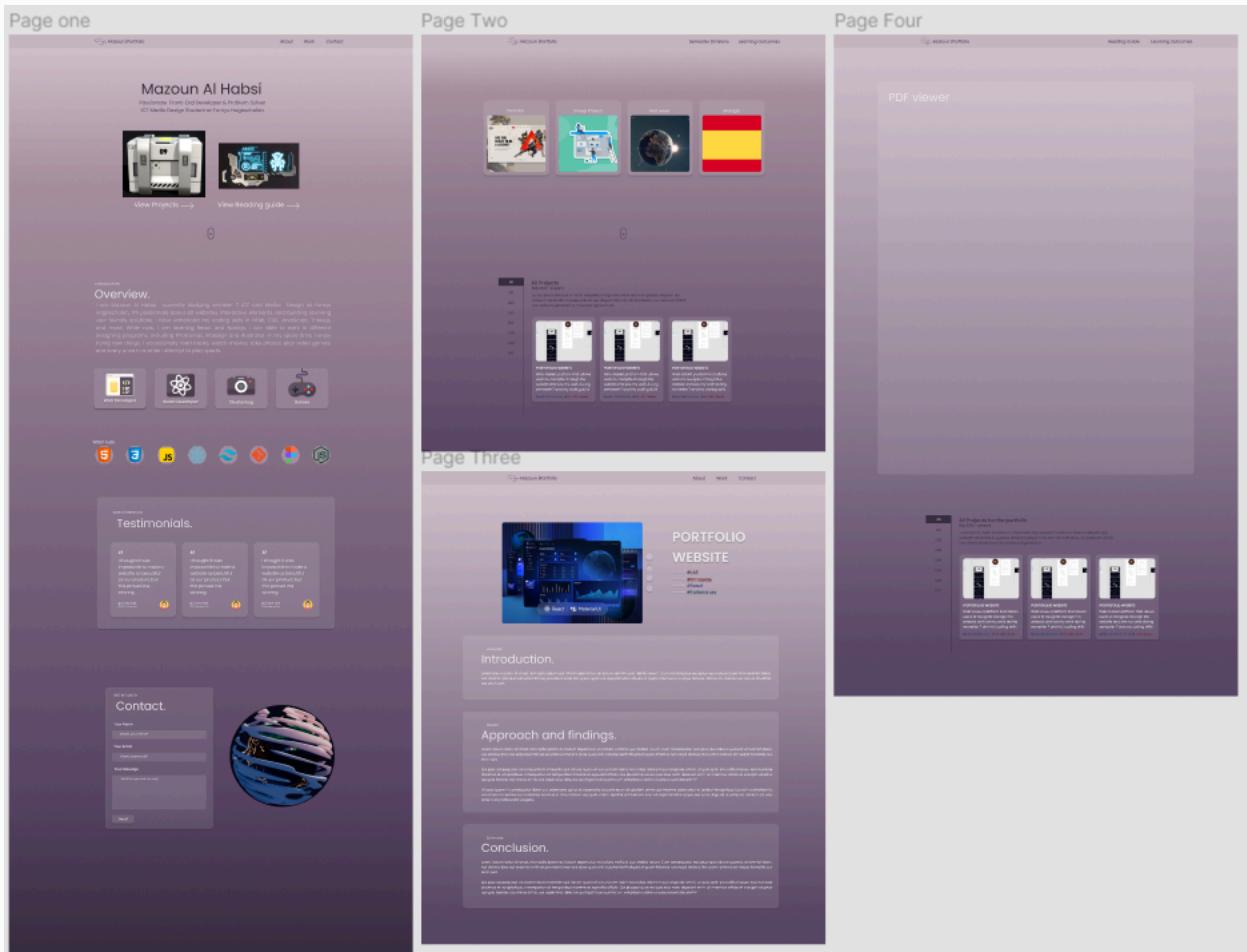


As can be seen, there is a somewhat great difference. The first one shows clearly what is what in each level, while the last one only shows the last level with some backend and deeper understanding of the relationships. The codes can be found on the full document, please review it for more information.

What's more, after doing the requirements list and the C4 model, I have updated the design of the website. The following image shows the sketch.



While the below image shows the mock-up.



As can be seen, what changed is that I added some categories to the different deliverables in this semester, previously I was only showing the deliverables for the portfolio but now I aim to show what is for the group project, what is for the first week, international week and Malaga trip.

I also added on the second page all the learning outcomes for all of the projects together just underneath the categories, or the user can go to a specific category and view the desired projects of the selected category.

## **So What?**

In conclusion, the structure of the website using the C4 model is very helpful, it illustrates the related people, the pages they view (Home page, reading guide, the work pages) and shows from where they navigate thought it, what kind of component goes into different pages and what are the needed coding languages in each page as the C4 models illustrated, not all pages will be using the Three.js language but all of them will use the HTML, React and JavaScript.

The upgraded prototype shows a significant change with a better navigation presenting all different stage of the semester from the portfolio to all projects reaching to the Malaga trip. It also consists of all the achievements of the semester connected to the learning outcomes and a separate categorization of a specific stage, for example the out space, when the user can view the achievement for that specific categories with its associated learning outcome. Finally, I will conduct a testing to verify the improvement of this website structure.

## 2.4 What is the best testing method?

### Method selection

I have used the following cmd methods:

- A. Library: Literature Study

### Why

I asked this question to know what are the available testing methods and which one is more beneficial for me.

### How

**Literature Study:** The search plan for answering this question involved in looking at different keywords like "Website performance testing", "Different types of website testing", and "Best testing for website". I found the article named "The Most Effective Testing Methods to Improve Website Usability" by Newsroom, published on Mar 3, 2022. The reliability of the article was ensured after looking at the publication date and the authority of the website. The search was successful by reading the article and extracting and summarizing relevant data of different testing.

## What?

UX testing is the process of evaluating common usability issues that might disrupt the user experience when using a website (Newsroom, March 3, 2022). Factors that define a site's usability coefficient include the site's responsiveness and intuitiveness, the difficulty (or ease) of finding information on the web pages, the website's loading speed and average load time, the site's memorability which allows users to navigate it during subsequent visits, the user's level of satisfaction after using the web platform the error frequency and severity when using features on the website.

From the UX usability testing results, the owners can optimize the website's structure, information architecture, user interface, and loading speed to generate more traffic. The UX testing also helps in improving the site navigation to ensure easy access to vital information. The below are the testing methods that the article talked about:

### 1. Baseline usability testing

- The specialist outlines the important UX metrics to evaluate the performance. It is usually tested with other people in the same team/company and sometimes with the users.

### 2. User testing

- Moderated: When the moderator supervises the testing. It helps to follow a testing approach which outlines valuable improvements.
- Unmoderated: When the researcher is conducting the testing. It limits the real user experience to only following instructions.

### 3. Guerrilla testing

- This testing is used when the owner has some concerns regarding the unbiased opinions. The testing begins with handing out the design either wireframe or prototype to random people and asks for feedback. It is good when the goal is to expand the target audience.

#### 4. Card sorting

- It is useful when the architecture of the platform needs to be restructured. It begins by handing out cards that contains the content. The users are asked to arrange the cards based on how they want to use them. After which, the tester can write down results on the best structure he finds.

#### 5. Customer feedback

- Using surveys and questionnaires can help into getting a wider improvement that is aligned with making users more satisfied with the experience.

#### 6. A/B testing

- As the article states, this method is for testing an older and a newer version of the same site. This testing is conducted to the target audience, where the users compare the results and usability of the website.

### So What?

There are different testing methods with different goals and outcomes, however, the best method for testing the usability is the user testing the moderate one, which is conducted under the supervision of a moderator. This is because among the ones I found on the article, it gives the most valuable improvement. Therefore, when I do any kind of testing, I must prepare a guideline to direct the user through the website and observe his actions to determine that.

## **Conclusion**

To ensure that the website is user-friendly, I adopted a range of research and testing methodologies. I conducted usability testing on specifically chosen websites in order to understand layout, structure, and user preferences. This helped in determining what works and what doesn't and based on that I was able to select a template.

After which, I focused on the layout of the website by sketching multiple design ideas, creating wireframes, and mock-ups. The goal was to create an engaging and user-friendly website, combining elements from the trends and the results from the testing.

Then I found the C4 model, which allow me to assess the structure of the created design and change it accordingly. The changed design showed a better navigation on my point of view, having more pages and better achievements division.

With the literature research, I found out that the best testing method is the moderated user testing, which was stated to be most valuable for improving website usability.

In conclusion, combining these results can aid me in creating the user-friendly website I want. The website that effectively showcase the skills and projects and ensure a clear navigation.

## The Conclusion

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To answer the main question:

**How can I as a programmer design a modern and user-friendly portfolio website that effectively incorporates the latest web design trends of 2023 while ensuring a smooth user experience and achieving the desired website goals?**

A possible answer is that the programmer needs to do a bunch of researches and actions ranging from making a plan all the way to deciding what kind of achievements or work can help in building a website that is having a trendy look, is smooth and according to requirements.

That is the stakeholder, and the target user requirements list is essential to make sure that the must-have of the project should be there first and to not waste time on the things that can be added later on, where the most important must be shown first to access the success of the approach and desired outcome.

That it is possible to use the pastels colours hence they are trending in 2023, that the less text the better. That the unique selling points of the website could be the 3d objects with the brand story and the touch of the developer design and code. That the C4 module can help in visualizing the structure of the website.

That having a brand guide that was created based on a mood board can help in the design process of collecting and making design choices. That it is good to have multiple design iteration with different sketches, wireframes, mock-ups and prototype.

That it is good to ensure the smooth user experience by firstly finding the best testing technique and then to conduct it with the target user and some external majors experts in marketing and business. That is, in order to have a border and better ways to show a website not only that it aligns with teacher requirements but to also find an internship by showcasing what makes it special and interesting.

That is not all the done research is useful, but it is good to show the different iterations and how each effected or did not affect in what matter and how. Overall, it is possible with having a solid mindset that helps in continuing the hard work to achieve the desired results.

## The Reference

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1. What are the 9 Biggest Web Development Challenges and Solutions to Tackle Them?  
Hardik Shah, March 11, 2022;  
<https://www.simform.com/blog/web-development-challenges/>
2. What are the most important web design trends for 2023? Karla Hesterberg, March 07, 2023; <https://blog.hubspot.com/marketing/web-design-trends-2017>
3. Simon, G. (Producer). (2023, July 7). Top 7 Websites of Spring/Summer 2023 [Video]. YouTube. <https://www.youtube.com/watch?v= X3OvCby1Bs&t=2s>
4. Gary Simon. (2022, May 17). 8 Developer Portfolios that MIGHT be 10/10's?! [YouTube video]. YouTube. <https://www.youtube.com/watch?v=At6XyItIHsE>
5. The Most Effective Testing Methods to Improve Website Usability, Newsroom, Mar 3, 2022  
<https://blog.unguess.io/the-most-effective-testing-methods-to-improve-website-usability>
6. How To Achieve A Stunning Personal Brand For Your Career, Goldie Chan, Dec 1, 2023:  
<https://www.forbes.com/sites/goldiechan/2023/12/01/how-to-achieve-a-stunning-personal-brand-for-your-career/>
7. Bradford, L. (2022, July 30). 28 Things to Put on Your Web Developer Portfolio (+ Real-Life Examples!). <https://learntocodewith.me/posts/portfolio-tips/>

## The Figures Reference

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1. The Importance of USPs in Product Management,  
ref:<https://productschool.com/resources/glossary/unique-selling-point>

## External Links

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- Project Plan:
  1. [!\[\]\(d8ddb494c62611a8938f1e29f98d510a\_img.jpg\) 2.2 Project Plan-Portfolio V3](#)
  2. [!\[\]\(4b517a7d78c4674bad03c8956f554d25\_img.jpg\) 2. PPV2](#)
- Documents:
  1. [!\[\]\(429ebafa9e32c51521cb318597a05458\_img.jpg\) 3. Design Trends and Principles](#)
  2. [!\[\]\(3ff57bc2f882c5d6d4b12399b323e6a2\_img.jpg\) 4. Website Selection Process](#)
  3. [!\[\]\(e71a2eb2fcaed5ffdf4324aa25487950\_img.jpg\) USER TESTING PORTFOLIO](#)
  4. Requirement List  
<https://docs.google.com/document/d/1u6enj-adUpHSrjiphR1Sdpa05JOkXzEap24omB9TKRU/edit?usp=sharing>
  5. C4 Model  
<https://docs.google.com/document/d/1Z6maOCePRPCojeKIWyqxT5bl5lsrlXDV-IGOT2RLx0/edit?usp=sharing>
- Figma designs:
  1. Mood Board  
<https://www.figma.com/file/F3NxM0MNJaXgAPnYivoAun/Mood-Board-Sci-Fi?type=design&t=W4w3iawNY1TID54u-6>
  2. Brand Guide  
<https://www.figma.com/file/SgIgXozo3D8NJPCE8oV5a/Brand-Guide-porto?type=design&t=W4w3iawNY1TID54u-6>
  3. Sketch, wireframes and mock-ups  
<https://www.figma.com/proto/19Jg8Hht7WqHKmDdrDL64S?node-id=129-2&mode=design&t=W4w3iawNY1TID54u-6>
- Courses:
  1. Build and Deploy an Amazing 3D Web Developer Portfolio in React JS | Beginner Three.js Tutorial: <https://www.youtube.com/watch?v=0fYi8SGA20k>
  2. React Portfolio Website Tutorial From Scratch - Build & Deploy React JS Portfolio Website: <https://www.youtube.com/watch?v=ohnrC3gh9YI&t=6221s>
- GitHub: <https://github.com/mars-xion/Project-Portfolio.git>
- Website: <https://project-portfolio-6i7c.vercel.app/>
- LA's:  
[https://docs.google.com/document/d/1IiV9wZmD4WjYdhqNgIpnz5NU\\_Ga0lNfCspD3pWo2GfM/edit?usp=drive\\_link](https://docs.google.com/document/d/1IiV9wZmD4WjYdhqNgIpnz5NU_Ga0lNfCspD3pWo2GfM/edit?usp=drive_link)

- Coding Process:

[https://docs.google.com/document/d/1U5T1ZZuPiPK6iElNgnr\\_BWeXvZWUm8ZHI\\_jIScSPoEU/edit?usp=drive\\_link](https://docs.google.com/document/d/1U5T1ZZuPiPK6iElNgnr_BWeXvZWUm8ZHI_jIScSPoEU/edit?usp=drive_link)