

# UX/UI DESIGN

/JOANA MARIA PORTFOLIO

/2023

- '22 Creative Emotions

Phototype

- '21 A Small Showcase of Graphic Design and World History

*Cuidar de Ti – Que cuidas de nós*

The Queen's Gambit project

Núcleo Estudos das Informações

- '20 Develop the way you think as a Designer

Grokem, Rehony and Zéjul

# ABOUT ME

Born and raised in Braga, Portugal, I have always been driven by my passion for design and technology.

I've had the opportunity to work on a diverse range of projects, ranging from UI/UX and graphic design and even web development and creative coding.

## /WEBSITE

[www.ajoanamaria.com](http://www.ajoanamaria.com)

## /INSTAGRAM

@umajoanamaria

## /BEHANCE

umajoanamaria

## /LINKEDIN

[in/joana-maria-oliveira/](https://in/joana-maria-oliveira/)

## /EMAIL

[umajoanamaria@gmail.com](mailto:umajoanamaria@gmail.com)

## I LOVE A GOOD CHALLENGE

When a problem arises, I dissect and quickly think of potential solutions. As part of the design process, not all are good, but I've learned to rapidly embrace the first bad ones because they often lead to a better solution.

## I BELIEVE IN ME

I believe in what I create and I am passionate about my craft. However, I also appreciate and value feedback. I think sharing and iterating each other's solutions is the way to achieve a better one.

## I AM A VERY DRIVEN PERSON

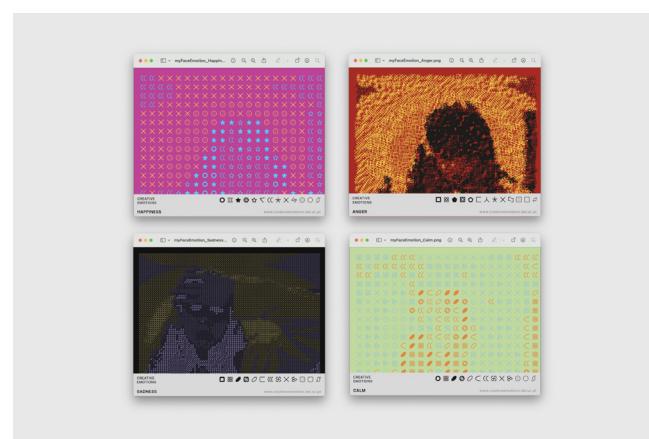
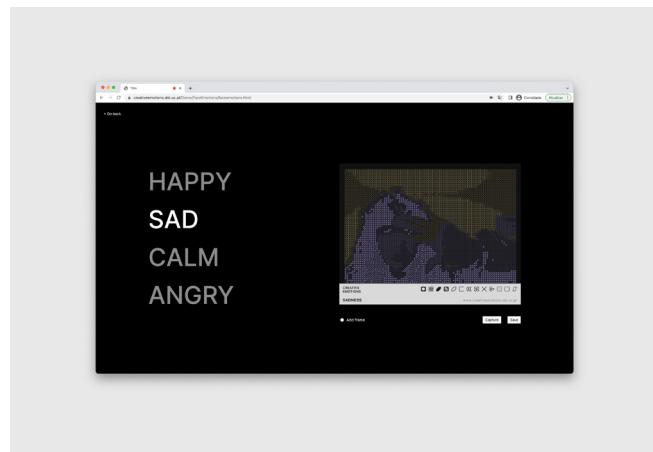
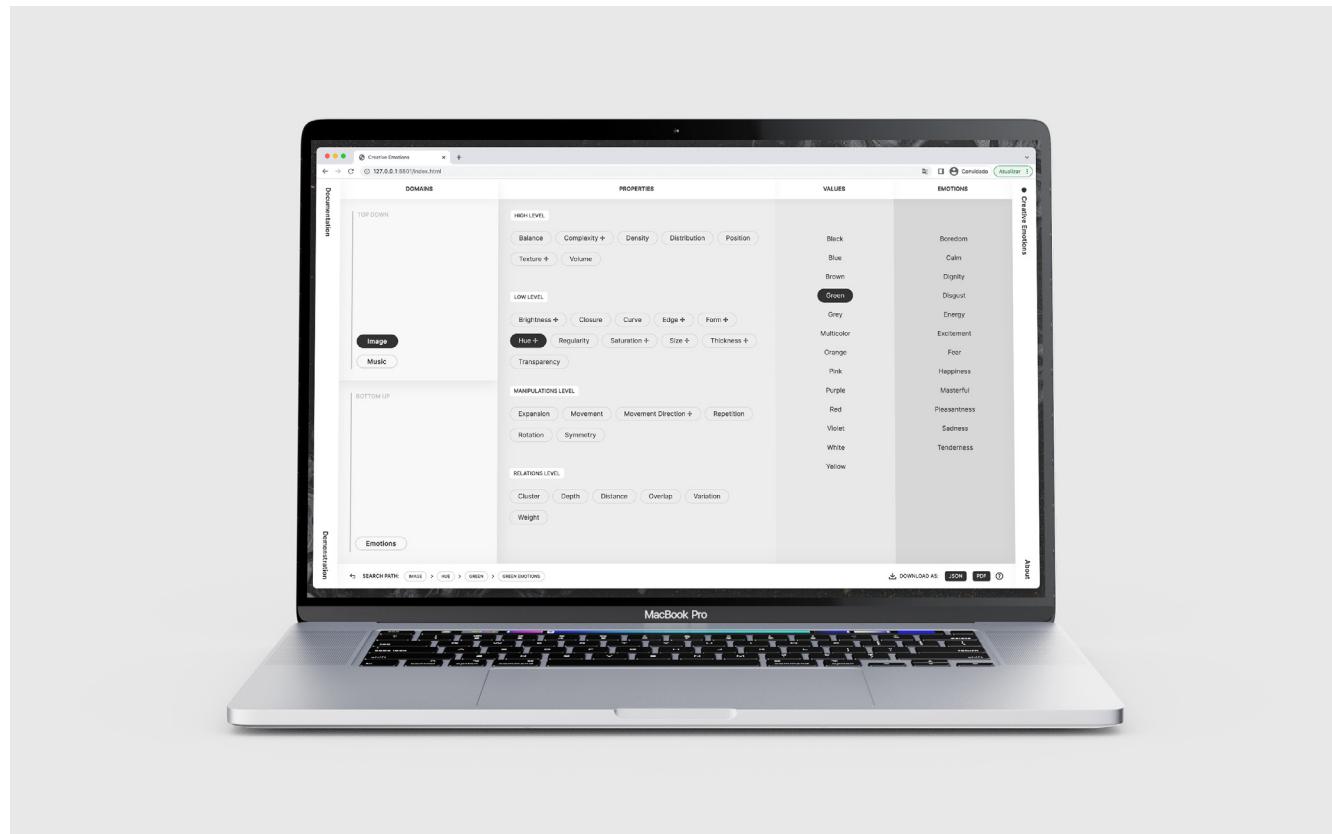
I consider myself to be very responsible and independent, as well as a quick learner. I found that I thrive in environments where there is space for creativity, honesty and teamwork.

## IN ADDITION TO MY DESIGN SKILLS

I have proficient coding abilities, which allow me to bring my ideas to life. I am constantly seeking out new ways to experiment with interactive and creative coding approaches to push the boundaries of traditional design.

/NAME

Creative Emotions



/LINK

[www.creativeemotions.dei.uc.pt](http://www.creativeemotions.dei.uc.pt)

This website allows easy access to data from an ongoing research at CDV Lab. on the relationship between music, image and emotions. The first steps required data analysis, leading to a prototype stage where we began iterating the platform.

Ultimately, we opted for a more minimalist and neutral design. We created a demonstration page where the user can see visuals dependent on the user's emotions.

/MAIN ROLE

Ideation, design  
and implementation

/COLABORATION

Ana Claudia, Daniel Lopes

/CONTEXT

Student Researcher  
CISUC – FCTUC

/DURATION

6 months

/YEAR

2022

**/PROBLEM**

Development of a website and an API that ensured easy access to a set of data resulting from ongoing research into the relationship between music, image and emotions at the CDV Lab./CISUC–CMS. Create a visual demonstration using the dataset.

**/APPROACH**

Provide a clear platform, so that the architecture of the data is evident. A clear and straightforward approach is necessary so that the user can fully take advantage of the platform.

**/KEY CONCEPTS**

Exploration, Information and data.

**/USERS**

Researchers, designers or other creative beings.

**/SOLUTION**

Platform  
Main website (*CreativeEmotions*)  
Demonstration (*FaceEmotions*)

**Implementation**

HTML, CSS, JavaScript (JSON and p5.js)

**/PROCESS**

1. REQUIREMENTS AND DATA ANALYSIS
2. LOW-FIDELITY PROTOTYPES
3. HIGH-FIDELITY PROTOTYPES
4. FACE EMOTIONS TEST
5. FINAL PRODUCT

## /PROCESS

### 1. REQUIREMENTS AND DATA ANALYSIS

The first steps required data analysis, where we understood and explored the architecture of the dataset. We answered the forward question:

#### ***What is the main goal when using the platform?***

The main goal is to explore the associations and relations of Image/Emotions and Music/Emotions. And also to see all the associations made with a specific Emotion (Image and Music values simultaneously).

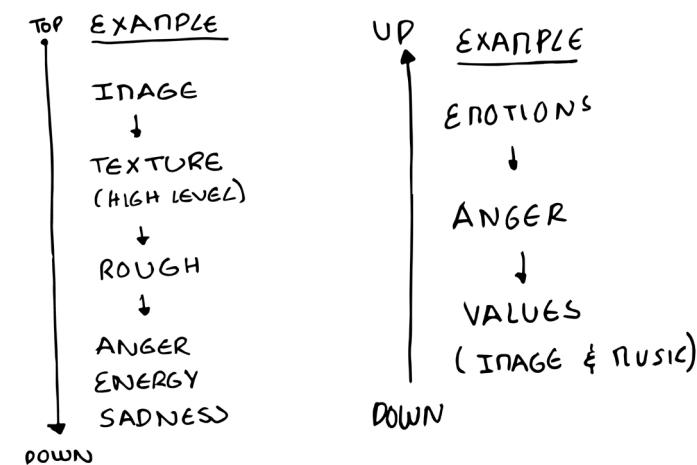
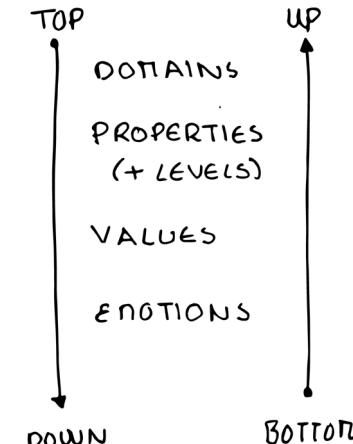
#### Solution

Top-Down and Bottom-Up Approach

By analysing the data, we understood that this would be the navigation basis of our platform.

## /KEYWORDS

Clarity, simplicity and uniformity.



## /PROCESS

## 2. LOW-FIDELITY PROTOTYPES

The first low-fidelity prototype (top) had too many steps that weren't essential to reach the information. Therefore, reducing the number of columns made sense, and made the layout more clear and organized.

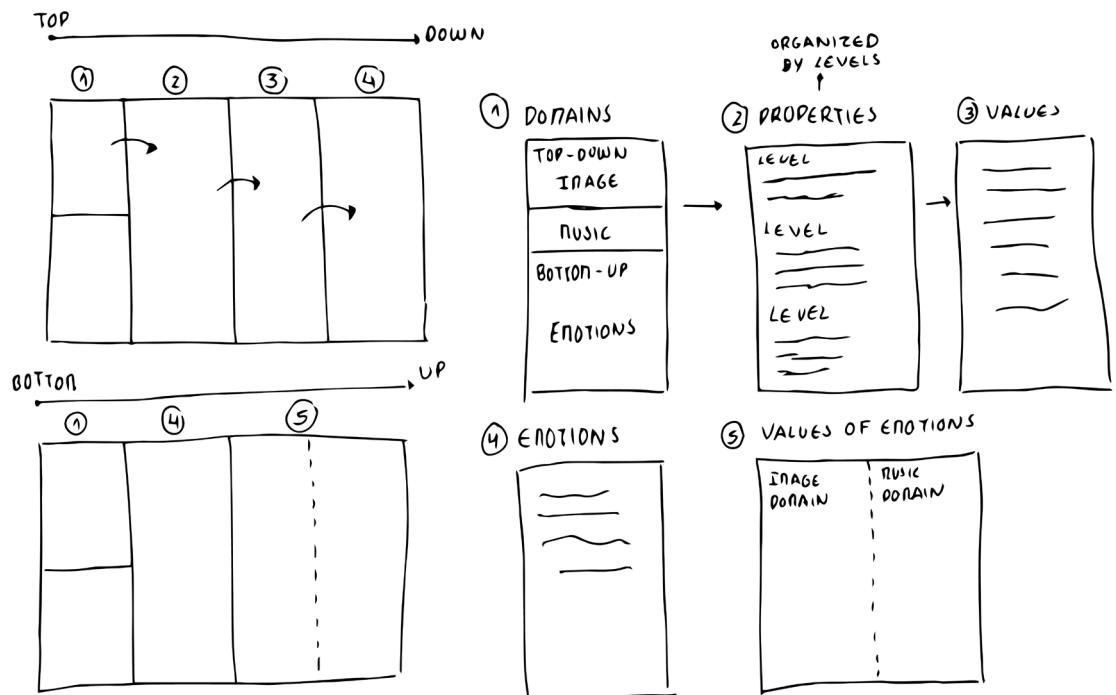
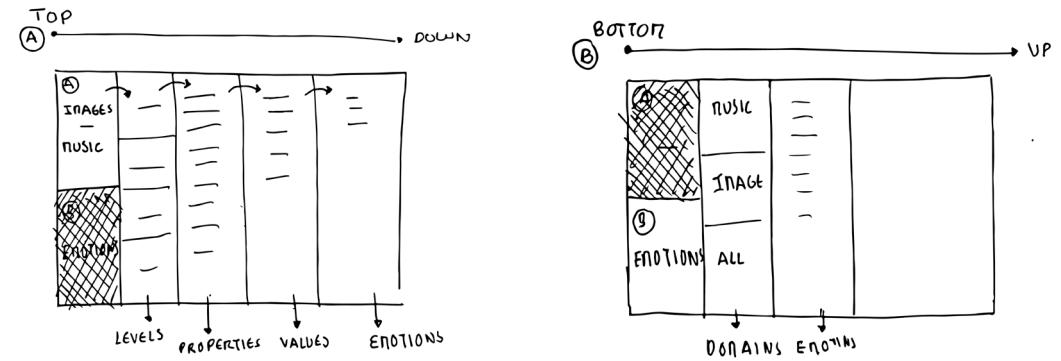
## /RELEVANT UI/UX CONSIDERATIONS

## KEEP TRACK

When exploring the dataset manually it was evident the need to keep track of your previous steps. The user should have visual reminders of their actions.

## SOLUTION

Using a column/tab composition for the dataset allows the users to see their journey.



## /PROCESS

## 3. HIGH-FIDELITY PROTOTYPES

There were a total of three iterations of the high-fidelity prototype. The main change was the division of the domains column into two parts (Top-Down and Bottom-Up).

Initially, we also had a line that showed the journey of the user, but it created a more complex implementation and that information would be more clear as tags at the bottom. Finally, the lateral menus are both white because, in the earlier prototypes, the black made it look like it was selected.

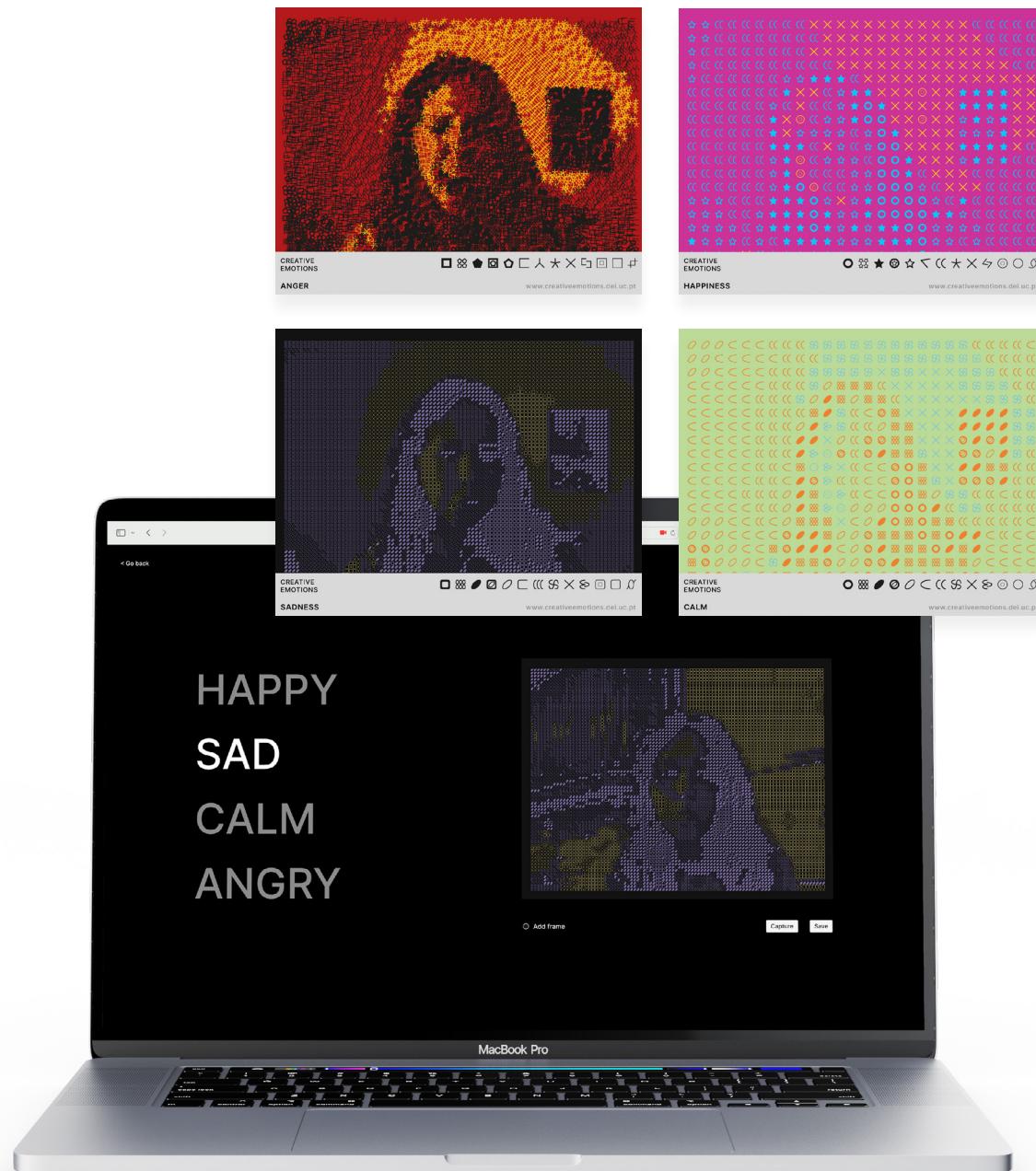


/PROCESS

**4. FACE EMOTIONS**

The demonstration page allows the user to create visuals dependent on the user's emotions. The user's emotions are live captured using a Javascript Face API which is later connected to the Image values of the dataset (JSON).

Each visual has its own rules using the Complexity, Form and Hue values of the dataset. Each emotion has 13 forms with different visual weights and colours, which are later mapped into the video capture grayscale values. They were manually created and then applied to said rules and values, allowing for an abstract identification of the subject.



## /PROCESS

### 5. FINAL PRODUCT

## /WEBSITE

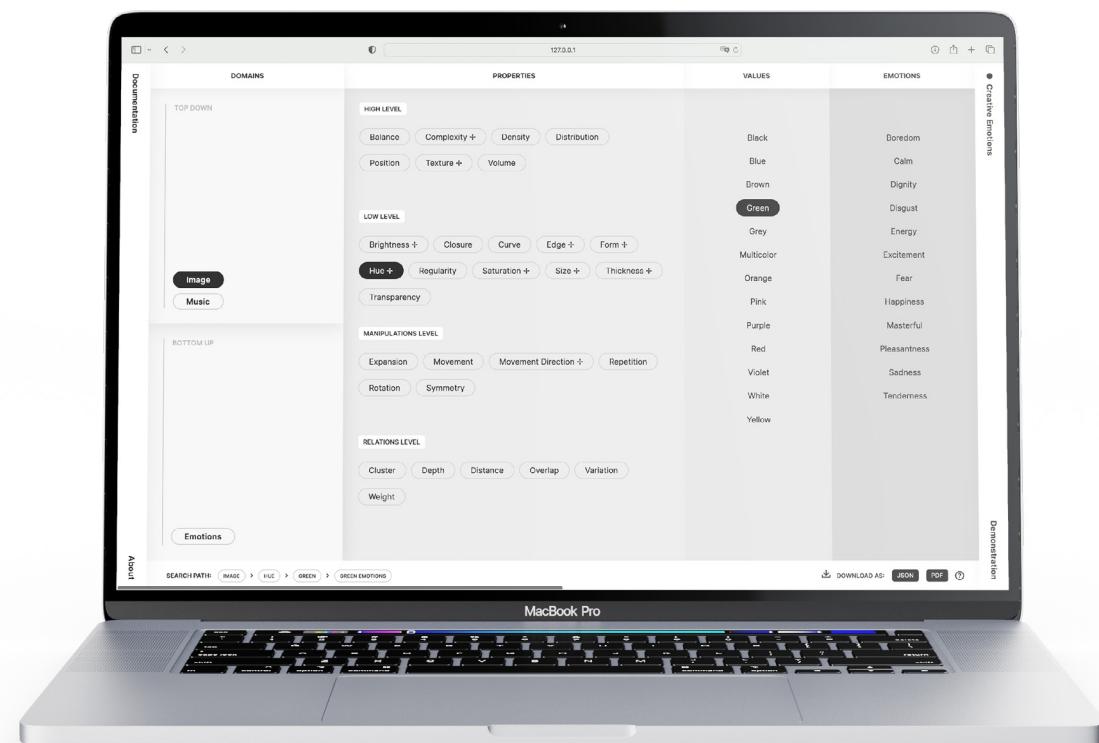
### /RELEVANT UI/UX CONSIDERATIONS

#### GOOD READABILITY

The dataset has only qualitative data, so the main content of the website will be text. Therefore good typography and hierarchy in the UI are crucial for the UX.

#### REMOVE DISTRACTIONS

The dataset refers to visual characteristics (e.g. colour) and their associations. So it is important to stay neutral and simple. The importance must be on the text. Less is more.



## /PROCESS

### 4. FINAL PRODUCT

## /SCREENS

## DEMONSTRATION

This dataset is available in two open-source formats, as JSON or as PDE file. Although with different purposes, each format allows you to explore and use the dataset in your project.

The structure inside the JSON file can be accessed by trying the “`ed`” variable in the browser console. The information is organized like this: `ed > domain > levels > properties > emotions`. For example, in the Music domain, there is a level called Harmony Melody. This level has a property named Sonance, which in turn, contains a value called Harmony Consont. Further, this value is associated with several Emotions, such as, Happiness.

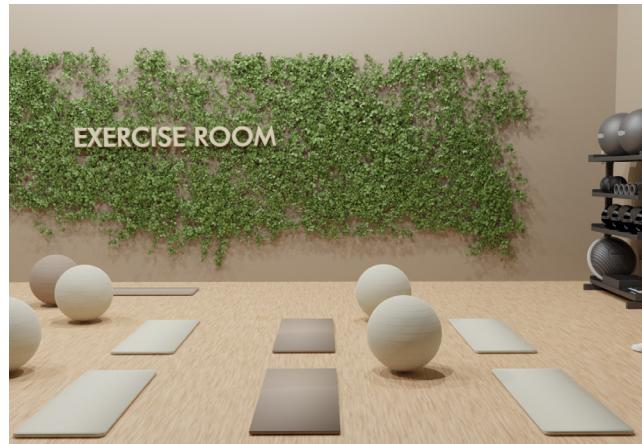
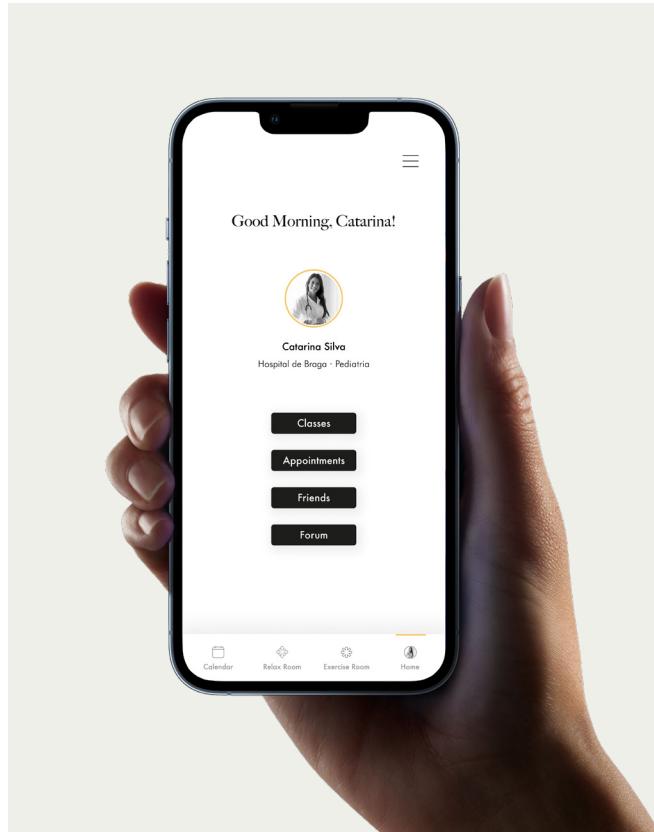
Music > Harmony Melody > Harmony Consont > Happiness.

The JSON file also allows us to directly access the level of information desired. We can access a property and see all associated emotions or access an emotion and see all associated properties. Generally speaking, we can search up (bottom-up) and down (top-down) the information tree.

## DOCUMENTATION

/NAME

Cuidar de Ti



*Cuidar de ti* is the final project of our Service Design subject. It required both desk and field research. Progress was made with the help of journey maps, system maps, value proposition canvas, and a service blueprint, among others.

The service we created tries to assist healthcare professionals who are burnt out or under stress. The service consists of an app and two physical rooms. The project was developed with three designers, and my main responsibility was to design the high-fidelity prototype of the app ([see prototype here](#)) however, all members add input at every stage of the project.

/MAIN ROLE

App UI/UX

/COLABORATION

Petra Grego, Sofia Torres

/CONTEXT

Service Design  
MsDM – FCTUC

/DURATION

14 weeks

/YEAR

2021

#### /BRIEF

*Reimagining the future of health and care services.*

The goal is to apply a Service Design approach to develop proposals of innovative solutions for health and care services.

#### /PROBLEM

Health Professionals are subject to high levels of stress in the workplace. *Burnout*, a syndrome characterized by emotional exhaustion, depersonalization and low professional fulfilment, is one of the main results. Currently, we are witnessing its trivialization and stigmatization, which sensitized us to make this the focus of our project.

#### /USERS

Health professionals in the initial phase of rupture of the *Burnout* syndrome.

**User A** | Altruistic user who relativizes the stress arising from the syndrome.

**User B** | User who is proactive in seeking psychological support and is self-aware of the syndrome.

#### /SOLUTION

The service consists of an app and two physical rooms.

The app's goal is to help health professionals by connecting them with others who have/had similar experiences and to provide them with moments of relaxation during the day. The app grants access to the rooms, respectively the Relax Room and the Exercise Room, to healthcare practitioners.

The main goal of these rooms is to provide a space for rest or exercise to relieve stress from their careers.

#### /PROCESS

1. RESEARCH
2. DESIGN PROCESS
3. BRAND IDENTITY
3. PHYSICAL SPACES
4. PROTOTYPE
5. VALIDATION

## /PROCESS

### 1. RESEARCH

Desk research proved to be important in defining our problem scope and in creating the materials that were later used in field research. The last one served as support for the developed JTBDs that helped in the construction of the VCPs.

### /DESK RESEARCH

We consulted different websites, videos, and articles that address health problems faced by health professionals.

### /FIELD RESEARCH

We conducted several interviews with potential users and people related to them, and launched a questionnaire.

### INTERVIEWS

Three different interview guides.

**Users** | A nurse, a medical student, a nursing student, a nurse's daughter, a doctor and a senior nurse.

**Main Topics** | Difficulties felt at work, the stigma about burnout, the impact that covid had on their lives, the pressure and excessive effort in the profession.

### QUESTIONNAIRE

**Users** | Twelve health professionals (different career paths).

**Main Topics** | Work experience and ways of coping.

/PROCESS

1. RESEARCH

/MAIN CONCLUSIONS

- Inherent need for excessive productivity;
- Inadequate ratios and the deontological duty to care;
- Stigma/taboo regarding Burnout;
- No concern, within the Medical Units, to break the tension and stress caused by work;
- Ineffective methods of publicizing available services.

## /PROCESS

### 2. DESIGN PROCESS

#### /JOURNEY MAPS

##### **Journey map 1**

Health professional who chooses an online support service.  
(Specifically focus on health professionals mental health).

##### **Journey map 2**

Health professional who chooses a traditional approach. (Private Clinic, recommended by a colleague).

#### /SYSTEM MAPS

##### **Stakeholder Map and Value Network Map**

We opted for a national analysis of the system, where we identified the stakeholders considering their relevance in the context of the problem and their relationship with the user.

##### **Ecosystem Map**

Considering the stakeholder map, we identified five value streams namely, service, support, information, authority and money, in order to highlight the relationships between stakeholders.

#### /VALUE PROPOSITION CANVAS

##### **VPC - User A**

Take care of yourself, that you take care of others!  
Do you feel tired? Do you live in intense restlessness?  
Our service is an opportunity for you to learn how to manage your emotions and conflicts in the work environment. We are concerned with centralizing useful information so that you can develop coping mechanisms.

##### **VPC - User B**

Those who take care, also need to take care of themselves! Our service offers you all the tools and methods you need to be at your best. It is essential to establish an emotional balance between the work and personal context. With us, you can find a quick and efficient solution.

#### /MATCH BTW CUSTOMER PROFILES AND VPC

The interconnection of the data acquired by Field research with the items of the VCPs was detailed through a table organized by the themes addressed. The table has been divided between the items of each user and the items that both have in common. Code associated with each VCP item was also created.

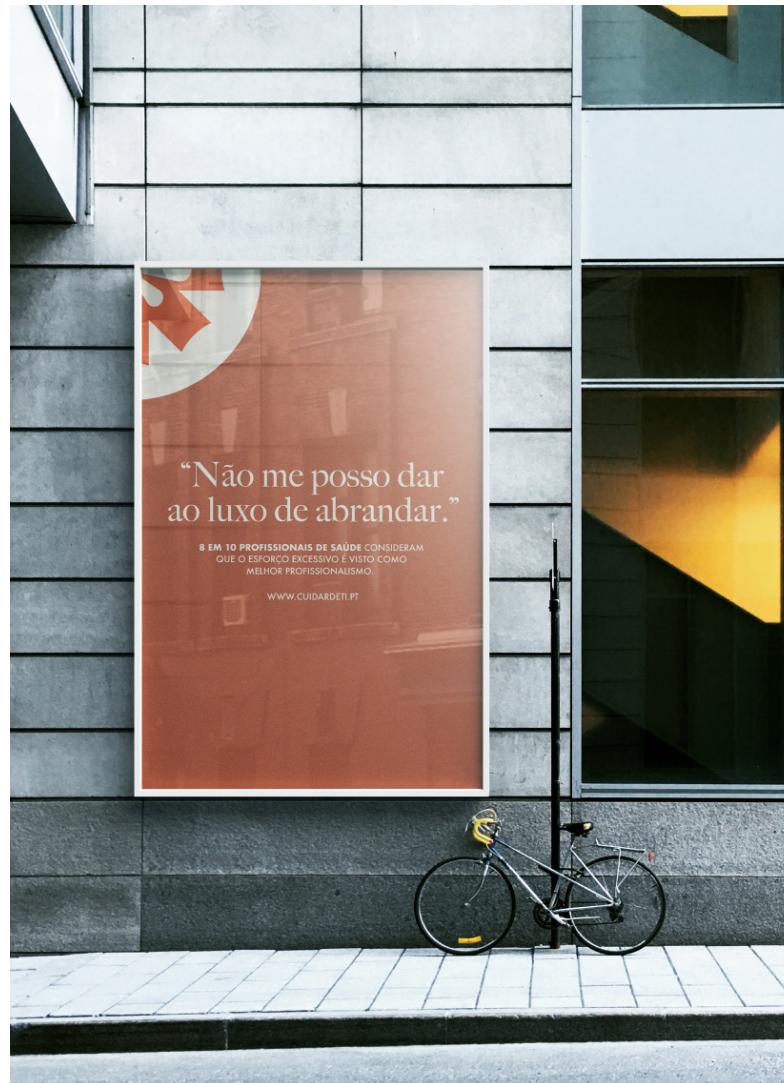
#### /SERVICE BLUEPRINT

We have identified moments that have the greatest impact on mitigating our problem scope. Thus, the key moments identified are the use of the Relax Room, the scheduling of a psychology/psychiatry consultation and participation in a class in the Exercise Room. With this mapping, we intend to guarantee the symbiosis between the different moments, all the processes and functionalities that support them.

See maps [here](#).

/PROCESS

3. BRAND IDENTITY



## /PROCESS

## 4. PHYSICAL SPACES



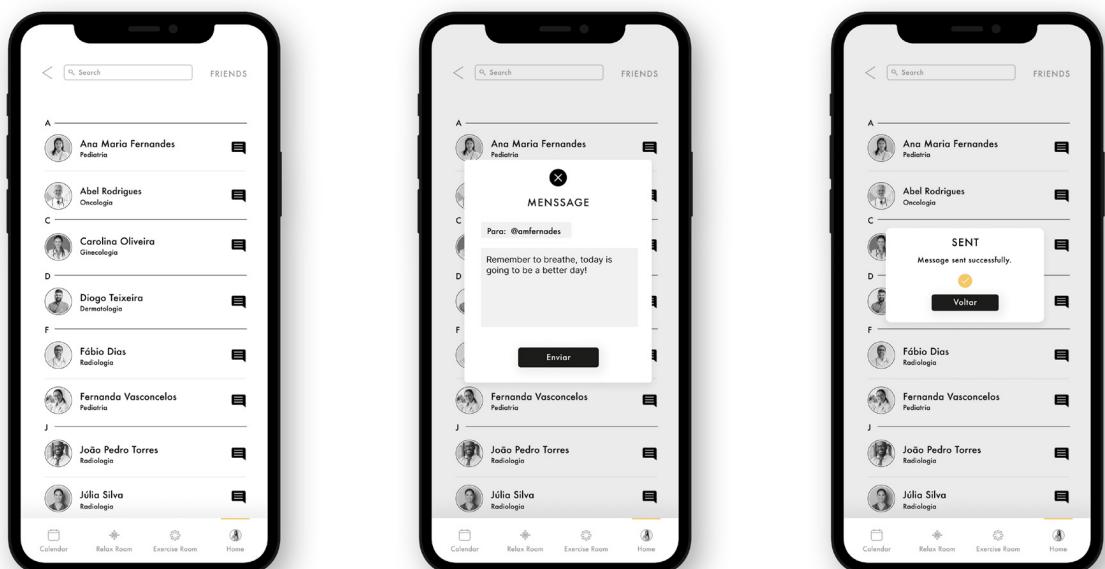
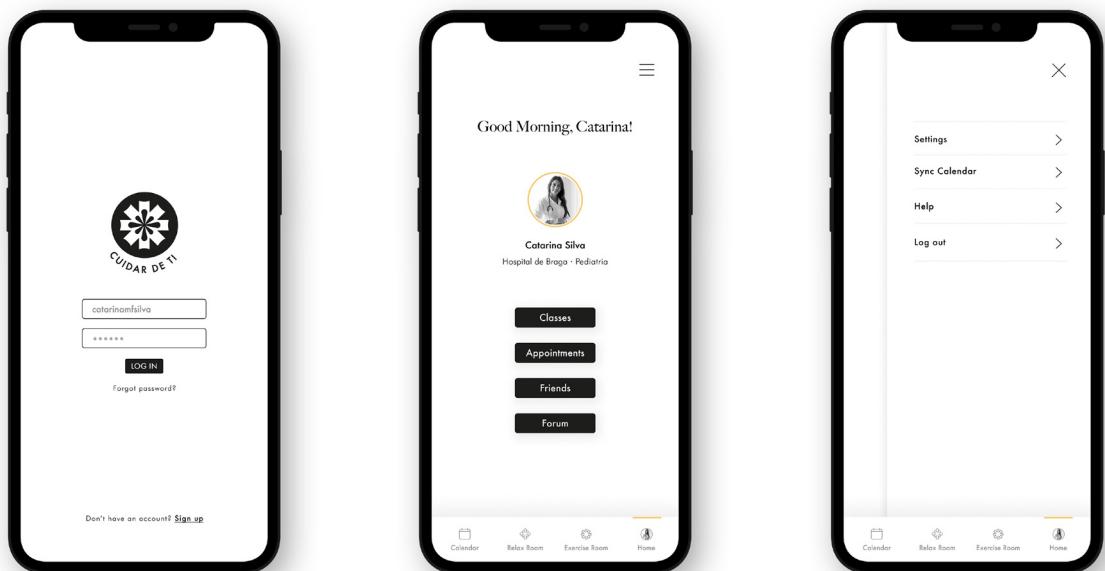
## /PROCESS

**4. PROTOTYPE**

After listing the functionalities and creating a flow chart we started developing the application prototype applying elements of the brand identity. The home page contains part of the most important functionalities of the app (top middle).

**/MESSAGE A FRIEND/COLLEAGUE**

The app allows users to send messages to their friends or colleagues, to encourage and support one another.

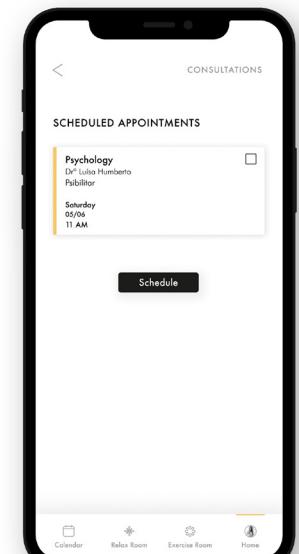
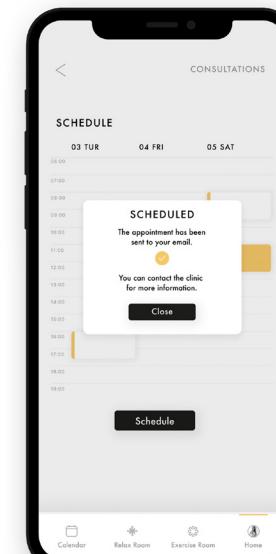
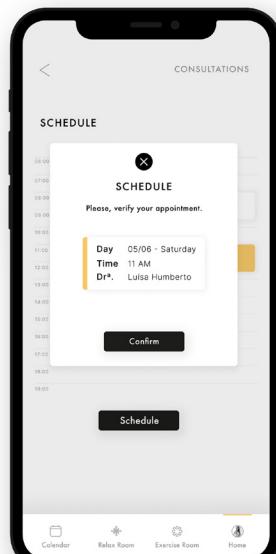
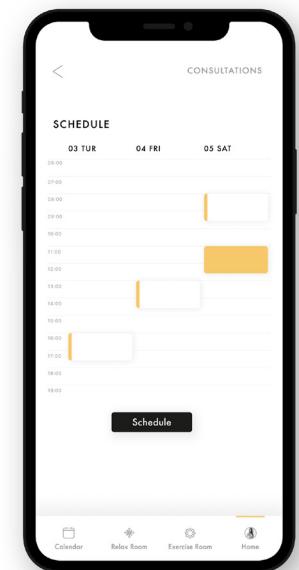
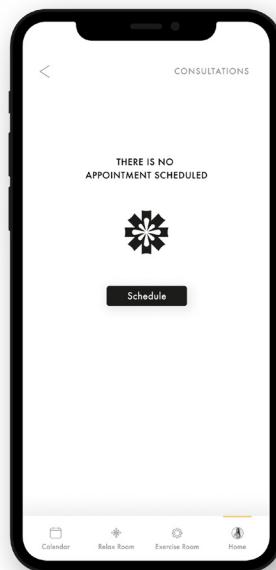


## /PROCESS

### 4. PROTOTYPE

#### /SCHEDULE AN APPOINTMENT

The app presents a feature for appointments, where the user can book an appointment with the specifications wanted, see the availability and reschedule or cancel the appointment if needed.



## /PROCESS

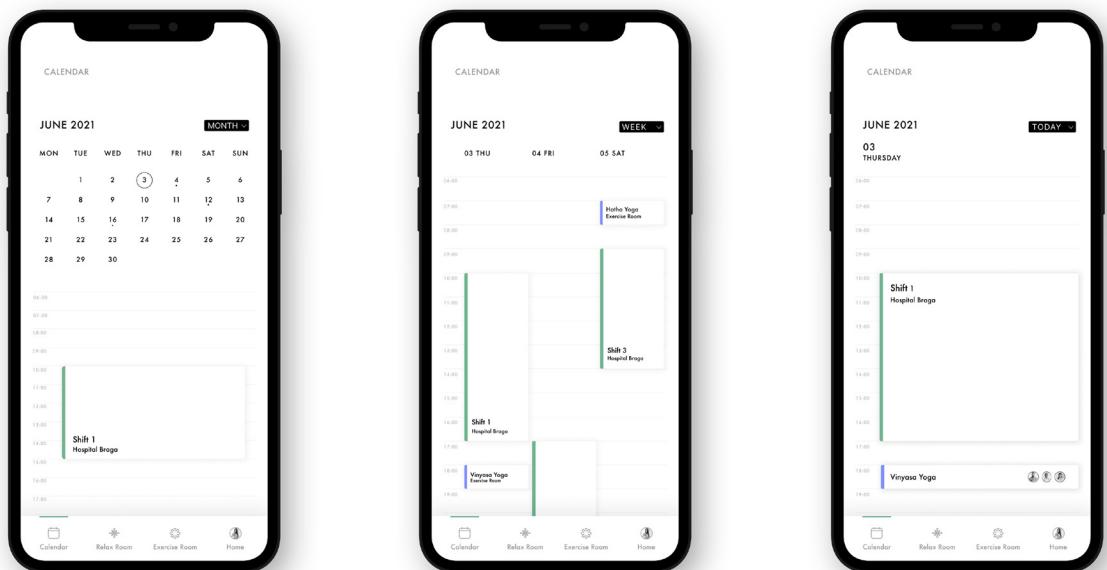
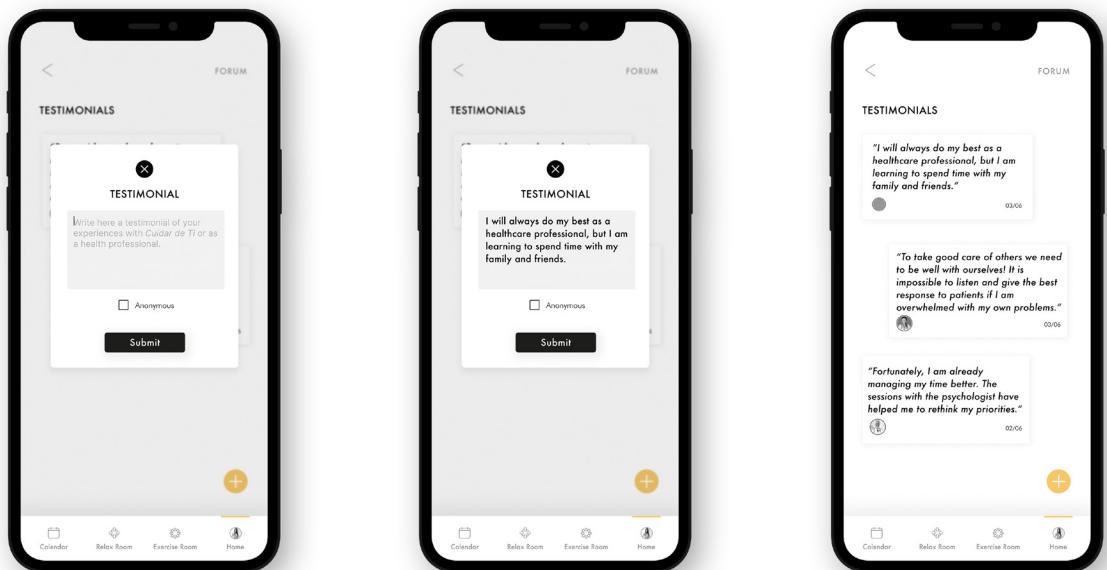
### 4. PROTOTYPE

#### /SHARE A TESTIMONY

The feature of testimonials allows the users to share their testimony and to feel inspired by other testimonies.

#### /CHECK YOUR CALENDAR

The app presents a calendar so that users can check their work life and accommodate different classes or activities.

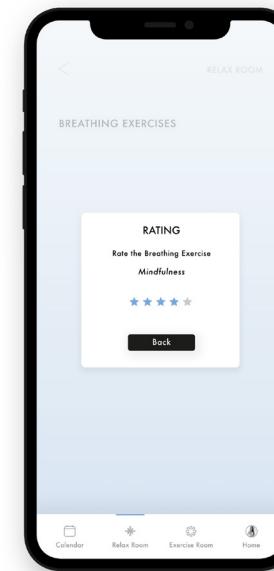
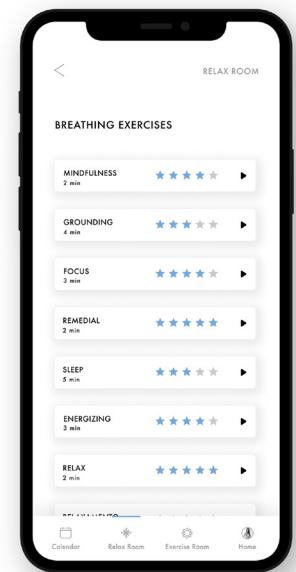
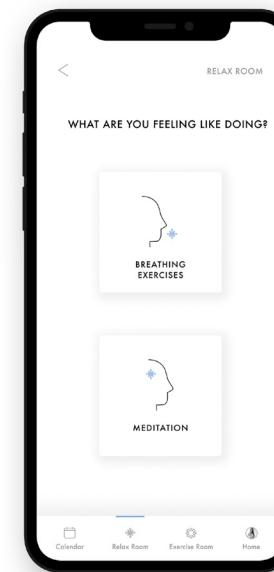


## /PROCESS

## 4. PROTOTYPE

## /GO TO THE RELAX ROOM

Access to the Relax Room is done through the app. A QR Code is generated that works as a key to enter the room. The Relax Room feature also provides users with different types of breathing and meditation exercises.

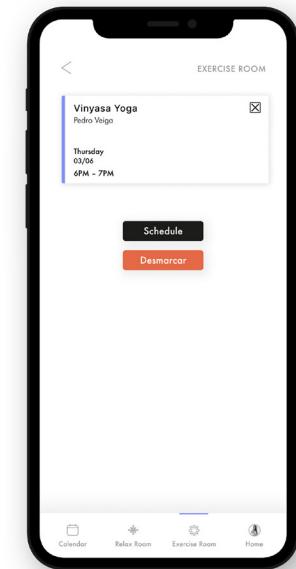
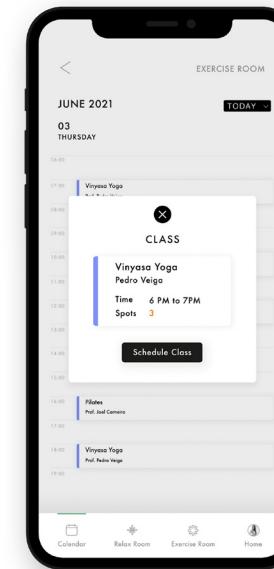
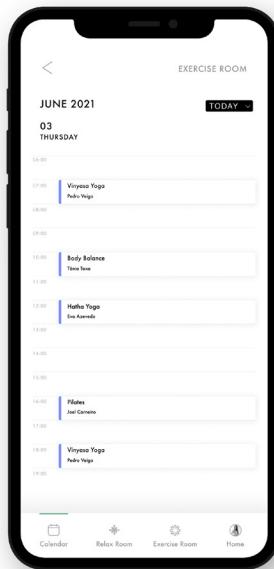
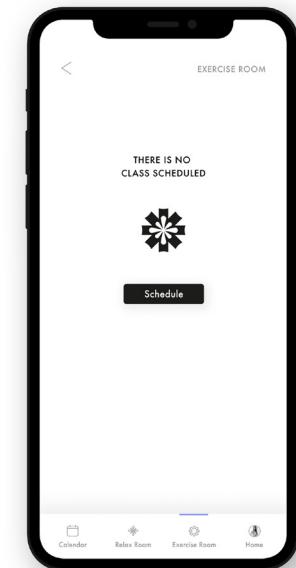
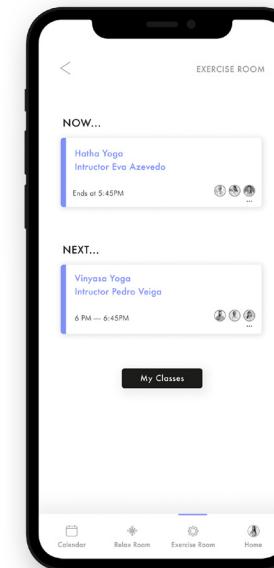


## /PROCESS

## 4. PROTOTYPE

## /GO TO THE EXERCISE ROOM

Access to the Exercise Room is done through the app. A QR Code is generated that works as a key to enter the room. The Exercise Room feature also provides users with the ongoing classes and the next classes. Users can also check the classes scheduled and book a class.



## /PROCESS

## 6. VALIDATION

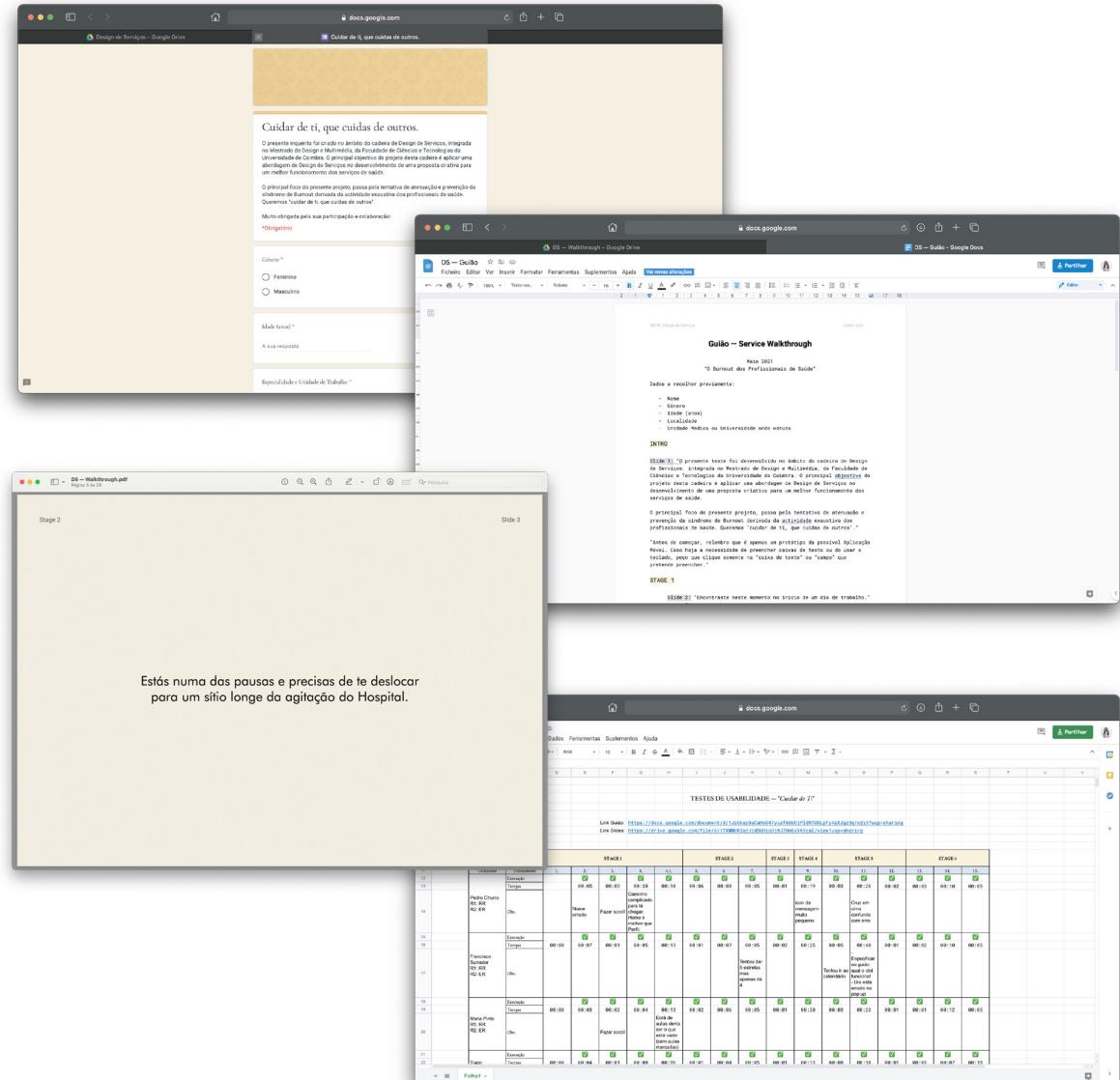
## /GOOGLE FORMS SERVICE FEASIBILITY QUESTIONNAIRE

Applied to the general community of healthcare professionals. Participants were 16 health professionals who responded to aspects of the service, such as time management.

## /SERVICE WALKTHROUGH AND USABILITY TEST OF THE APP

4 participants

Creation of a hypothetical narrative (visual presentation) that allowed the user to immerse in the physical and technological artefact. Throughout the Script, the narrator was responsible for reading the tasks of each Stage while the other member wrote down all the observations and time of each interaction.

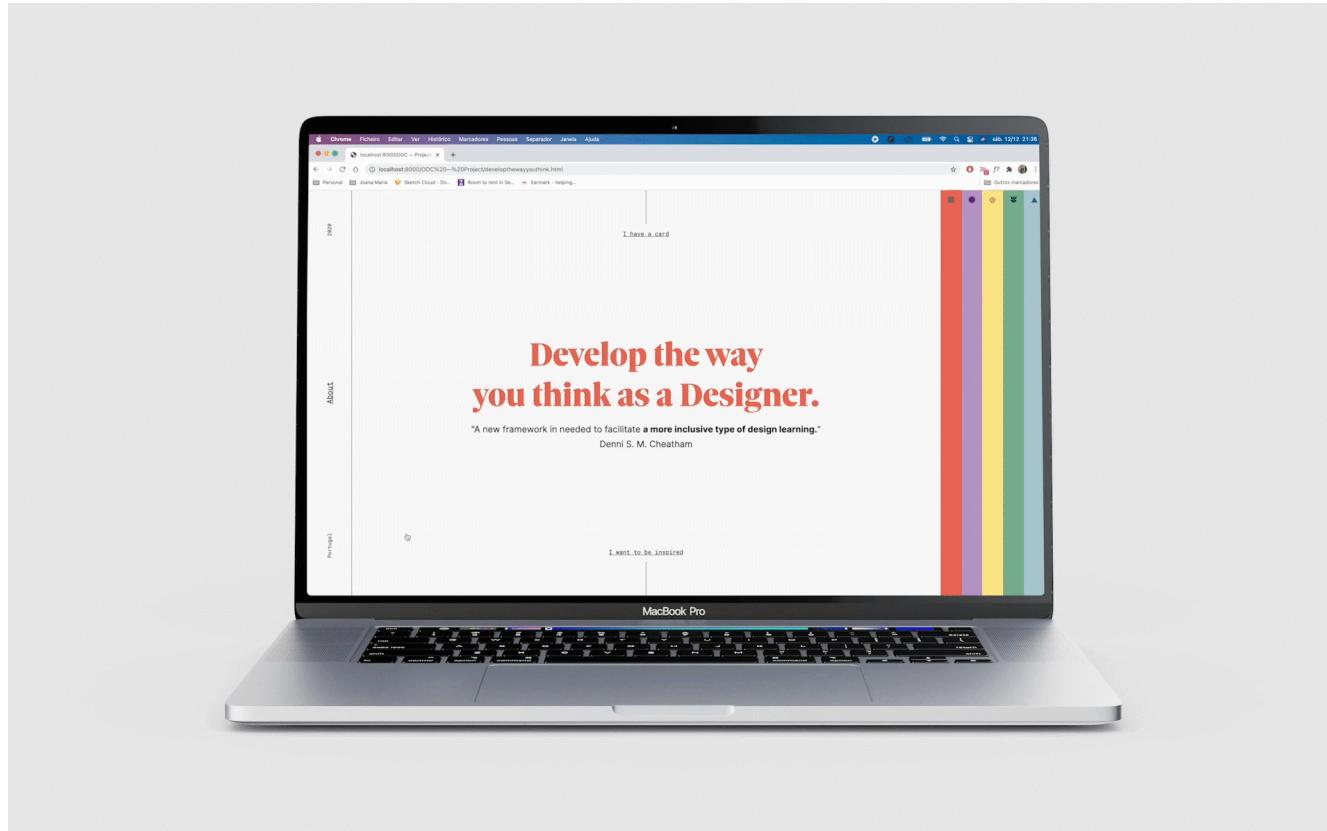


/NAME

Develop the way you think as a designer

/YEAR

2020



As Master's Designer students, we created work we loved and believed in. This project was born in our Communication Design subject at the Faculty of Science and Technology, University of Coimbra.

Nowadays, traditional design education models focus primarily on form-giving. More attention should be given to teaching students about how design functions in broader contexts, why it is culturally relevant, and how and why it now has a widespread economic, political, environmental and technological impact. This project allows users to develop their thinking as designers.

/COLABORATION

Petra Grego, Sofia Torres

/CONTEXT

Communication Design  
MsDM – FCTUC

/DURATION

10 weeks

/YEAR

2020

#### /PROBLEM

The educational system does not differentiate all types of intelligence (PACES<sup>1</sup>) necessary for the Design practice.

#### /APPROACH

Provide the necessary tools for a designer to be able to stimulate the different intelligences and apply them in the different phases of a design problem.

#### /CONCEPT

The Design Practice is increasingly having more and more influence in complex matters of the world. As designers, we must fully understand how our choices shape our society and how they can economically, politically, environmentally or even culturally influence it.

This project offers a variety of resources (books, magazines, articles, podcasts, videos, and websites) that approach and stimulate each of the five intelligences (PACES), enabling users to improve the way they think as designers. And possibly touch on a subject or need that would otherwise be forgotten or taken for granted through the design workflow.

#### /KEY CONCEPTS

Eduction, Design and Intelligences (PACES)

#### /SOLUTION

Both objects complement each other. They are to be used in an initial stage of a design project (brainstorming).

#### EDITORIAL OBJECT

Cards Kit (set of printed physical cards + instructions/ indications + support to store the kit)

#### TECHNOLOGICAL OBJECT

Website (HTML + CSS + JavaScript)

#### /USERS

Learning design teams, companies, studios, ateliers, coworking spaces

#### /PROCESS

1. ORGANIZE INFORMATION/CONTENT
2. BRAND IDENTITY
3. PROTOTYPING/SKETCHES
4. FINAL PRODUCT

<sup>1</sup> PACES Multiple Intelligences Model for Design (PACES = Practical, Analytical, Creative, Emotional, and Social).

"A Multiple Intelligences Model for Design: Developing the Ways Designers Think as Design Disciplines Expand", Denni S. M. Cheatham

/PROCESS

## 1. ORGANIZE INFORMATION/CONTENT

## /RESOURCES TABLE

Spreadsheet with the different design resources (books, magazines, articles, podcasts, videos, apps and websites) tagged by the intelligences and types of media.

## /CARDS TABLE

Spreadsheet with the different cards for each intelligence, and respective resource, question and description.

Initially, a total of 142 resources were collected. After a selection process and an analysis of each one, in which we normalized their information and filtered them by relevance, we ended up with 125 resources in the final product.

**Oficina Design Comunicação**

Intelligence	Media	Key Words	Link	Author	Data	Reading Time	Observations
Todas	Webpage	news, world, graphic design	<a href="https://www.wesabe.com">https://www.wesabe.com</a>	Vox			Vox is a general interest news site for the 21st century. Its mission is simple: Explain the news. (Design approach on point)
10 Creative	Webpage	design, creative, images	<a href="https://unsplash.com">https://unsplash.com</a>	Unsplash			The internet's source of freely-useable images.
11 Creative	Webpage	ideas, brainstroming, inspiration	<a href="https://www.pinterest.com">https://www.pinterest.com</a>	Pinterest			Pinterest is a visual discovery engine for finding ideas.
Creative + Social	Webpage	portfolios, network, creatives, community, inspiration	<a href="https://www.behance.net">https://www.behance.net</a>				
Creative	Webpage	color, color wheel,	<a href="https://color.adobe.com">https://color.adobe.com</a>				
Creative	Webpage	ux, ui, home, case, javascript, site, interface, design	<a href="https://www.w3schools.com">https://www.w3schools.com</a>				
Social	Webpage	world, organization, graphic design	<a href="https://www.worldcat.org">https://www.worldcat.org</a>				
Todas	Magazine	graphic design, magazine, culture, world	<a href="http://lymag.com">http://lymag.com</a>				
Todas	Magazine	art, magazine, culture, world	<a href="https://www.firebaseio.com/tradition-magazine.html">https://www.firebaseio.com/tradition-magazine.html</a>				
Todas	Magazine	lifestyle, art, world, magazine	<a href="https://www.lexus.com">https://www.lexus.com</a>				
Practical + Creative Practical	Book	book, graphic design, typography	Co-A Kid's Guide To Typography <a href="https://tinyurl.com">https://tinyurl.com</a>				
Todas	Book	book, graphic design, world	How To Be a Graphic Designer Your Way <a href="https://tinyurl.com">https://tinyurl.com</a>				
Practical +	Book	book, graphic design	Design for Communication <a href="https://tinyurl.com">https://tinyurl.com</a>				

**Cards Questions**

Intelligence	Theme	Question	Topic	Reference	Who
A01	The more you search the more you find			What is the right User Research for you	Article P
A02	Don't judge a book by its cover			Critical Thinking w Andrew Coppers	Podcast J
A03	Catch me if you can!			Copyright For Designers Don't Get Caught Out, Nautilus Phem	Article J
A04	The ends justify the means?			Democracy	Webpage J
A05	Fix it!			11 Brilliant Problem-Solving Techniques Nobody Taught You	Article S
A06	Effective is Not Efficient			7 Practical Tips for cheating at design	Article S
A07	A bird in the hand is worth two in the bush. Think twice.			Design Observer	Webpage S
A08	How, where, when and who?			Why we need design thinking	Article P
A09	Test it until you make it.			Netflix, testing	Video P
A10	It's about consistency			7 tips for design consistency	Article P
C01	Tell me more.			Milanote	APP J
C02	Did you ever play "pretend" as a kid?			Heads Up!	APP S

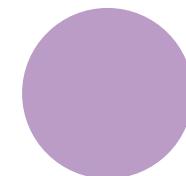
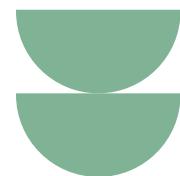
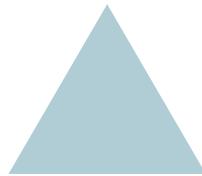
**Cards Questions -**

Folha1	Folha2	Cards Questions

/PROCESS

2. BRAND IDENTITY

/SYMBOLS AND COLOURS



Practical  
Intelligence  
#ED6F5C

Analytical  
Intelligence  
#B1CDD5

Emotional  
Intelligence  
#81B599

Creative  
Intelligence  
#FSE791

Social  
Intelligence  
#BC9ECB

/TYPOGRAPHY

Inter Regular

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj  
Kk Ll Mm Nn Oo Pp Qq Rr Ss  
Tt Uu Vv Ww Xx Yy Zz  
0 1 2 3 4 5 6 7 8 9

Inter Bold

**Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj**  
**Kk Ll Mm Nn Oo Pp Qq Rr Ss**  
**Tt Uu Vv Ww Xx Yy Zz**  
**0 1 2 3 4 5 6 7 8 9**

Sole Serif Display

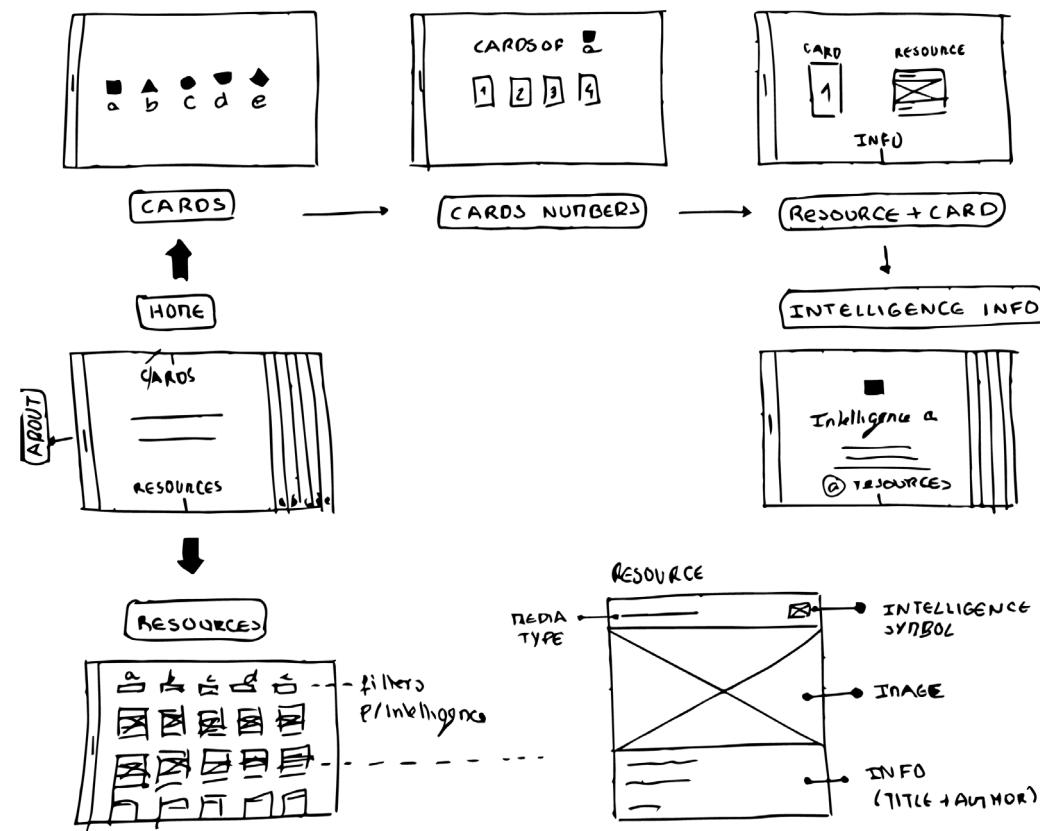
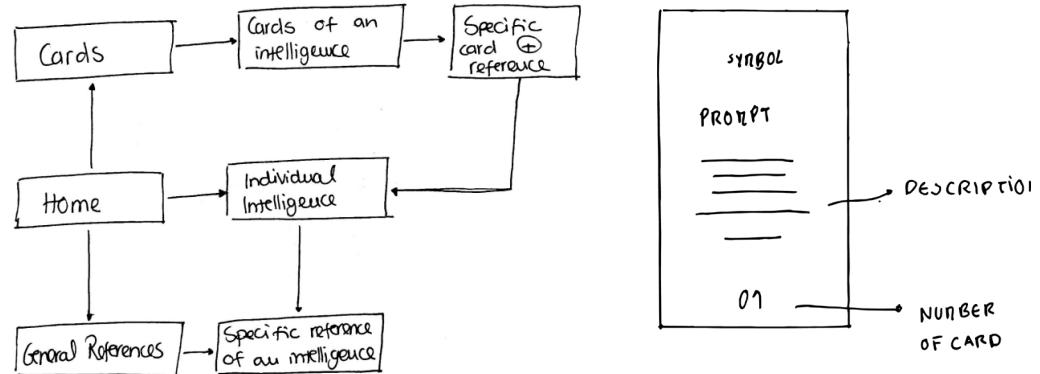
**Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj**  
**Kk Ll Mm Nn Oo Pp Qq Rr Ss**  
**Tt Uu Vv Ww Xx Yy Zz**  
**0 1 2 3 4 5 6 7 8 9**

## /PROCESS

## 3. PROTOTYPING/SKETCHES

We explored a few users flows to determine what way would be the best to have a navigation that was intuitive and dynamic with the use of the cards.

Our primary concern was to create a composition that represented the information clearly without being cluttered yet visually engaging.

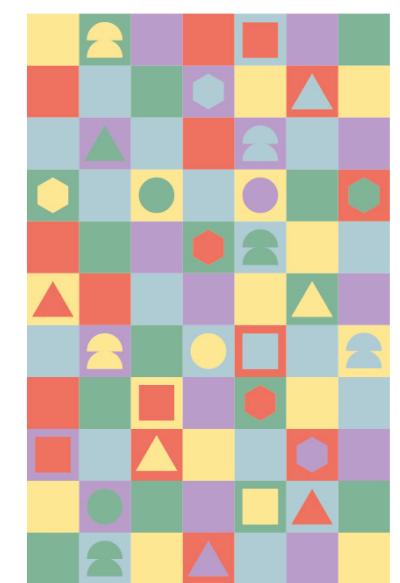
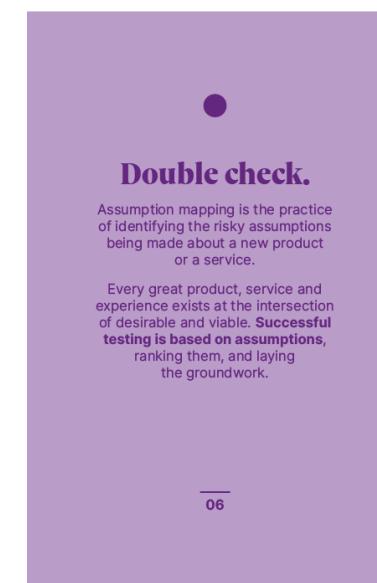
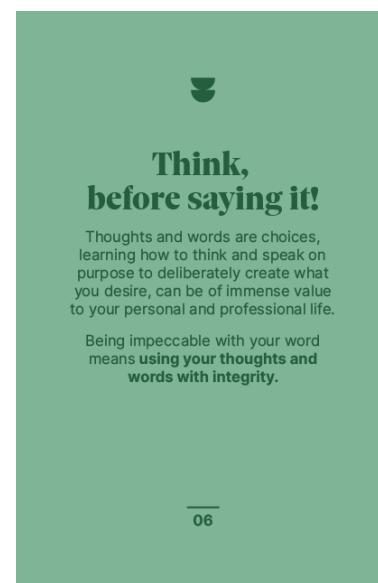
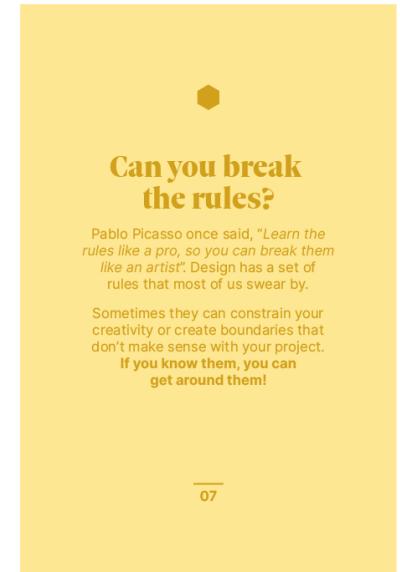


## /PROCESS

## 4. FINAL PRODUCT

## /DECK OF CARDS

Each card has a prompt and a number for a resource to be consulted on the website. Through the card number it was possible to access a resource related to the prompt which helped the user to better understand the task or even complete it.



/NAME

Develop the way you think as a designer

/YEAR

2020

/PROCESS

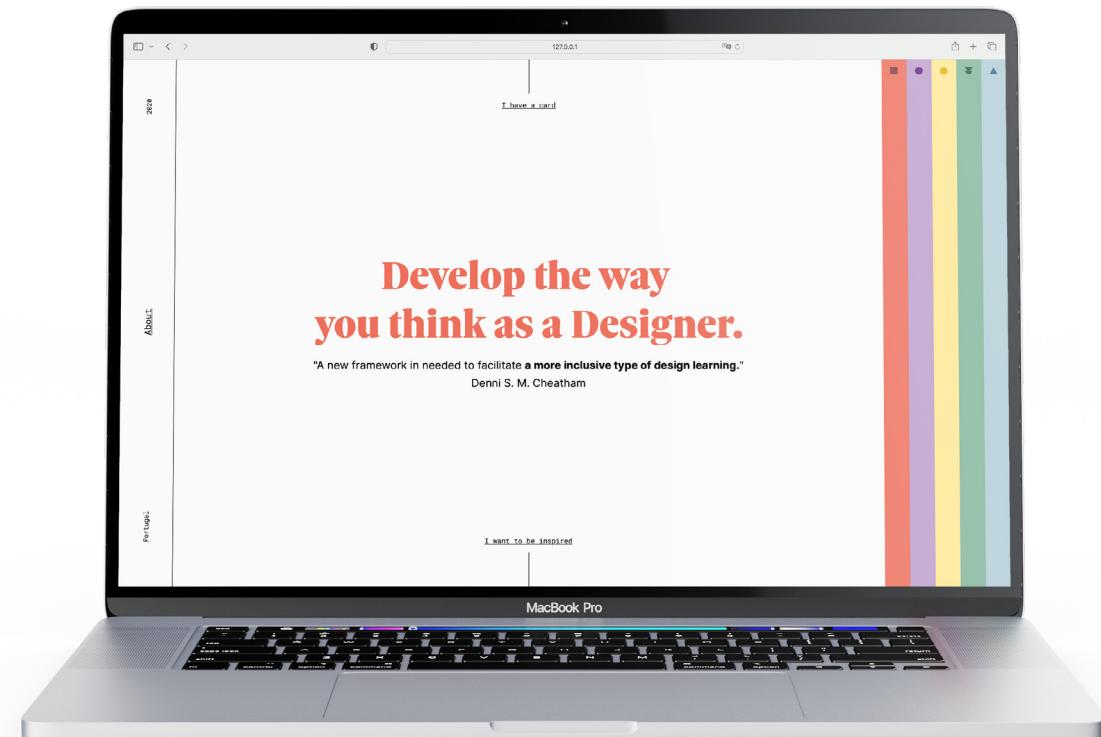
#### 4. FINAL PRODUCT

/WEBSITE

The website is a platform with 125 resources categorized by the five intelligences and media types. The platform also provides a contextualization of the project, the intelligences and a connection to the deck of cards.

#### Implementation

HTML, CSS, JavaScript (JSON and jQuery)



## /PROCESS

## 4. FINAL PRODUCT

## /WEBSITE

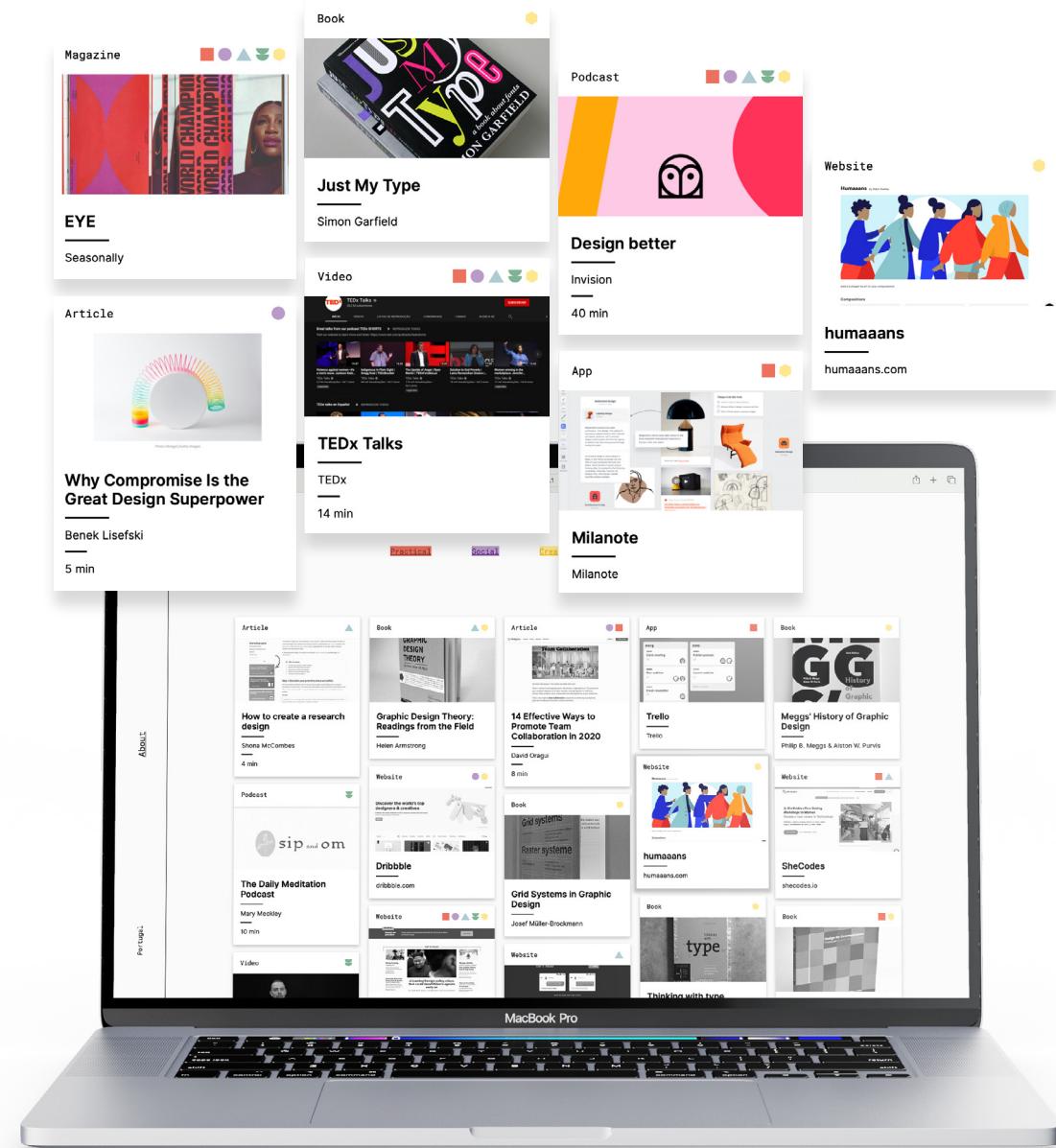
## Resource Box

Includes a representative image, the intelligences that it stimulates, the name of the media, the author and the reading time.

## /RELEVANT UI/UX CONSIDERATIONS

Mouseover enhances the resource (colouring the image and increasing the size of the resource box.) and it is possible to filter the references by intelligence.

This arrangement allows for a better understanding and an increase of interest by the user.



/NAME

Develop the way you think as a designer

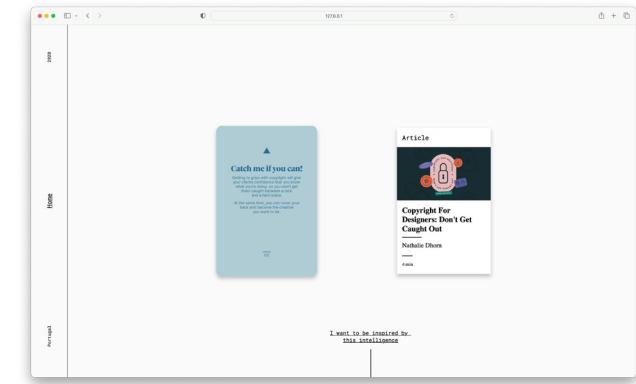
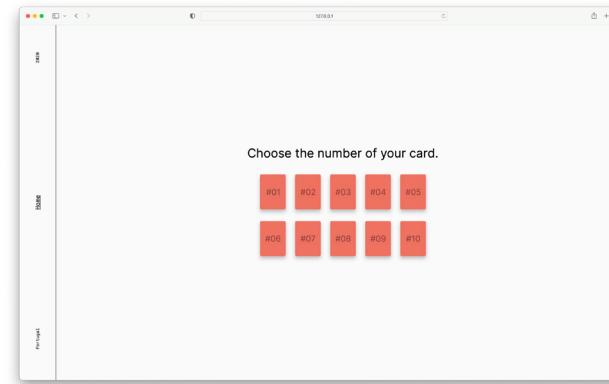
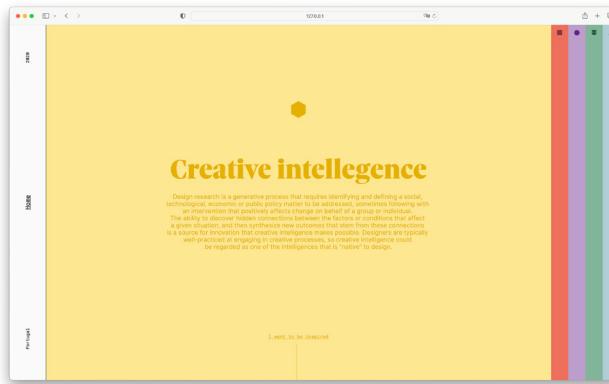
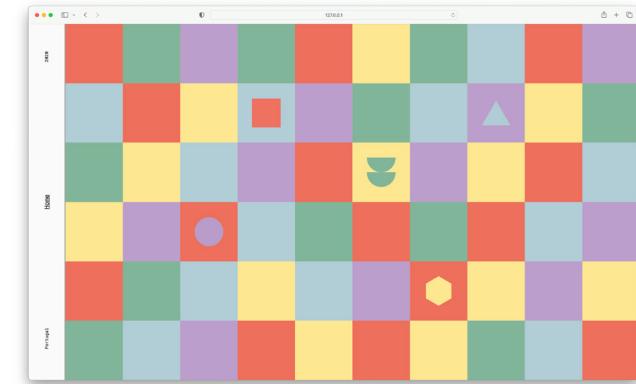
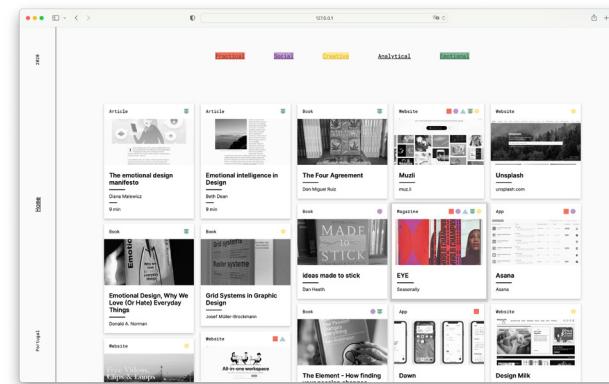
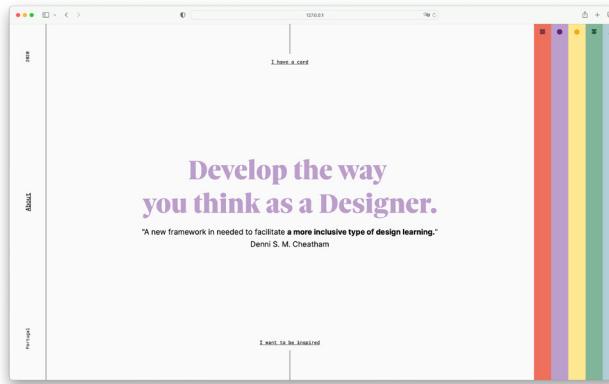
/YEAR

2020

/PROCESS

## 4. FINAL PRODUCT

/SCREENS



# THANK YOU!

If you are a curious soul,  
please feel free to visit my website.  
[www.ajoinamaria.com](http://www.ajoinamaria.com)

Or say hello if you have any question!  
[umajoinamaria@gmail.com](mailto:umajoinamaria@gmail.com)