



# Local Healthcare Application

**Challenge:** Create a application that helps individuals and communities to access (local) healthcare.

**Solution:** Medipath is a responsive and accessible app that offers medical solutions, healthcare and products to individuals.

## Topics we'll be covering and what we've learned:

- Creating personas and user stories
- Sketching wireframes
- Affinity diagrams, themes and insights
- Prototyping
- Competitive audits
- Research studies

## Emphasize

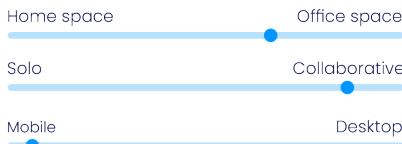
The first stages of the Design Thinking process involves developing a sense of empathy towards the people you are designing for, to gain insights into what they need, what they want, how they behave, feel, and think, and why they demonstrate such behaviors, feelings, and thoughts when interacting with products in a real-world setting.

## Personas

We started our project by empathizing with users and creating random personas that meets solutions for all users.

### What are personas?

"Personas are fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product, site, or brand in a similar way. Creating personas helps the designer to understand users' needs, experiences, behaviors and goals"



# Shima Qinyang

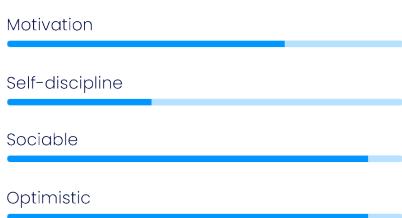
## Beauty model

*"Beauty is the illumination  
of our heart, body and soul"*

## Demography

Age: 27  
Education: Bachelor (Bsa)  
Status: Married  
Location: Shengzen, China  
Carreer: Beauty model

## **Psychographics**



## User end goals

- Expand family and have more children
  - Beak free from trauma and local therapy visits.
  - A dedicated online psychologist.

## Scenario

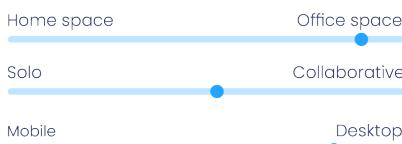
Shima is a successfull young model that was born and raised in Shenzhen (China). A adaptive and dynamic woman that is always on the go. She is married to Haoyu and they have 2 children.

Sadly, Shima experienced a dramatic trauma at a younger age, and often requires therapy for her mental health.

With her busy lifestyle, she hasn't much time to visit a psychologist. So she needs to find a way to do online classes.

## Summary

Shima is a model that experienced a drastic trauma when she was younger. She has a quite busy lifestyle and is always on the move. Unfortunately she hasn't recovered yet from her past and requires therapy twice a week. She doesn't have much time and wants to discover a better alternative to therapy sessions.



## Leo Muller

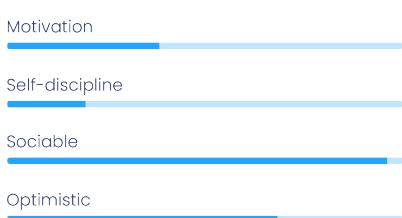
Teacher

*"Education is a form of personal development"*

## Demography

Age: 38  
Education: High School  
Status: Single  
Location: Berlin, Germany  
Career: Unemployed

## Psychographics



## User end goals

- More information about healthcare documents
  - Learn the dutch language

## Scenario

Leo had some personal issues in the past and recently moved to The Netherlands. He does not speak Dutch and is currently unemployed.

He is looking for a job but first needs to get his paperwork sorted out. He doesn't have a health insurance yet and doesn't precisely know where to find one. Because of the language, Leo cannot communicate with locals for assistance or whereabouts.

Eventually, Leo wants to learn the language and start a new life.

## Summary

Leo recently moved from Italy to the Netherlands and doesn't speak the local language. He wants to work but hasn't any legal documents like health insurance. He needs more information and whereabouts to get start working.

## User stories

To better understand users we must create user stories based on the data of **personas**. This is so we can better recognize the user and their needs.

### What are User stories?

A user story is a small, self-contained unit of development work designed to accomplish a specific goal within a product. A user story is usually written from the user's perspective and follows the format: "As [a user persona], I want [to perform this action] so that [I can accomplish this goal]."

# User Story Template

Shima Qinyang

**As a/an**

(User)

Successfull and young beauty model that lives in China

**I want to**

(Action)

Take online therapy classes to break free from my traumas

**So that...**

(Benefit)

i can focus on my carreer and live a healthy lifestyle

# User Story Template

Leo Muller

**As a/an**

(User)

An Foreigner that has recently moved to the Netherlands

**I want to**

(Action)

Learn the language so that i can get my insurance papers

**So that...**

(Benefit)

i can search for a job and communicate with locals

## Journey Mapping

To get more information about the user we need to know their emotions and interactions between the product. We do this by creating a journey map. By capturing the user actions we can understand more clearly about their pain points.

## Short summary of journey mapping

A journey map is a visualization of the process that a person goes through in order to accomplish a goal. In its most basic form, journey mapping starts by compiling a series of user actions into a timeline. Next, the timeline is fleshed out with user thoughts and emotions in order to create a narrative. This narrative is condensed and polished, ultimately leading to a visualization.



**Shima Qinyang**  
Journey Map

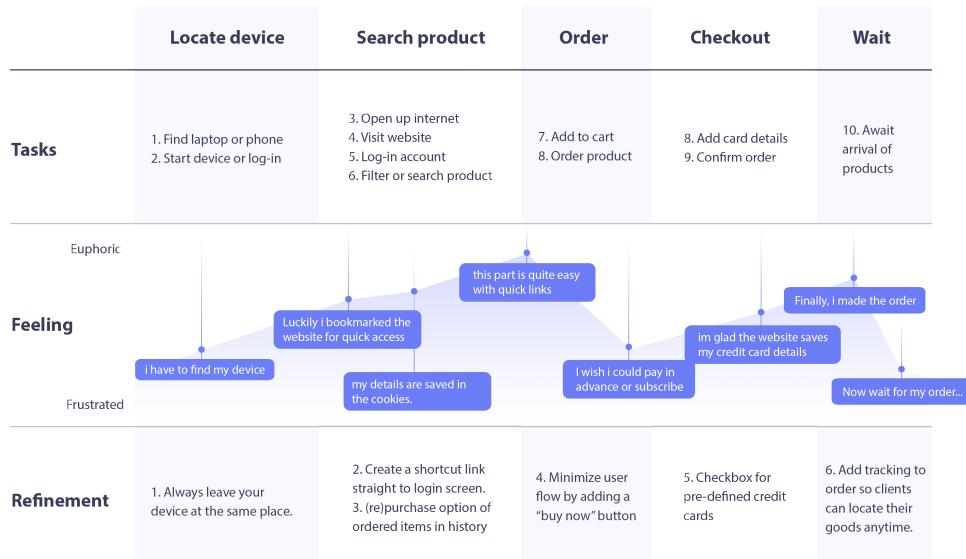
**Scenario:** Shima is a busy beauty model that lives in China and experienced a trauma when she was younger. Now she seeks online classes for therapy treatment.





**Sharon Greenfield**  
Journey Map

**Scenario:** Sharon Greenfield is a full-time HR manager that orders medicine online because she doesn't have time and her work quite is stressfull..



**Note** We were unable to create a journey map for the persona "Leo" because he didn't have enough ability to execute a action. Since he was unable to communicate with locals and couldn't find any information related to registering his health insurance papers. We came up with the idea to create a **Knowledgebase** or **Informational blog** translated in 5 different languages so everyone could understand. Furthermore, in collaboration with government instances users could be forwarded to a appointment link. *More to follow in affinity diagrams.*

## Define and Ideate

Advancing further in the design thinking process we come to define and ideate phases, Ideation is a creative process where designers generate ideas in sessions (e.g., brainstorming, worst possible idea). Participants gather with open minds to produce as many ideas as they can to address a problem statement in a facilitated, judgment-free environment.

## Competitive audits

**Competitive audits** are one of the many valuable steps you can take during the ideation process. A competitive audit is an overview of your competitors' strengths and weaknesses. Analyzing the brands and products of competitors, or the companies who offer similar products as you do, can give you a well-rounded foundation of knowledge about the market your product will enter.

Competitor type Direct or indirect	Location(s)	Product offering	Price	Website	Business	Audience
Direct	Netherlands (National)	Online info and listing about medicines	\$-\$\$(varies)	apotheek.nl	Medium	All ages
Indirect	Online (Universal)	Mobile app for therapy sessions and support	\$\$	betterhelp.com	Large	18-65+
Direct	4708AL Roosendaal, Netherlands	Orthopedist	\$\$	livit.nl	Small	All ages

First impressions						
Business	Desktop website experience			App or mobile experience		
Apotheek.nl	Glossary	Organized Navigation	Accessibility Color branding	Glossary	Minimalistic Educative	Functionality Responsiveness
Betterhelp.com	Navigation	Benevolent Usability	Assistive Clear	Price indications	Straight-forward	Informative
Livit.nl	Poor web speed Content-dense	Support	Branding consistent	Performance	Clarity Support	Correct margins of content

Interaction				
Business	Features	Accessability	User Flow	Navigation
Apotheek.nl	Advanced search for medicines and diseases. Local search for nearby pharmacies.	Light/dark mode Enlarged content Screen reader	Breadcrumbs on pages	Applies 3-click rule, straightforward and easy navigation.
Betterhelp.com	Multi-language therapists	Limited to US only	ALT+9 to acces usability interface	No clear indication of menu in header
Livit.nl	Informative infographics and imaging hotspots Local search	Screen reader and enlarged text available	Availability to contact on every page, + for support	Clear waypoints and 2-click rules to destination

Visual Design			
Business	Brand identity		
Apotheek.nl	Border radius of info box to match the overall style layout (round)	Color pallete according to page. Dark mode only enables on text.	Strong visual branding, consistent in color.
Betterhelp.com	H1 title to be larger	Smooth animations and interaction	Use of similair font across app well-explained content and imaging
Livit.nl	White spacing, content is too packed	Clear top navigation for users. Header background is clear and easy to read according to WCAG.	High quality photos. Empathy design on CTA's

## Crazy 8's

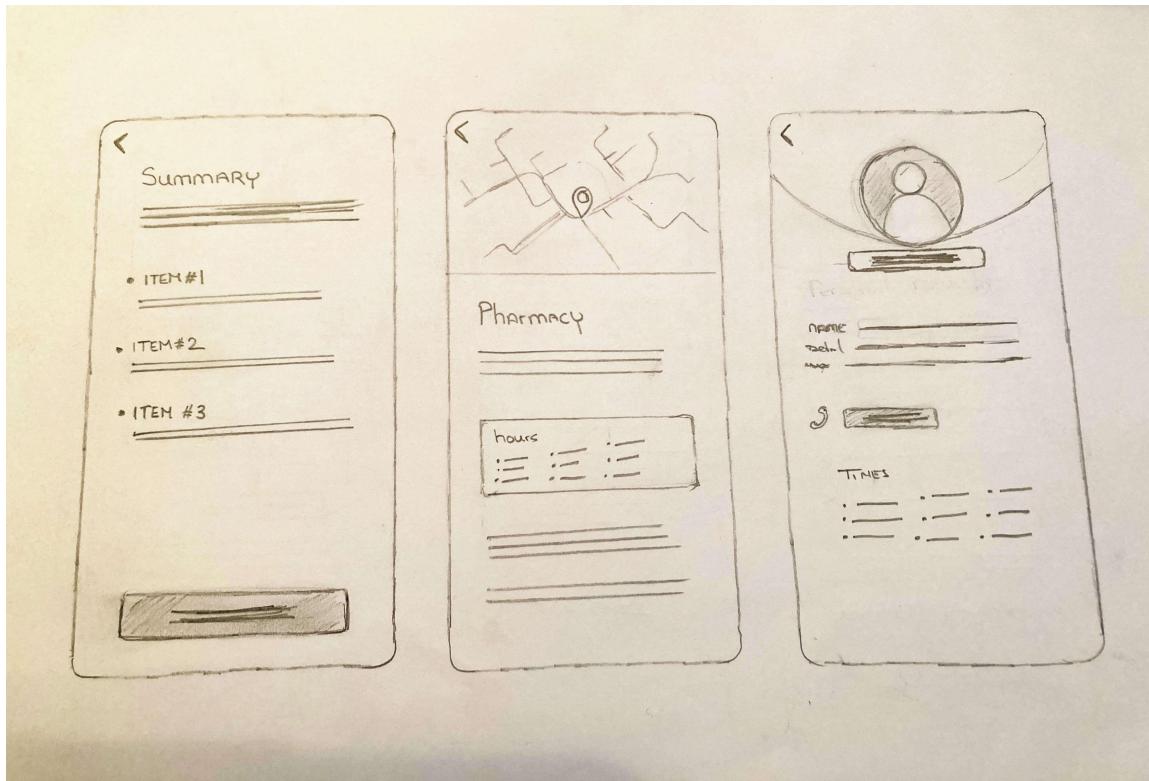
Next up is pen to paper. Crazy 8's is a core Design Sprint method. It is a fast sketching exercise that challenges people to sketch eight distinct ideas in eight minutes. The goal is to push beyond your first idea, frequently the least innovative, and to generate a wide variety of solutions to your challenge.



## Sketching paper wireframes

Wireframes help us establish the basic layout of a screen. A layout is the structure that supports how visual components on a page are arranged, like images, text, and icons. Because paper wireframes are inexpensive and easy to create, you can draw multiple wireframes for the same screen of an app or website to explore a bunch of design possibilities.





# Digital wireframes

We are continuing our case study to screen time. We start by converting our ideas to digital wireframes through the **figma application**. If you do not know what figma is, learn more so here: <https://www.freecodecamp.org/news/figma-crash-course/>

The image displays three digital wireframes for a medical subscription service, likely built using the Figma application.

**TOS (Terms of Service):** This screen shows the "Terms of Service" page under the "Medicines > Paracetamol" navigation. It includes a header with a lock icon and a menu icon. The main content area contains the "Terms of Service" text, which is a standard legal boilerplate. At the bottom, there is a checkbox labeled "I accept to the terms and conditions" and two buttons: "Continue" and "Cancel".

**SUBSCRIPTION:** This screen shows the "Subscription" page under the "Medicines > Paracetamol" navigation. It includes a header with a lock icon and a menu icon. The main content area contains the "Subscription" section, which includes a "Subscription" text area and a "Payment details" section. The "Payment details" section shows an item #5 with a price of \$31.88, a subscription period of 1 year, and payment in installments (x12). Below this, there is a note about deducting the total amount due from the user's account every month. At the bottom, there are "Cancel" and "Continue" buttons, and a link "if nothing happens, click here".

**loading screen:** This screen shows a "loading screen" with a circular progress bar and the word "Processing".

**meds:** This screen shows the "INFO" and "Summary" sections for the "Paracetamol" product. The "INFO" section shows the product details: "Paracetamol \*\*\*\* (26)" and its description. The "Summary" section shows the product details again and includes a "Coupon Code" input field, a "Total Price: \$43,90" summary, and a "Payment" button.



## Prototyping

After subsequently time emphasizing and ideating, it is time to start building. This is where the project comes to life with visual elements and prototypes that make the app responsive.

## Building a low fidelity prototype

After all our sketching and initial design work is done, we'll start by creating our first prototype to prospect the user flow and have a preview of how the product feels like in a real-world scenario.



You can preview the low-fidelity prototype here: <https://www.figma.com/proto/ykun1JU0h20Hg1u51DDpIk/LOW-FIDELITY?node-id=2%3A17&scaling=scale-down&page-id=0%3A1&starting-point-node-id=2%3A17>

**Note** The LOWFI prototype is outdated and hasn't been worked on since we push new features and updates to our high fidelity prototype by preference.

## High fidelity prototype

Continueing our design phase, we move to a high-fi prototype. This is how a product should look or feel like for a user. First we make the mockups followed by a layout, then we create a user flow and afterwards we add transitions and animations.

**support**

**Customer Support**  
A customer service app is a go-to resource for customers in need of assistance.

Please visit our [help desk](#) for general information and questions.

**Live chat with agent** Monday to Friday 7:00 - 17:00 | **Start chat**

**Request Call** Monday to Friday 10:00 - 16:00 | **Unavailable**

**start chat**

**Start live chat**

**Full Name**  
**Email Address**  
**Select language**

**Send message**

**live chat**

**Alexander Grunsnov**  
Customer Support

Hello, I have a question...

I need more information about this [product] please.

I'm glad you ask, feature #1 and feature #2... (detailed expl.)

**FAQ**

**Frequent a. Questions**  
Most frequent asked questions by customers can be found here.

**Second question**

**Third question**  
88816 Maps and hydrographic or similar diagrams, printed, not in book form.

**Fourth question**

**Fifth question**

**Sixth question**

**Seventh question**

**Eighth question**

**Ninth question**

**meds**

**Medicines**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex ornare placerat. Vestibulum massa...

**Search...** **Filter** **Filter**

Most searched: Paracetamol | Amoxicillin |

- Amoxicillin** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Benzylamine** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Ibuprofen** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Risedronate** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...

**meds\_filterd**

**Medicines**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex ornare placerat. Vestibulum massa...

**Search...** **Filter** **Filter**

Most searched: Paracetamol | Amoxicillin |

- Amoxicillin** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Benzydamine** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Ibuprofen** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...
- Risedronate** Pellentesque semper at tellis quis posuere. Phasellus eu velit ac...

**meds\_filterd**

**Medicines**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex ornare placerat. Vestibulum massa...

**Search...** **Filter** **Filter**

Alphabetic

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z				

**pop\_up**

**Medicines**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex...

**ibuprofen**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex...

**Learn more** **Buy now**

**ibuprofen**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex...

**Risedronate**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex...

**search pharmacies**

**Local Pharmacies**

Search by ZIP code... **Search**

Found 2 results within 5 miles of: 4106 EM

**Pharmacy Anvil**  
Monday - Friday 9:00 - 16:00 | **More Info**

**Pharmacy Cure heart**  
Monday - Friday 7:00 - 14:00 | **More Info**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex ornare placerat. Vestibulum massa tortor, scelerisque ut...

**INFO**

**Pharmacy Anvil**

**Information** Location Opening hours

Duis magna lacinia, cursus varius eros id, aliquet aliquam massa. Nullam suscipit faucibus massa a facilisis.

Nam felis lorem, vehicula vel diam sit amet, vestibulum lobortis sapien. Suspendisse sit amet ex sed turpis tempus lobortis.

Call

**menu**

**Index** **←** **←**

More navigation can be found here, scroll down for additional support

**Search...**

**Dashboard**  
**Medicines**  
**Online Therapy**  
**Local Pharmacies**  
**Profile**

Select language

- Dutch
- English**
- Spanish
- French

**Customer Support**

**TOS**

**Terms of Service**

Pellentesque semper at tellis quis posuere. Phasellus eu velit ac ex...

Nullam suscipit faucibus massa a facilisis. Nam felis lorem, vehicula vel diam sit amet, vestibulum lobortis sapien.

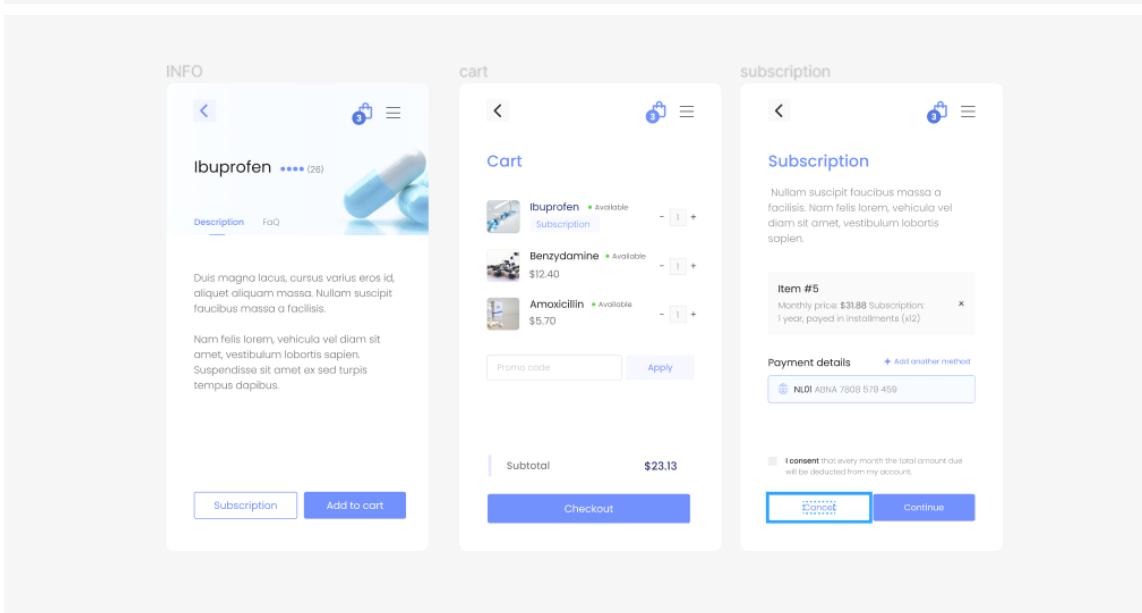
Suspendisse sit amet ex sed turpis tempus lobortis. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

Nullam suscipit faucibus massa a facilisis. Nam felis lorem, vehicula vel diam sit amet, vestibulum lobortis sapien.

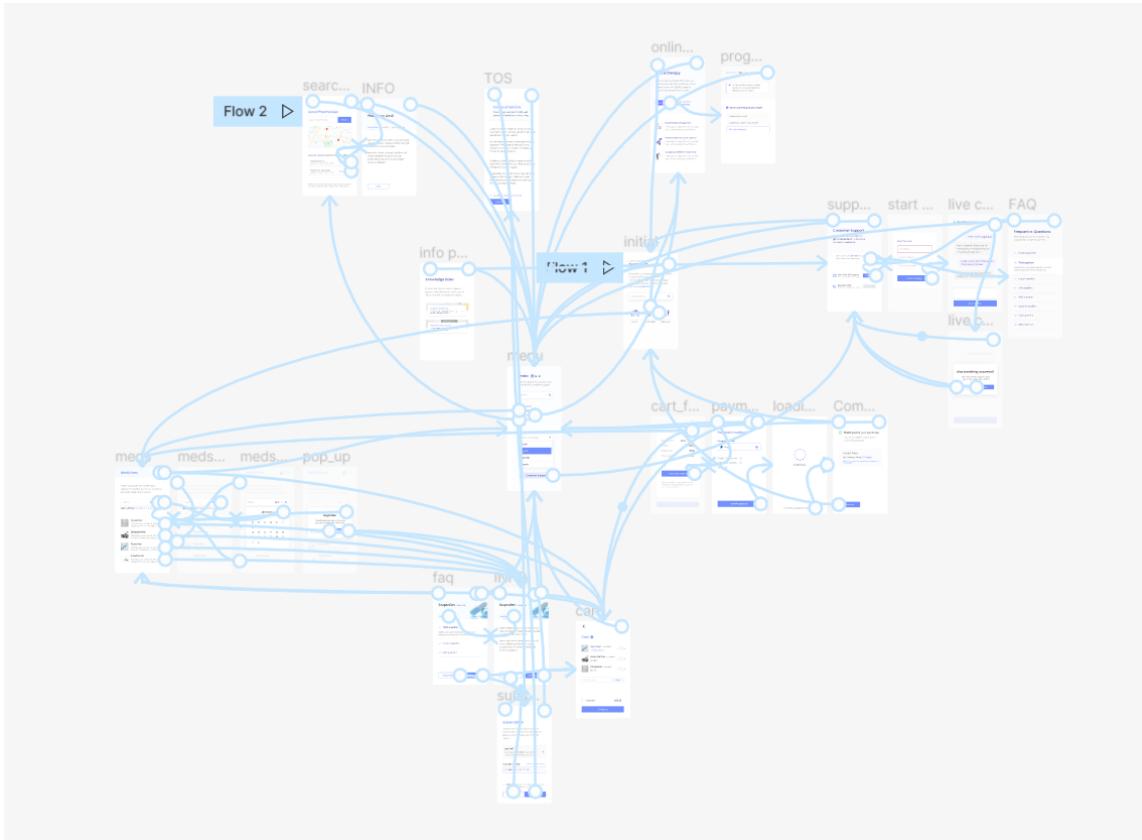
Suspendisse sit amet ex sed turpis tempus lobortis. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

**I accept to the terms of service**

**Continue**



## The prototype:



Interactive app can be found here: <https://www.figma.com/proto/LDLrHaCII463UQOfsNTopJ/official-mockups?node-id=30%3A3952&scaling=scale-down&page-id=0%3A1&starting-point-node-id=30%3A3952>

## Testing Phase

The final step in the design thinking process is testing the application and conduct research to gain insights based on users feelings, opinions and biases. Following this section we can iterate back to the ideate phase and forward to comply with new ideas and features obtained by feedback.

### Research study

Let's outline our project goals and define our principle questions. You can view/download the research study plan here: <https://docs.google.com/document/d/>

UX Research Study — Plan Template

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<b>Introduction</b>	<ul style="list-style-type: none"><li>▪ <b>Title:</b> Healthcare application</li><li>▪ <b>Author:</b> A. Martinez (UX student at coursera)</li><li>▪ <b>Stakeholders:</b> (local) customers and UX project designer.</li><li>▪ <b>Date:</b> 27/8/2022</li><li>▪ <b>Project background:</b> We're creating a healthcare app that allows individuals to connect easily with local healthcare providers (ex; personal doctors, consultants, pharmacies and hospitals), and give the user a faster approach to a solution.</li><li>▪ <b>Research goals:</b><ul style="list-style-type: none"><li>▪ Create a universal app accessible by everyone with multi-language</li><li>▪ Link local pharmacies and medicines to buy online</li><li>▪ Create an online network within the app for therapy sessions.</li></ul></li></ul>
<b>Research questions</b>	<ul style="list-style-type: none"><li>▪ What are the questions your research is trying to answer?</li><li>▪ Can users buy or subscribe to medicine?</li><li>▪ Can foreigners connect to a doctor that speaks their language?</li><li>▪ How can customers do online therapy?</li><li>▪ Do people get assistance with medical documents?</li><li>▪ How do people get informed about features or services? (knowledge base or information desk)</li><li>▪ Is there any solution for customer support? (live chat, phone, etc.)</li></ul>
<b>Key Performance Indicators (KPIs)</b>	<ul style="list-style-type: none"><li>▪ How can you measure progress toward the research goals?</li><li>▪ Search vs Navigation</li><li>▪ System usability scale (SUS)</li><li>▪ Customer satisfaction (CSAT)</li></ul>
<b>Methodology</b>	<ul style="list-style-type: none"><li>▪ How will you collect data? How will you analyze data once you get it?</li><li>▪ Online through shareable links (prototyping)</li><li>▪ Offline marketing</li><li>▪ Spreadsheet, note taking and data management</li></ul>



## Affinity diagrams

An affinity diagram is a collection of large amounts of data that is organized into groups or themes based on their relationships. The affinity diagram process is great when you want to make sense of insights gathered during research, as well as when you want to organize ideas generated during ideation sessions.



## Gathering

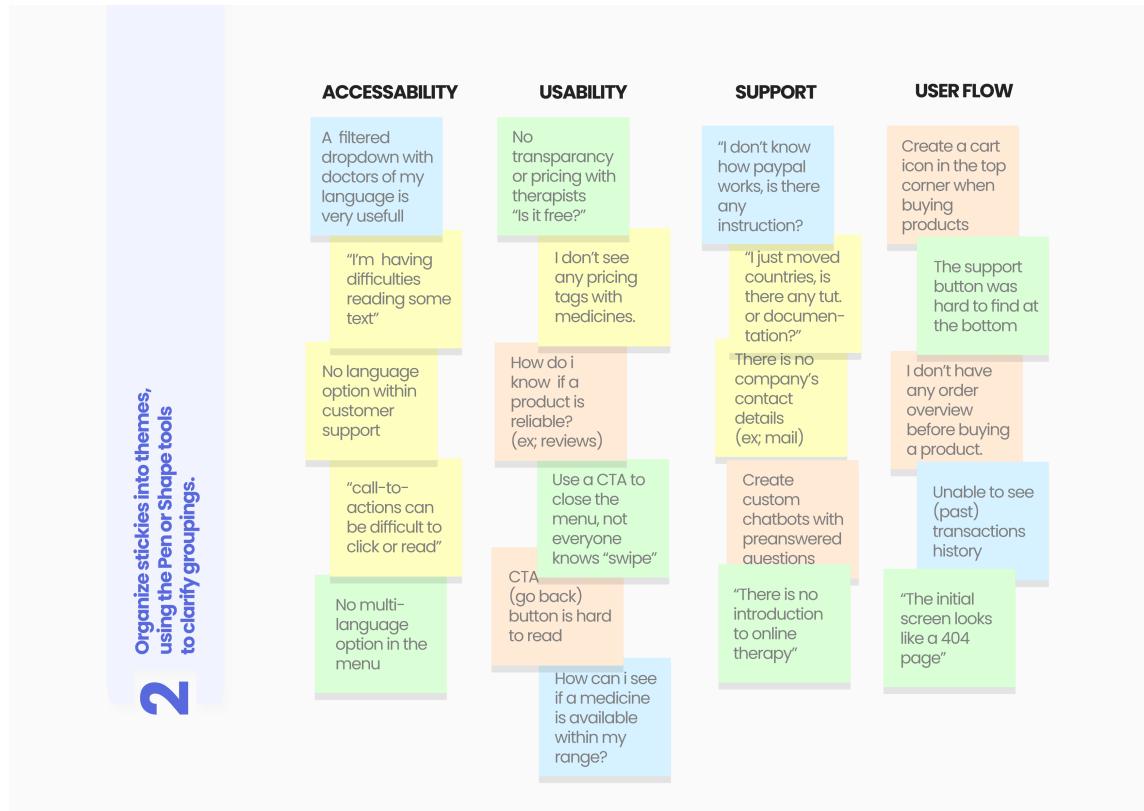
In the first phase we come up with as many ideas, insights or concepts as possible. We gather all of these on sticky notes.

**1**  
Capture as many insights,  
ideas, or other concepts as  
you can.

How do i know if a product is reliable? (ex; reviews)	The support button was hard to find at the bottom	"The initial screen looks like a 404 page"	"I'm having difficulties reading some text"	I don't have any order overview before buying a product.	Unable to see (past) transactions history	"call-to-actions can be difficult to click or read"
A filtered dropdown with doctors of my language is very usefull	There is no company's contact details (ex; mail)	"I just moved countries, is there any tut. or documentation?"	No transparency or pricing with therapists "is it free?"	Create custom chatbots with preanswered questions	"There is no introduction to online therapy"	No language option within customer support
Create a cart icon in the top corner when buying products	No multi-language option in the menu	CTA (go back) button is hard to read	I don't see any pricing tags with medicines.	Use a CTA to close the menu, not everyone knows "swipe"	"I don't know how paypal works, is there any instruction?"	
	How can i see if a medicine is available within my range?					

## Creating themes

Secondly, we start organising our concepts in themes (groupings).



## Create insights

Once we've collected everything, it is time to create insights based on the data we gathered.

You can download/view the document with the following link: <https://docs.google.com/document/d/>

[https://docs.google.com/document/d/1UKa4ekEbVehAauKCqohQL3AyvbgU3d21Jp6yZtLN\\_Cs/edit?usp=sharing](https://docs.google.com/document/d/1UKa4ekEbVehAauKCqohQL3AyvbgU3d21Jp6yZtLN_Cs/edit?usp=sharing)

## Insight Identification Template

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1. Based on the following research, **6 out of 8 participants found that they couldn't switch the app to their language**, this means that **most users cannot communicate about their problems**.
2. **3 out of 8 participants found there's no information desk about certain documents or guidelines**, an insight is: **that most consumers can't get assistance on where to be or what to do**.
3. **2 out of 8 participants could buy and subscribe to medicine, but it had some transparency issues, including therapy sessions**; this suggests that: **customers couldn't see pricing or user reviews**. (only total pricing in cart)
4. Based on the accessibility section in the affinity diagram: we've found that **2 out of 8 participants had some difficulties with the text size**. This means that **some users are unable to read certain texts**.
5. After research in the user flow section, **we've noticed that some processes are disrupted without a follow-back**. This means that whenever someone abandoned their cart or continued shopping, there was a gap in the user flow to get back to their cart.
6. Overall, **7 out of 8 participants found the support section helpful**, except that the button was featured too low in the menu. This means that users that didn't scroll downwards, were unable to find the support features.



## Prioritize data

The final stage is to prioritize the most important features. view document:

<https://docs.google.com/document/d/>

<1gKDVRJUdzgl9ce8D0F19SiGB4EJVbuyqXjrNbjj-KN0/edit?usp=sharing>

## Prioritized Insights Template

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### Priority 0

1. Based on the fact that most users couldn't switch the app to their language an insight is: to create the app multilingual so it is accessible to everyone

### Priority 1

1. We've noticed that some processes are disrupted without a follow-back, a feature is to create a cart icon in the upper corner next to the menu.
2. Some users had some difficulties with the text size. We should address some of these features in the accessibility section of the app.

### Priority 2

1. Based on collected data from insights: users found there's no information desk about certain documents or guidelines, an input would be to create a knowledge base or blog to inform users with counsel.
2. In the usability section of the diagram: customers could buy and subscribe to medicine, but it had some transparency issues. This means we should add pricing and reviews for products accordingly.

### Priority 3

1. Users found the support section helpful, except that the button was featured too low in the menu. We should add a clear button in the menu within sight that is emphasized for customer support.

