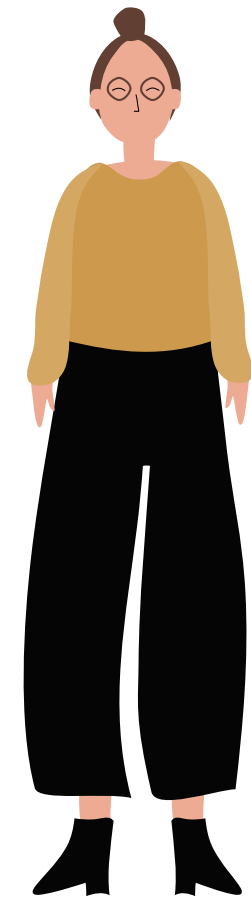


th.

Theresa Horn | Industrial Design  
Portfolio 2019



# Nice to meet you,

---

I'm **Theresa**, currently studying **Industrial Design**  
at the **University of Arts in Linz**, Austria.



Photo Jürgen Grünwald

## **7 random facts about me**

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- 001** I hardly use a calender because I remember almost every date.
- 002** If you dare to look in my bag you will find things for most emergency cases.
- 003** To get new ideas I like to take my camera and travel by myself into a new city.
- 004** I took twelve years accordion classes and as well played in an orchestra.
- 005** The day I love the most of the year is the first spring day with nice weather.
- 006** If you struggle with organization, I would be pleased to help you.
- 007** When I am working I like to start with details until it results to be a whole thing.

I'm particularly interested in  
**design research, design strategy, service design,  
user centered design and storytelling.**

---

## Education

### University of Arts Linz, Industrial Design

from 2014 until now

### Universidad de Sevilla, Exchange Semester

from 2014 until 2014

### JKU Linz, Mechatronics BSc

from 2010 until 2014

### Business School Vöcklabruck, Matura

from 2005 until 2010

## Working Experience

### Research and Analysis - Keba | E-mobility [Linz]

from 11-2019 until now

### Graphic Design - Academia Superior [Linz]

from 08-2019 until 10-2019

### Social Media - Academia Superior [Linz]

from 07-2018 until 08-2018

### Product Design Intern - Pearl Creative [Ludwigsburg]

from 09-2017 until 02-2018

### Content Management - PixelTrend OG [Linz]

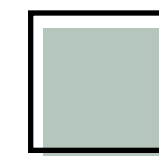
from 05-2016 until 08-2017

## Skillset

ADOBE  
Photoshop  
Illustrator  
InDesign  
After Effects

CAD  
Rhinoceros  
3DS Max  
Solid Works  
Autodesk Alias  
KeyShot

Prototyping  
Arduino (basics)  
VR/AR (basics)



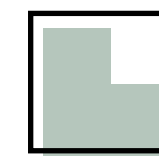
**German**

Native



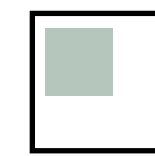
**English**

Fluent



**Spanish**

Fluent



**French**

Basic



## **projects**

---

- 001** LUN  
changable furniture for families
- 002** LePeu [Hangman]  
intrinsic value of shoulder shaper for hanger
- 003** DrinkFit  
rise personal water consumption
- 004** Home Automation Concepts  
for Seniors
- 005** Alea  
the other ordering in a restaurant

***Never a failure, always a lesson***



## LUN Modular Furniture

---

4th year | 4 month | individual project | collaboration: Roomle and MHC Upper Austria

LUN is the outcome of project with focus on identifying **digitalisation** through **all product phases** from design, manufacturing and marketing to distribution and sales/orders.

This furniture meets the needs of **parents**, fits the taste of **children** and goes with current **lifestyle trends**.





**Digitalization allows more flexibility in lives, so should furniture do.**

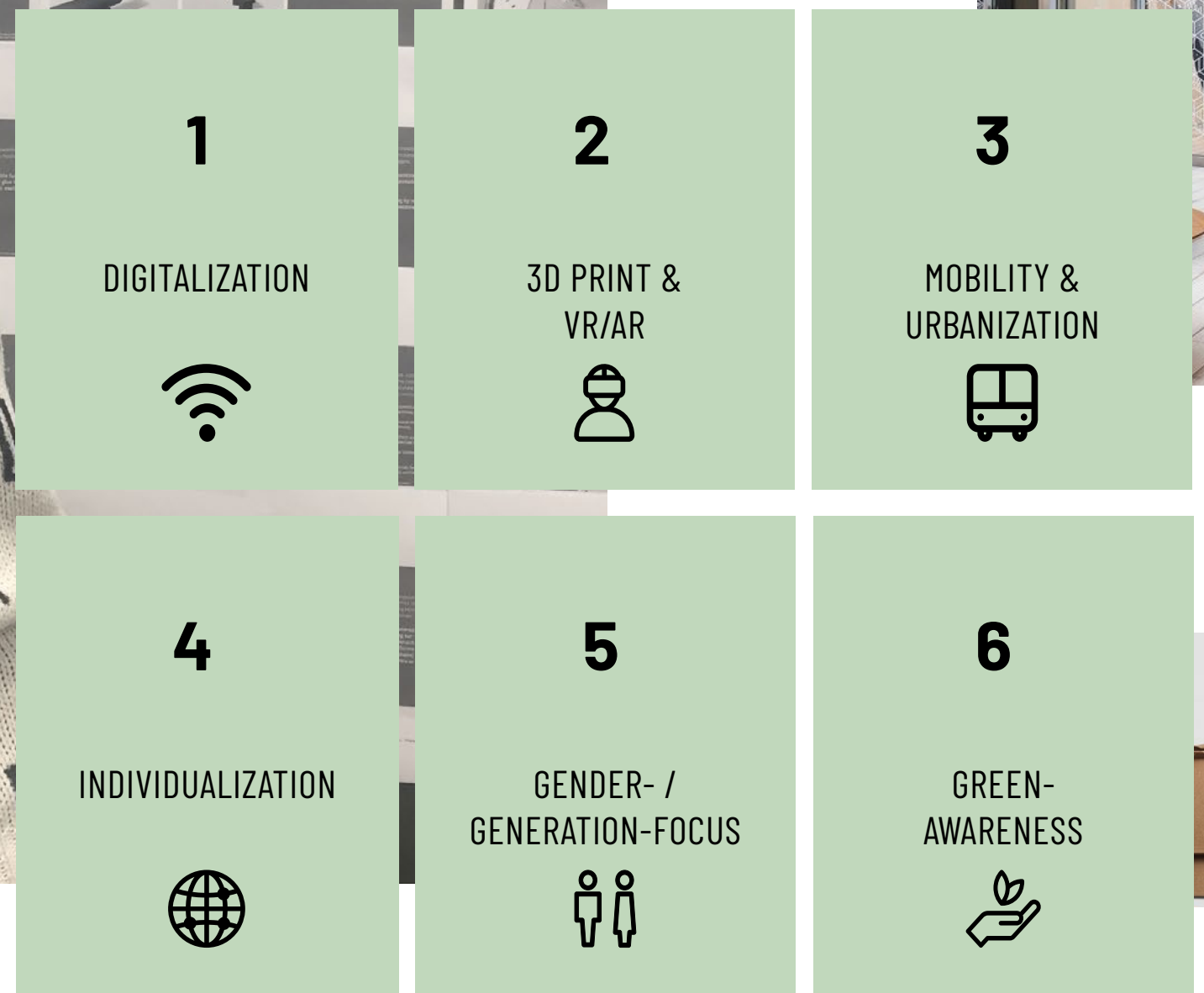


Photo Deskopolitan



Photo Ikea

## Research

When **furniture meets digitalization** an understanding of both fields is crucial find the melting point.

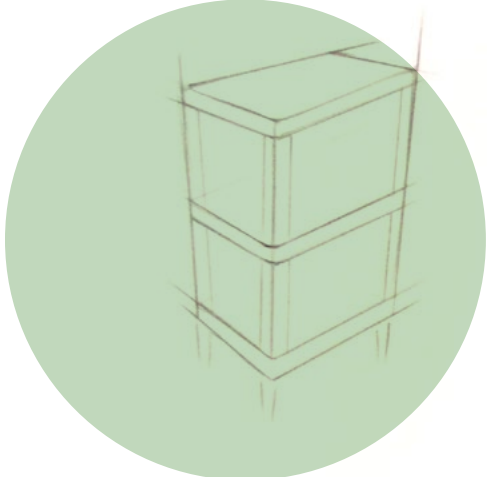
In teams of two or three we gathered information on topics like **traditional woodwork, new production methods, the market and trends in society**. The analysis was shared with everyone in the project to get best synthesis out of it.

My team delved deep into trends in **society** and its **influence** on the market. To teach everyone involved the meaning of the trends for the furniture market we gave **several examples**.

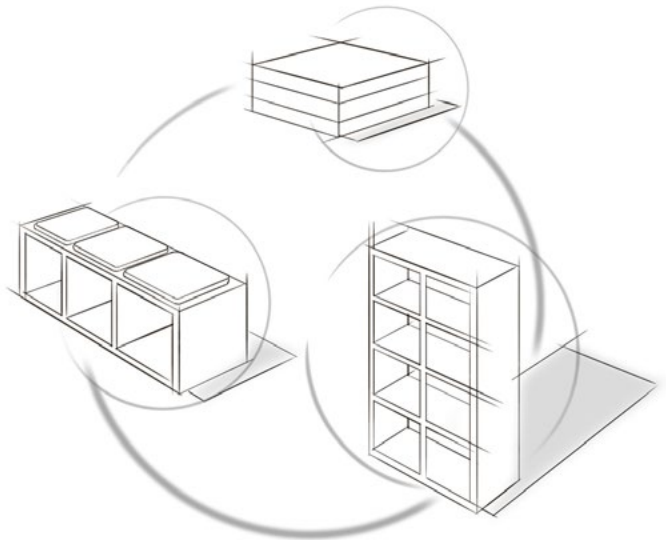
Source pwc: Die deutsche MöbelbrancheStruktur, Trends und Herausforderungen, 2017.



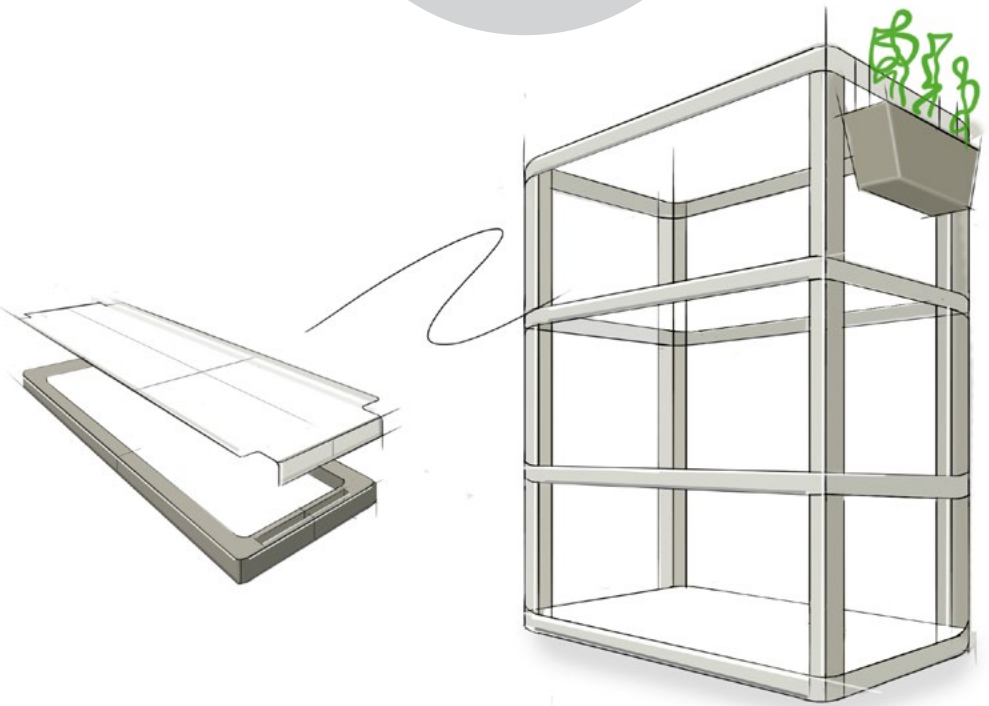
# Who will really benefit from modular and multifunctional furniture?



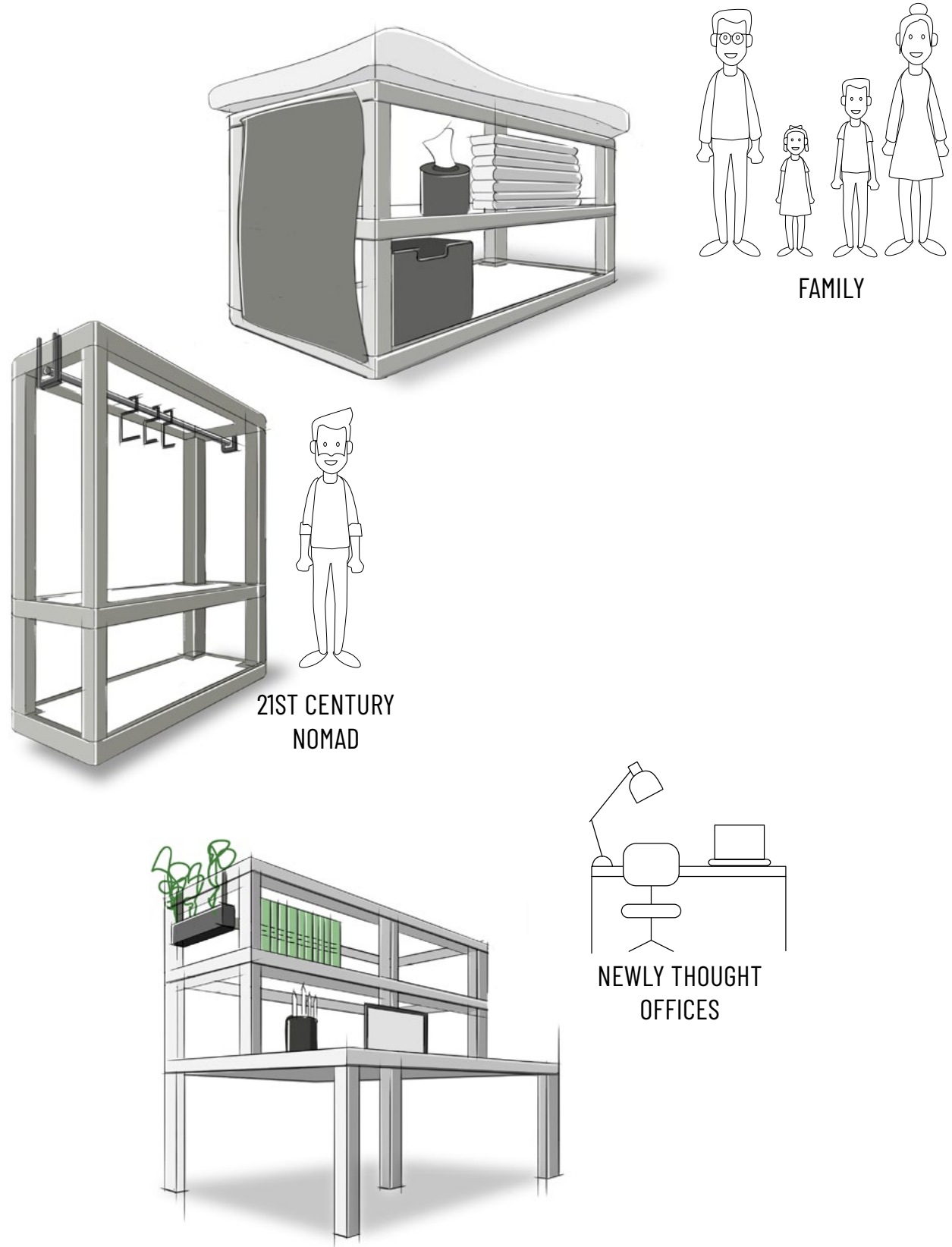
KEYSKETCH



ABLE TO RECYCLE  
LOW WEIGHT  
EASY TO TRANSPORT  
NO TOOLS  
LONG LIVING



## first ideation

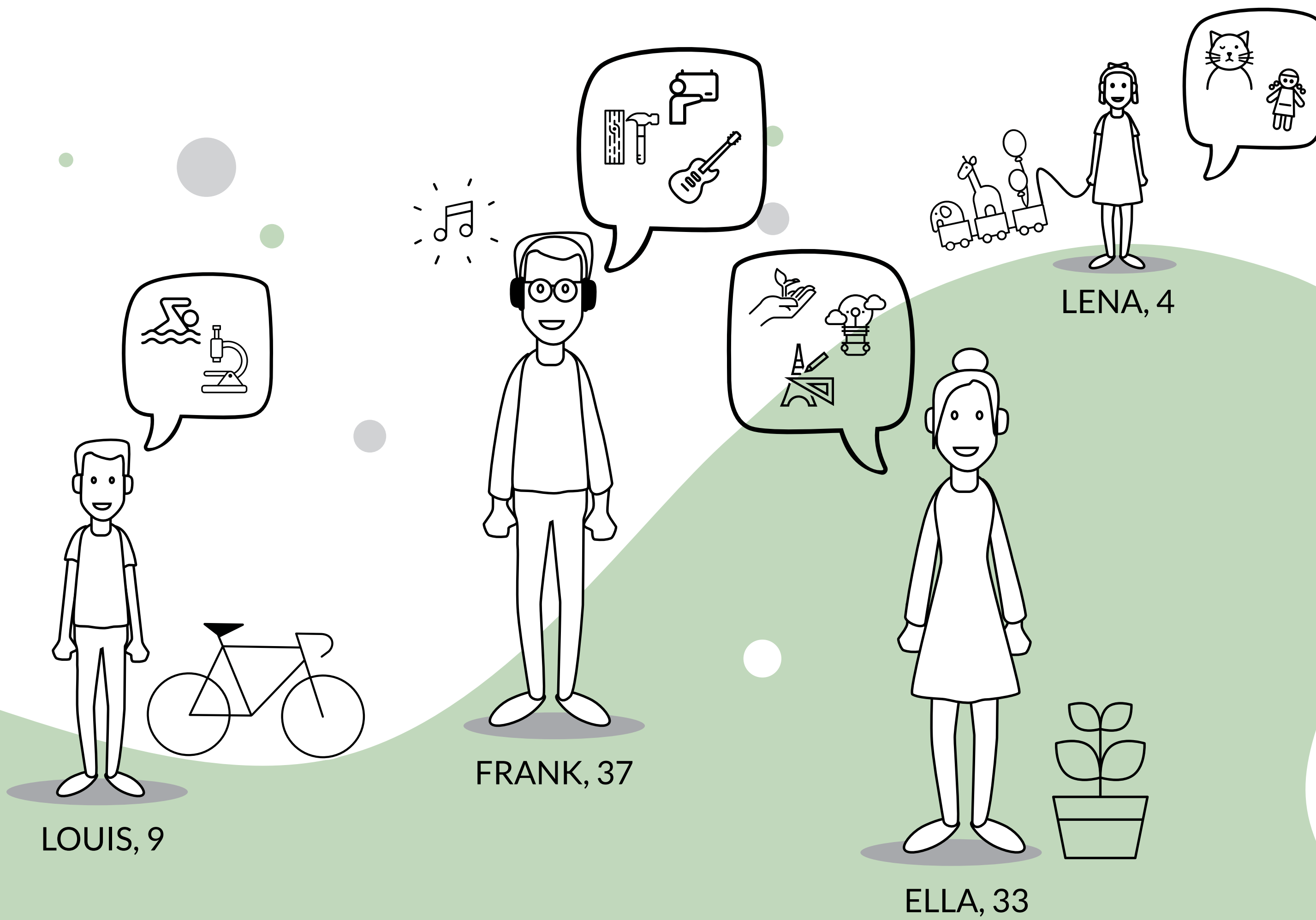


## Ideation

Many **people are moving** a lot of times, especially young ones on their hunt for career. Having a look on the **environmental situation**, it seemed to be a good idea creating modular and multifunctional furniture for them.

Spontaneous ideas always must be checked profound whether they are really the best. So here it turned out, that **families fit** far better as target group because of continuously **changing needs** of their children.



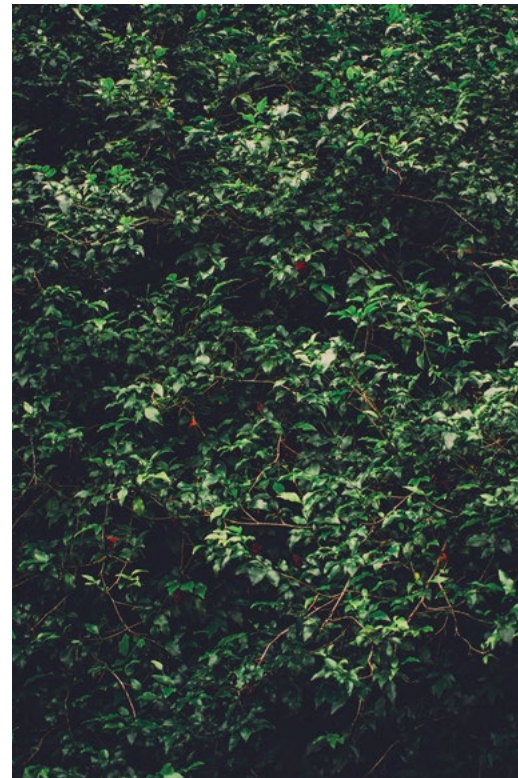


## Target Group

Frank and Ella are living with their children close to the city of Linz. **Ella** is working as an **architect**, mainly focused on new urban concepts. **Frank** is a **teacher** for handcrafting and English.

Both love science, working with their hands and **nature**. They wish for their children to be able to enjoy beautiful nature as much as they do in the future. That's why they teach them **environmental issues** from the early beginning.

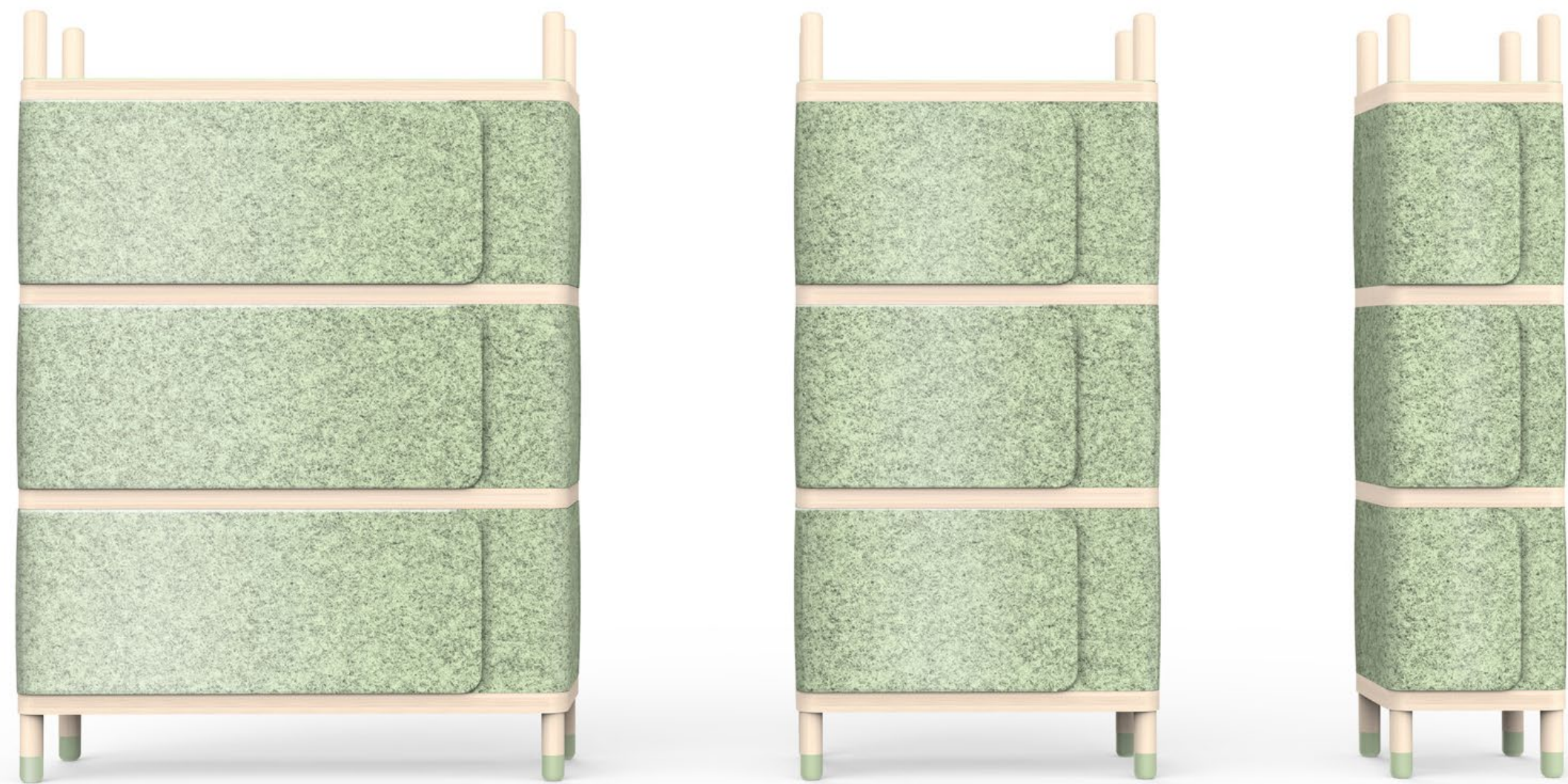




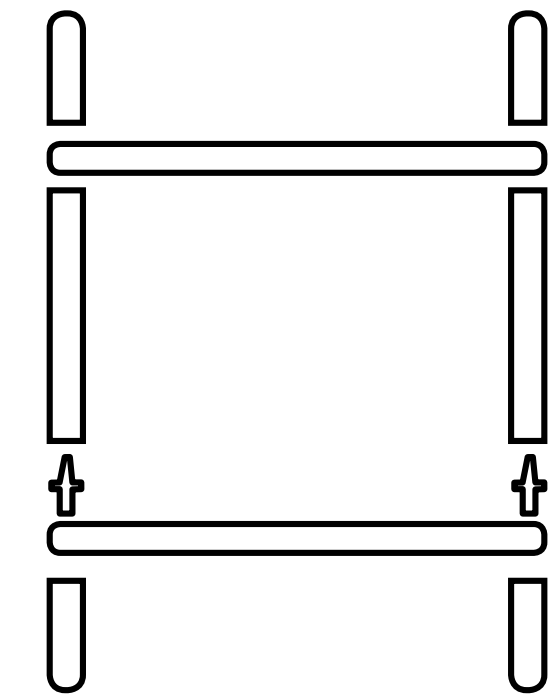
## Moodboard

nature  
calms you down  
good to touch  
organic material  
without harm





LEG - wood  
CONNECTOR - wooden thread  
BOARD - wood



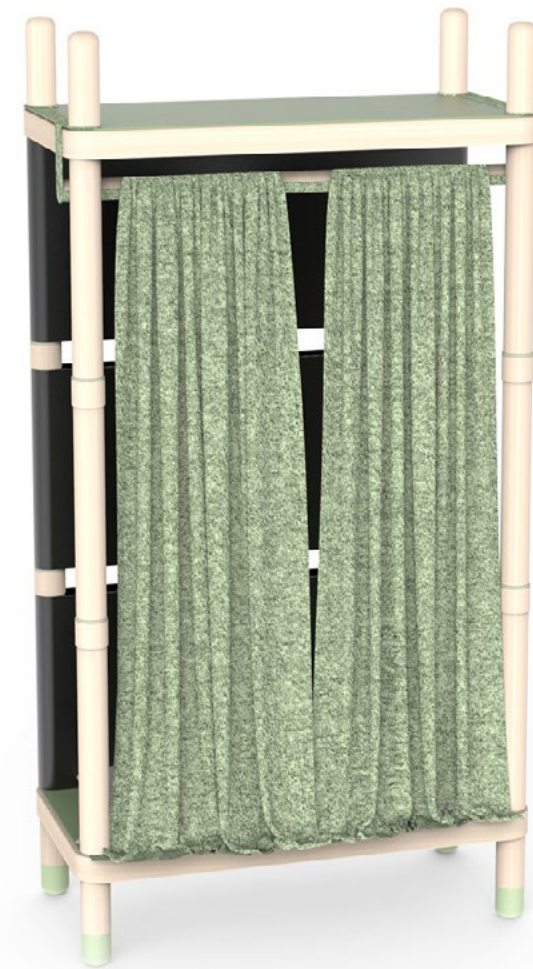
## Concept

**Wooden legs**, a **wooden board** that comes in three different sizes and a connector with a **wooden thread** make up the basic elements of this concept. In order to create the perfect furniture for everyone, a felt cover, a felt drawer, a blackboard and a clothes rail can be added.





BABY CHANGING SHELF



PLAYING CAVE



WARDROBE

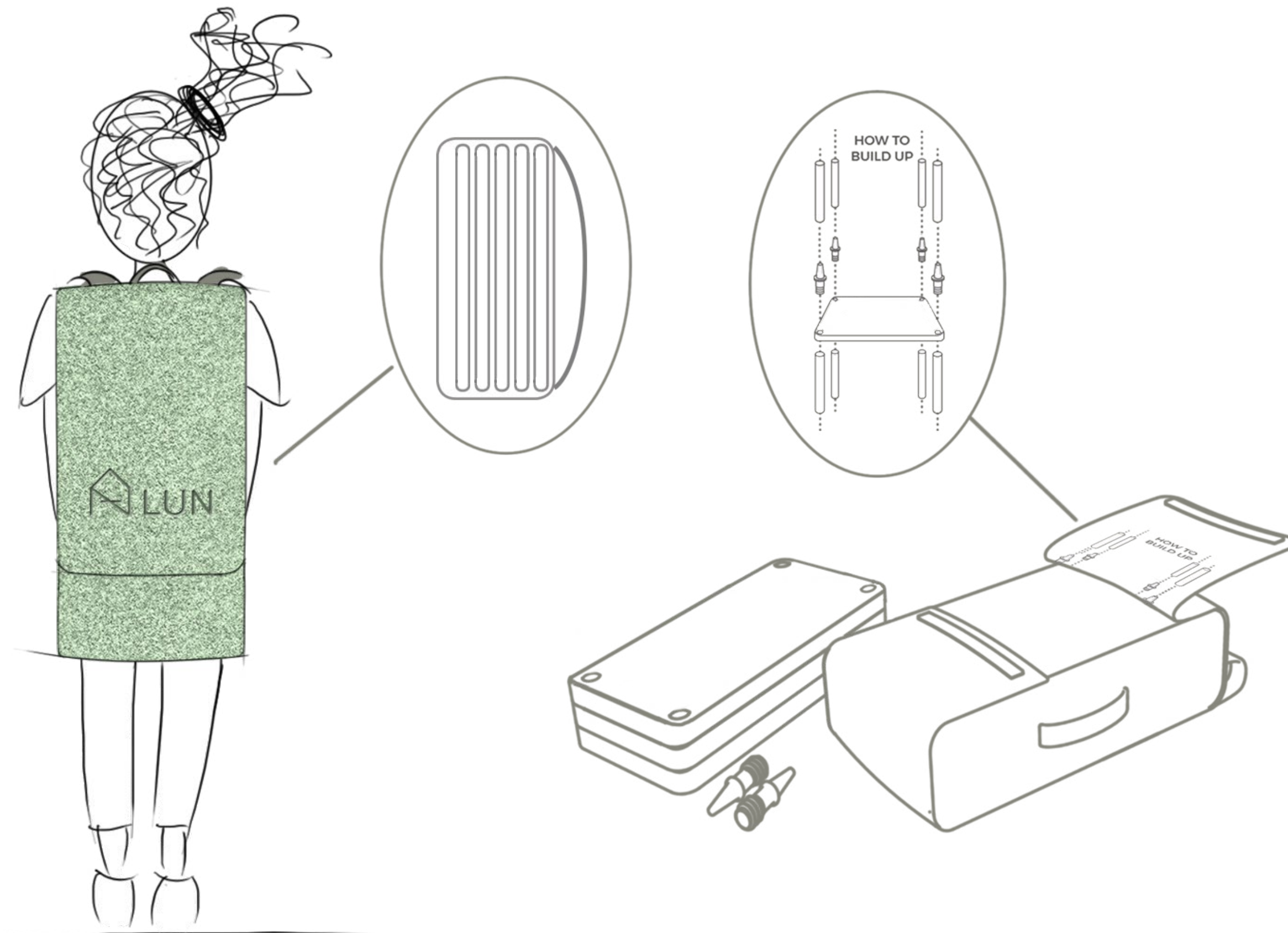
ABLE TO RECYCLE  
LOW WEIGHT  
EASY TO TRANSPORT  
NO TOOLS  
LONG LIVING

## Applications

This system offers many ways of **applications** for every taste and age, like a **baby changing wardrobe**, a **cave to hide and play** and **a wardrobe**.

LUN has a big focus on sustainability. There is an eye on **organic materials**, but also on long use through adaption.

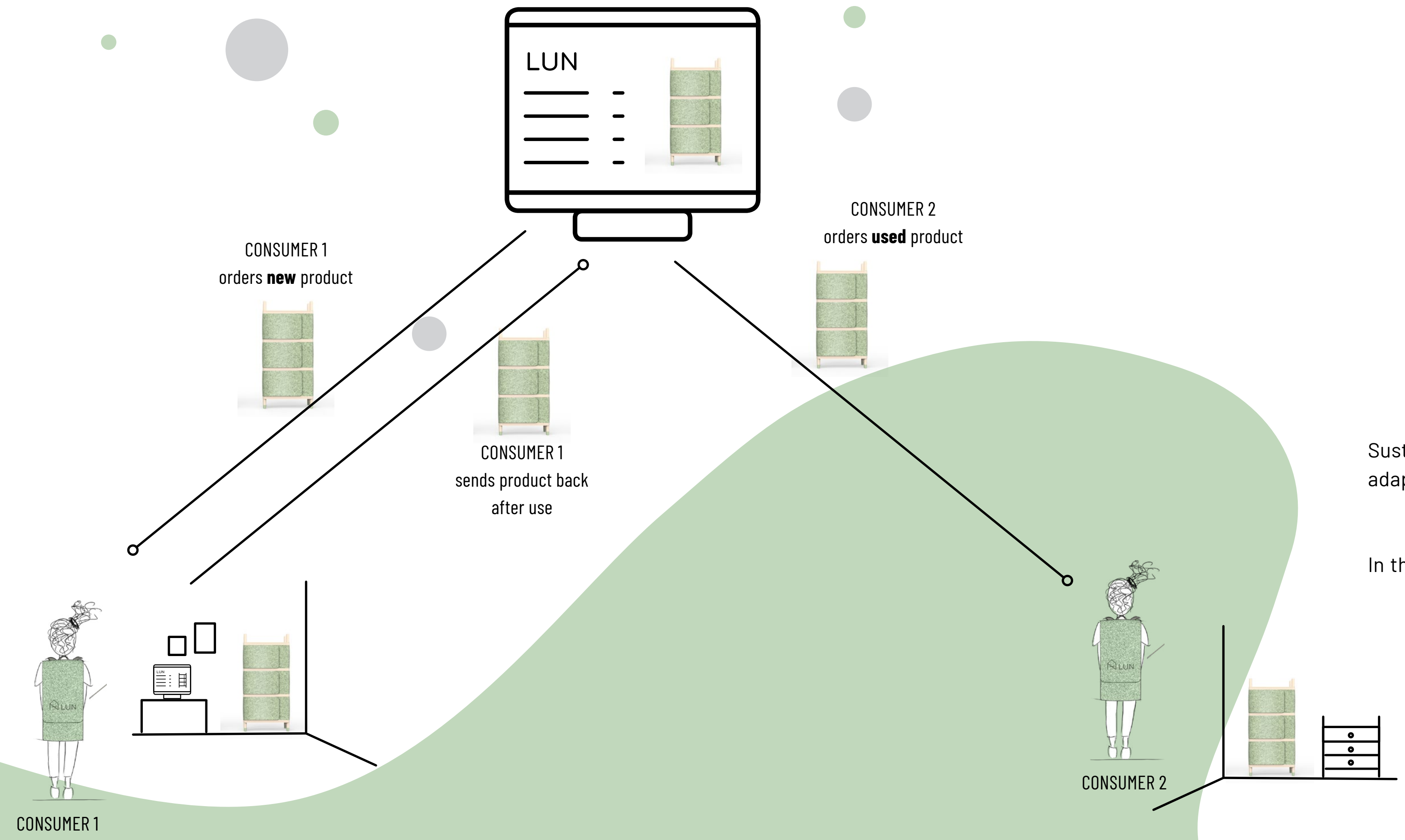




## Packaging

This furniture is made to be built up and dismantled fast and easy.  
But how to bring all the single pieces to the new place?

LUN is delivered in a **felt backpack**. So, when you are moving pack the backpack and carry it like any other one.



## Retail Concept

Sustainability is thought deeper in the retail concept. Even with adaptations there may come the point, where the furniture isn't needed anymore.

In this case, you can **send back the furniture**, it will **be repaired**, and some can **rebuy it for a reduced price**.



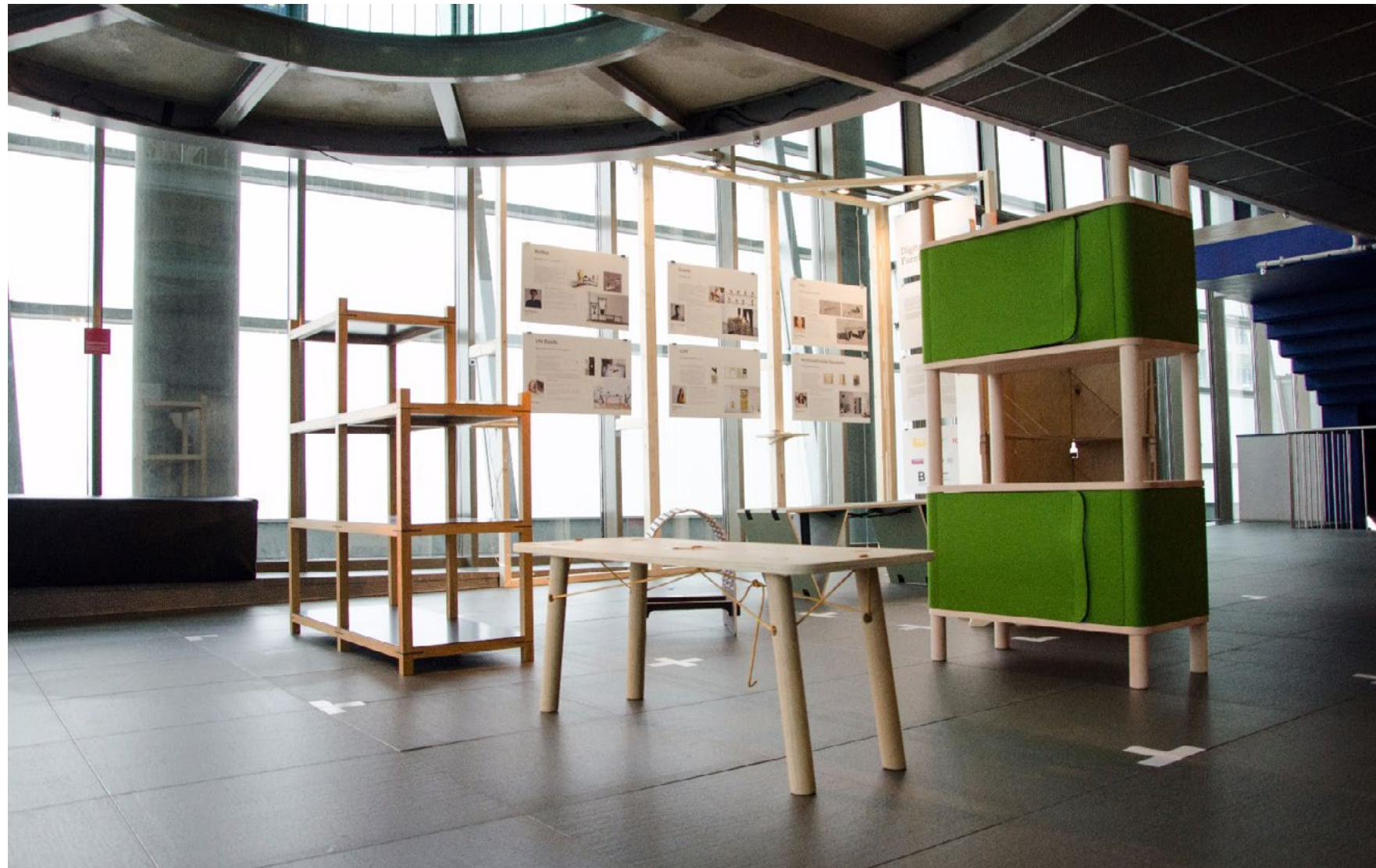


## Prototype

We were happy in this case to get help and financial support by our cooperation partners to have professionals done the prototypes.

Capenter Wittmann GmbH  
Textile ALOM Manufaktur Haslach





## Exhibitions

This nice prototypes opened us the doors to several exhibitions

BestOFF 2018 University of Art Linz | Linz  
DesignLovers at küchenwohntrends 2019 | Salzburg  
Forum Innovation 2019 | Linz









## **LePeu [Hangman]**

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2nd year | 4 days | team project | Maiworkshop

We all have things we do not use anymore. Adding value can change a product and give it a second life.

What can you make out of "shoulder shaper for hanger" found in your grandmother's wardrobe?





**YOU ARE ALL HIRED!**

**WELCOME ON BOARD,  
YOU ARE THE DESIGN  
TEAMS FOR THESE PRODUCTS.**



**Process**

During a one-week project workshop titled **„second life instead of second hand“** under the direction of Sander Hofstee at the Art University Linz some products whose use was apparently no longer valued should undergo a transformation.

The basic principle of the workshop was the so-called **„intrinsic value“** of a product not only in the value of its material but also in its function.

Having this **“shoulder shaper for hanger”** in hand, we immediately had this image of a **“baroque mirror”** in our heads.











# Home Automation Concepts for Elderly

---

5th year | individual project | collaboration: Loxone

Do you also have some **family member** or **friend**, you care a lot about because he/she is not in that good condition anymore?

**New technologies** are making our **life easier** in so many ways. Why not also support elderlies by home automation?





## How might *new technologies* support *elder people* in their homes?

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### Elderly care

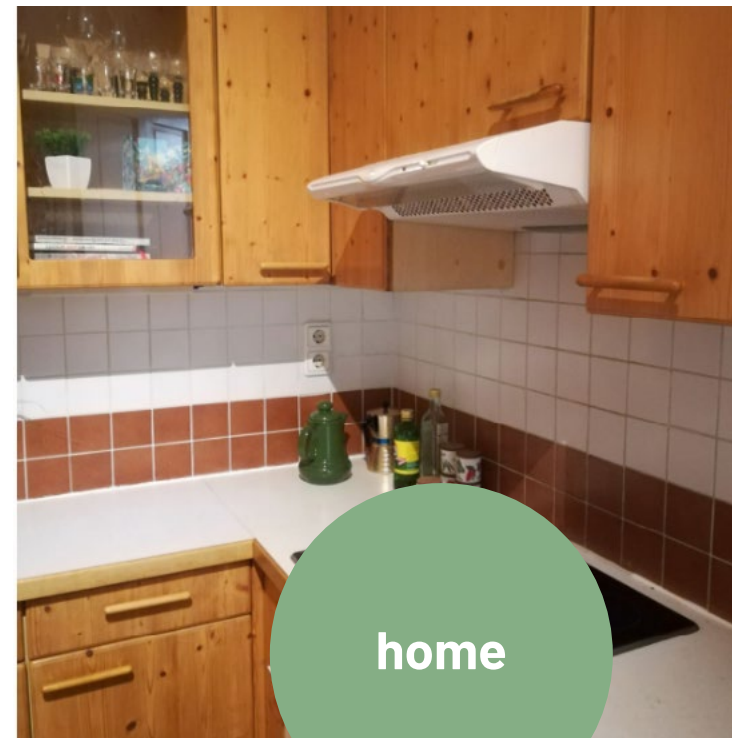
Demographic Aspects are changing. Research indicates that by **2030** every **third Austrian** will be over **sixty years**.

In the Western world lives and so **family structures** too have **changed** a lot the last decades. This has an huge impact on caring for elderlies. It is not just a family topic anymore, but a governmental issue.

As the number of people in **need of care** is **rising**, caring needs to be thought new.



## contextuel interviews - insights



home



assisted  
living  
residence



old  
people  
home

"It feels better, to know there is somebody close to help me."

"An appropriate housing helps me to do things again on my own, which I couldn't do anymore."

## interviews

In the first step it was important to get some impressions how the **generation 60+** is living and to hear about their **issues in everyday life.**

## expert interviews - insights



**Nicole B.**

**[ Competence Manger for Seniors of a social service organisation ]**

"People are afraid of being alone when they need help"

"Simple tools are needed, there is no wish for gamification"

"Money is an essential factor"

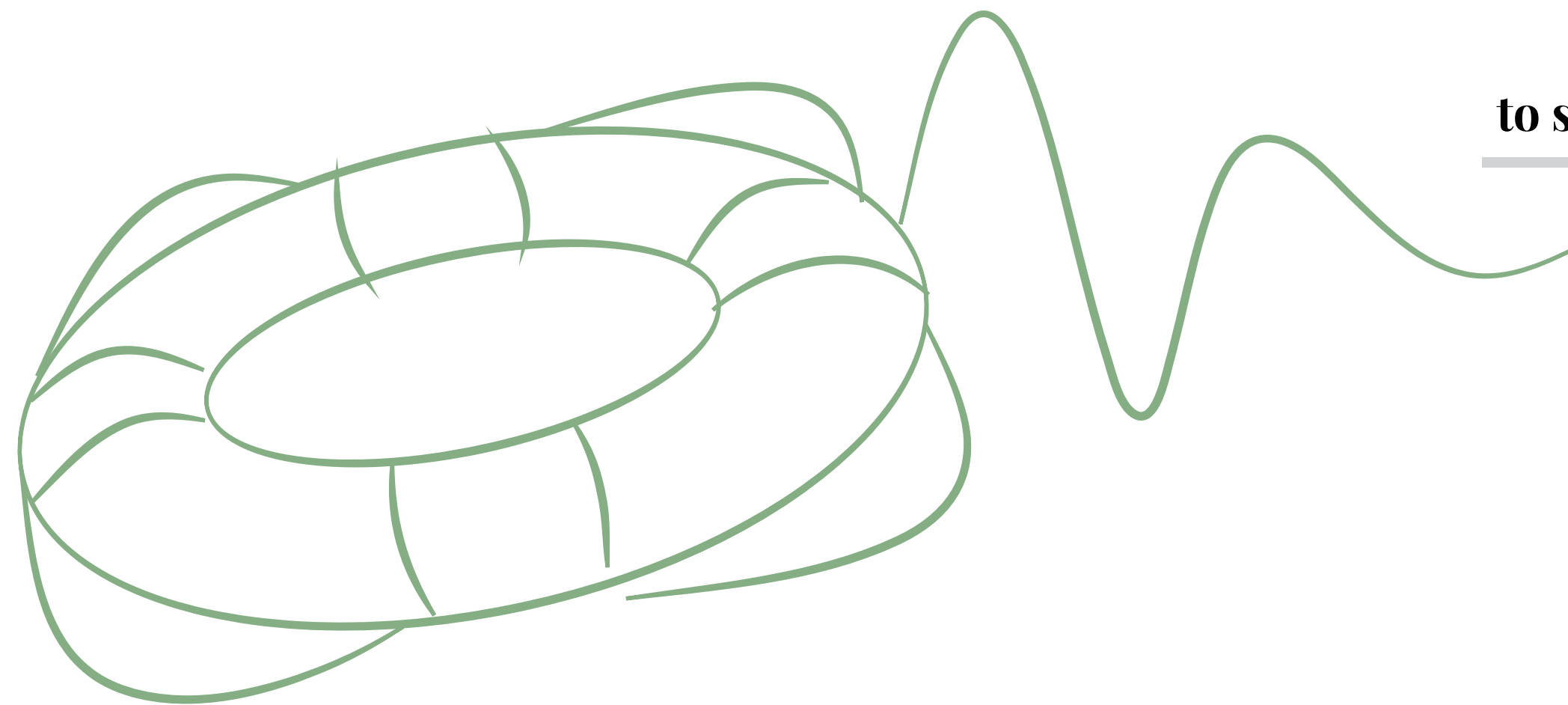


**Daniela S.**

**[ medical assistant ]**

"Few people can foresee health problems."

"Even with the same disease emergencies vary a lot."



## creating a tool to simplify communication

## insight

The big **understanding** of listening and gathering information was, that **communication is the key**.

The possibility of being able to communicate **supports mentally**. This means less anxiety and not getting so easy in a downgrade spiral.

New technologies like **Smart Homes** will provide offer **additional help**, like adapting housing to the user's needs at any exact moment.







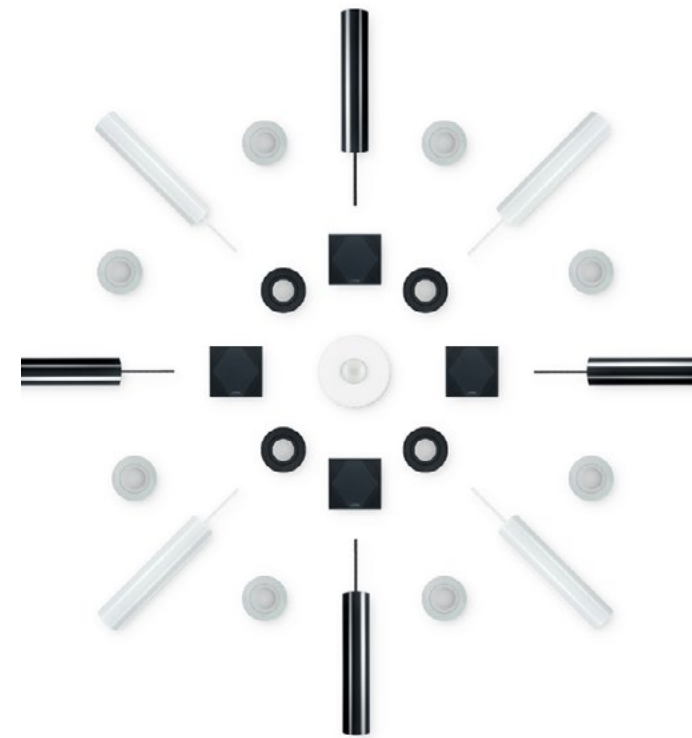
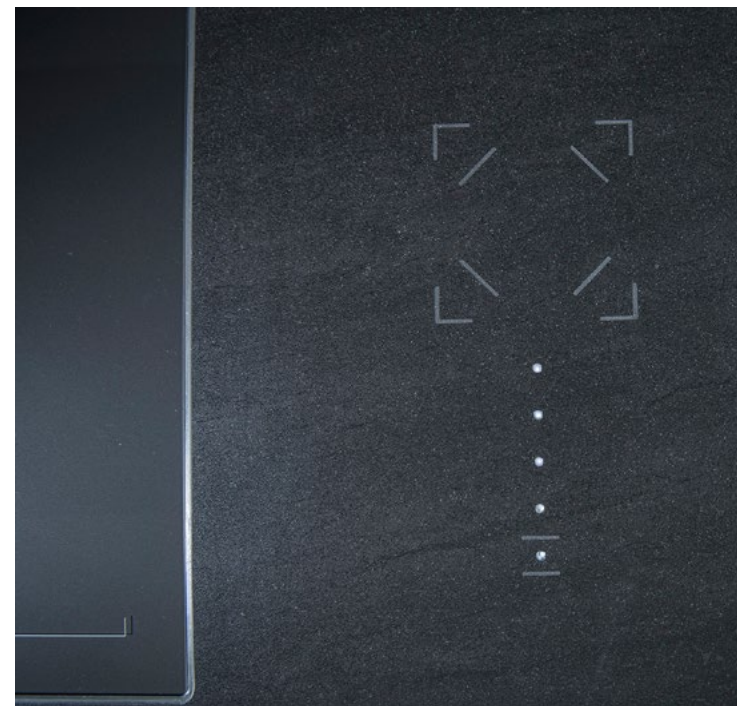


**secondary research market**

The market research showed that products **health tracking** became **lifestyle products** and others for **emergencies** are **hardly used**. This all **comes with design and stigma**.

We all know that our body at 60 won't work as good as our body at 20. We are all afraid of this. Products shouldn't remember you of pain points but support you to keep on going.

LOXONE ■■□



### brand analysis

simple interactions [but ones the user has to learn]  
reduction to the maximum  
hard basic shapes  
helping hand  
real smart home now gimmicks  
on track of newest technology



MAINSTREAM

Erna  
[74]



Erna lives together with her family in a **house** in the **rural region** of Austria. As all other family members are working, she is **alone** at home **most time**. When she was younger, she decided to live in the first floor, to have a nice view into the mountains from her balcony.

But nowadays she feels the age in her bones. She often suffers from **dizziness**, which already caused some falls. The **fear of falling** again and hurting herself keeps her **stuck** into her rooms in the first floor.

EXTREME

Helmut  
[63]



Helmut could already have retired, but he loves his in **work in finance**. Though being generation 60+, he is really into technology, and so always on the run for the newest phone. You could describe him as a real **workaholic**, working a lot, sleeping little, eating between meetings and having a cigarette to relax.

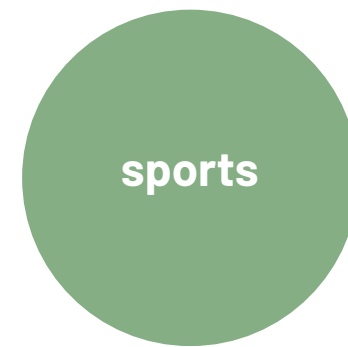
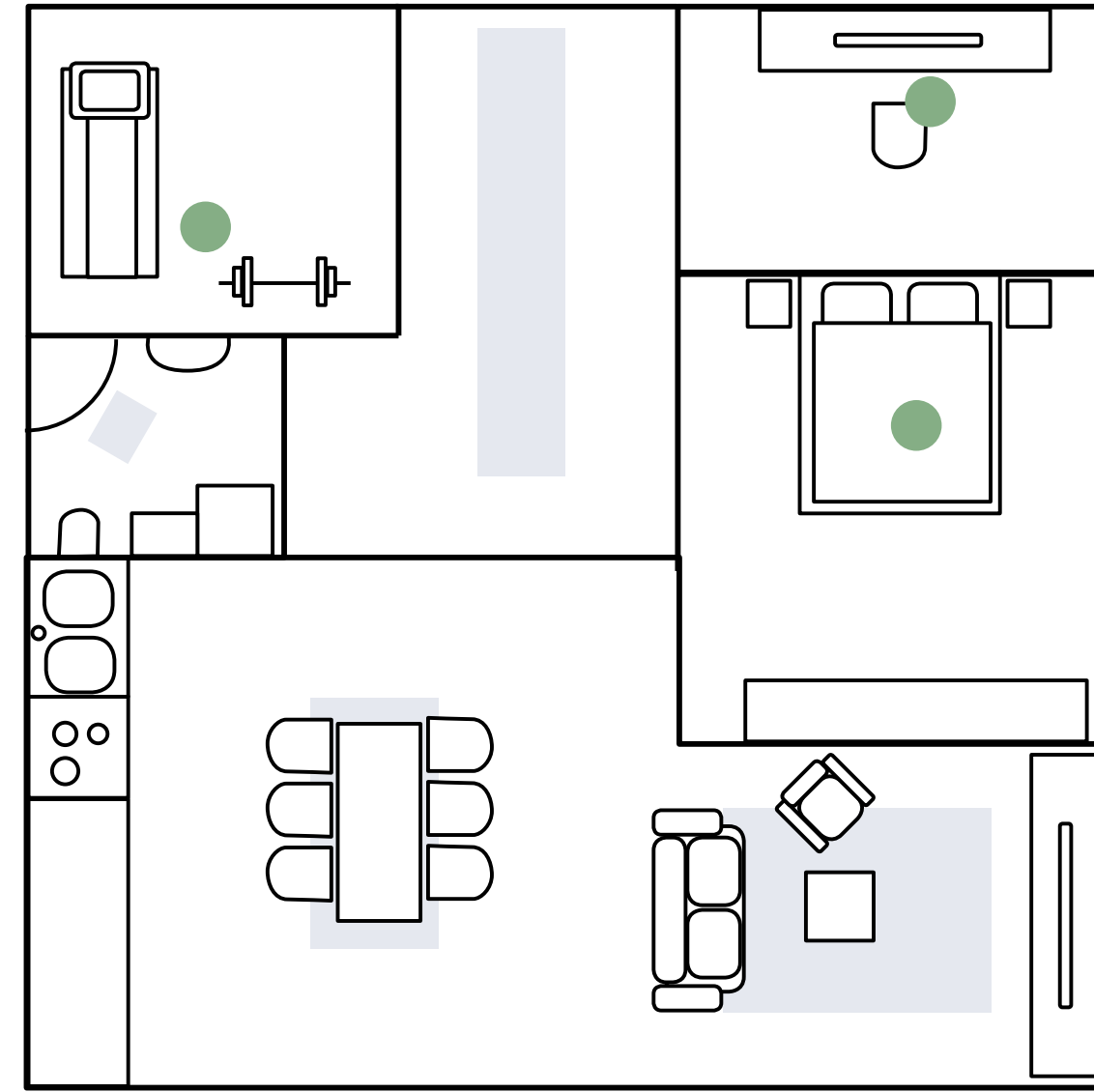
This all caused **coronary heart** disease and his first heart attack. As he knows the next one could end worse, he is wearing a **smartwatch** to help him in emergency. But there are situations where he would prefer **not to be depended on a body device**.

Persona

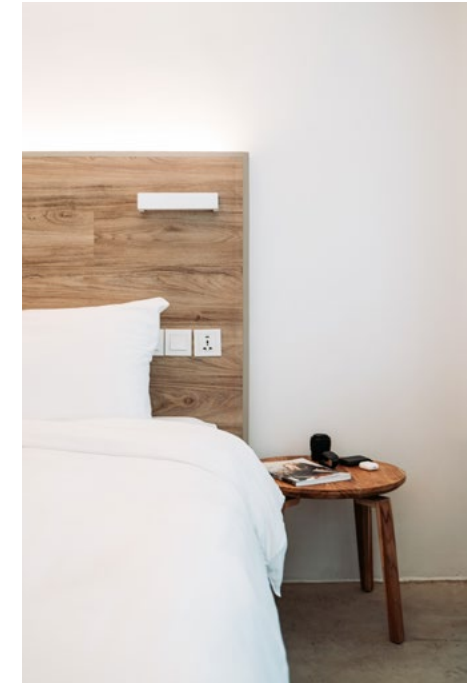




**Where is it likely to fall?**  
flat Erna



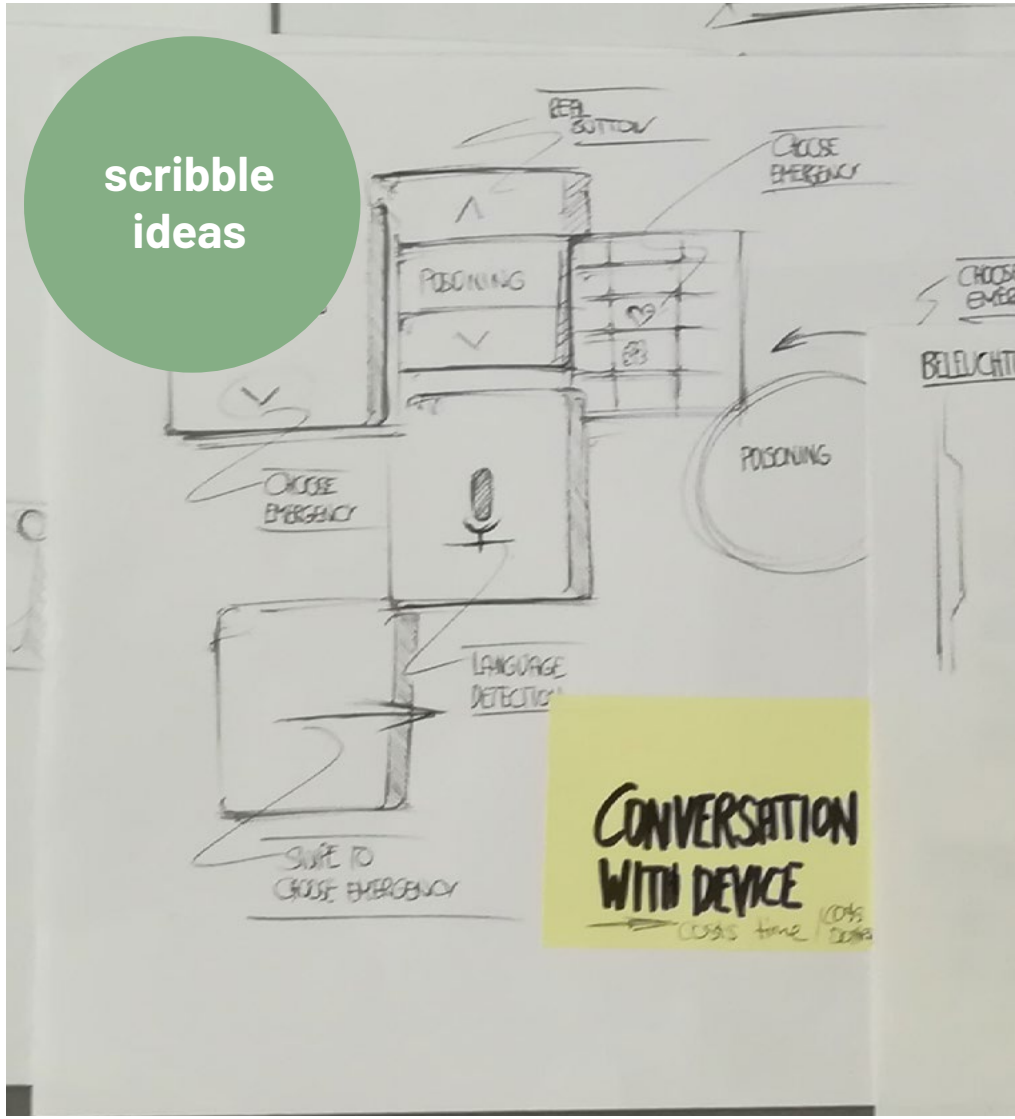
**Where is it likely to get an heart attack?**  
flat Helmut



## Synthesis - Where is help needed?

To bring the story alive, personas gave faces to the data and additionally, flats were visualized to get a feeling how people are living and where actual problems spots in different housings for different health issues are.





scribble ideas



rough first prototypes



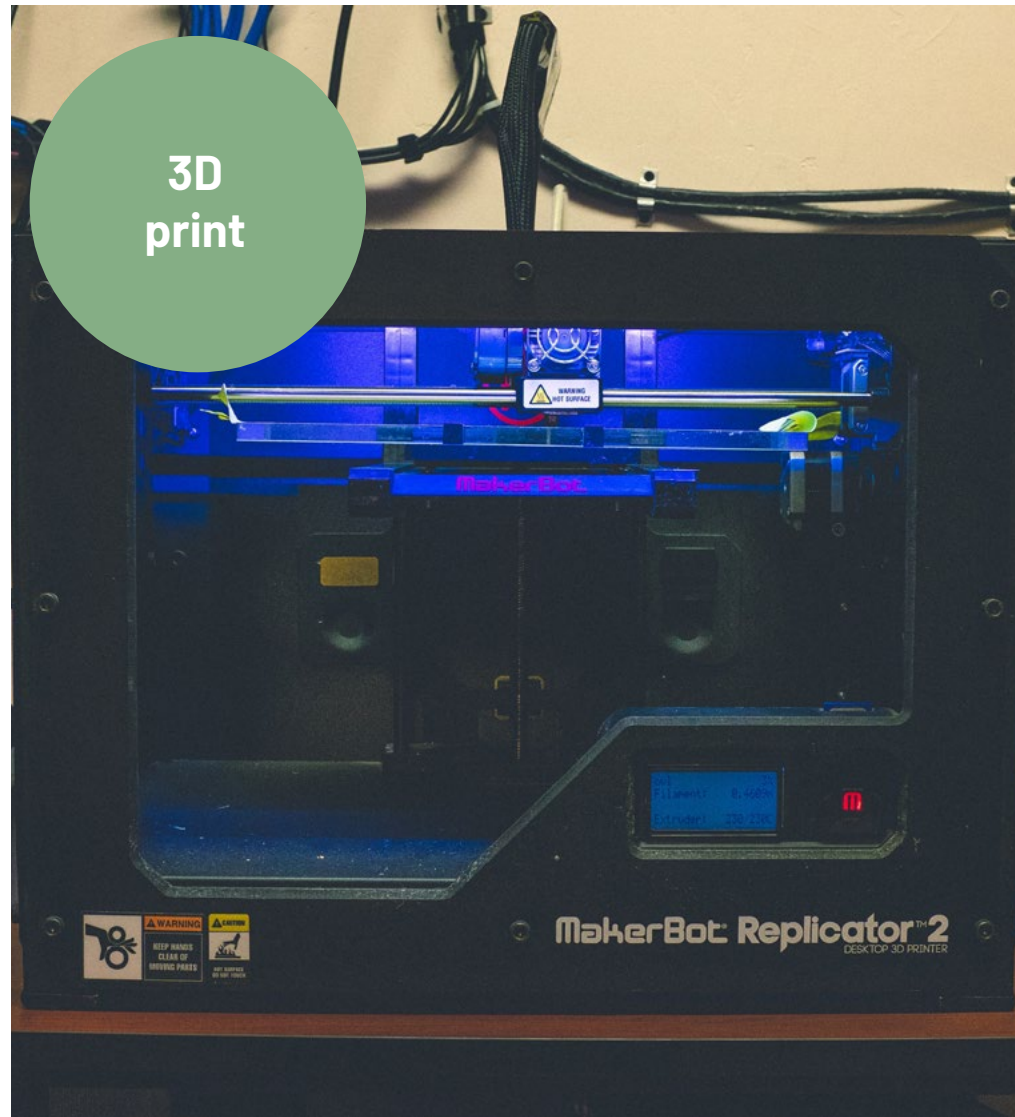
foam mock ups



wireframing



Arduino



3D print

working process



**I'd love to share this idea with you,  
but unfortunately this is very confidential**

---





# DrinkFit

3rd year | 4 months | individual project | class: User Experience Design

Health is essential to have a decent life. In the Western world we are privileged to have good medical infrastructure, but as result of our ways of life we often harm our body.

DrinkFit is the result of first time really dealing with UX tools, digital products and service design.





## How might *we improve health in everyday places?*

---

### health issues

Health is an important topic to care about in our life. The task of this class was to find a service which can improve our well-being in life.

In group we started a **World Café** to get an overview of the topic. The following three questions should help to delve into the topic:

What does **influence health**?

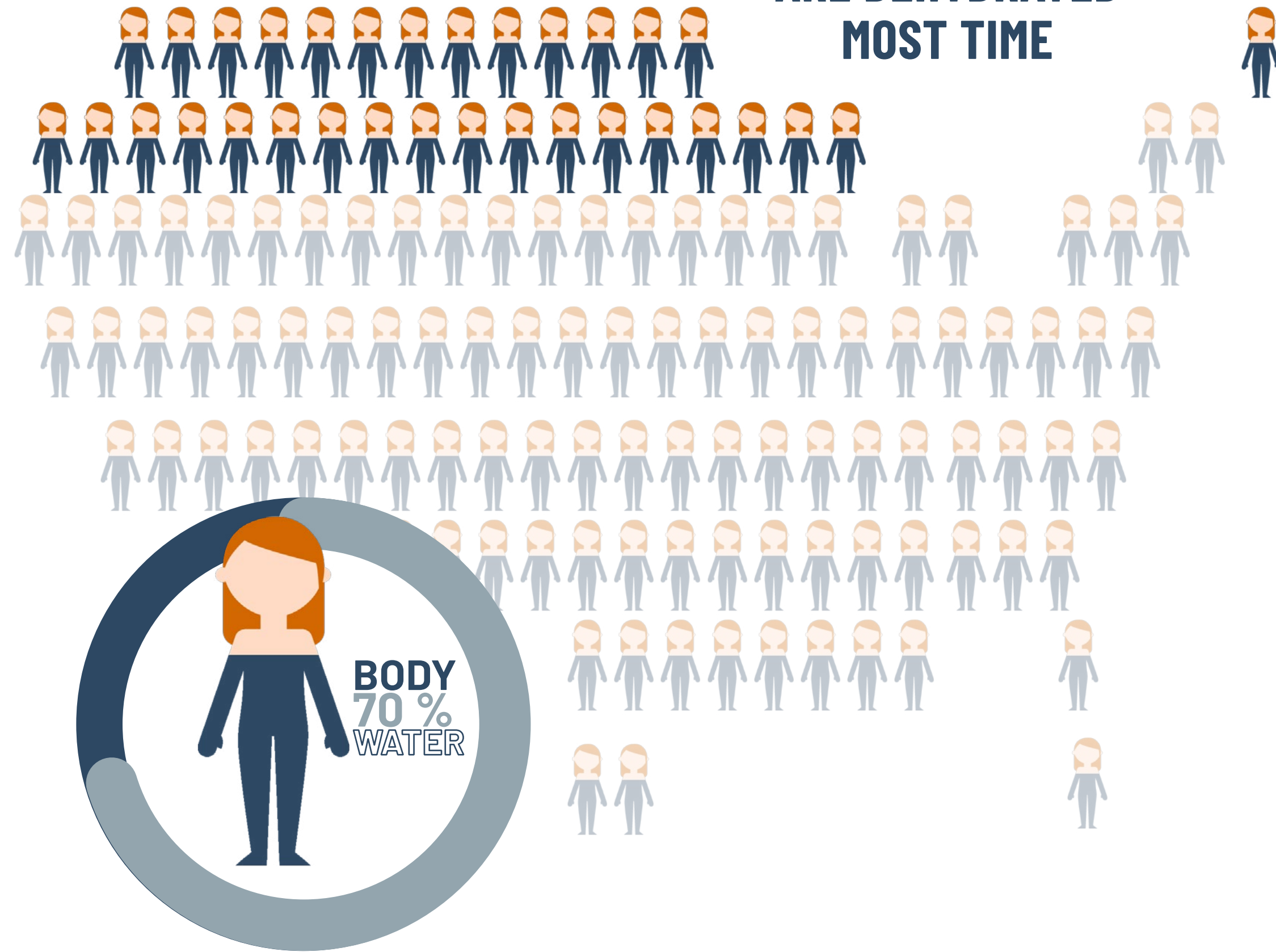
What are **everyday places**?

Which services and applications could **people wish in the future**?

My understanding out of this was to separate in **mental health** and **physical health** for the first, and second that there exist everyday places where we **have to be** and where we **can choose to be**.



## 75 % OF ALL AMERICANS ARE DEHYDRATED MOST TIME



### health issues

Health is complex, there are so **many factors influencing how we feel**. To improve you will probably get tips like do sport, see what you eat and take time for yourself.

One question also asked is, **"Do you drink enough water?"** Though we are having quite easy access to drinking water in the Western world, research indicates 75 % of all Americans are dehydrated most of the time.

Dehydration **greater impact** on us than thought at first glance, so it makes us feel **unmotivated**, gives us **headache** and let **increase weight**.

### **HOW MIGHT WE MOTIVATE PEOPLE TO DRINK MORE?**



## INTERVIEW GUIDE

What kind of job do you have?

Can you tell me about your daily routine?  
Are there any fix points in your day?

What do you do to motivate yourself?

How much do you drink a day?

What do you like to drink?

Do reach your daily goals of consumption?

If yes, could you tell me what motivates you to do so?

If yes, do you have some tips?

If no, do you have any idea why you don't reach the amount?

## INSIGHTS

“It might sound stupid, but it did one of this internet challenges, and it was enough to get a routine.”

“I change my working place a lot during the day, that is when i forget to bring water.”

“ I am very good at ignoring annoying stuff, so an alarm on the phone would not improve the situation for me.”

“As I am a very competitive person, I could imagine that challenges with other users can help.”

“It sounds stupid, but it did one of this internet challenges, and it was enough to get a routine.”



## interviews

Some people **drink enough** every day without even thinking about it, others **struggle hard**.

The interviews should show if there is any **obvious difference** between these two groups. Does it depend on the daily environment, the kind of what work or are there other factors too?

To help people getting a routine, people already having one were asked for **tips**.





**Paul, 32, Hagenberg**

software engineer  
married and father of two children  
loves gaming



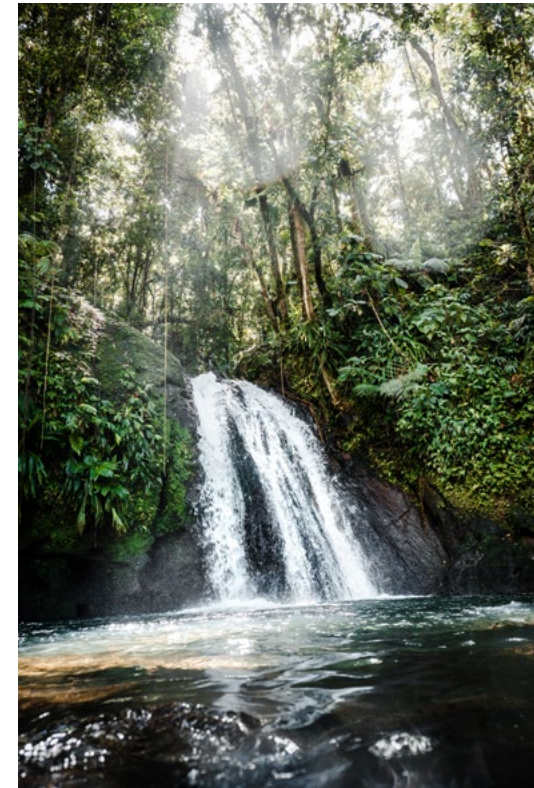
**Montserrat**  
Montserrat  
Montserrat



**attentiveness**  
slow down  
me-time



**easy**  
simple  
for everybody



**JOSEFIN**  
**SANS**



**fit**  
**happy**  
**motivation**

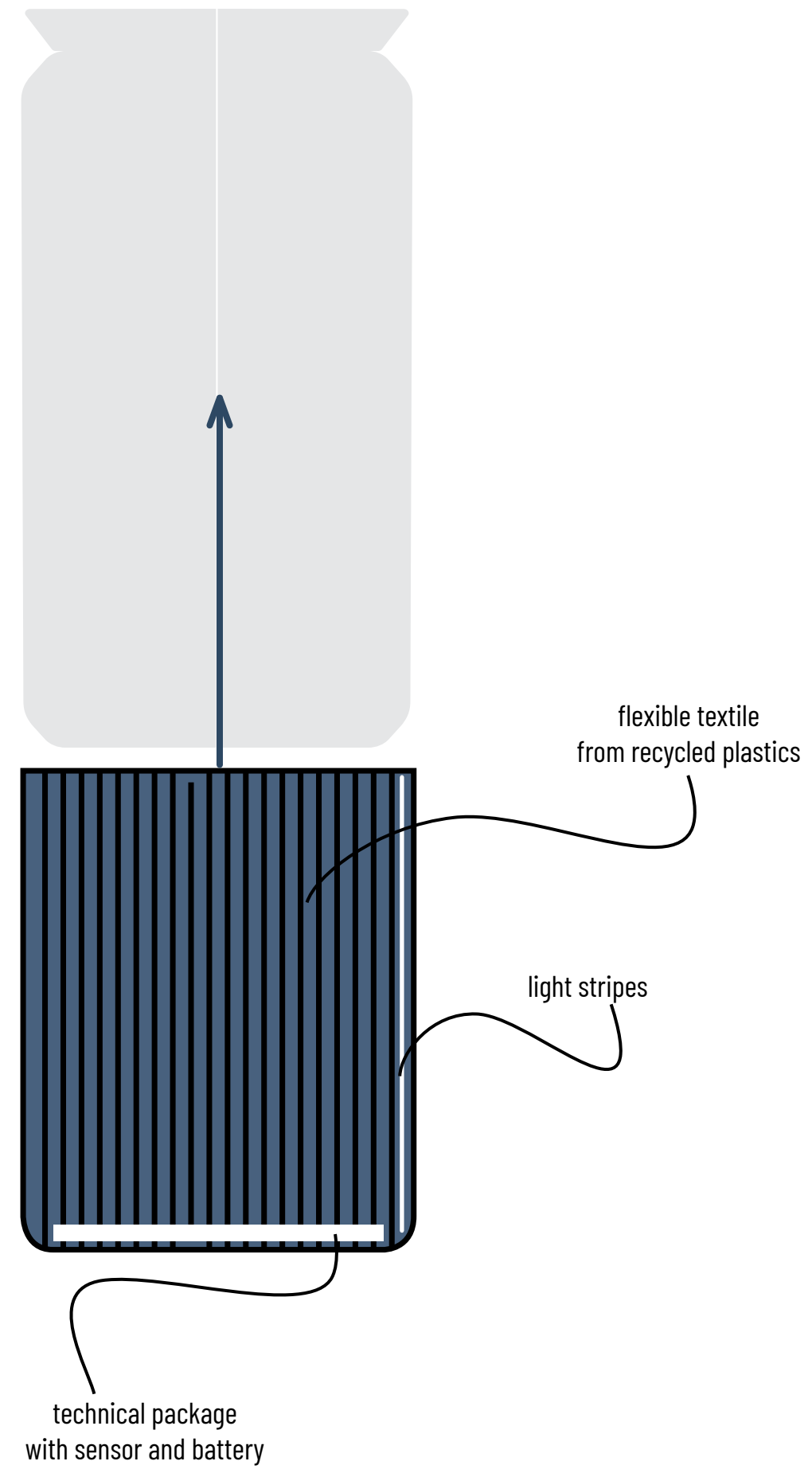
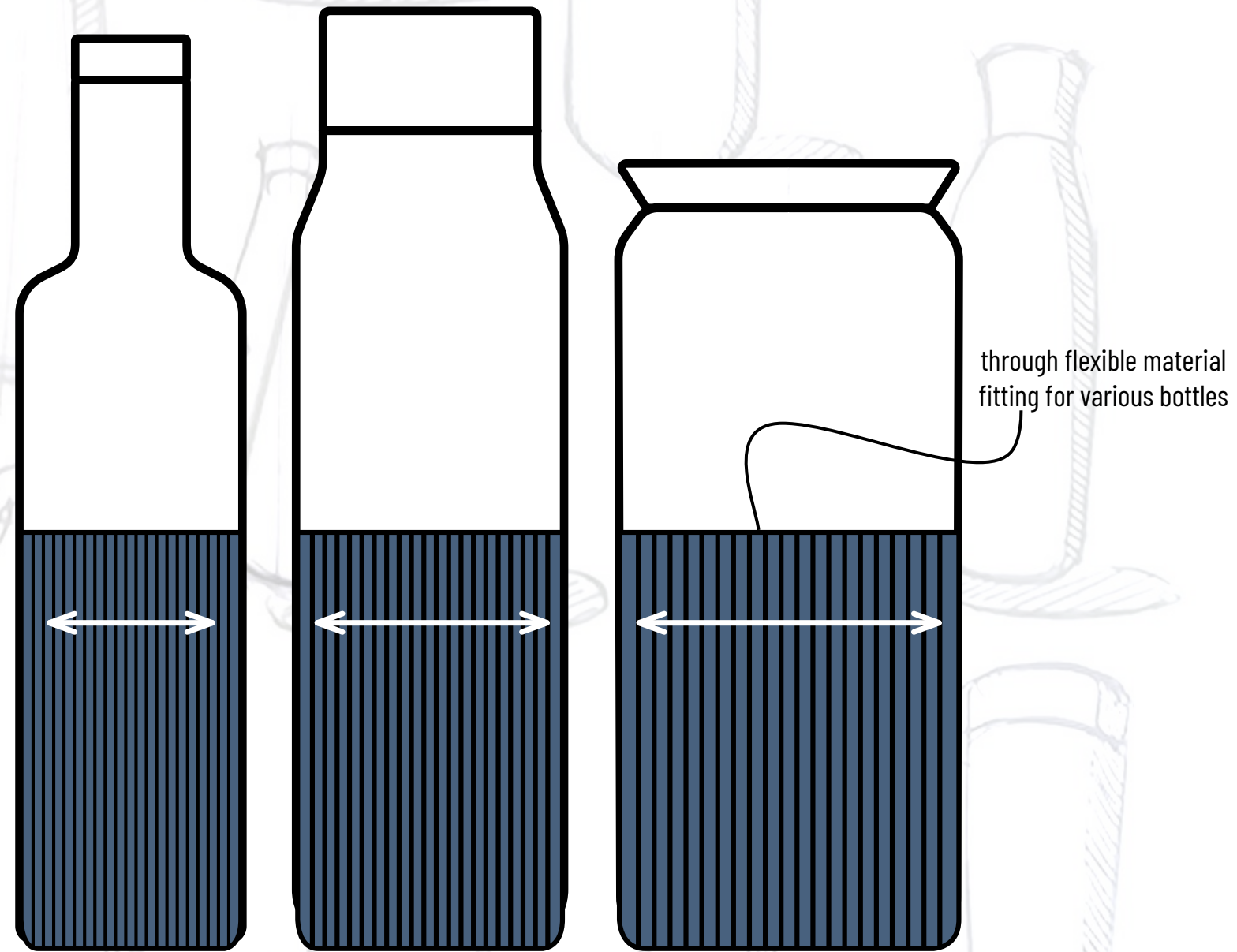
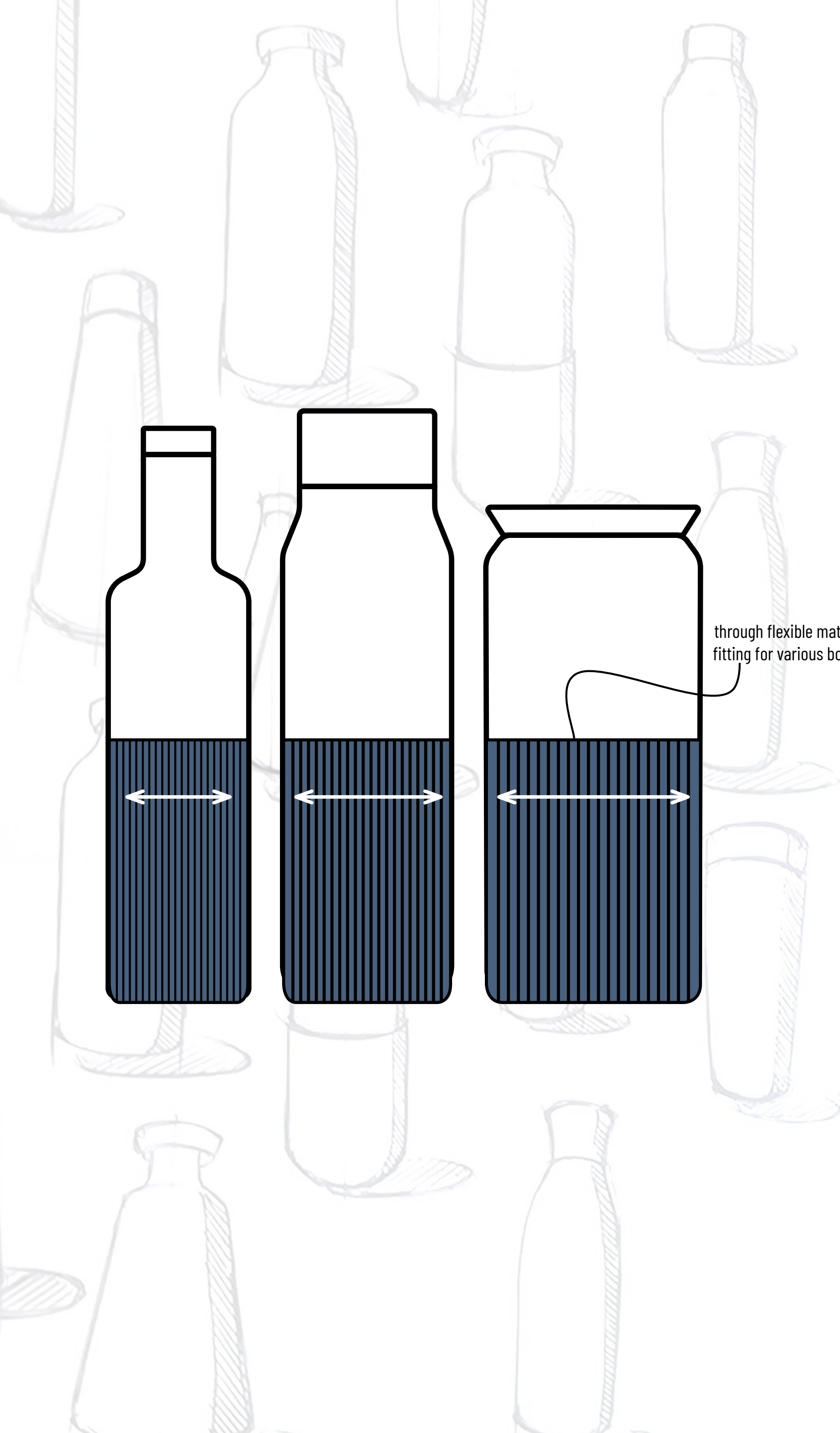


**Franka, 27, Vienna**

studied communications  
recently started working in marketing  
sustainability is an important topic  
mostly going by bike

mood



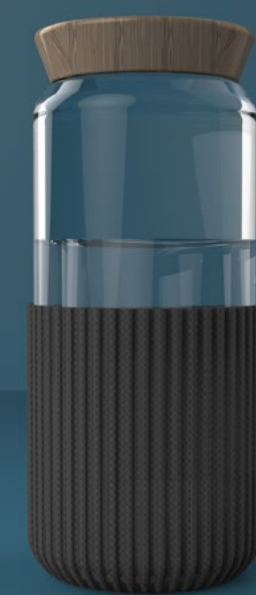
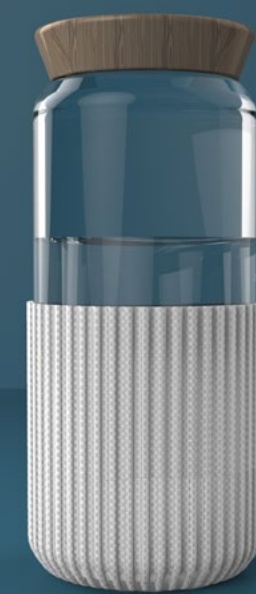
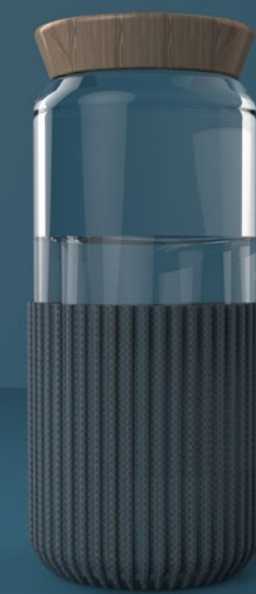
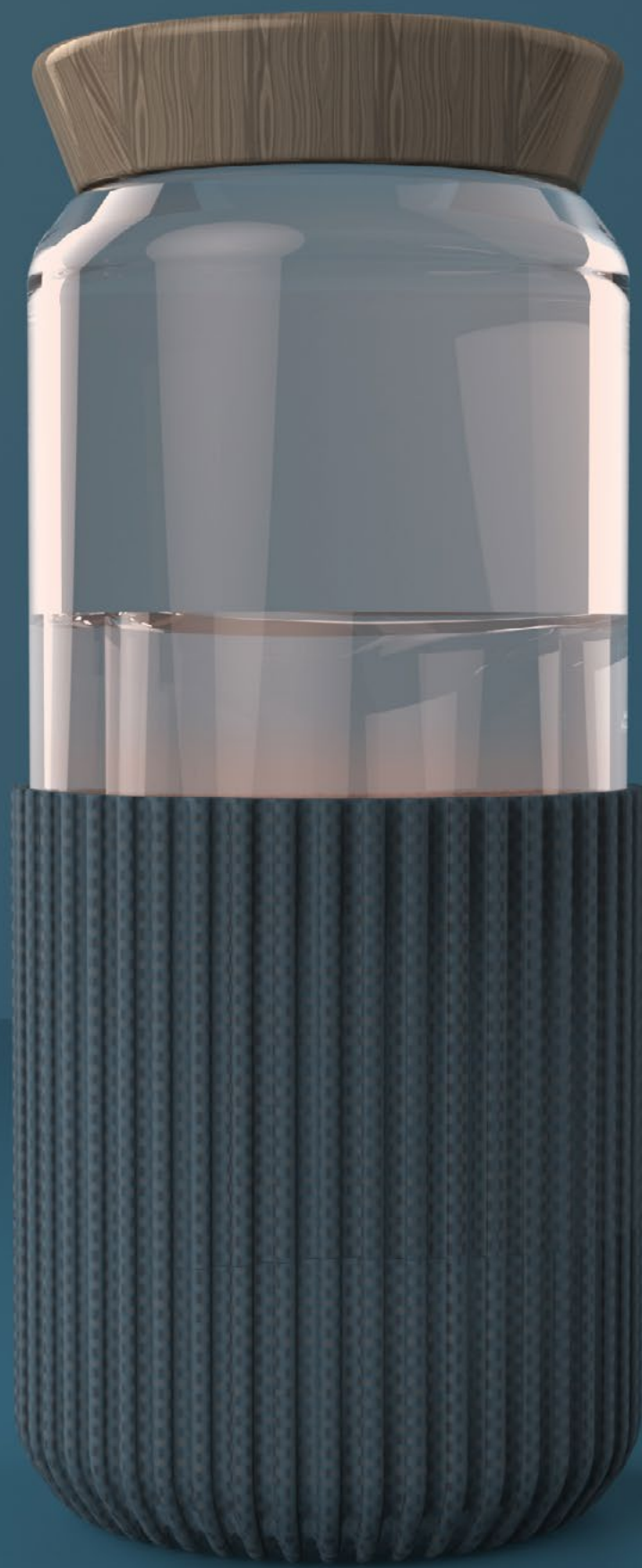


## concept

The service here combines an **intelligent sleeve for bottles**, which tracks your water consume, and **an application**. A **light** in the sleeve turns **red** as a soft reminder if you didn't drink enough during the day.

The interviews showed, that everybody prefers a different bottle, some might prefer glass because of sustainability, others plastic because of lightweight - sometimes it even changes between activities. To meet as many needs as possible a size-adaptable sleeve was created.





## sleeve design

The design of the sleeve kept quite **simple** for a broad target group. The **ripple** of the flexible textile from recycled plastics allows **stretching** the material even more to fit different bottles.

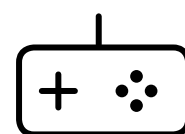
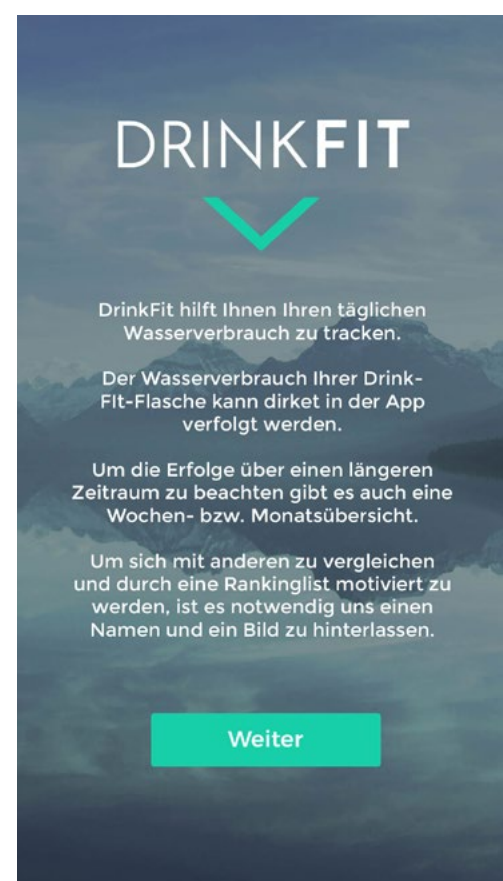
available in 3 colors



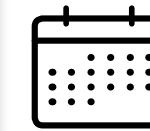




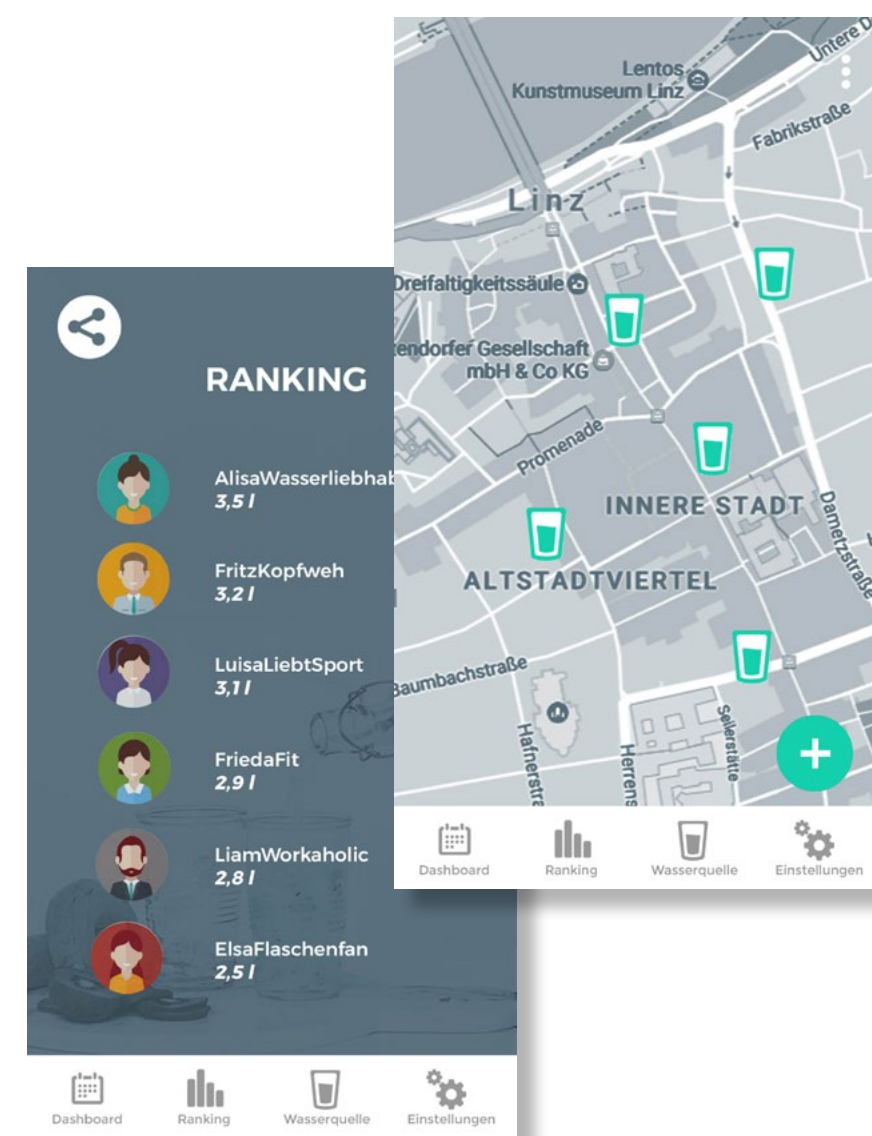
ranking dopamin  
paper prototyp  
supportive



You have a lack of motivation?  
Others did it, you can do it too!



You get a daily, weekly and monthly  
overview, how much you drank.  
Compare how you feel to your water  
consumption!



You are in a new city and your  
bottle is empty?  
DrinkFit will show you where to fill it up.

## screens

If you have drunken water but didn't use the bottle it is also possible to **add** the data **manually**. You can check your consume in a **daily, weekly, and monthly** dashboard.

As drinking water affects your body in various ways, the application allows you to **track your feelings, hours of sleep, level of energy and eventually illness**.



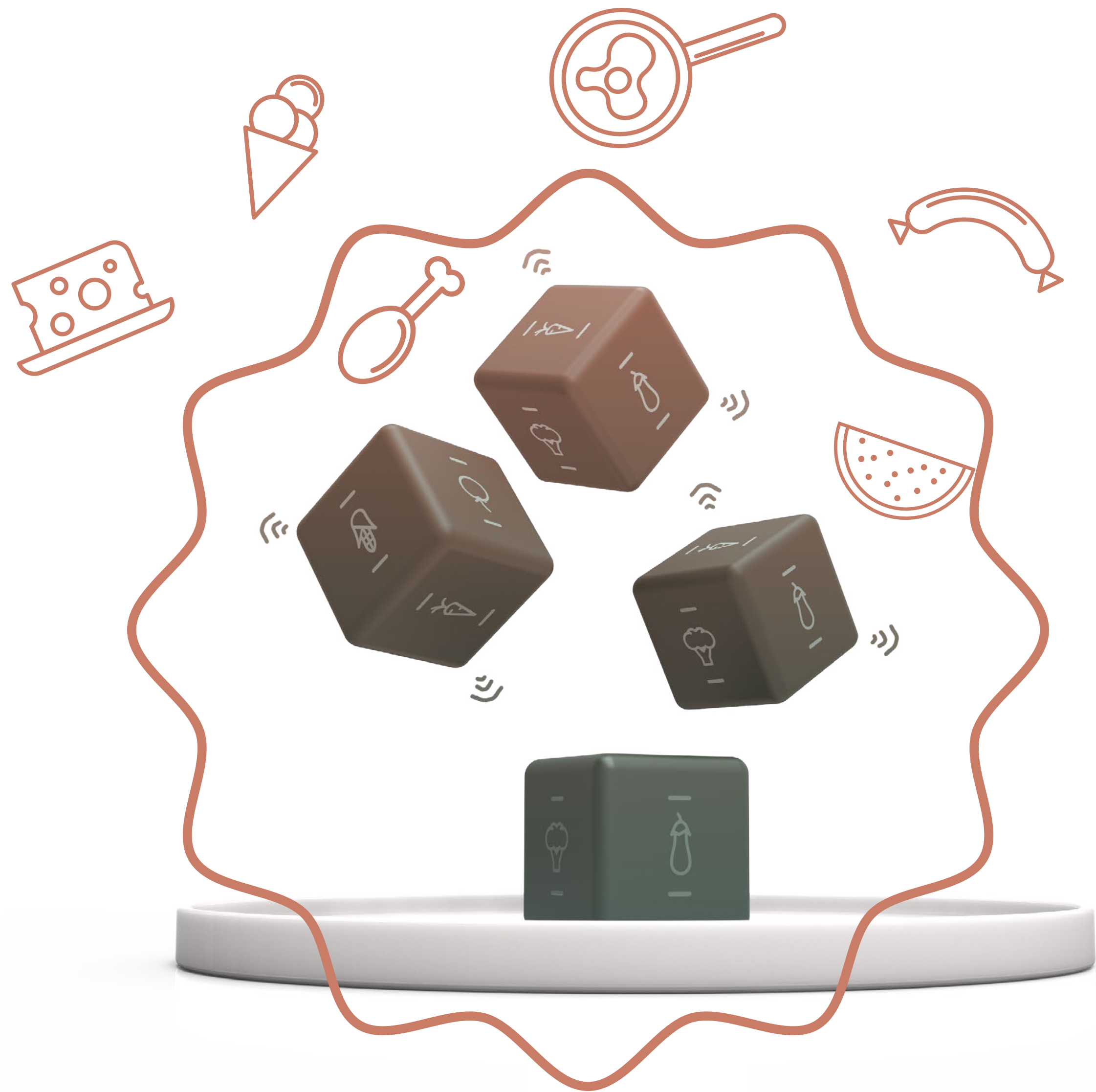


# DRINKFIT

DRINKFIT hilft Ihnen Ihren täglichen Wasserverbrauch zu tracken. Ihr Wasserverbrauch in der App verfolgt werden. Erfolge über einen längeren Zeitraum zu beachten gibt es auch eine Wochen- bzw. Monatsübersicht. Vergleich mit anderen zu vergleichen. Ein Rankinglist motiviert zu sein. Ist es notwendig uns einen Screenshot und ein Bild zu hinterlassen.

Weiter





## Alea

5th year | 2 months | individual project | class: Mechatronics and Sensorics

So many restaurants are stuck to **soulless paper** menus. How can we **change** that?

Alea brings digitalization and gamification into restaurants. It started in "mechatronics and sensorics" class and got designed on my own.





### BUCKET LIST

- Get a Tattoo
- Jump off a cliff
- Ride in a Hot Air Balloon
- Skydive
- Hold a monkey
- Dance in the Rain
- Travel on my own
- See a Coral Reef
- Stand under a waterfall
- Go with a postcard
- Work a Pottery wheel
- Buy art at a Second-hand

**How might  
we *enhance people to  
try something new?***

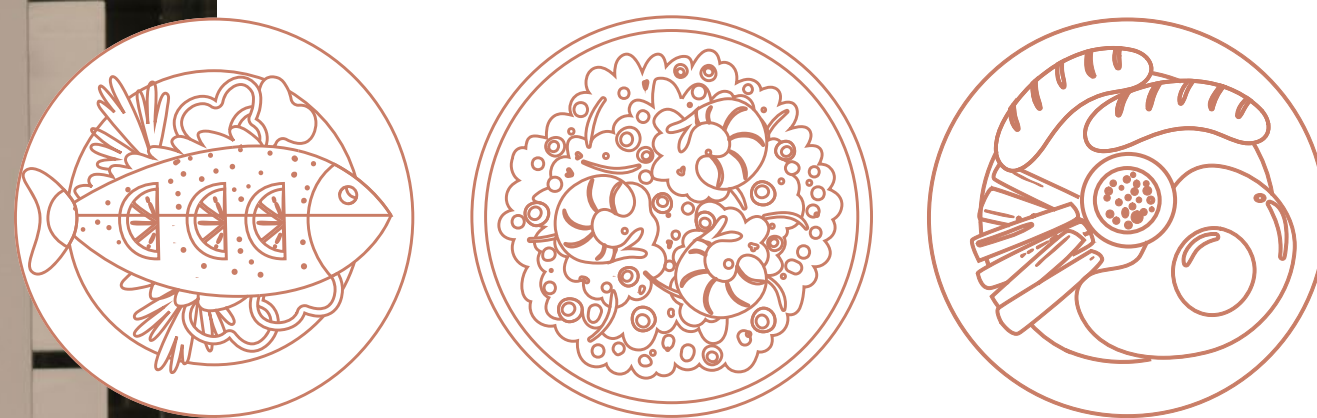
### Out of comfort zone!

*"The more you seek the uncomfortable,  
the more you will become comfortable."  
Conor McGregor*

*"Not to be in your comfort zone is great fun."  
Benedict Cumberbatch*

The "**flinch**" is the moment **shortly** before we **step out of our comfort zone**. When we overcome these moments, do not withdraw in the last moment, we will feel personal growth.





## Let's start simple! How often do you *choose new food* in a restaurant?

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### Eating out

We are having dinner out because we have to **celebrate** something, we want to have **nice time**, to **try new food** or just because we are **too lazy to cook**. Sometimes we also grab some Take-Away because we are in a hurry.

We do **romanticize** this experience. If we are honest, we have to tell ourselves that quite a lot of times it is not that perfect.

We went to this fancy restaurant to eat something different. We opened the menu - yeaah we already know it because we checked on the internet. We are reading. Thinking. Reading. Thinking. And after a long time end up taking the least special thing, to be sure we like it.





## Who?

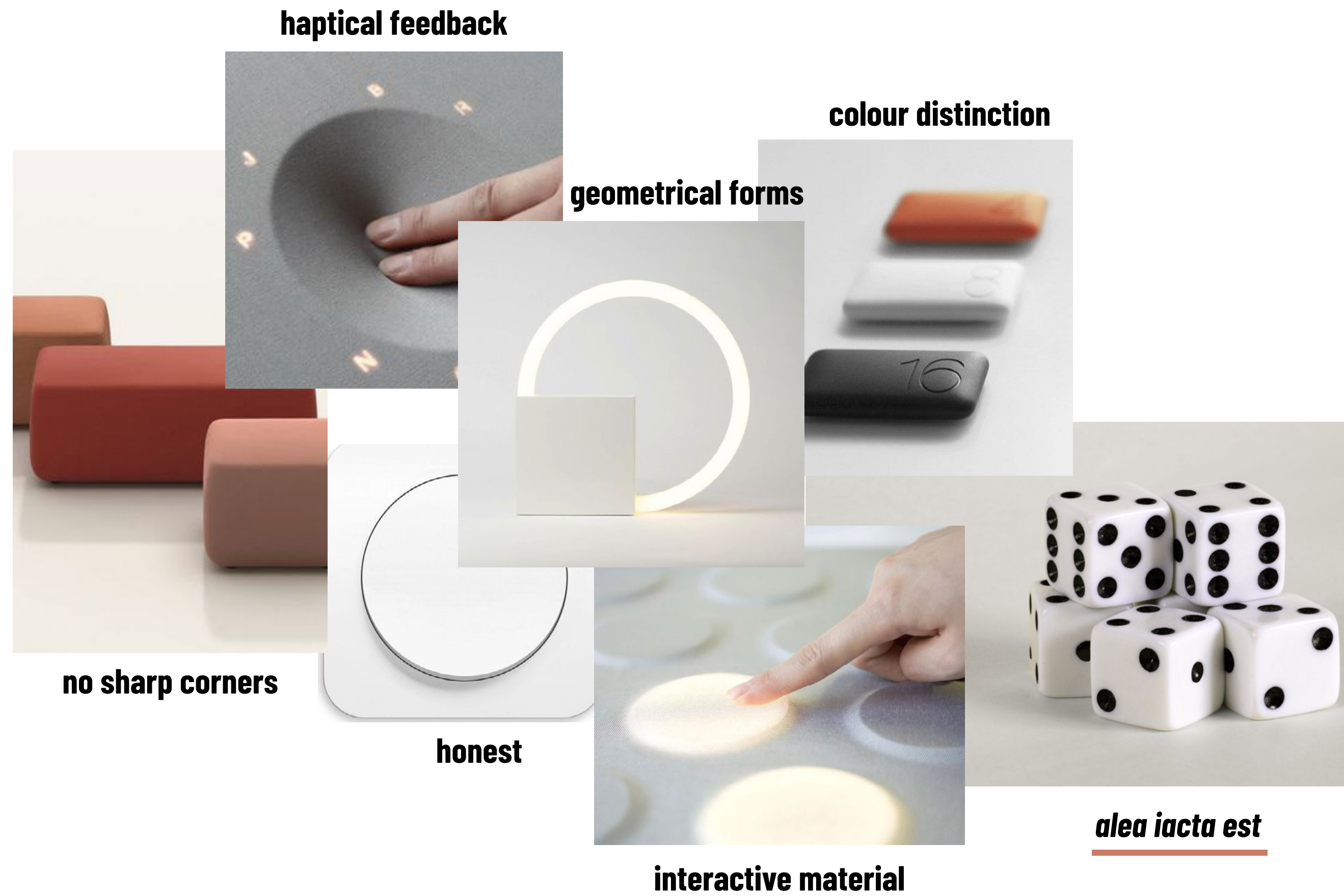
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Hi, I am Carol!

I am 26, born US-citizen and came for PhD in Social Studies to Vienna. I love to dance, read and enjoy spending sunny days outside. I would actually call myself a really open-minded person. Stories of people fascinate me, and so I am really into meeting new people - some friends would even call me to outgoing. In general, I love to be pushed out of comfort zone - I had a trip to the desert Sahara, I love swimming in cold water. But when it comes to food, I am really stuck close to my mother's food. I always push myself to order something new, especially in Europe with this big variety, but sometimes I just can't overcome it.

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## **Feel an Form**

This new tool should show represent the **modern** it brings to food place, should have a **material** fit to its sometimes not so clean surrounding and **still be intuitive** at its handling.

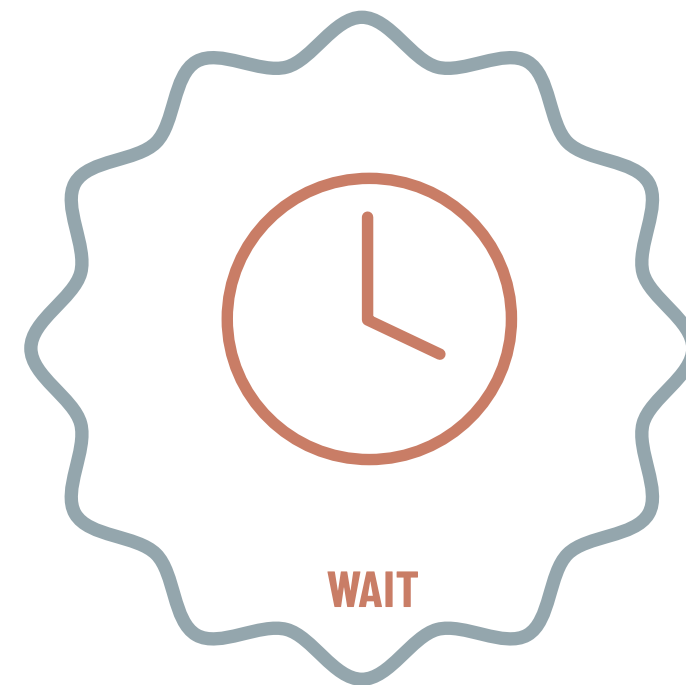




## Eating out

*Alea* brings **eating out** into the **digital world**. The gamification will give you a **new experience** - you are pushed into trying new food. Human interaction will be supported by a **lack of** known digital devices like **phones**.





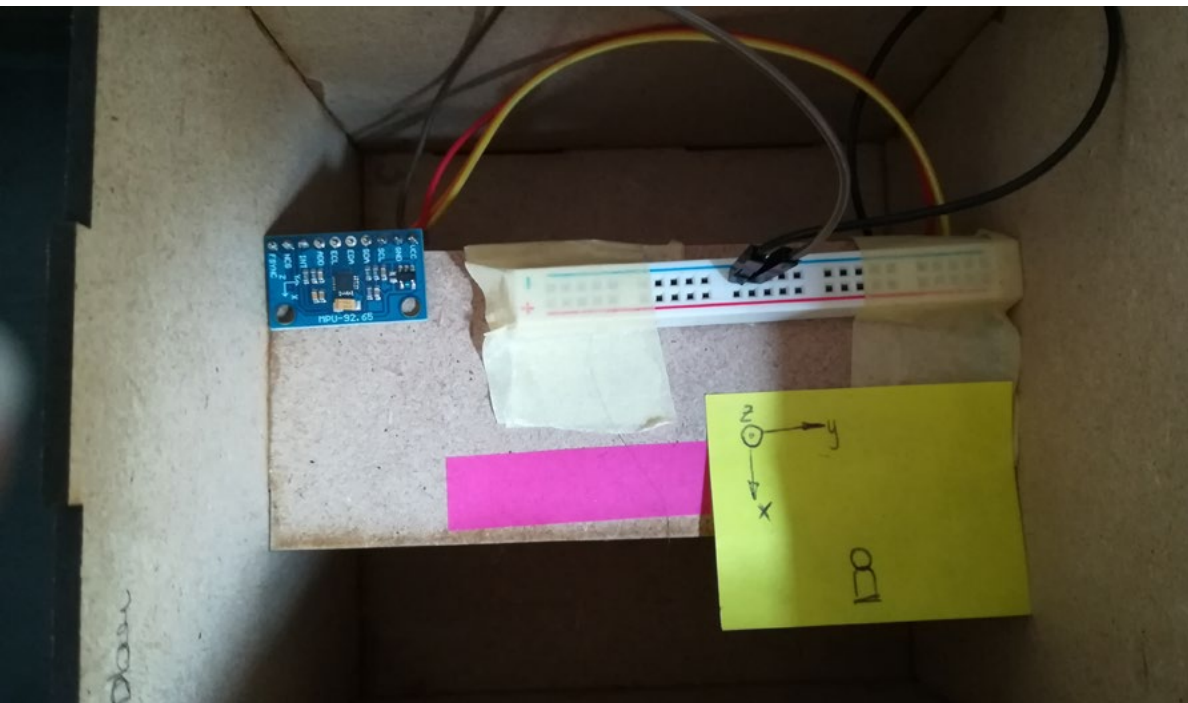
## How to order

In the restaurant first everything starts as always - you enter and take a seat.

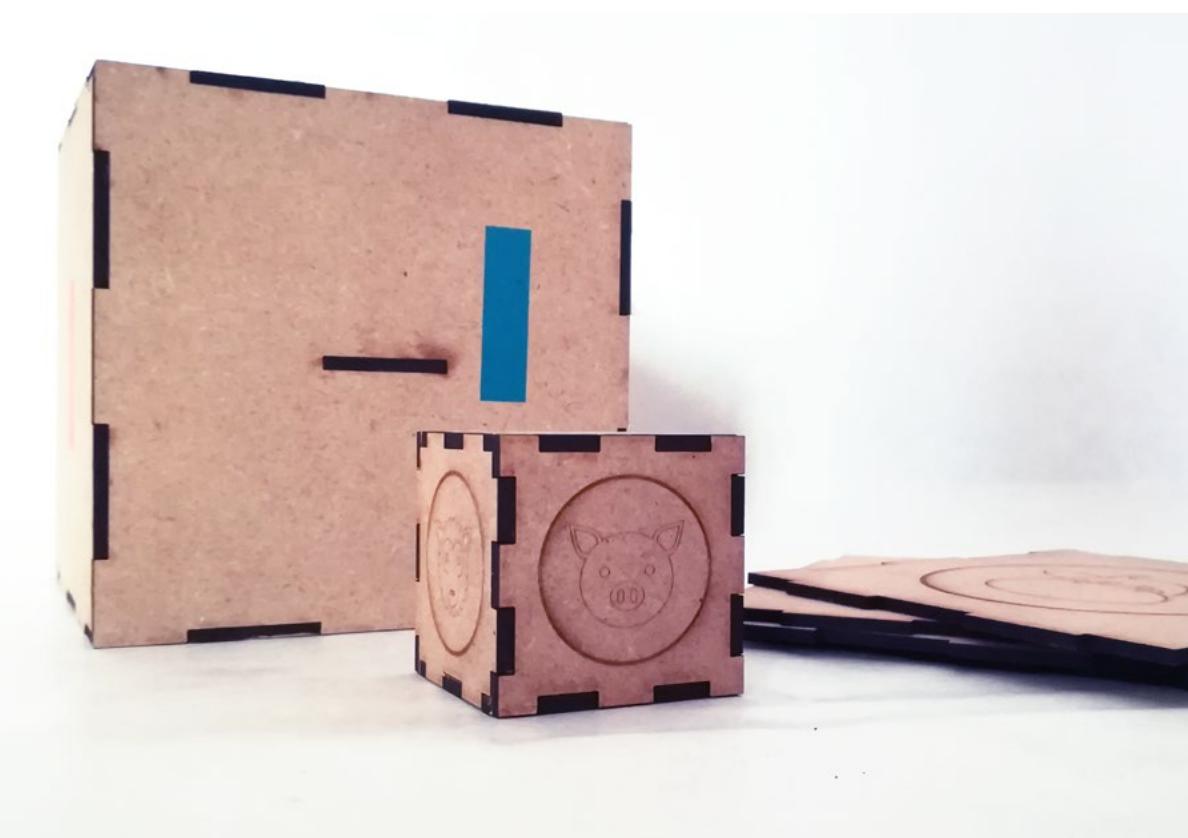
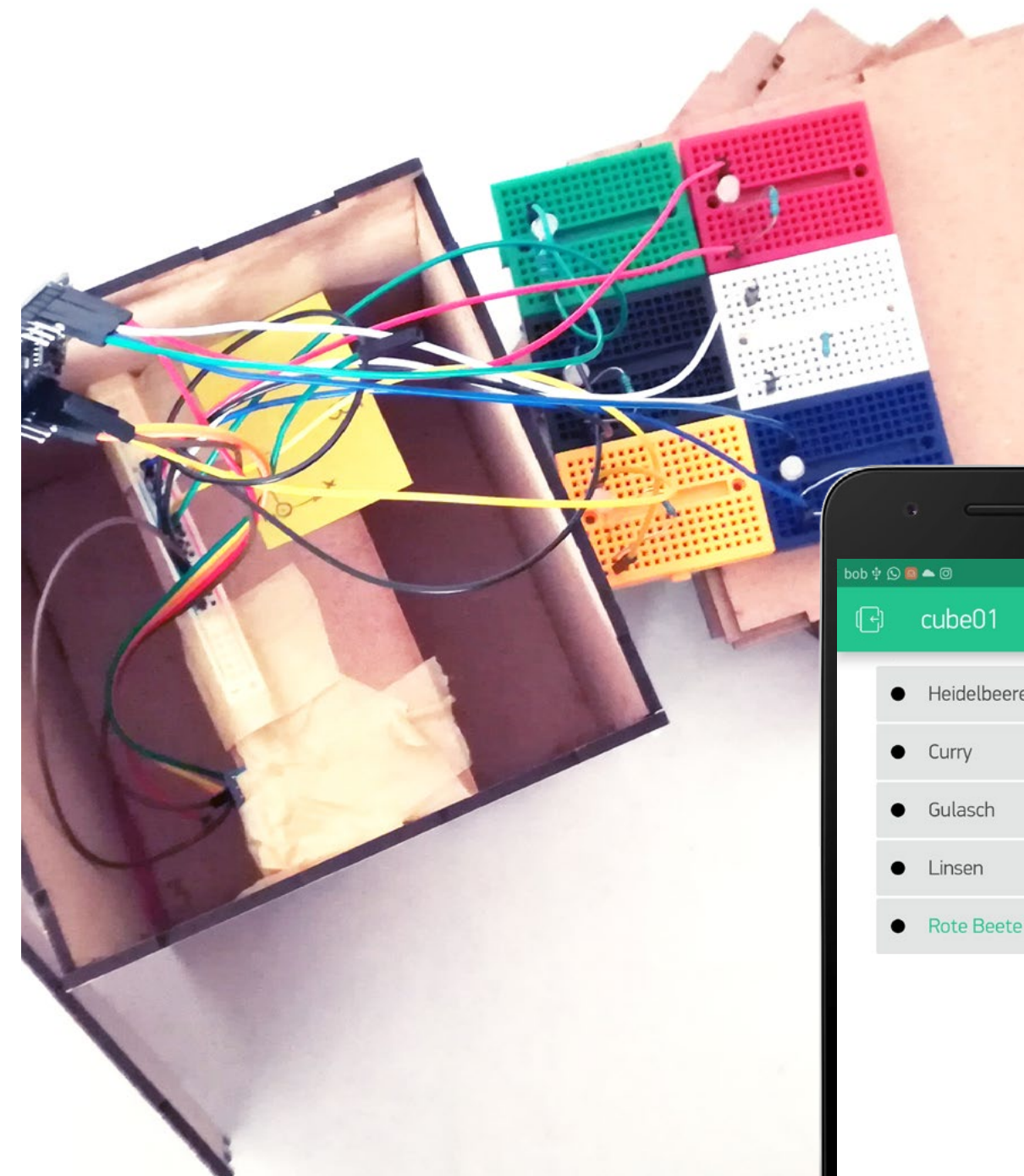
Then the new starts. There are **various dice** on the table. You just have to decide whether you want to have **omnivore, vegetarian or vegan food** . You roll the chosen dice, your order will be sent, you wait and will be surprised by your food.



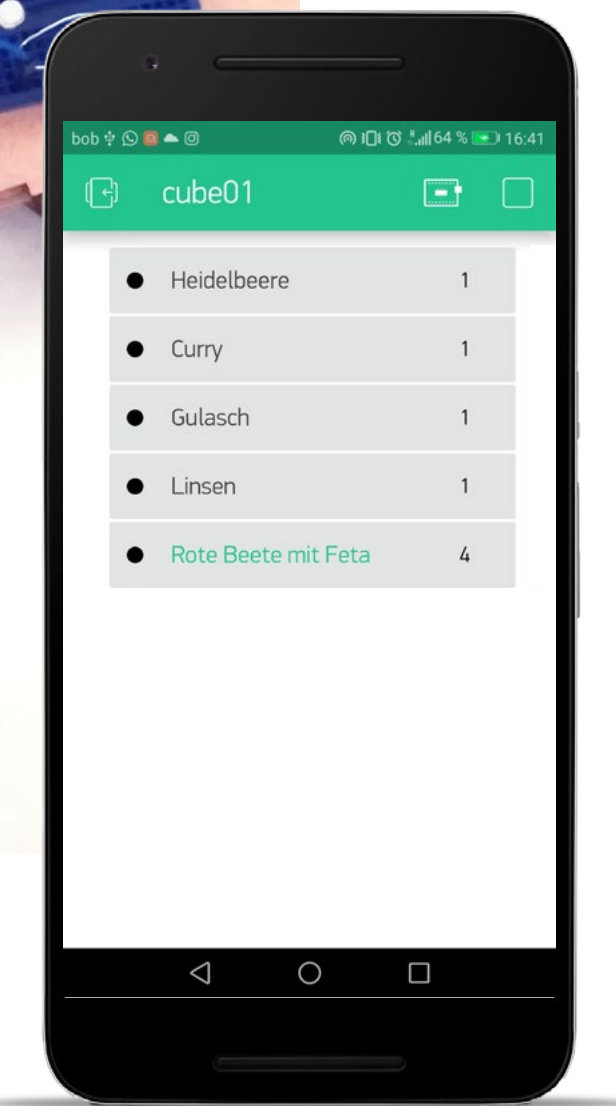
FIRST TRIES GYRO SENSOR



FINAL INSTALLATION



PROTOTYP SIZE | REAL SIZE

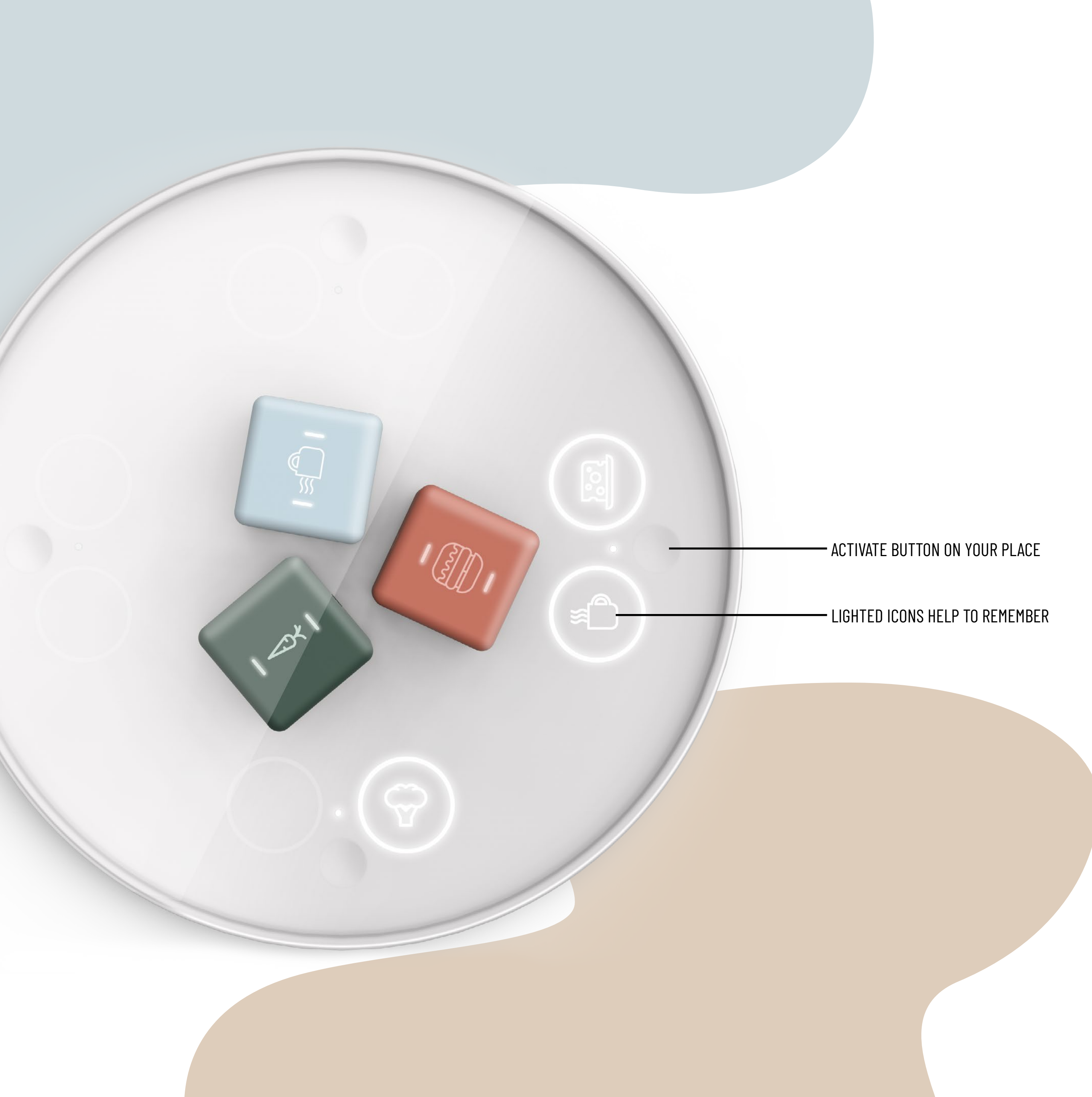


APP MADE WITH BLINK

## Make it work!

To give an idea how this idea could work, there **Arduino** was used for prototyping. Once diced, the cube will **blink on the top side** and the result will be **sent via BLYNK** to a connected device.





ACTIVATE BUTTON ON YOUR PLACE

LIGHTED ICONS HELP TO REMEMBER

## Roll the dice and get surprised!

Let's do something simple. Simple design. Simple to understand.

Go there, push the button, roll the dice, see what was chosen for you, wait, and enjoy the food.

The ground plate of Alea will help you to remember what was chosen for you. So you can go on with your conversation, may it be guessing what food it will be or story of your last horrrorate.

No interruptions though !







th.anks  
for your time

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or see you in real and have a cup of tea together :)

