



PORTFOLIO

Ileen Boelhouwer | Industrial Design



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Hi, I am Ileen Boelhouwer, 21 years old. I completed my Bachelor Industrial Design at the Technical University Delft in June 2021. I'm broadly educated during my bachelor, but I have the most affinity with graphic design, UI/UX design and service design.

This college year (09/2021 - 08/2022), I took a gap year from study. In the first part, I worked at DUWO Student Housing as a member of the board secretary, to save money for travelling. From February till June, I have been travelling alone in South America and this was a valuable experience on a personal level.

Now, I would like to gain work experience before I start my Master's degree, so I would love to discover the design business by taking an internship starting in September 2022. I am looking forward to what is to come!

ABOUT ME

CURRICULUM VITAE

PERSONALIA

Ileen Boelhouwer

Born: September 9th 2000,
Eindhoven, The Netherlands

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2628 RR Delft, The Netherlands

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 Driving License AM-B



HARD SKILLS

Adobe Illustrator	● ● ● ● ○
Adobe XD	● ● ● ○ ○
Adobe Photoshop	● ● ● ○ ○
Adobe Premiere Pro	● ● ● ○ ○
Adobe InDesign	● ○ ○ ○ ○
Blender 3D	● ● ● ○ ○
Solidworks	● ○ ○ ○ ○

LANGUAGES

Dutch	● ● ● ● ●
English	● ● ● ● ○
German	● ● ● ○ ○

EDUCATION

VWO Degree, Van Maerlant Lyceum
Eindhoven [2012-2018]
GPA: 7.2

Bachelor Industrial Design,
Technical University Delft [2018 - 2021]
GPA: 7.1

ABOUT

Creative
Organizer
Team player
Problem Solver



EXPERIENCE

10/2021 - 02/2022	Management Secretary at DUWO Student Housing - Delft, the Netherlands
11/2020 - 02/2021	Call center sales agent at Contactworx - Delft, the Netherlands
03/2020 - 07/2020	Secretary at Stud, a student employment agency - Delft, the Netherlands
05/2017 - 09/2018	Waitress at Berlage Kitchen and Bar - Eindhoven, the Netherlands
09/2014 - 06/2015	Hockey Trainer at DVS hockey - Aalst-Waalre, the Netherlands



SIDE ACTIVITIES

01/2019 - 06/2020	Stud Playground Festival Committee "Organizing a (livestream) festival with six other students" - Delft, the Netherlands
09/2019 - 08/2020	Photo Committee at K.S.V. Sanctus Virgilius "Making photos at different kinds of events" - Delft, The Netherlands
03/2018 - 12/2018	Participant of the Sensus 2017 High School Project "Designing a biosensor for measuring troponine levels in blood to indicate heart failure." - Eindhoven, the Netherlands



THE OCEAN SAVERS

01 O'Neill Sunglasses

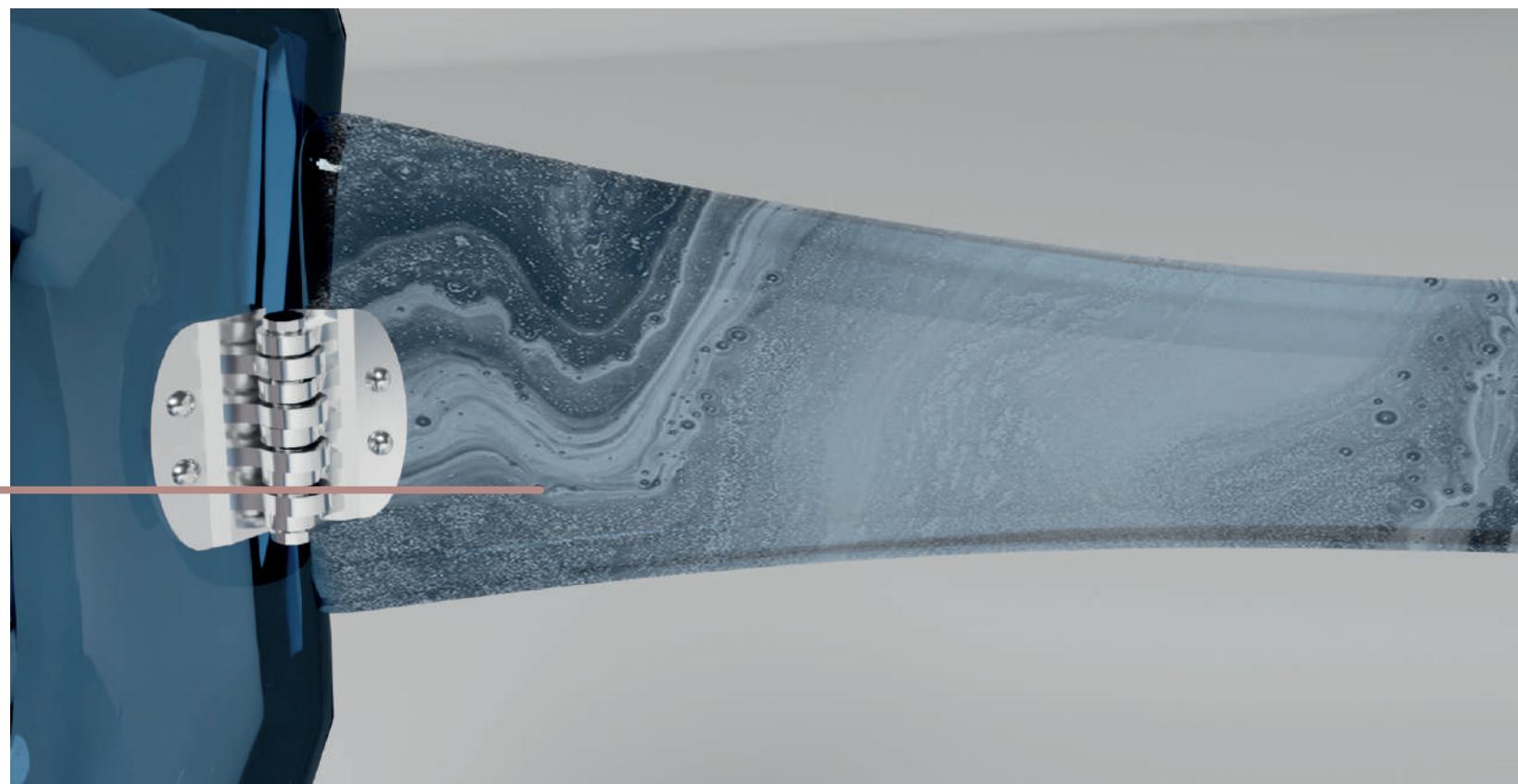
For my bachelor thesis I designed a new pair of sunglasses for the surf brand O'Neill, under the guidance of the innovations director of the global sunglasses company Inspecs. The main goal of the project was to design sunglasses that reflects the unique characteristics of O'Neill so well, there is no need for a logo. I translated this direction to my personal design scope; "Design new hip & green sunglasses for the O'Neill collection, in such a way that the O'Neill style is integrated with fashionable sunglass trends. The challenge is to make sustainable impact."

Details

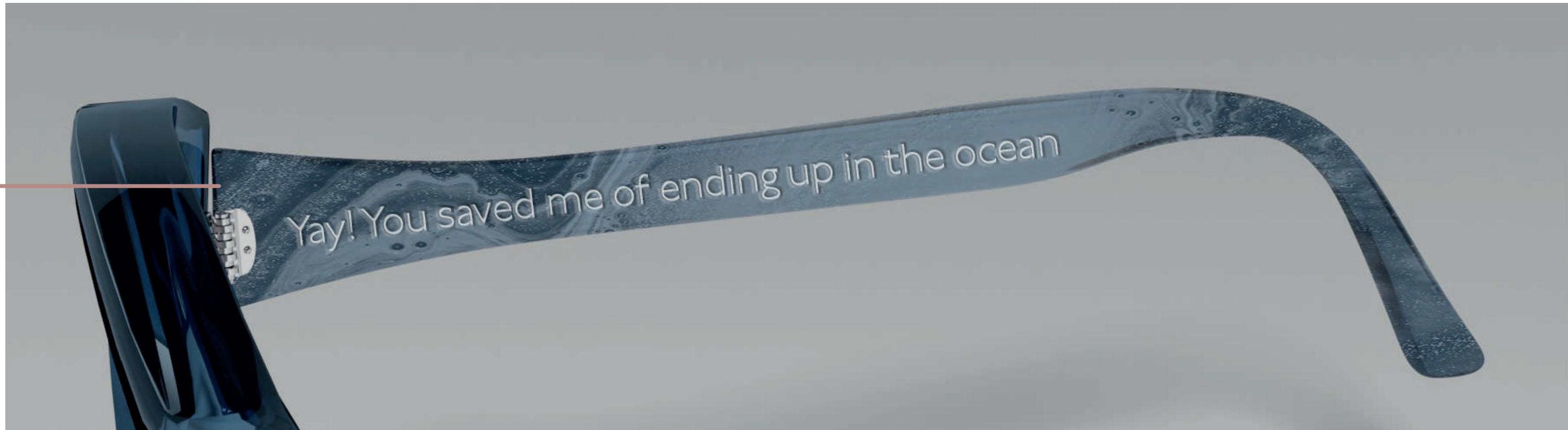
The sunglasses are made from 100% recycled TR90 (Nylon). This material is strong, lightweight & flexible, which makes the glasses comfortable to wear. The frame is produced by Injection Molding. The renders were made with the 3D programme Blender.

The concept is based on making people aware of ocean pollution and attracting a younger target group for O'Neill, so they can create a larger market.

Pattern gives an impression
of the ocean



Encouraging texts to be
more sustainable



Engraved O'Neill logo





01 Blue

02 Black

03 Brown

04 Beige

02 Medical App

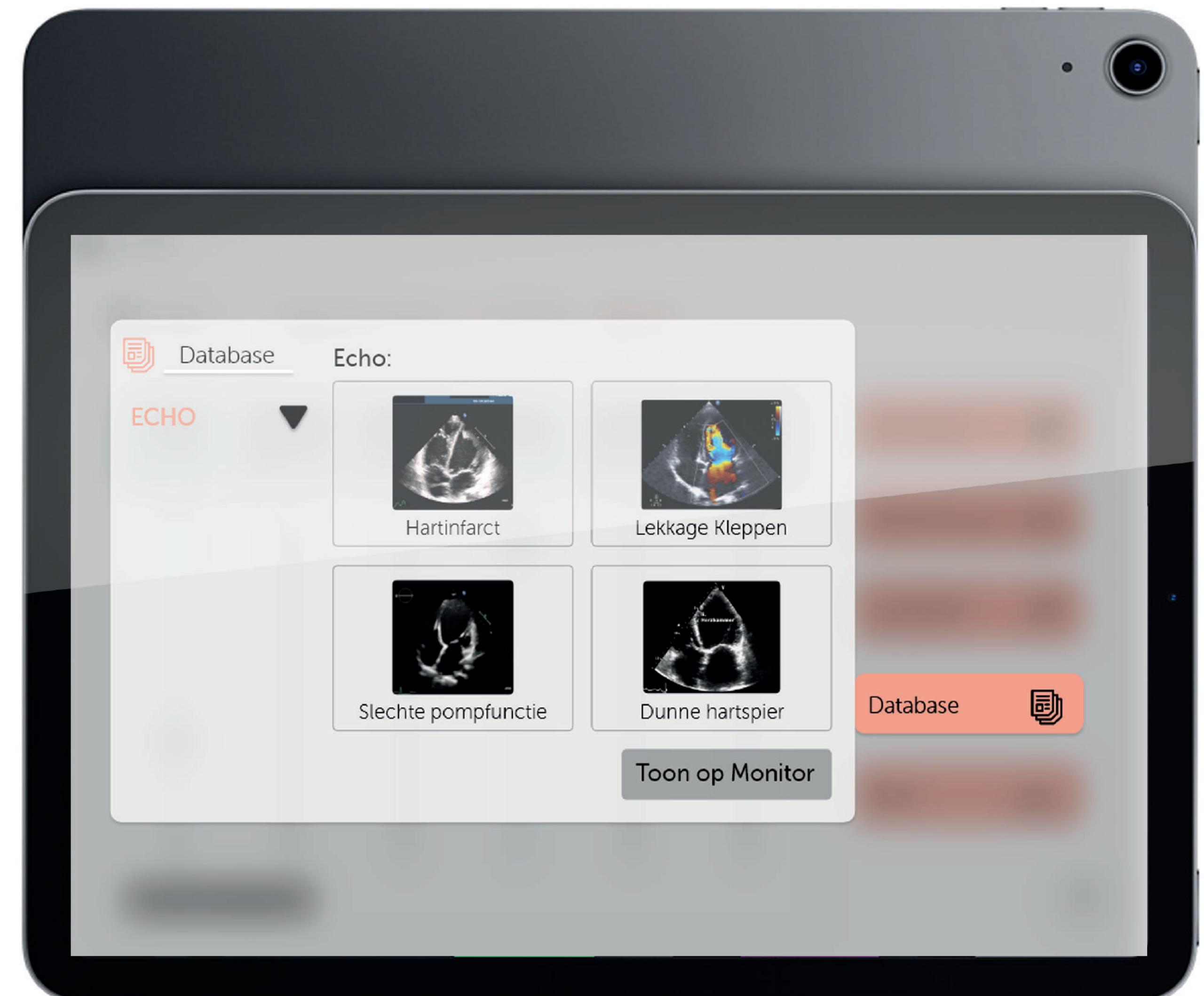
In the third year of my bachelor's, I studied for six months at the Erasmus University for a Minor in Medicine. During this minor, I made a prototype of the App in Adobe XD.

What is this app for?

To educate all doctors in hospitals in a good way for resuscitation, there is need for simulation training. Doctors must learn and remember how to respond to irregular values on a patient's monitor in the hospital. The need for training and repetition is high, because resuscitation is doing like a professional sport.

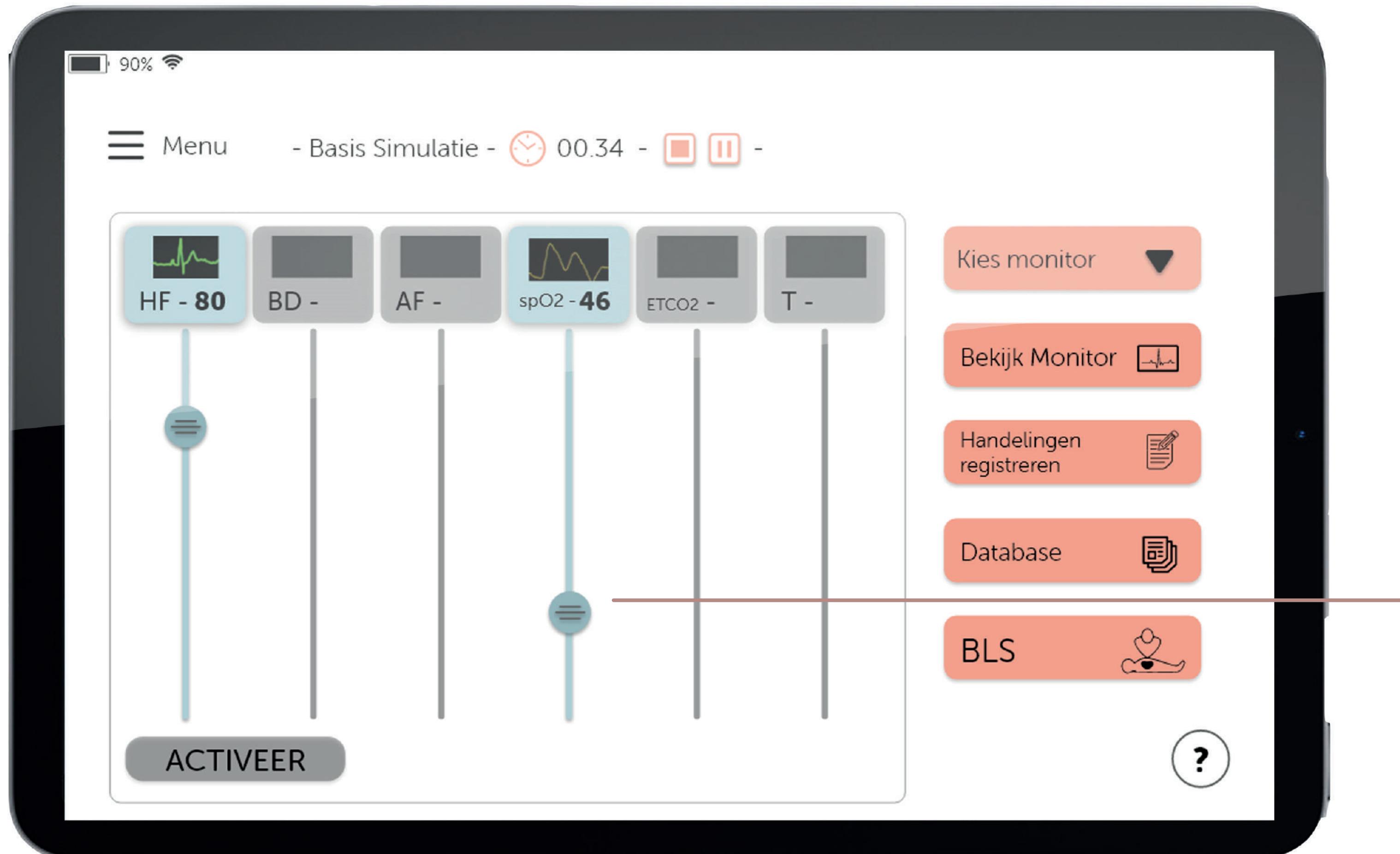
Currently, doctors of the Erasmus MC Sophia practice in a specific room; called the simulation box. The problem is that there are far too few exercises happening because it is not logically possible to get trainees and the instructor into the simulation box at the same time, due to the hectic workload.

As a solution, I came up with a mobile system that simply consists of two ipads and a doll. The instructor can easily transport these parts to different places in the hospital. In this way, the instructor can start a training session unexpectedly during a lunch break, a moment when the doctors (course participants) are already together.



Working of the Application

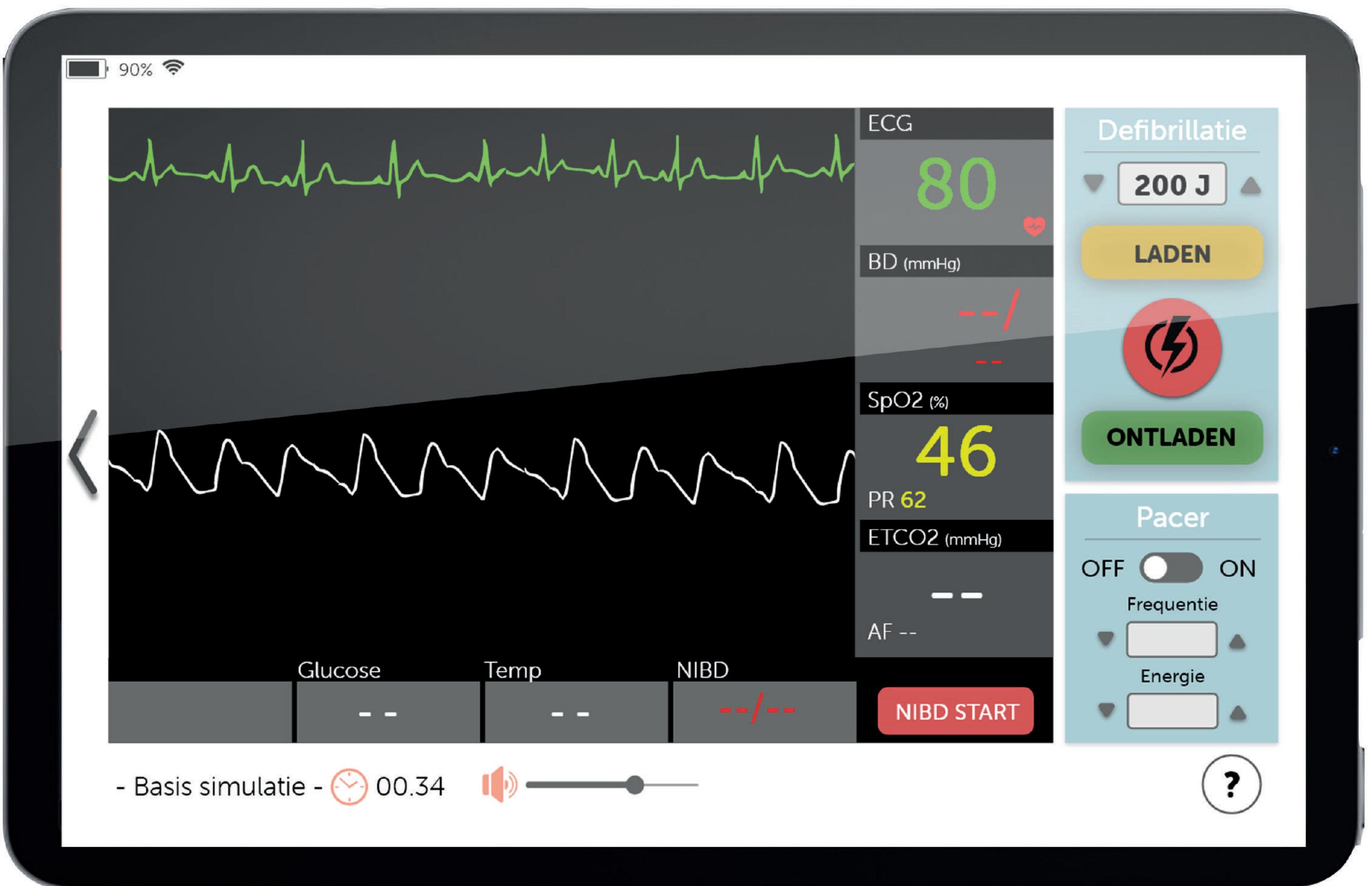
Ipad 1: Input; Instructor Screen



The two Ipads are connected through Wifi. On this ipad, the instructor can adjust various parameters. These are medical values such as heart rate, oxygen saturation in the blood, etc. The moment the instructor increases or decreases a value, it affects the graph on the student's monitor.

Slide the bar to in- or decrease the value

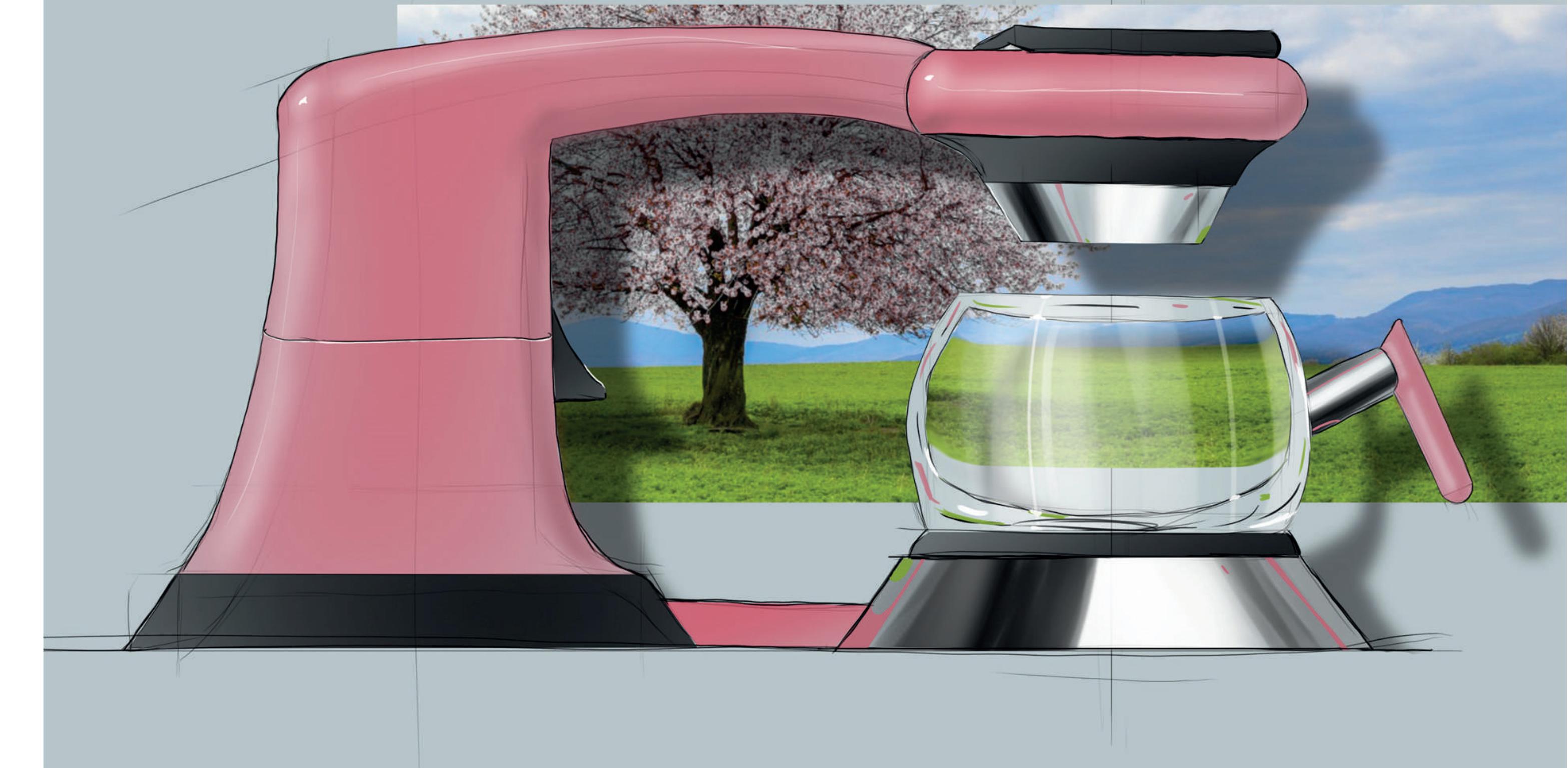
Ipad 2: Output; Student Screen



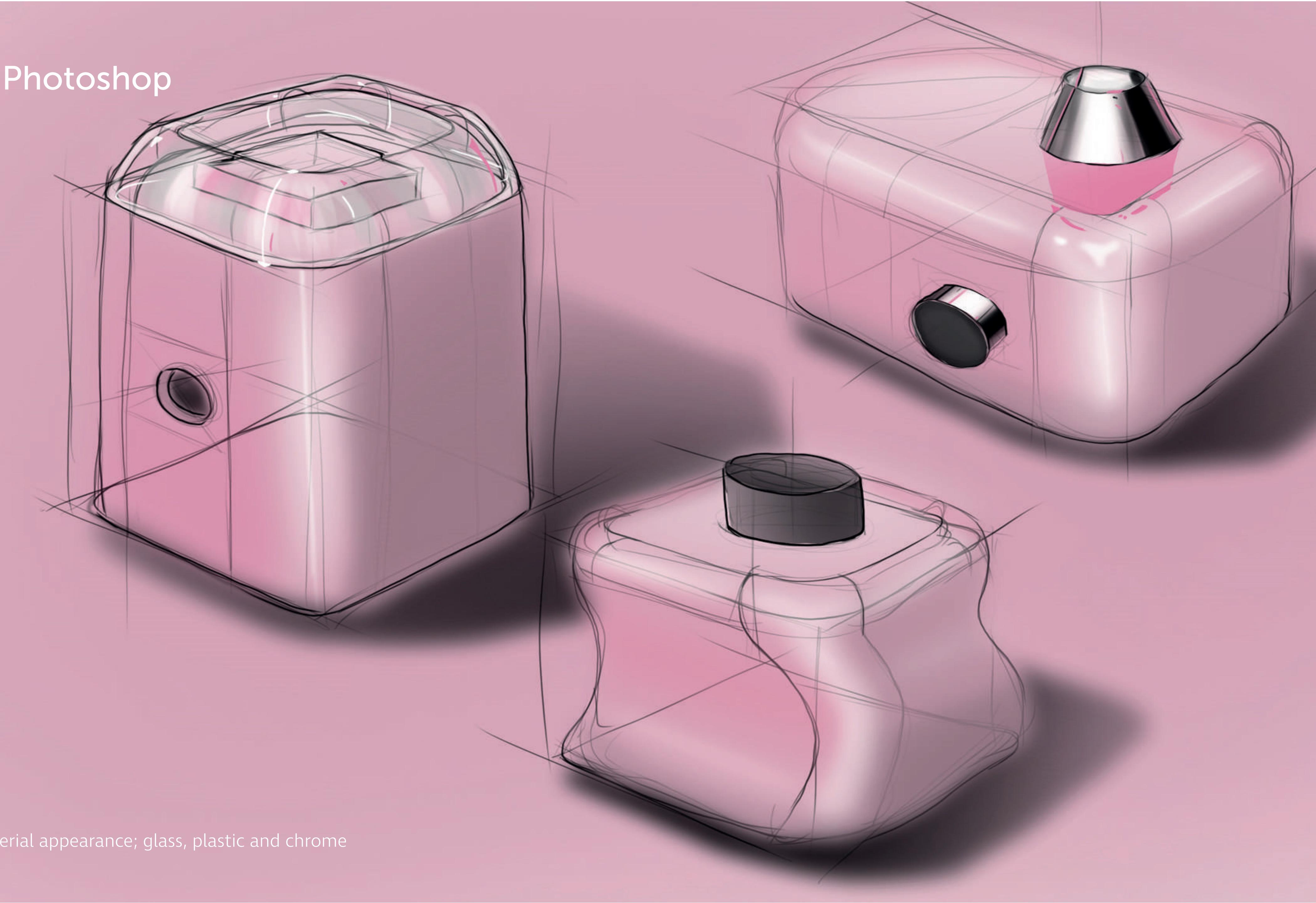
According to the changing graphs & values on the monitor, the student has to take appropriate actions on the doll. The instructor can now assess whether the doctor is acting correctly during a resuscitation. Afterwards, the training is analysed and the instructor can give feedback.

03 Design Visualisation

In this third year's course Design Visualisation of my bachelor, I have improved my hand drawing & graphical skills. The learning objectives of the course were: reproducing different materials & textures in 2D and 3D, making posters, hand drawing in perspective, drawing in photoshop using a drawing tablet and post-processing in photoshop. The following pages show a selection of the different drawing assignments during the course.

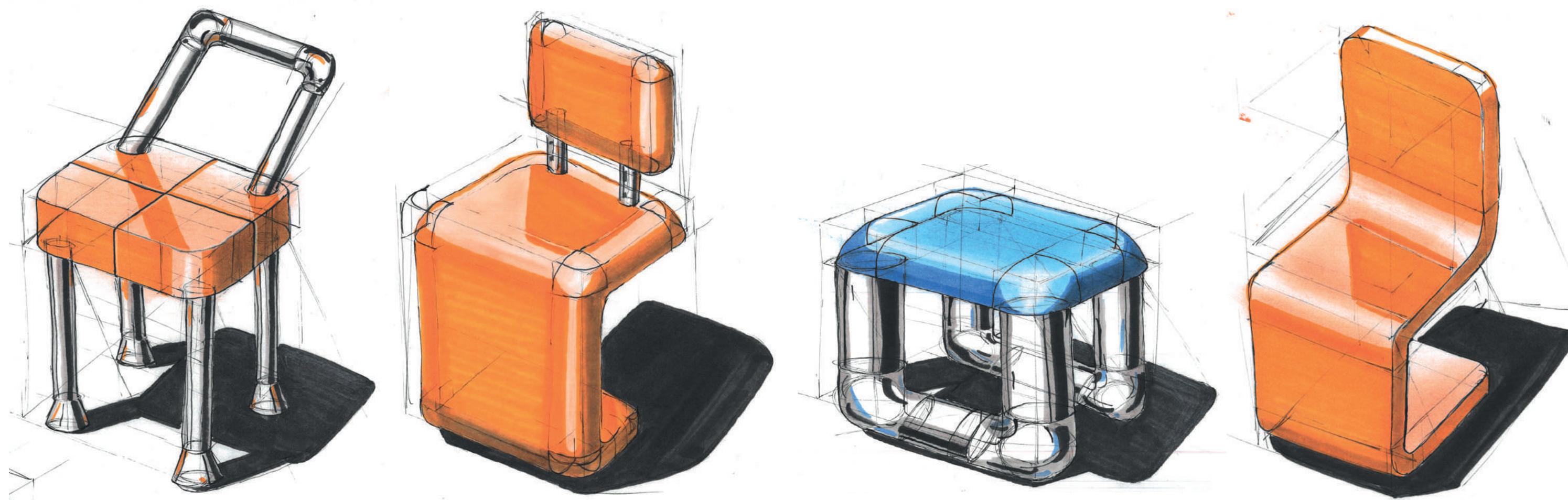


Drawing in Photoshop

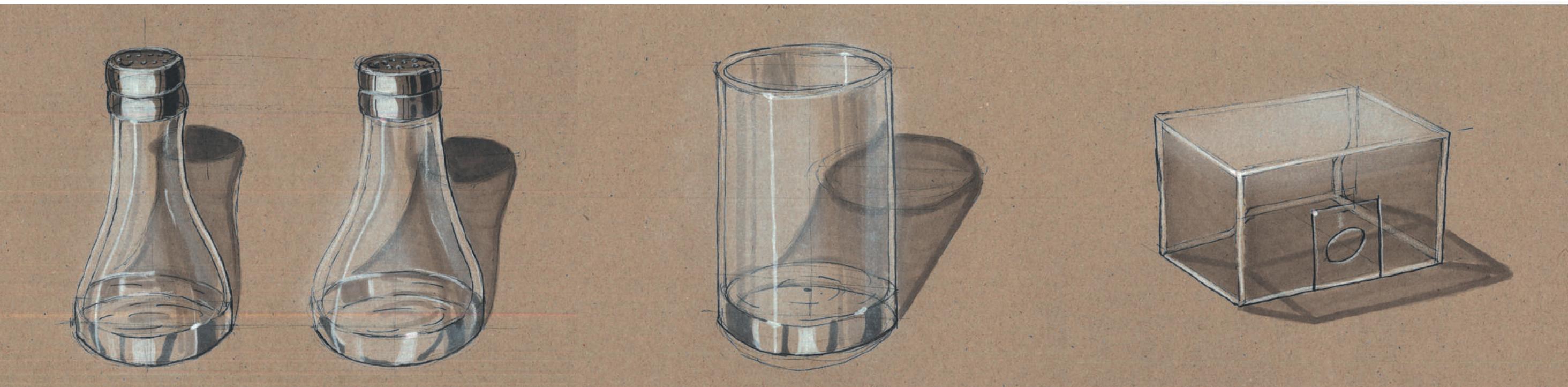


Detailed blocks: material appearance; glass, plastic and chrome

Hand drawing

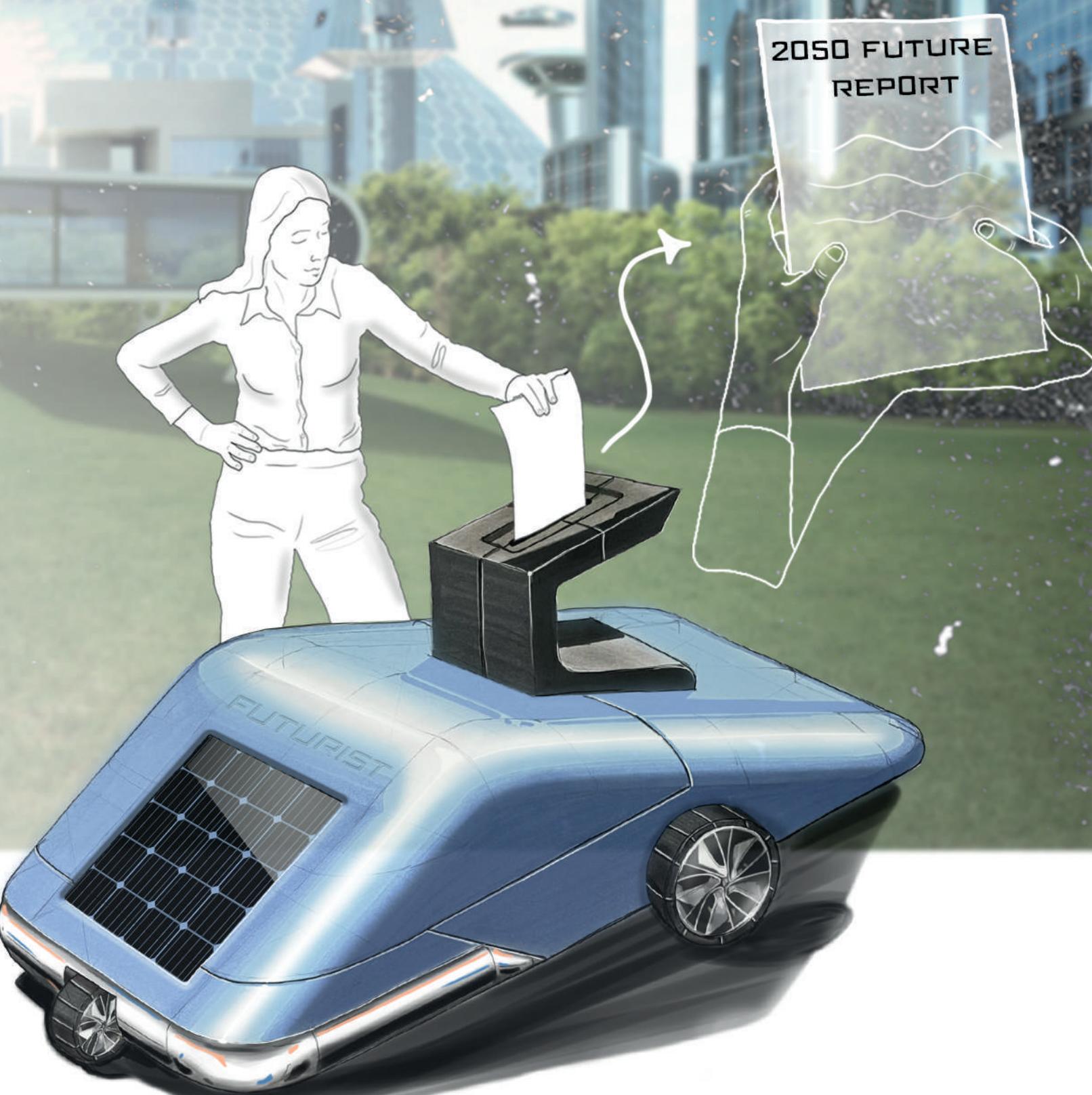
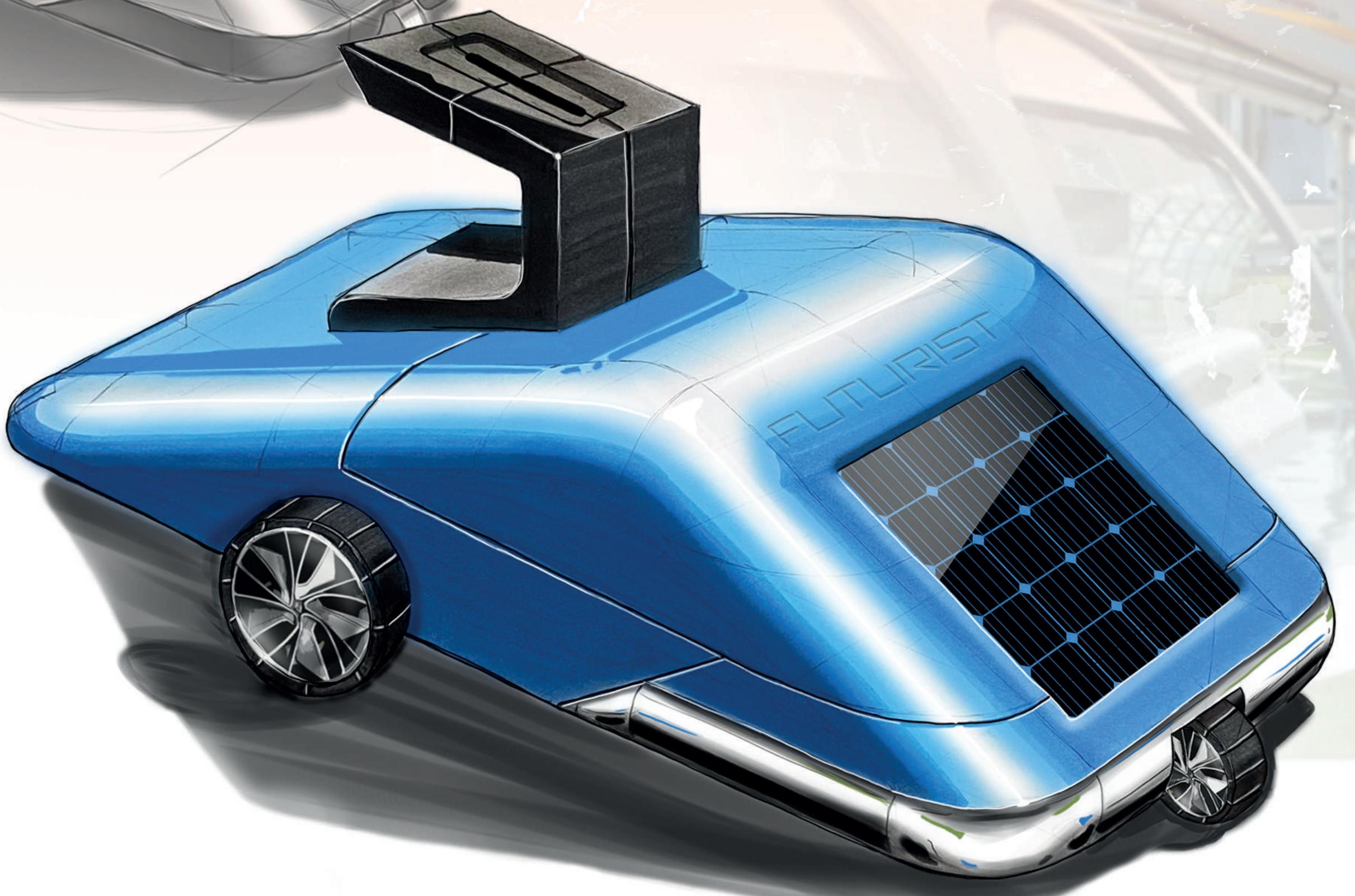


A series of chairs



A series of glass objects

FUTURIST



Final Assignment - Poster: Futuristic Vehicle

04 Calming Chameleon

For a second year's course I designed a wearable for 2040. The subject's assignment: design a futuristic wearable that assesses the user's behaviour on the basis of social and moral rules. The wearable helps preventing anti-social behaviour.

I have chosen to design for people with aggression regulation problems. The calming chameleon is a wearable consisting of a part that you wear above your T-shirt, and a brace under your T-shirt.

Research has shown that emotions can be read by means of your heartbeat. For example, your heart rate increases with a specific speed when you become aggressive.

I used this input for my wearable; as soon as the user's heart rate increases, the chameleon starts to massage (vibrating motors) so that the user calms down again. In addition, the chameleon briefly changes colour, so that the people around are getting a signal that they are dealing with an aggressive person. At this moment, our society is not ready yet for such a product, because people will be ashamed to wear this wearable. But it could have potential for the future when everyone is familiar with this product.

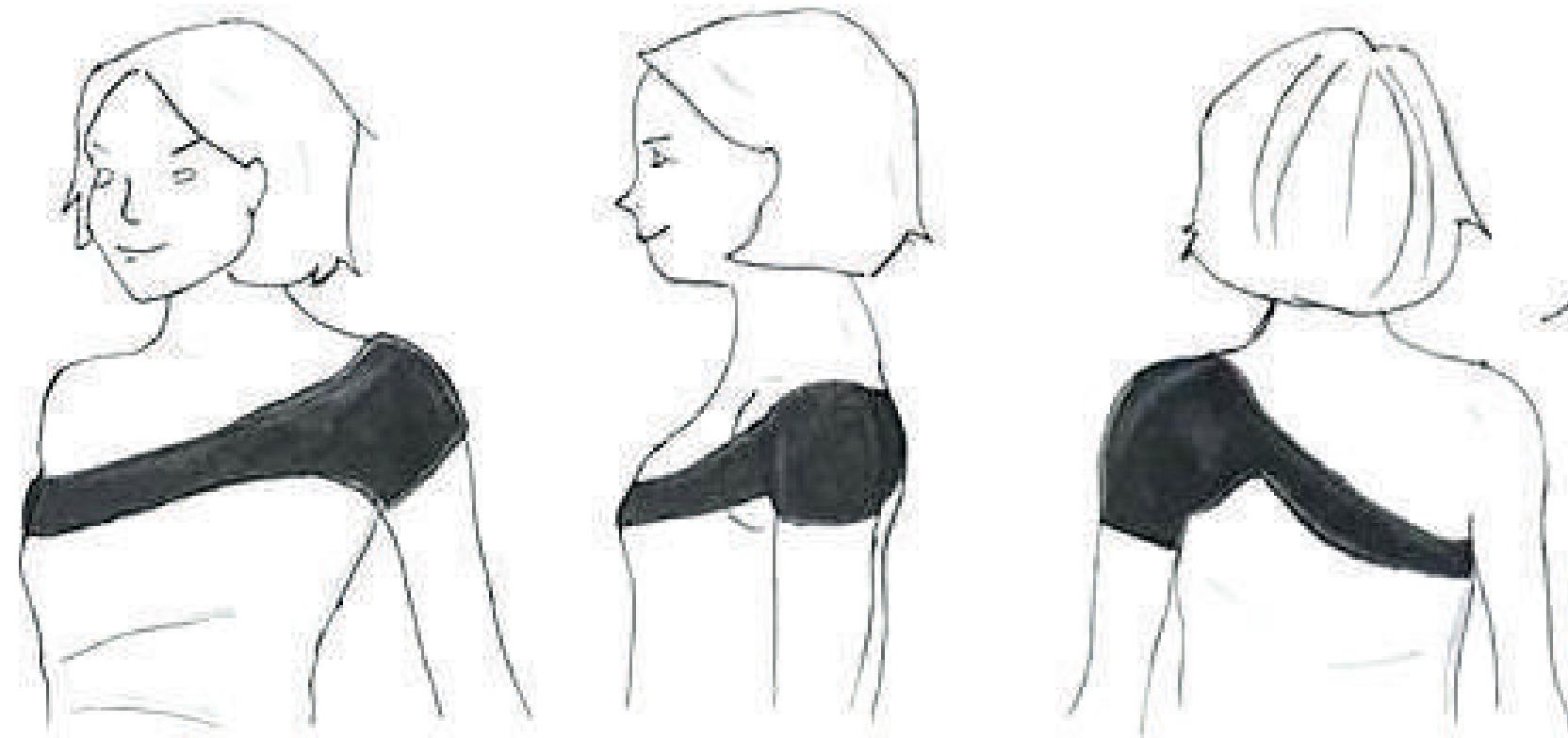
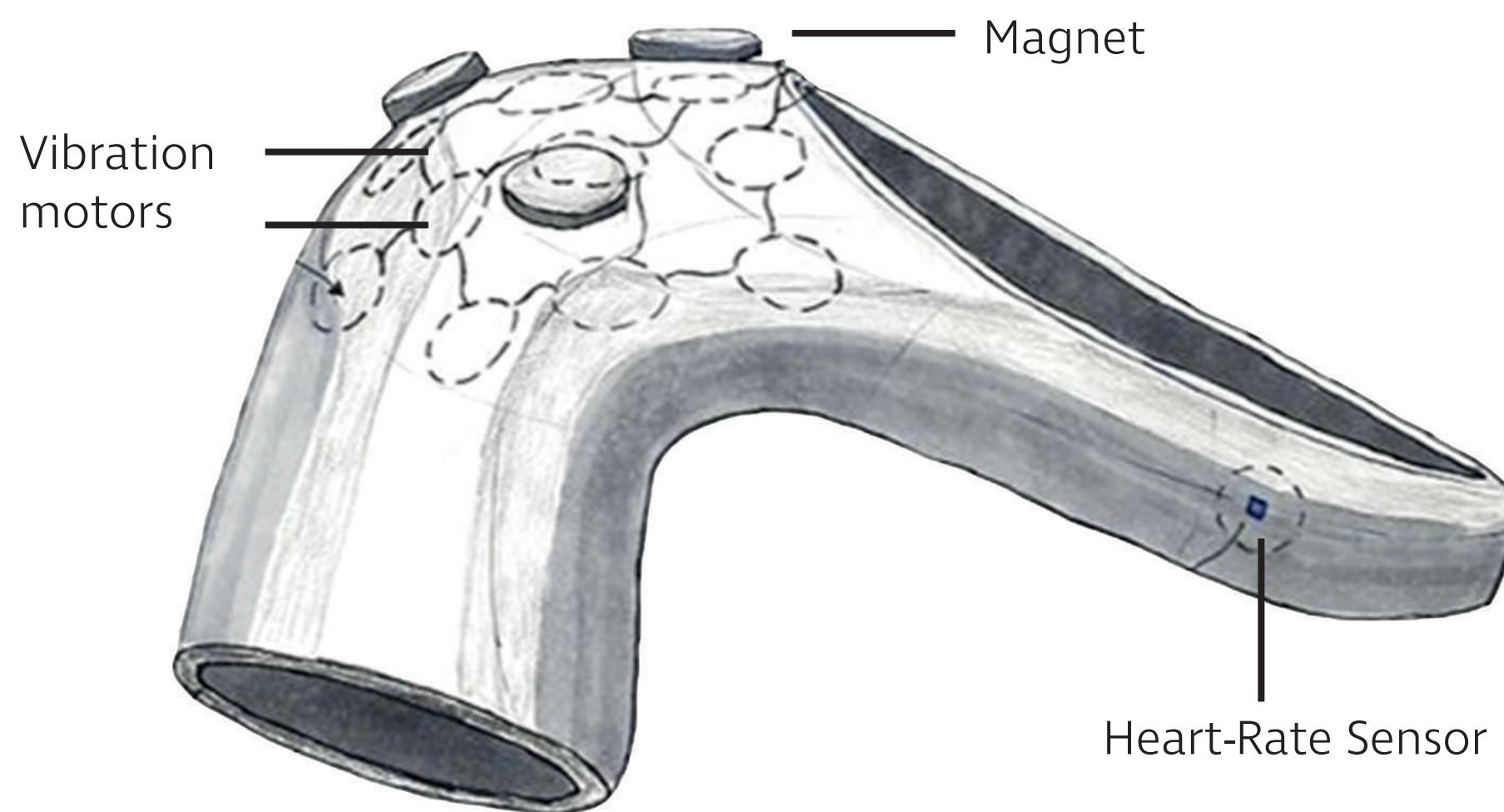


Target group

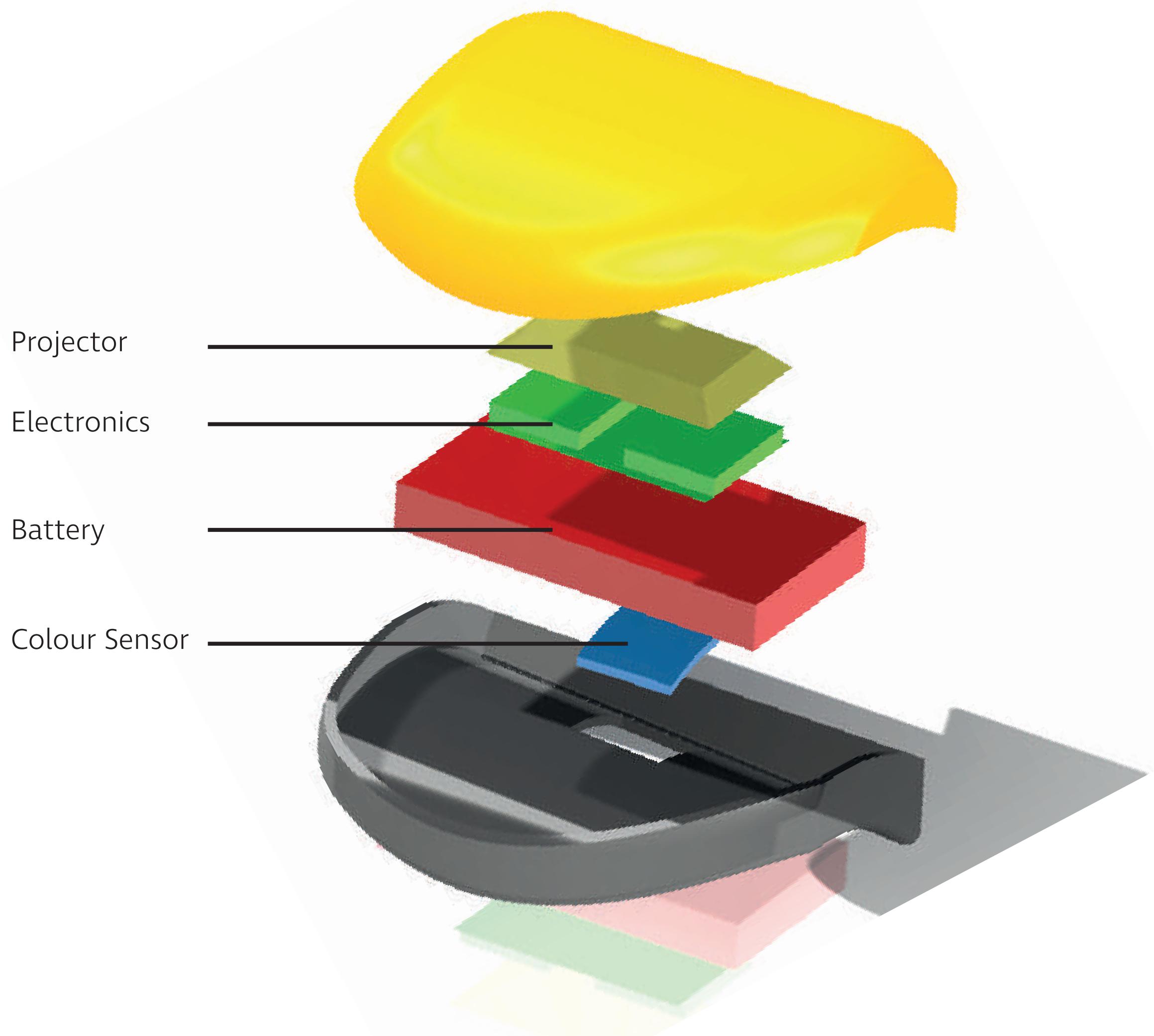
"People with aggression regulation problems"

Configuration

Brace



Chameleon



Working Principle

Input;

- Heart-rate sensor
- Colour sensor

Output;

- Projector
- Vibration motors



Chameleon adapts to the colour of the T-shirt using the colour sensor

Heart rate accelerates

Chameleon starts to change colour

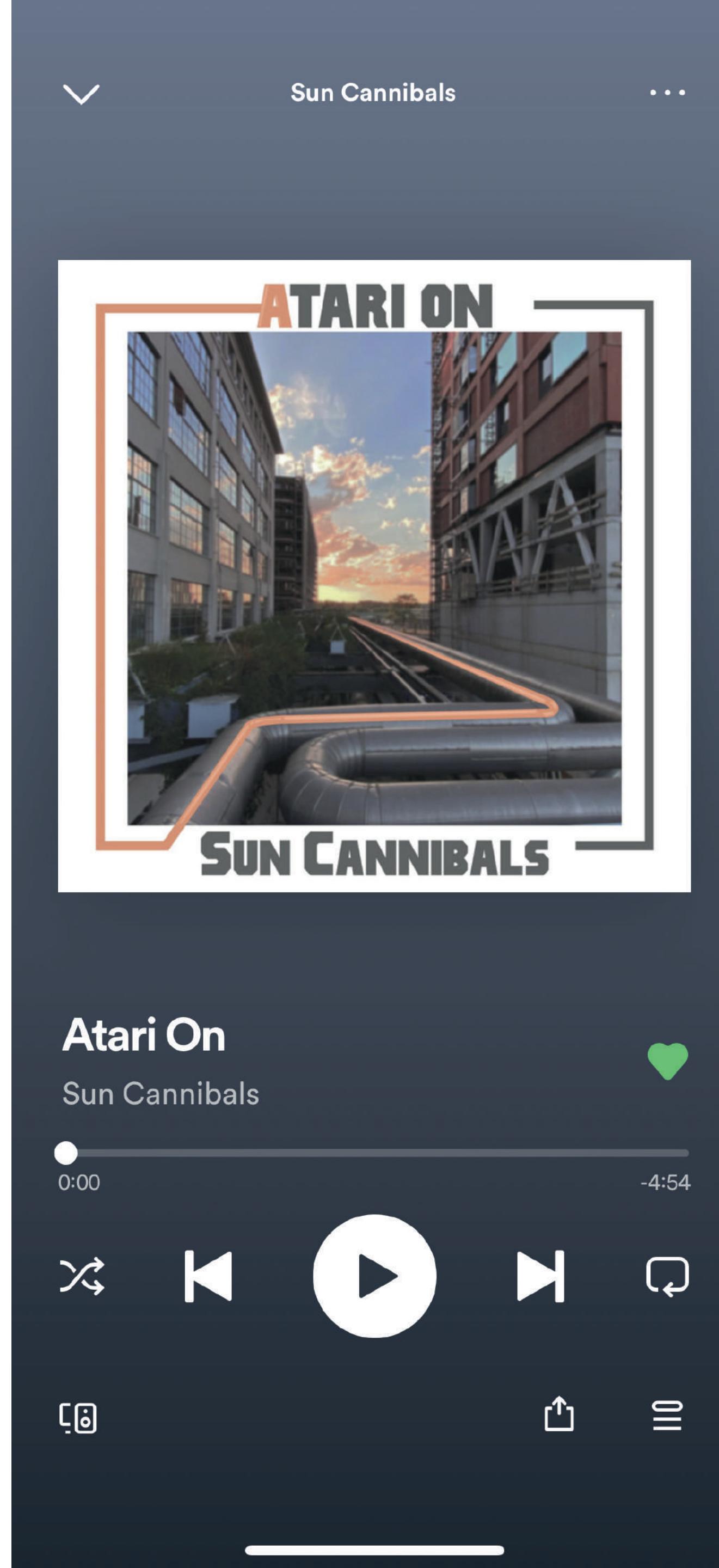


The vibration motors in the brace vibrate to calm the user

The discoloured chameleon signals to bystanders to leave the user alone for a while

05 Album Covers

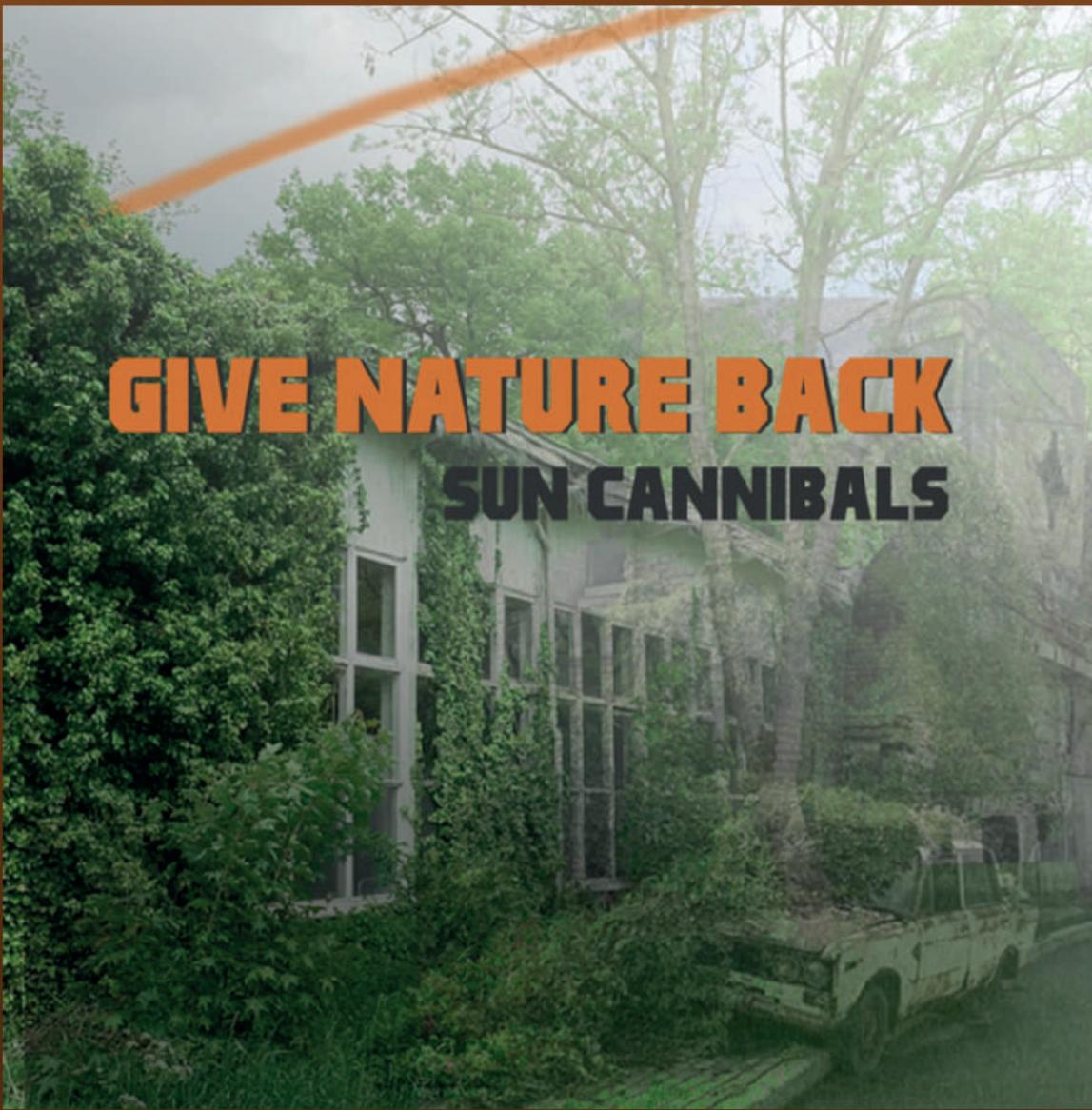
In my spare time, I made two album covers for a family member to put on Spotify. The covers contribute to the user experience because they illustrate the atmosphere of the song.





Sun Cannibals

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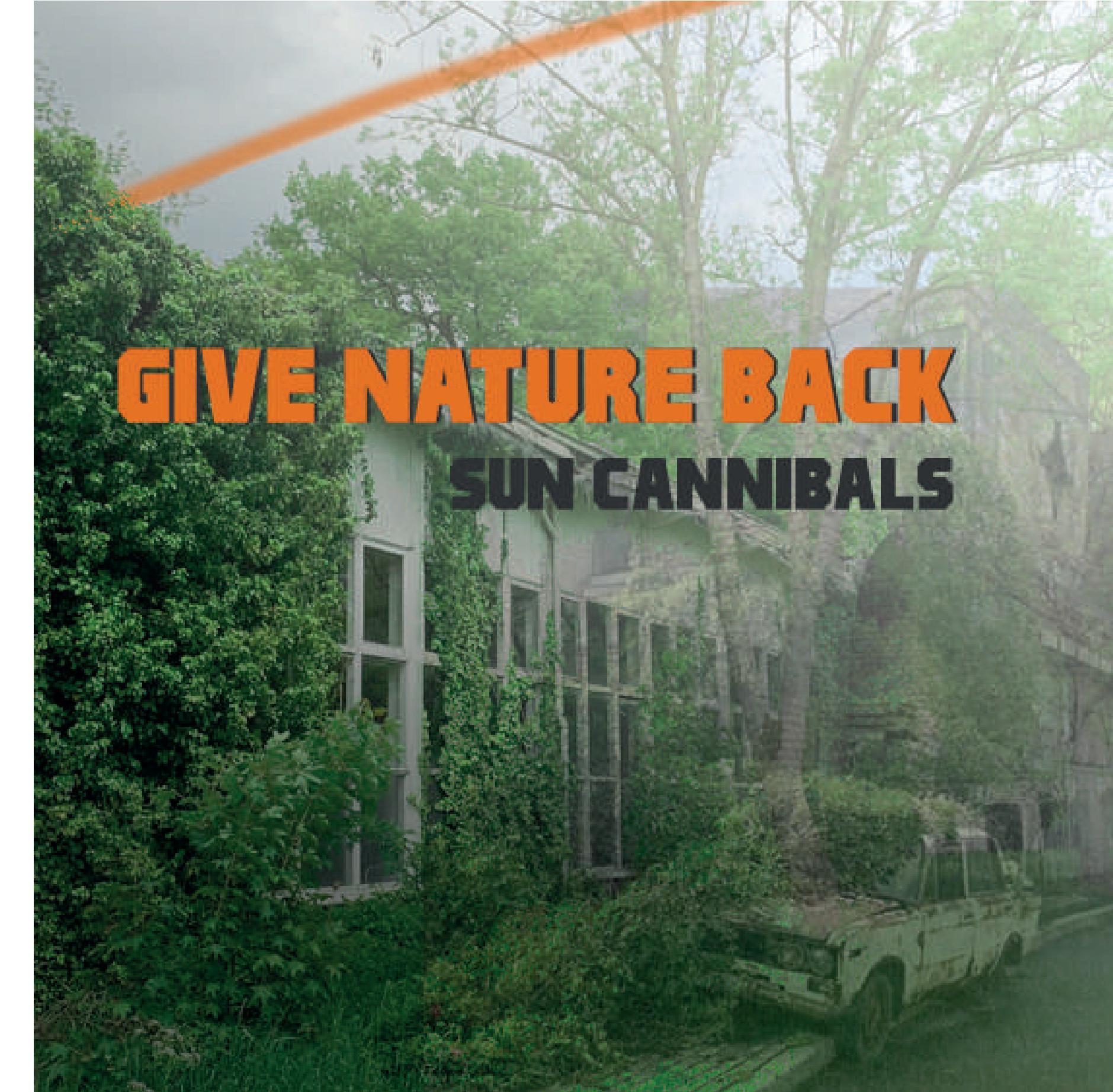
Give Nature Back

Sun Cannibals



0:00

-5:30



Portfolio By

IEEN BOELHOUWER