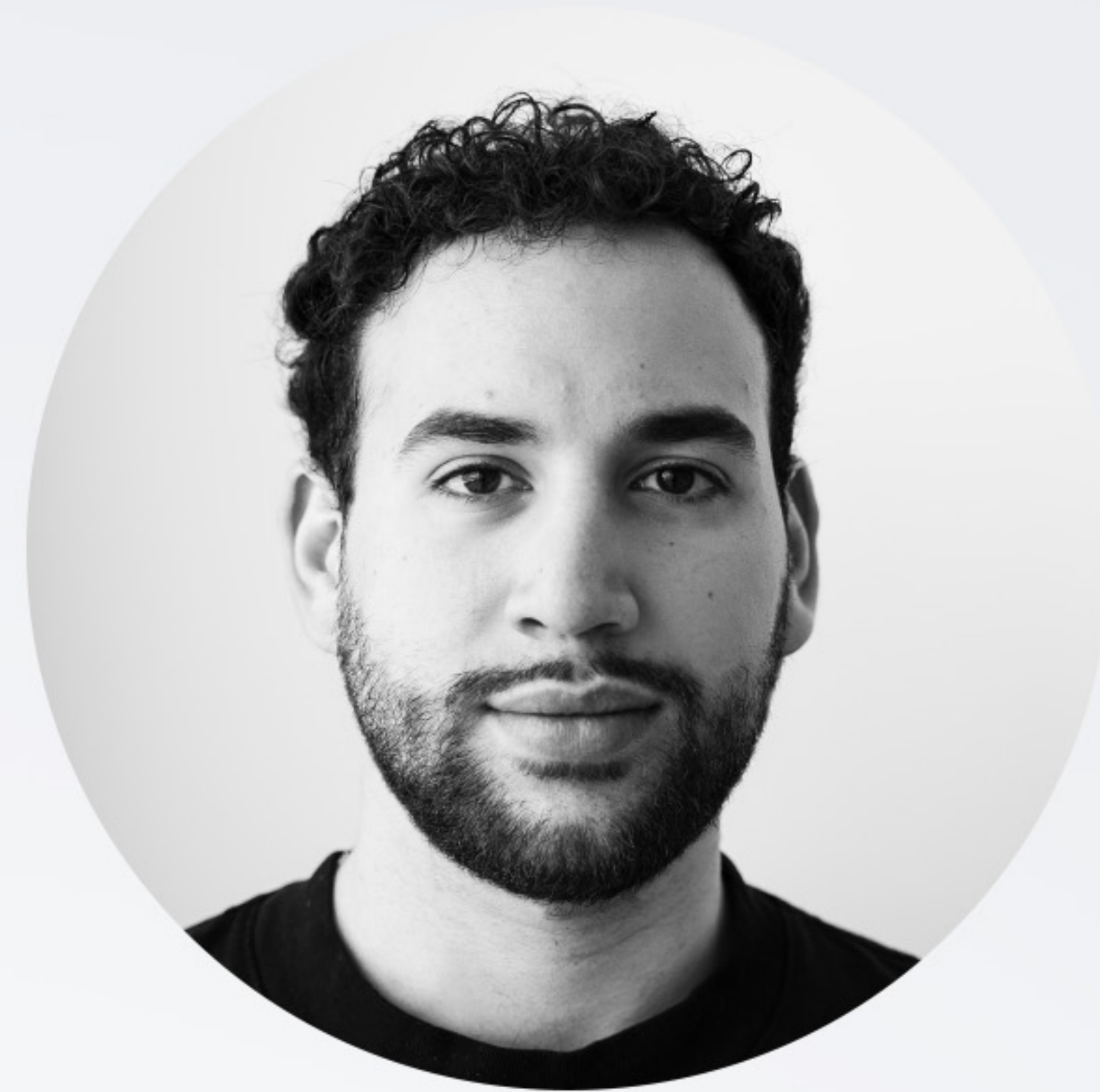


Eye Care

Delivering a convenient, personalized, and cost-effective solution for eyewear measurement and prescriptions.





Julian Saliby

4th Year Industrial Design
Capstone



Introduction

In the realm of the eyewear industry, a critical examination of accessibility and affordability is underway. This project delves deep into these challenges, aiming to reshape the landscape of vision correction solutions. Through rigorous research and iterative development, we seek to introduce innovative, user-centric approaches that empower individuals to access quality eyewear solutions seamlessly.

Problem Statement

Shopify

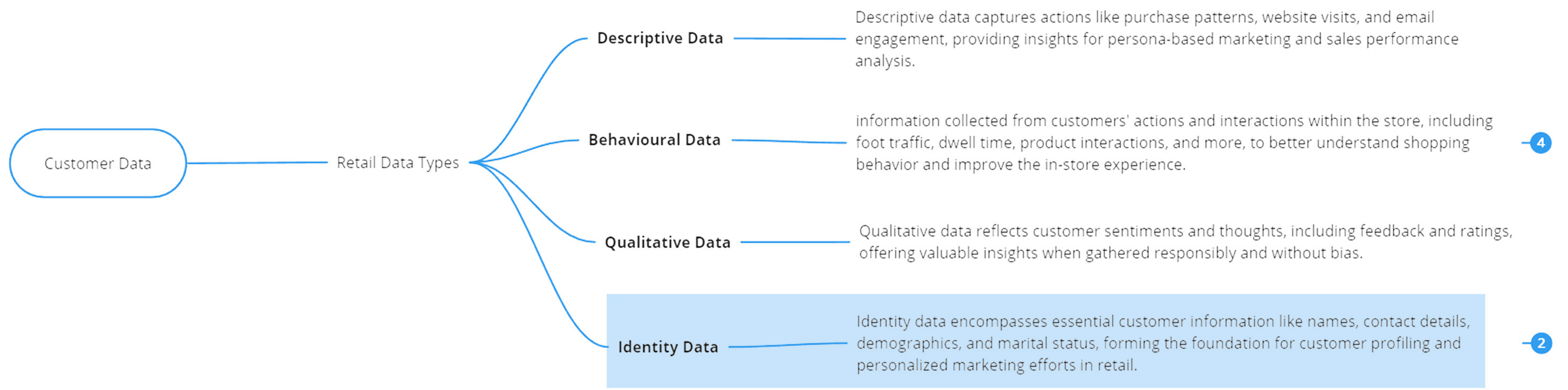
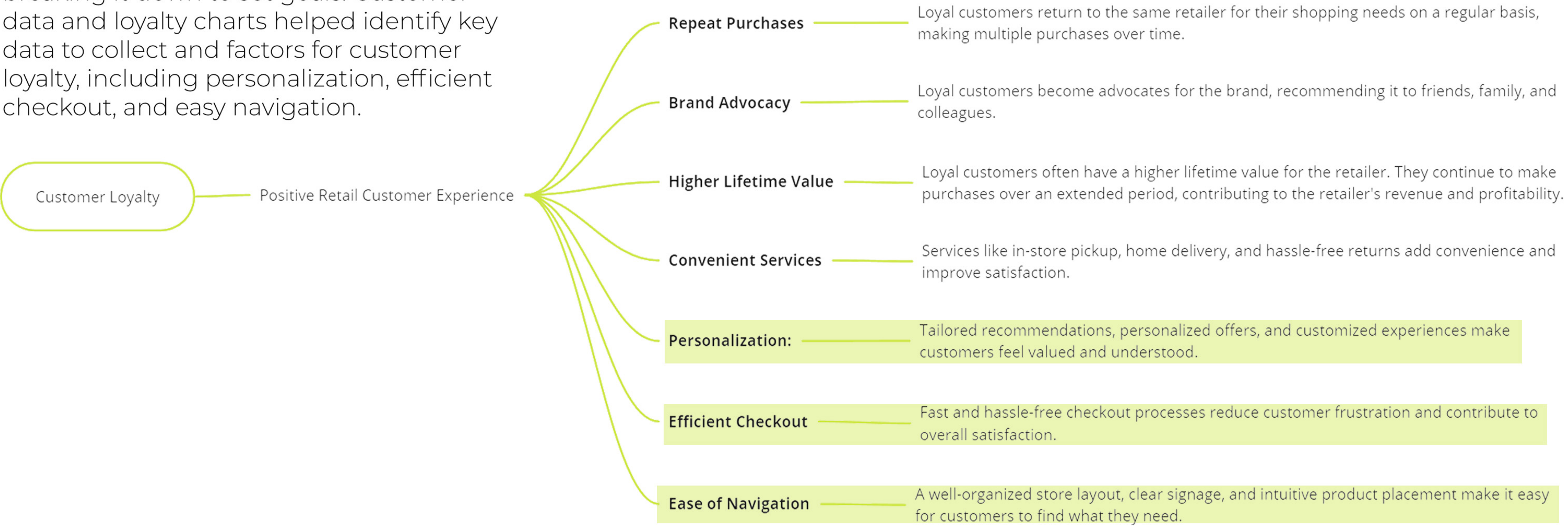
This project presents an exciting opportunity for design students to explore various aspects of customer experience, data-driven design, and retail innovation. Students can delve into designing customer-centric loyalty programs, intuitive interfaces for data collection, personalized shopping experiences, interactive in-store displays, or even innovative packaging and product designs that enhance customer engagement and encourage repeat purchases

General

More than 1 billion people around the world need eyeglasses but don't have them. Many of these individuals face challenges accessing appropriate eyewear solutions due to various barriers. Researchers say, an affliction long overlooked on lists of public-health priorities.

Objectives

Understanding the problem required breaking it down to set goals. Customer data and loyalty charts helped identify key data to collect and factors for customer loyalty, including personalization, efficient checkout, and easy navigation.



Research Questions

What are the most common challenges patients face when buying eyewear online?

How do current methods of obtaining eyeglass prescriptions, such as professional eye exams, compare in terms of accessibility and cost-effectiveness?

What are the existing online eyewear options, and how do they address the needs of individuals without insurance or in underserved regions?

Applied Method

Mike



ophthalmologist



15:05.96



Bill



optometrist



27:16.33



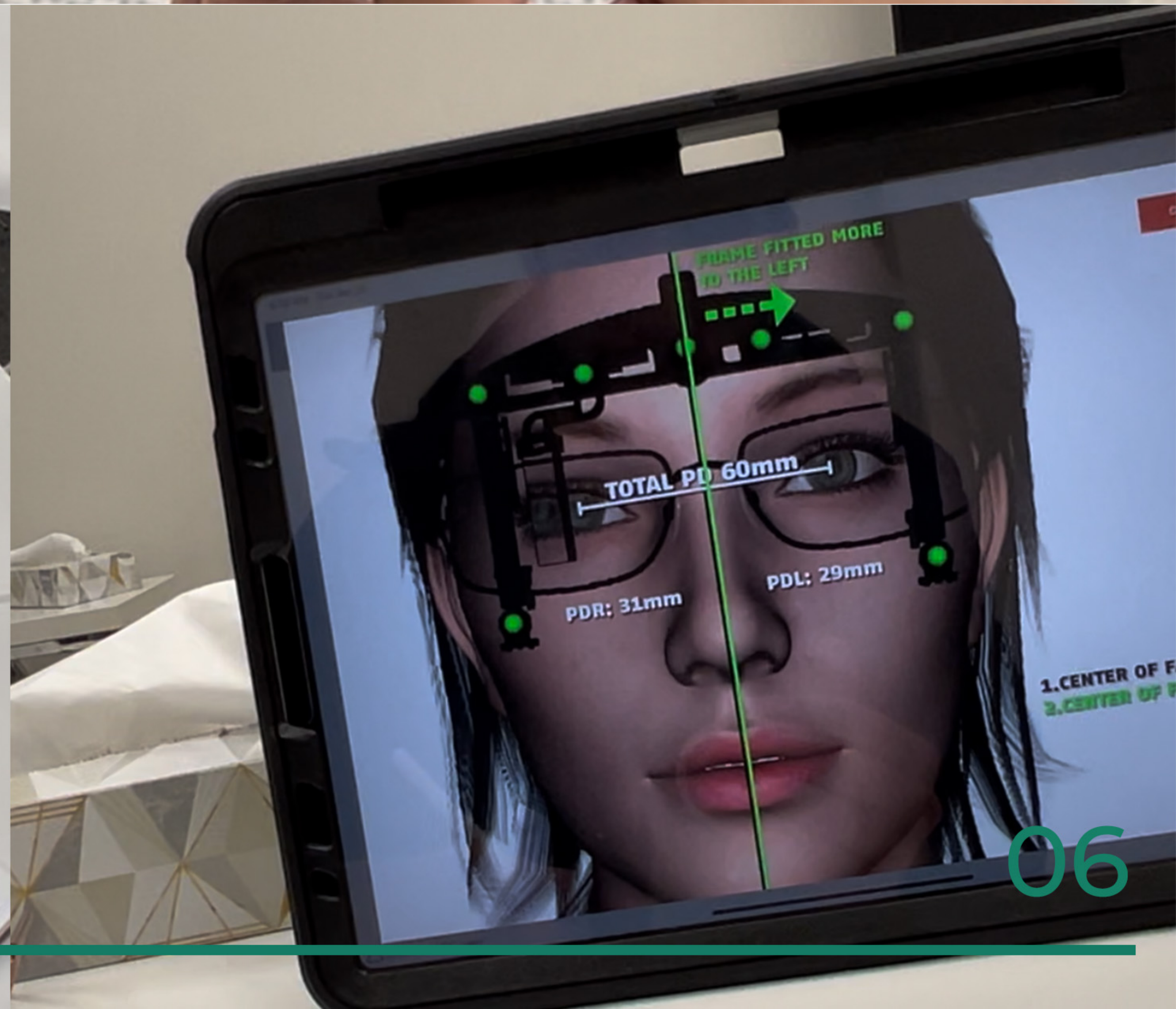
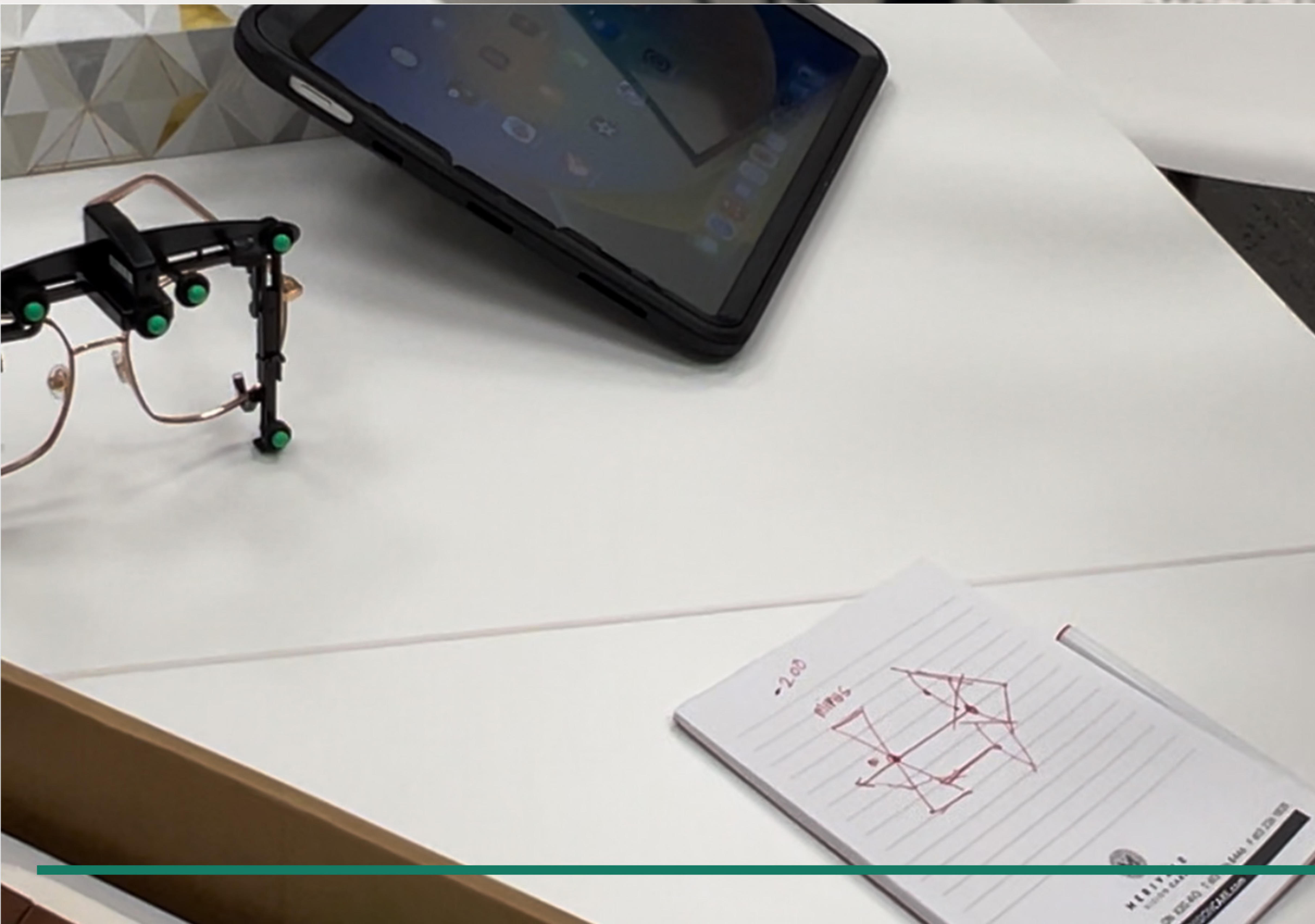
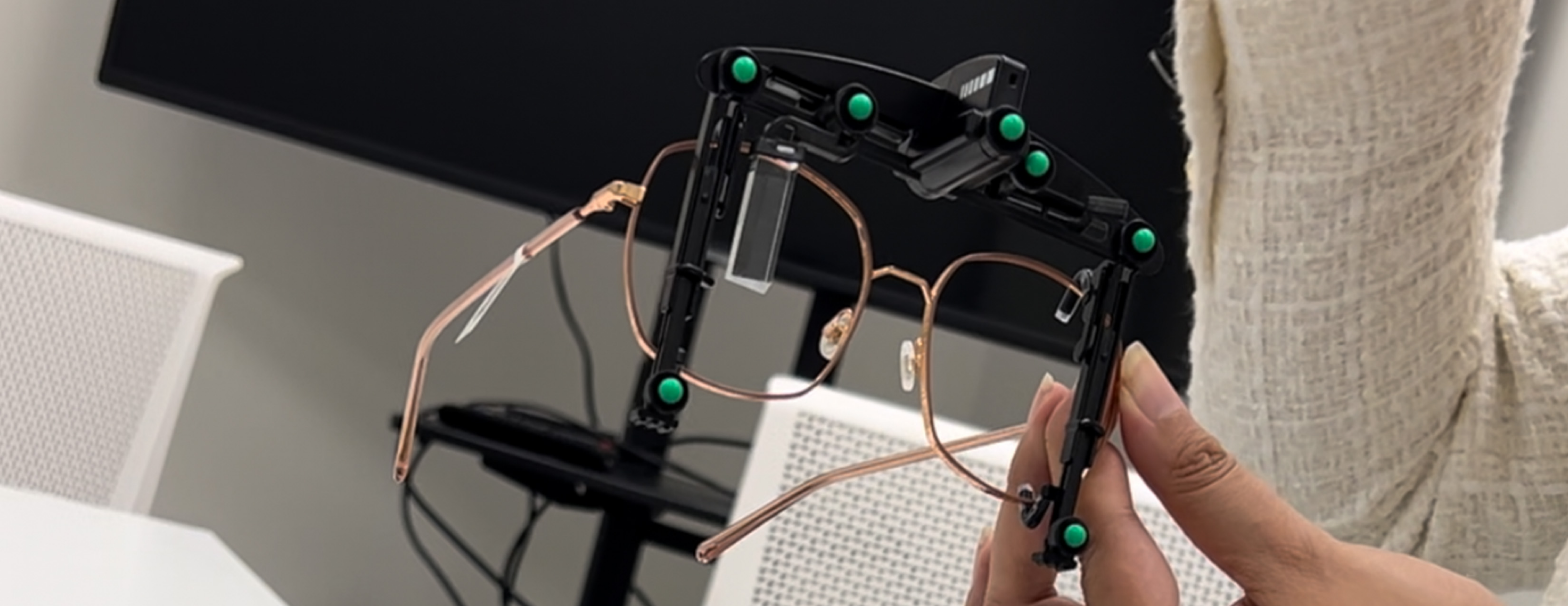
Antoinette



Fitting Specialist
In person meeting



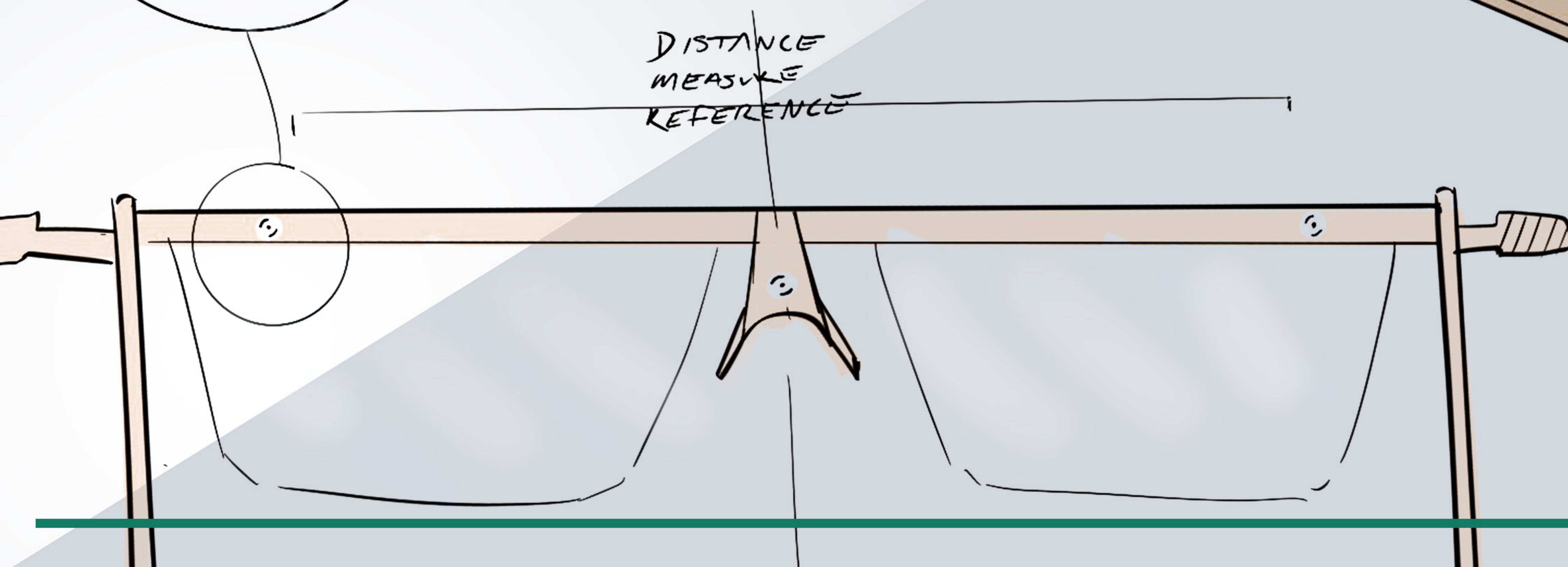
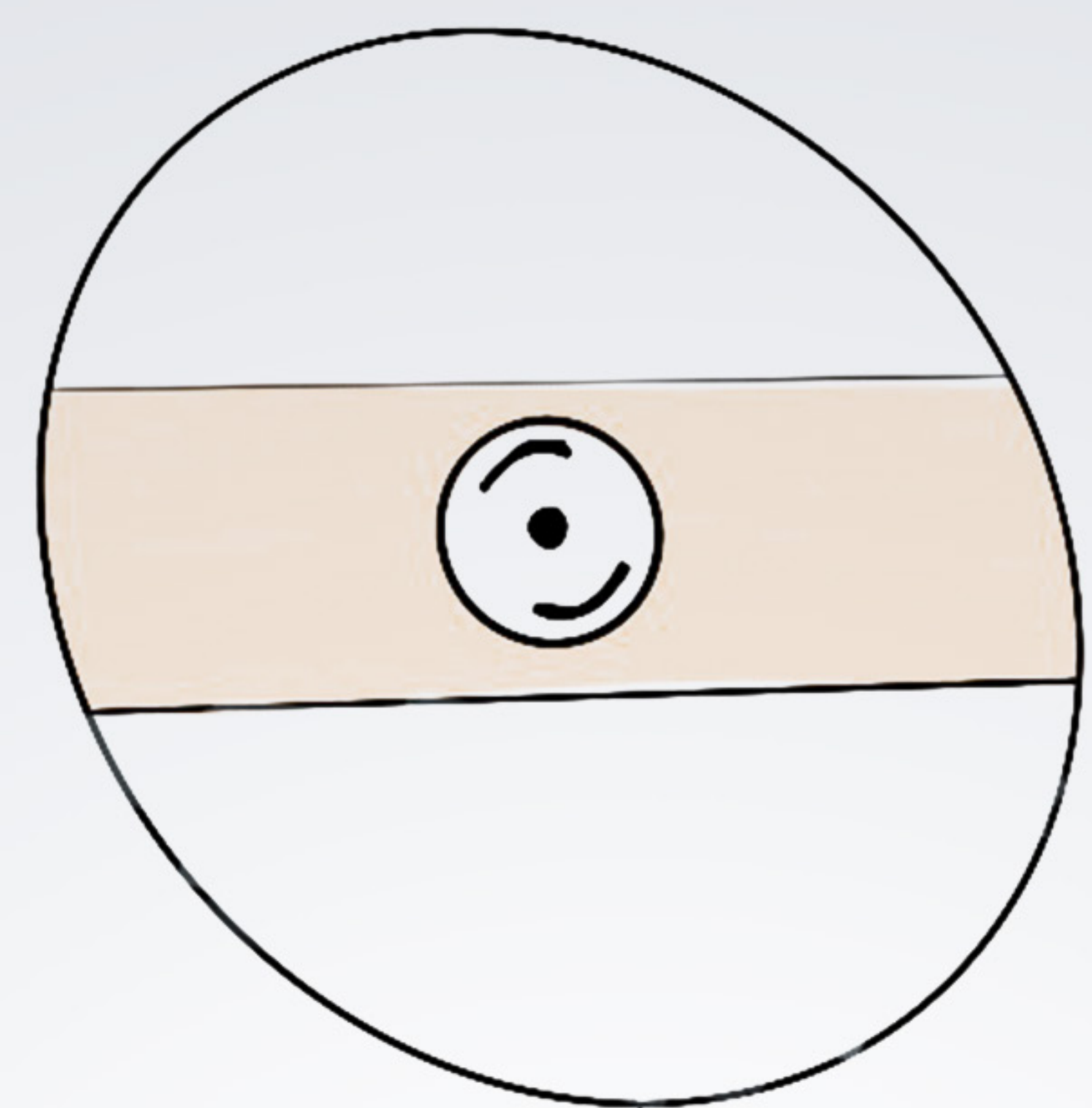
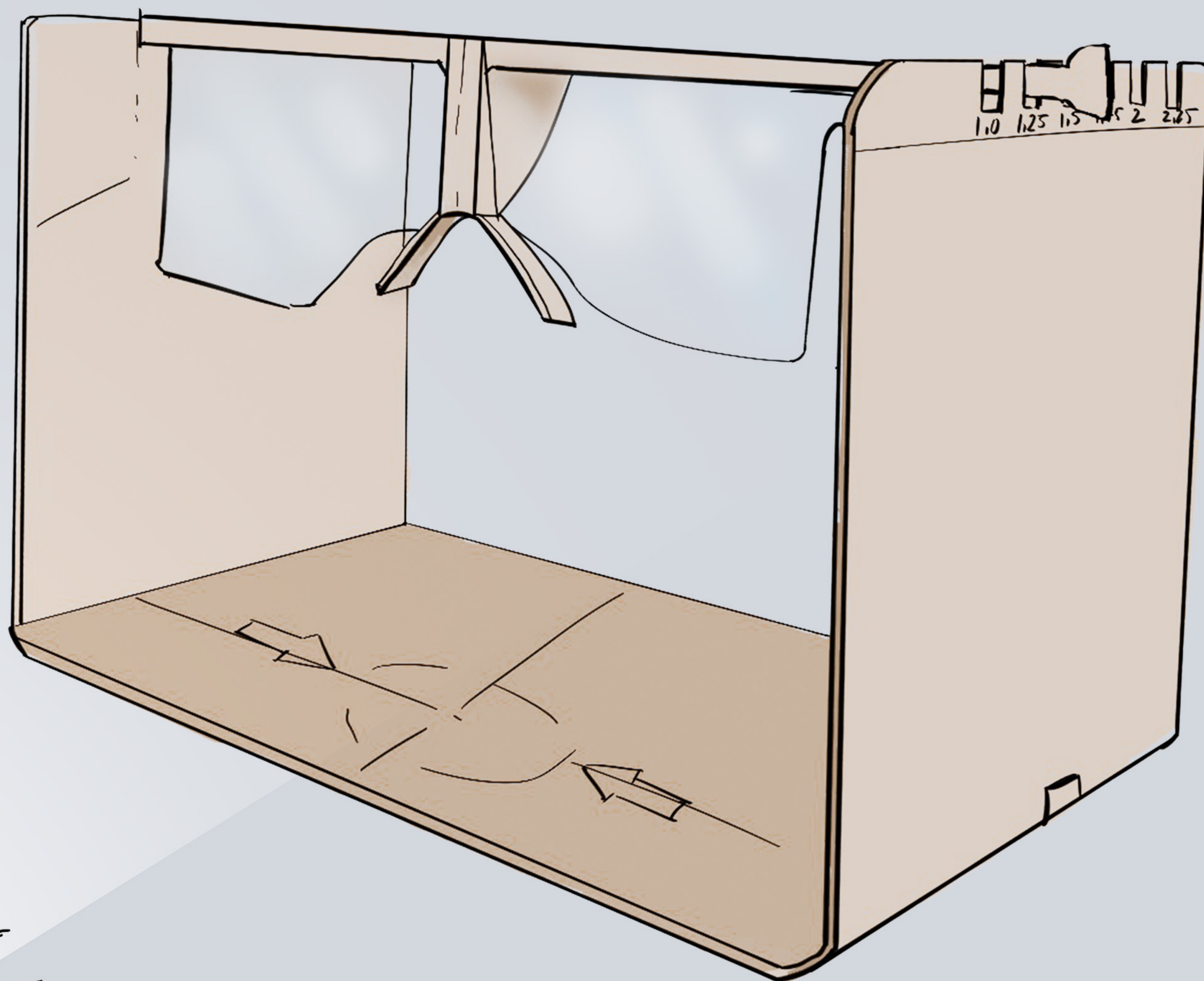
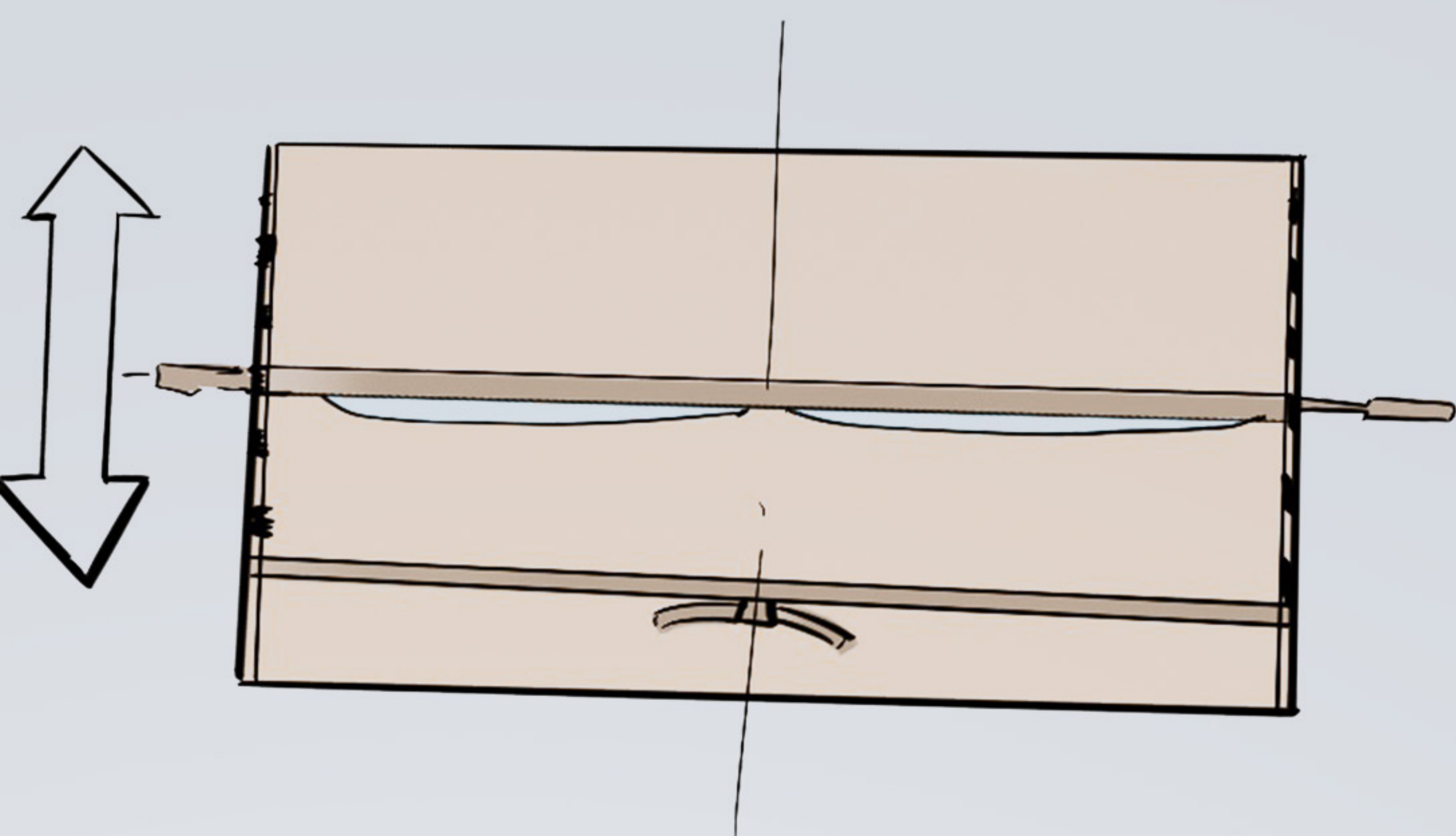
For my research, I conducted interviews with three professionals: an ophthalmologist, an optometrist, and an eyeglass fitting professional. These interviews provided valuable insights into various aspects of the eyewear industry, including medical considerations, vision correction techniques, and the importance of proper fitting for optimal vision and comfort.



Initial Concept

My initial concept for this project revolved around the idea of creating an affordable tabletop cardboard product that could be shipped to individuals in need of eyewear solutions. The concept involved incorporating lenses that could be adjusted away from the user's face, theoretically altering the refraction of the lens to achieve the desired prescription.

While admittedly rough and rudimentary in its form, this concept represented my first step towards exploring innovative and cost-effective approaches to eyewear. By leveraging simple materials and mechanisms, I aimed to develop a solution that could democratize access to eyewear and alleviate the financial burden often associated with traditional prescription glasses. This concept laid the foundation for further exploration and refinement of ideas in pursuit of affordable and accessible eyewear solutions.



Background

During my exploration of solutions to address the challenges of accessibility and affordability in the eyewear industry, I stumbled upon the groundbreaking work of Joshua Silver, the inventor of liquid-filled spectacles. Silver's innovative approach to eyewear, which allows users to adjust the lenses to their prescription by simply adding or removing fluid, sparked a series of concepts in my mind.

Inspired by Silver's pioneering spirit and commitment to creating accessible eyewear solutions, I began to explore ways to apply similar principles to my own project. The concept of adjustable eyewear opened up new possibilities for empowering individuals to take control of their vision needs without relying solely on expensive professional services. It served as a catalyst for brainstorming ideas on how to develop a practical, self-administered solution for measuring eyeglass prescriptions accurately and affordably.



Fig. 1

Fig. 2a

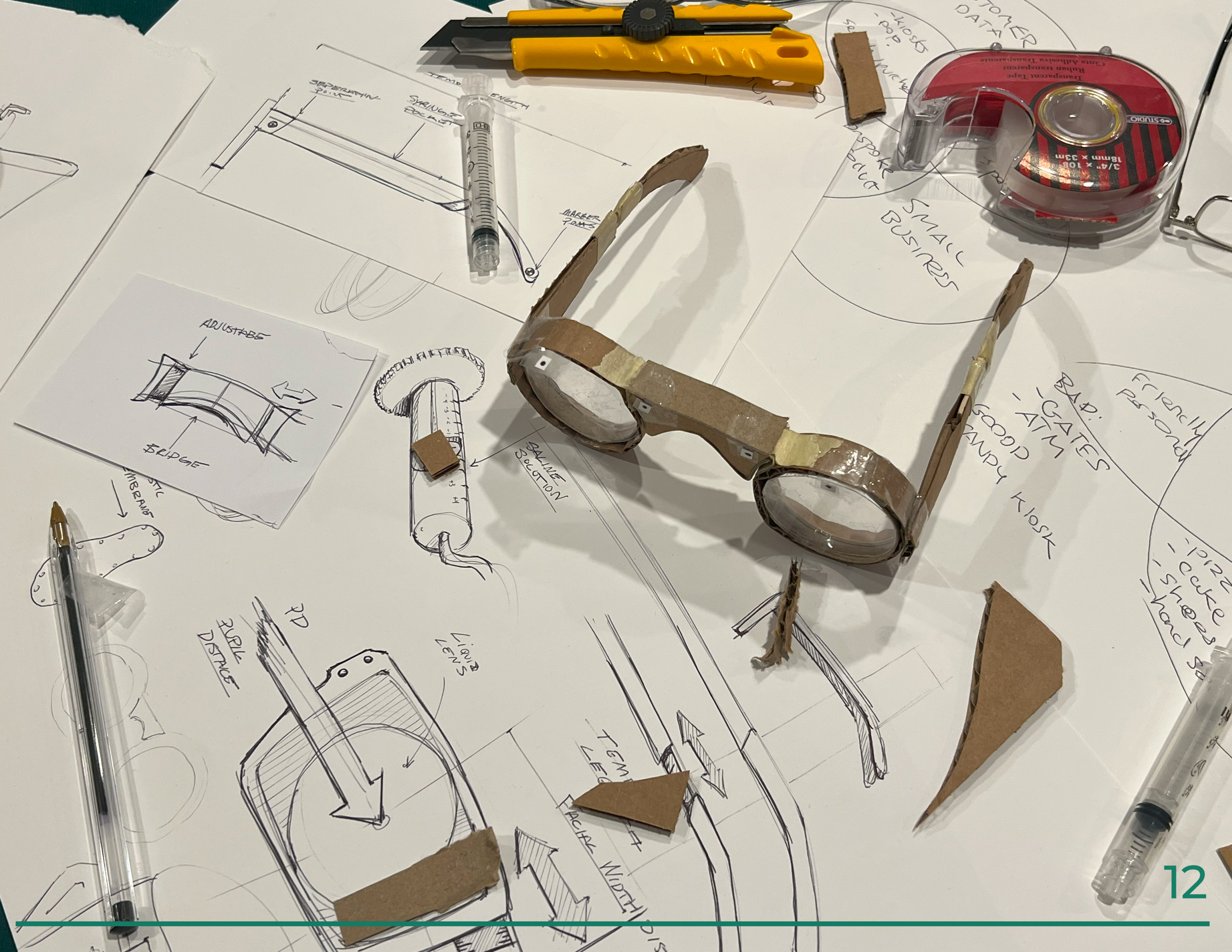
Fig. 2b

Ideation

This initial concept introduced adjustable features, combining scanning markers with a user interface (UI), alongside the integration of Joshua Silver's liquid-filled lens innovation. The idea aimed to revolutionize the eyewear industry by providing users with customizable and adaptable eyewear solutions, all crafted from a pulp-like cardboard material. By leveraging advanced scanning technology and innovative lens designs, this concept sought to offer users greater control over their vision correction needs, while also enhancing accessibility and affordability in the eyewear market.

AI Mid Journey Renders

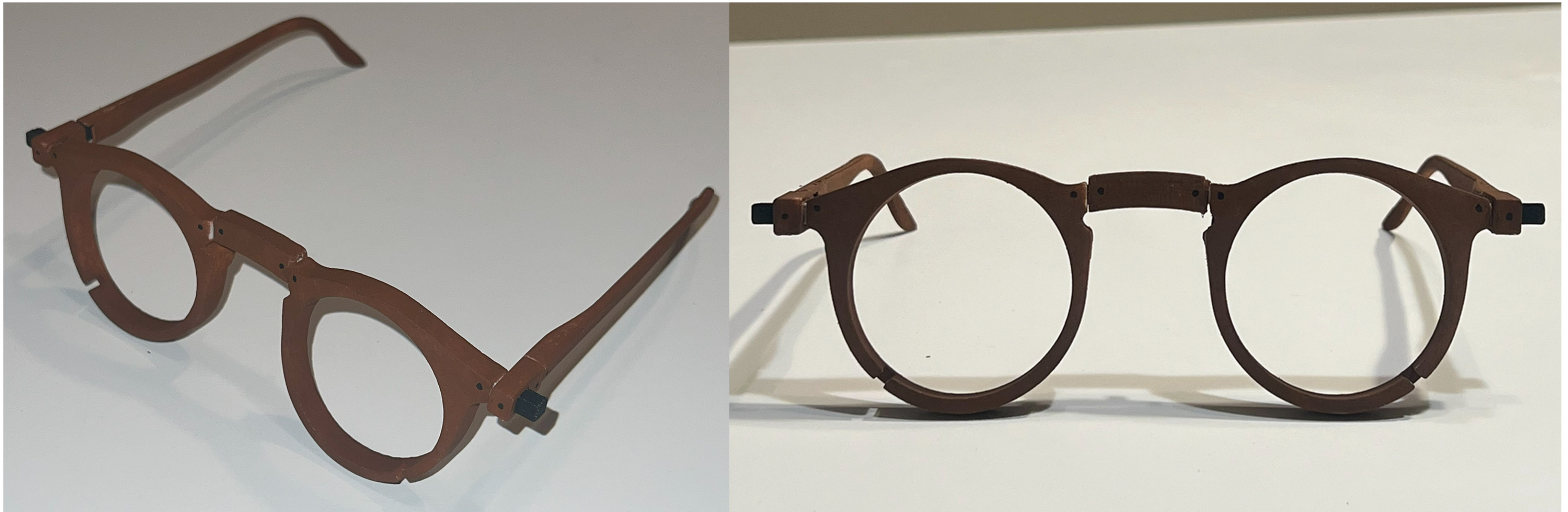




Concept Development

This next concept represented a significant evolution within the project. The major shift occurred with the transition from cardboard to recycled plastic as the primary material for the eyewear solution. While still in the exploration phase, I continued to refine the use of scanning markers and began ideating on the integration of liquid syringes. Additionally, this phase introduced the initial iteration of packaging design, demonstrating a consideration for user experience and simplicity.

As the project progressed, this concept served as a crucial milestone in the ongoing journey towards creating accessible and environmentally conscious eyewear solutions.





Concept Development

At this stage, I began to question the innovation behind the liquid-filled lenses. It was during this period of reflection that I had the breakthrough idea to move away from the cumbersome syringes and adopt a more user-friendly approach. The concept revolved around a self-contained lens design that utilized rotation to adjust the pressure on the liquid inside, eliminating the need for additional liquid. I also initiated testing on the adjustment features and began exploring the integration of green spheres into the glasses. This phase of experimentation and refinement propelled the project forward, paving the way for a more user-centric and innovative eyewear solution.





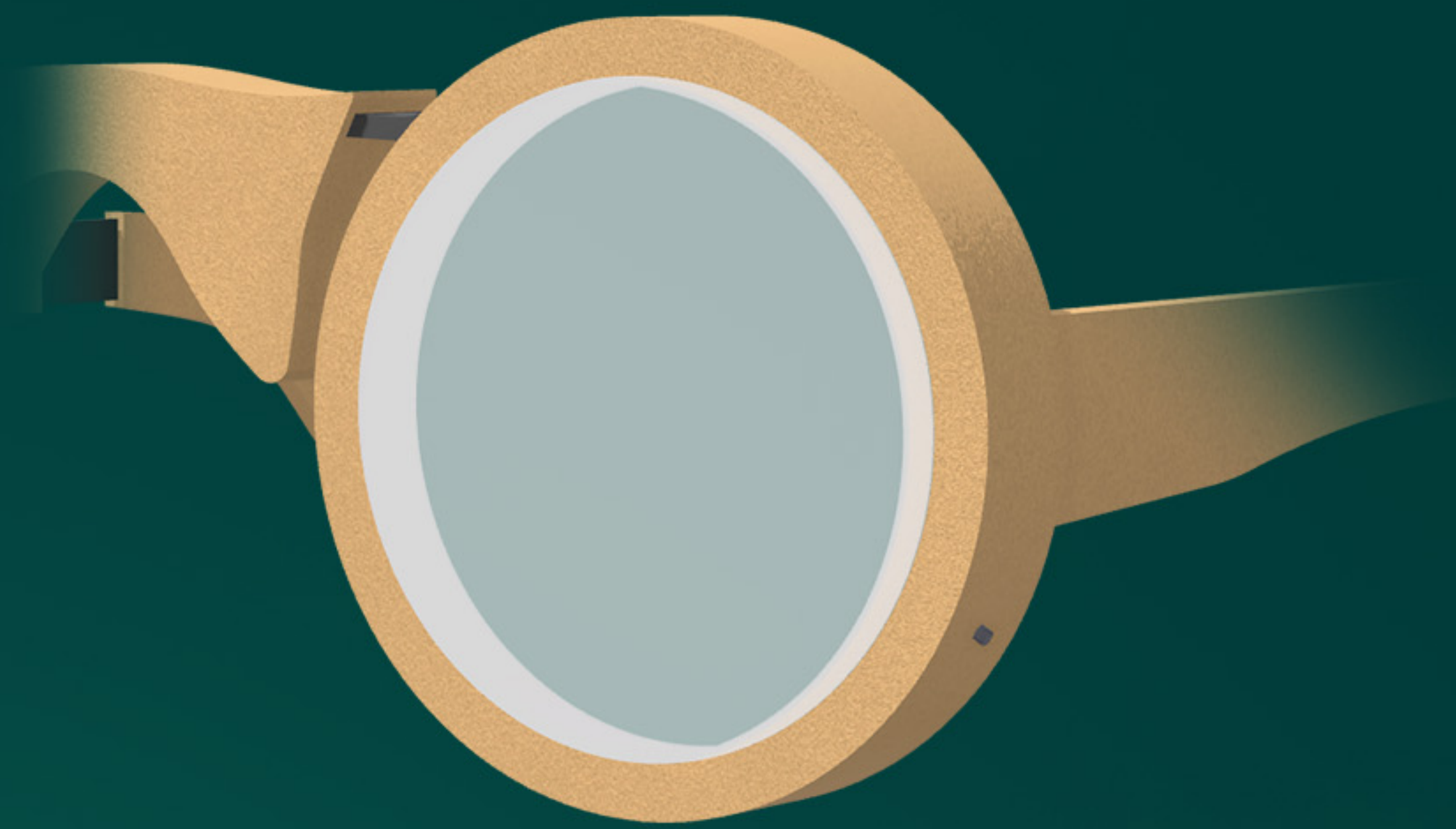
Concept Development

In this final stage of prototyping, the focus has been on fine-tuning every detail of the eyewear solution. The adjustments, particularly in the bridge and stems, have been perfected to ensure optimal comfort and functionality. By integrating moving parts, durability has been prioritized, ensuring that the eyewear remains sturdy and reliable even after manufacturing. Additionally, the lenses have been finalized with magnetic inserts, and a transition has been made from aluminum to clear recycled plastic. With two sets of lenses ranging from 0 to -5 and 0 to +5, versatility and adaptability are key features of the finished product.

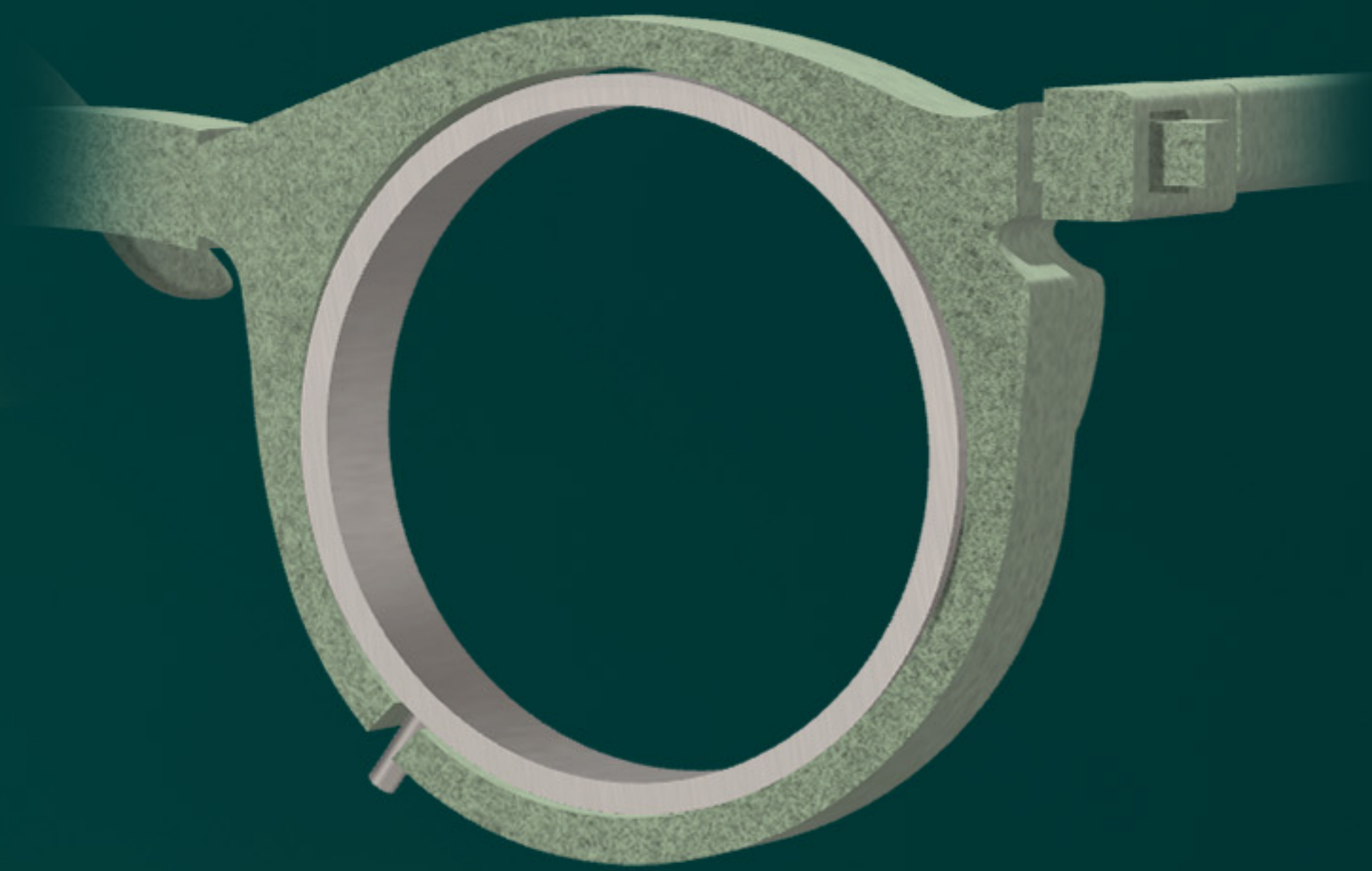




Concept Development



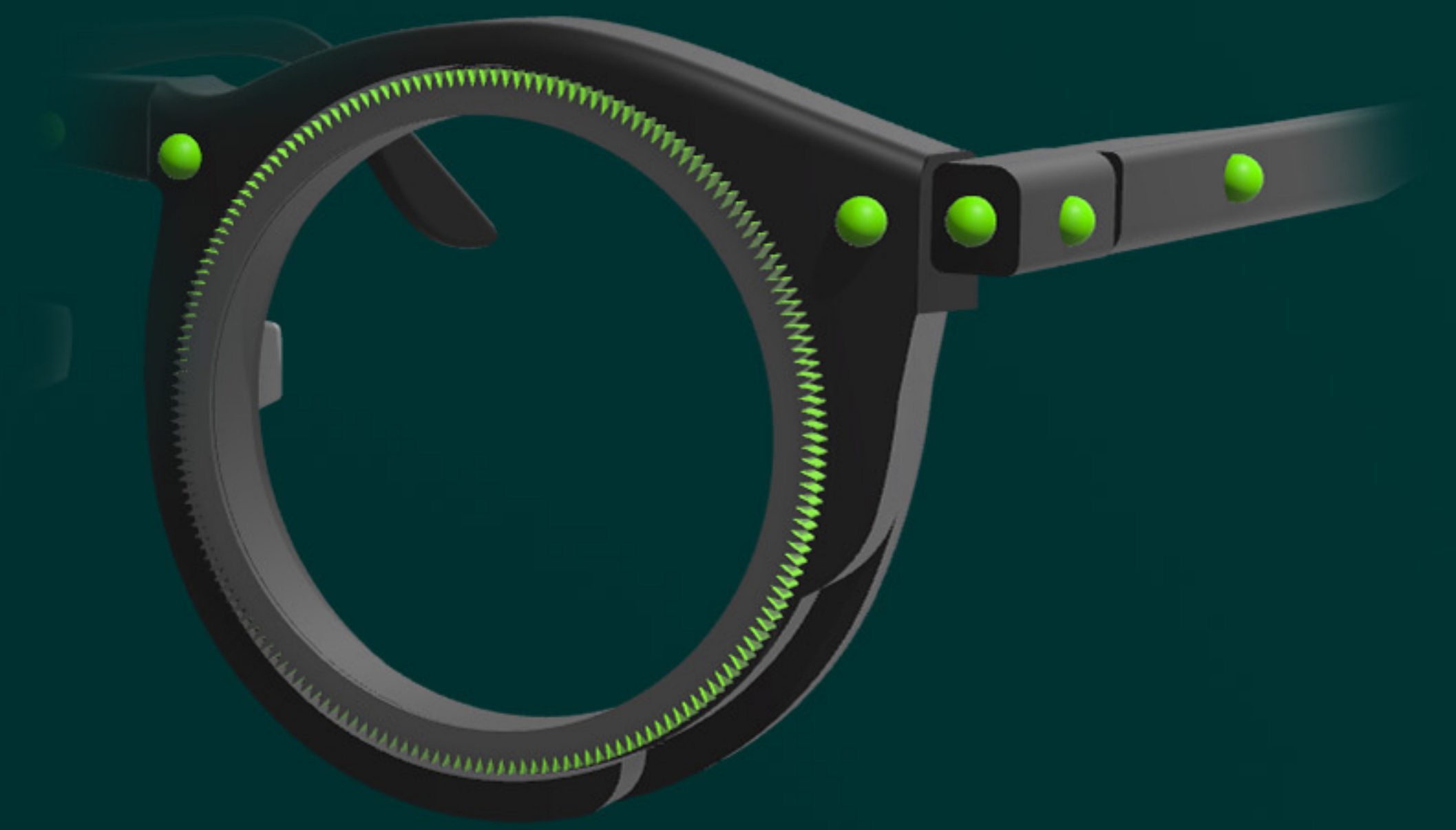
Concept 1



Concept 2



Concept 3



Concept 4



Concept 5

Final Design

Frames



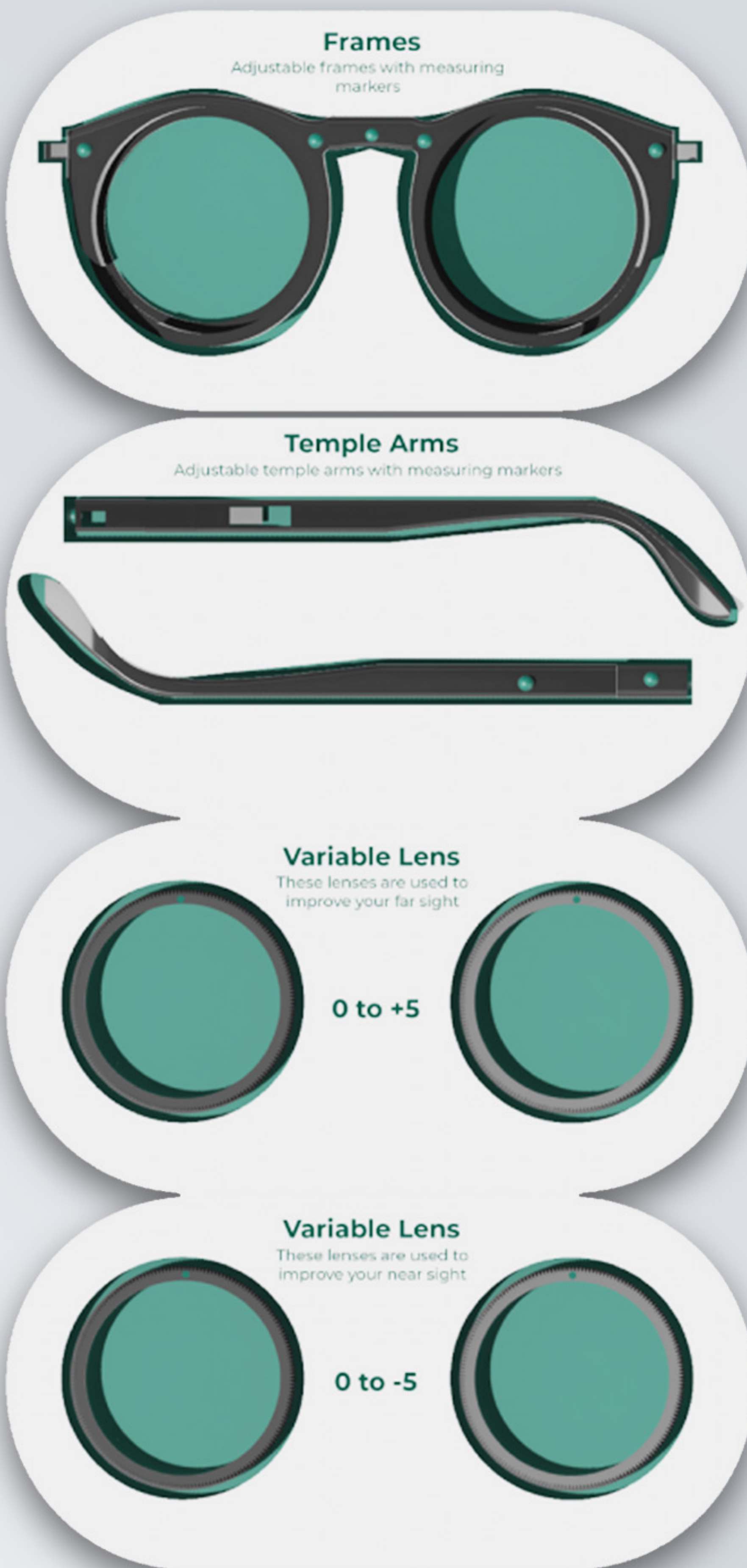
Final Design Packaging



Concept 1



Concept 2



Concept 3

Final Design Packaging



UI Development

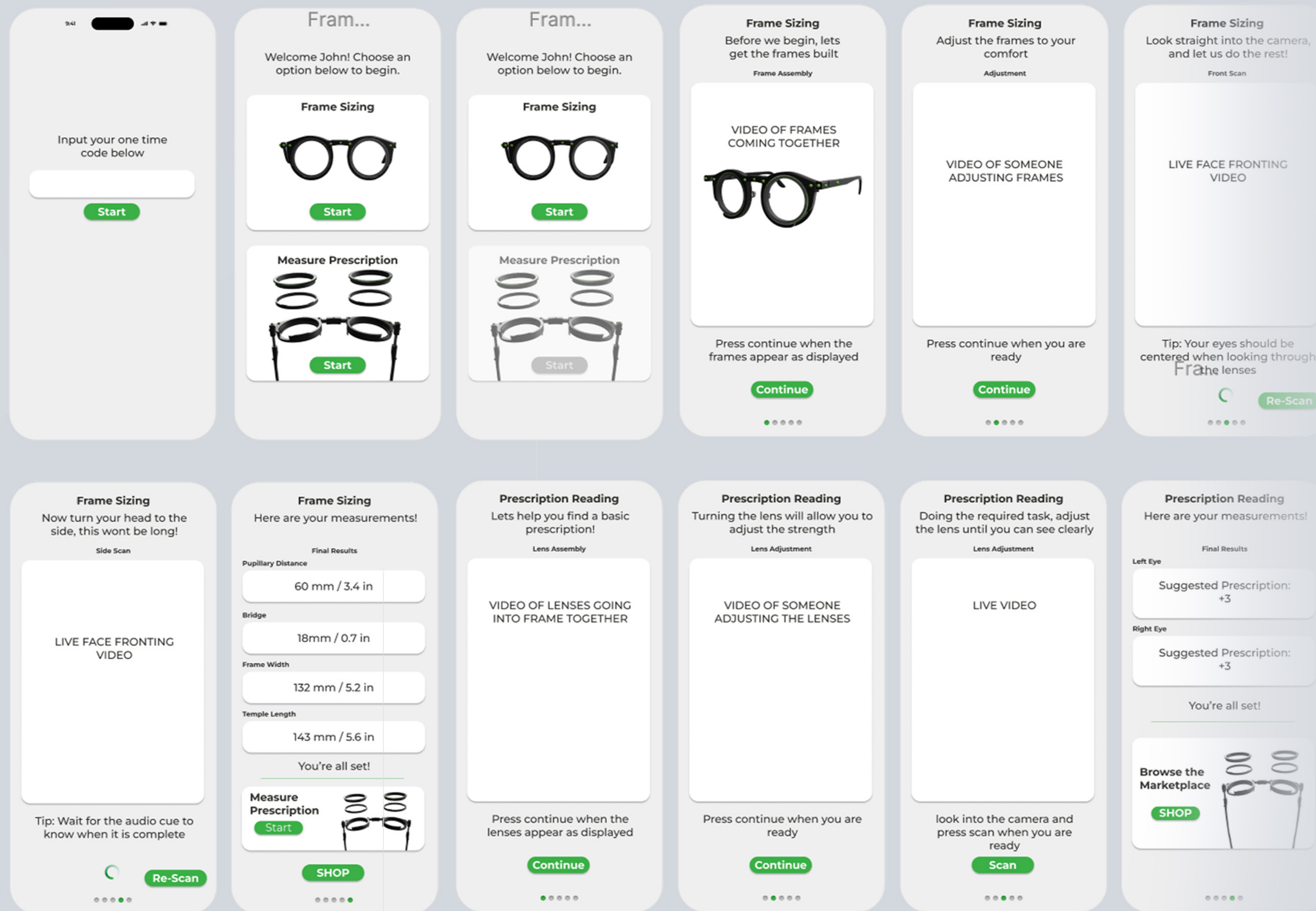
- Computer based
- Not functional
- Shopify themed



Concept 1

UI Development

- Designed for phones
- Interactive wireframe
- First user testing



Concept 2

Final Design - UI



Companion Application

The Eye Care Companion app serves as your guiding hand through every step of the measuring process. From adjusting the frames to obtaining your prescription, it provides visual aids and clear instructions to ensure accuracy and ease.



Eyewear Marketplace

After completing the process, users are directed to the Eyewear Marketplace, showcasing Shopify-powered eyewear companies with tailored selections based on their specific metrics.



Eye Care Verification

When users spot the Eye Care Verification badge, they can rest assured that the specific pair of glasses aligns perfectly with their measurements. This streamlined process allows for easy ordering without the need to review multiple metrics.

Try The App!





The Idea

The idea behind this project was to reimagine eyewear solutions, making them more accessible, affordable, and user-friendly. By challenging traditional approaches and incorporating innovative design elements, the aim was to create a product that meets the diverse needs of individuals seeking vision correction.

What

This project entailed the development of novel eyewear solutions, integrating cutting-edge technologies and sustainable materials. The result is a product that offers customizable vision correction options, catering to individuals with varying needs and preferences.

Why

The driving force behind this project was the recognition of the widespread barriers to accessing adequate eyewear. With millions of people worldwide lacking affordable options for vision correction, there was a pressing need to innovate and disrupt the status quo, ensuring that everyone has access to high-quality eyewear solutions.

How

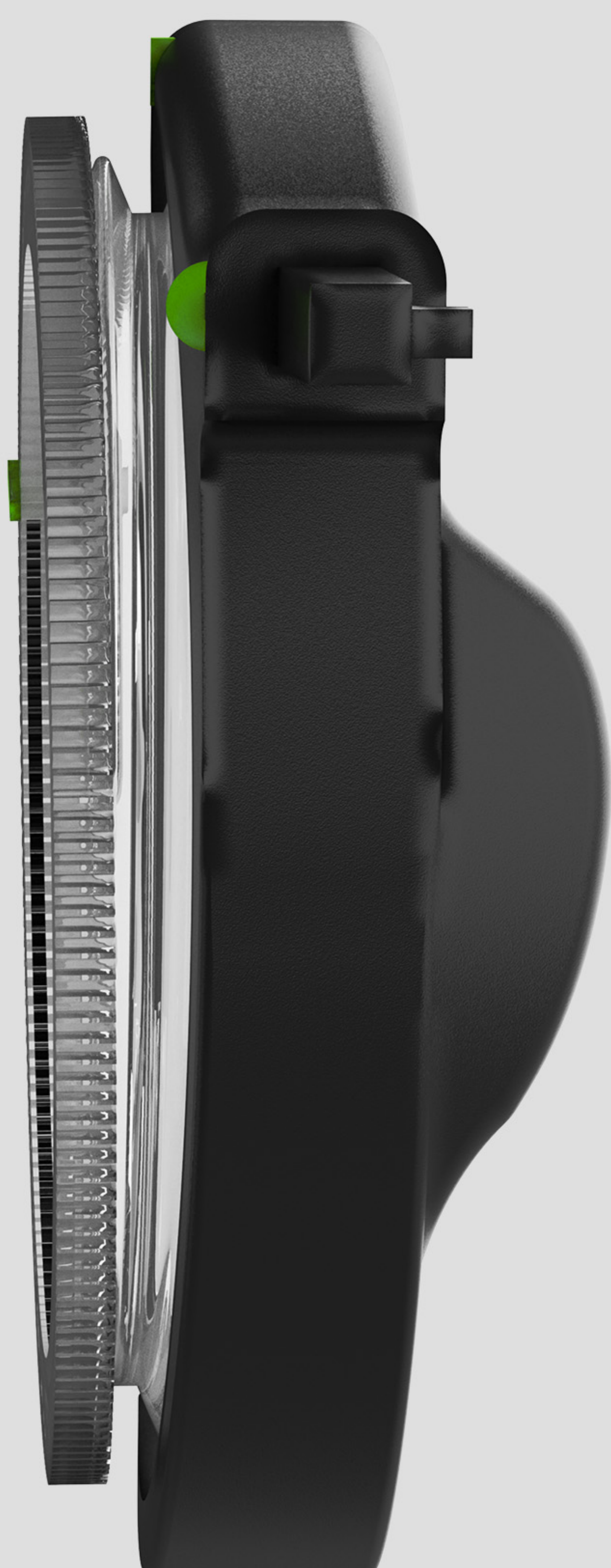
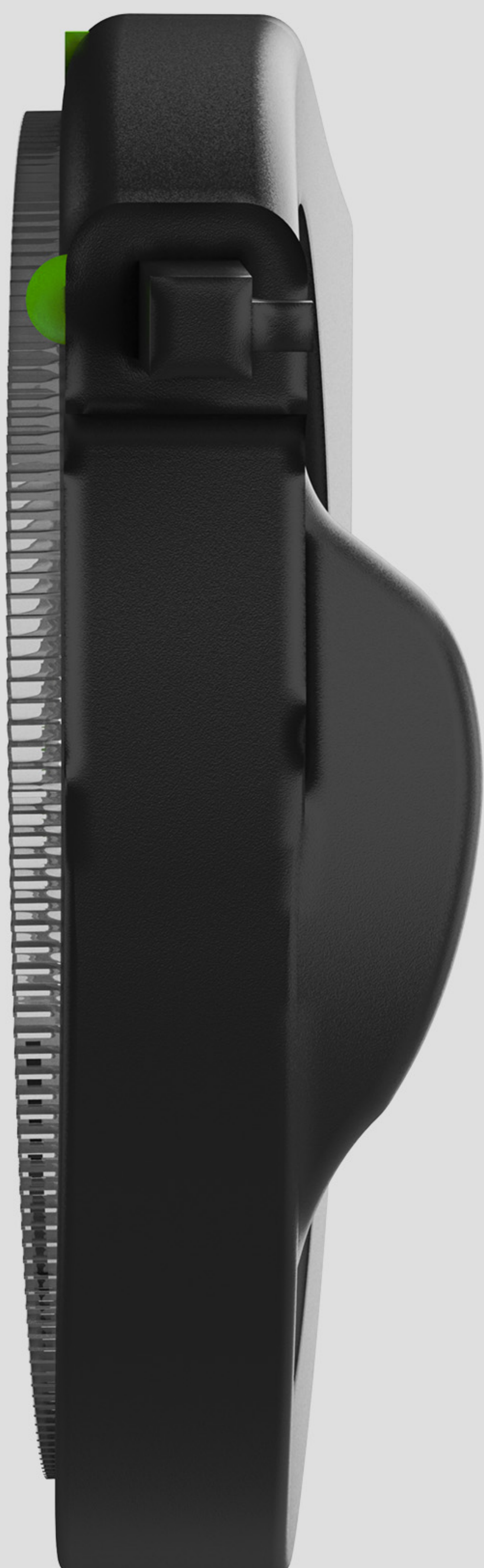
The project methodology involved extensive research, collaboration with industry professionals, and iterative prototyping. By leveraging insights from user feedback and technological advancements, the design was refined to create eyewear solutions that are not only functional but also environmentally sustainable.

User Journey Map

This chart visually maps the user journey from discovery to purchase of the product, while also indicating key data collection points within the Shopify platform.









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