# HCI - Assignment 1 2024/2025

## ClearVue

"Making you days clearer since 2025"

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# Problem Being Addressed

## Problem
Difficulties in purchasing eyewear online (sizing issues, inability to try on, unavailability of buying specific personalized lenses)

## Affected Users
People needing prescription glasses, fashion-conscious consumers, overwhelmed professionals with neglected eye health

## Current Status
High return rates and low customer confidence in online eyewear shopping

## Project Selection
Creating an integrated e-commerce solution for opticians that offers personalized shopping experiences with virtual try-on and prescription management

# Objectives

**01**

Increase customer confidence in online eyewear purchases

**02**

Create an intuitive optical e-commerce platform with virtual try-on capabilities

**03**

Simplify prescription upload and management

# Competitor Analysis - Opticalia

- Opticalia is an optical retail company that sells eyeglasses, sunglasses, contact lenses, and other vision-related products.
- They operate multiple retail locations throughout Portugal.
- They offer vision testing services and eyewear prescriptions.
- As a retail optical chain, they carry various brands of frames and lenses.
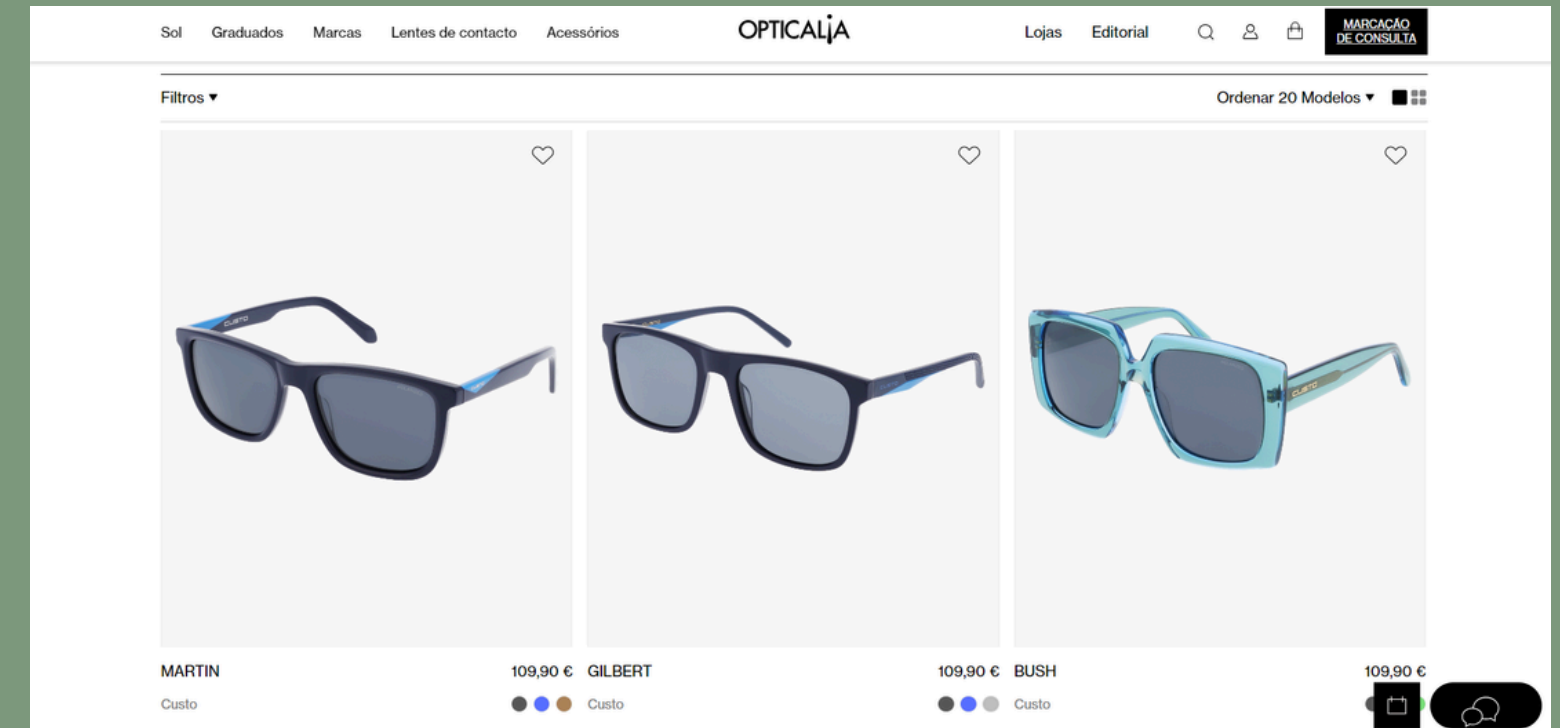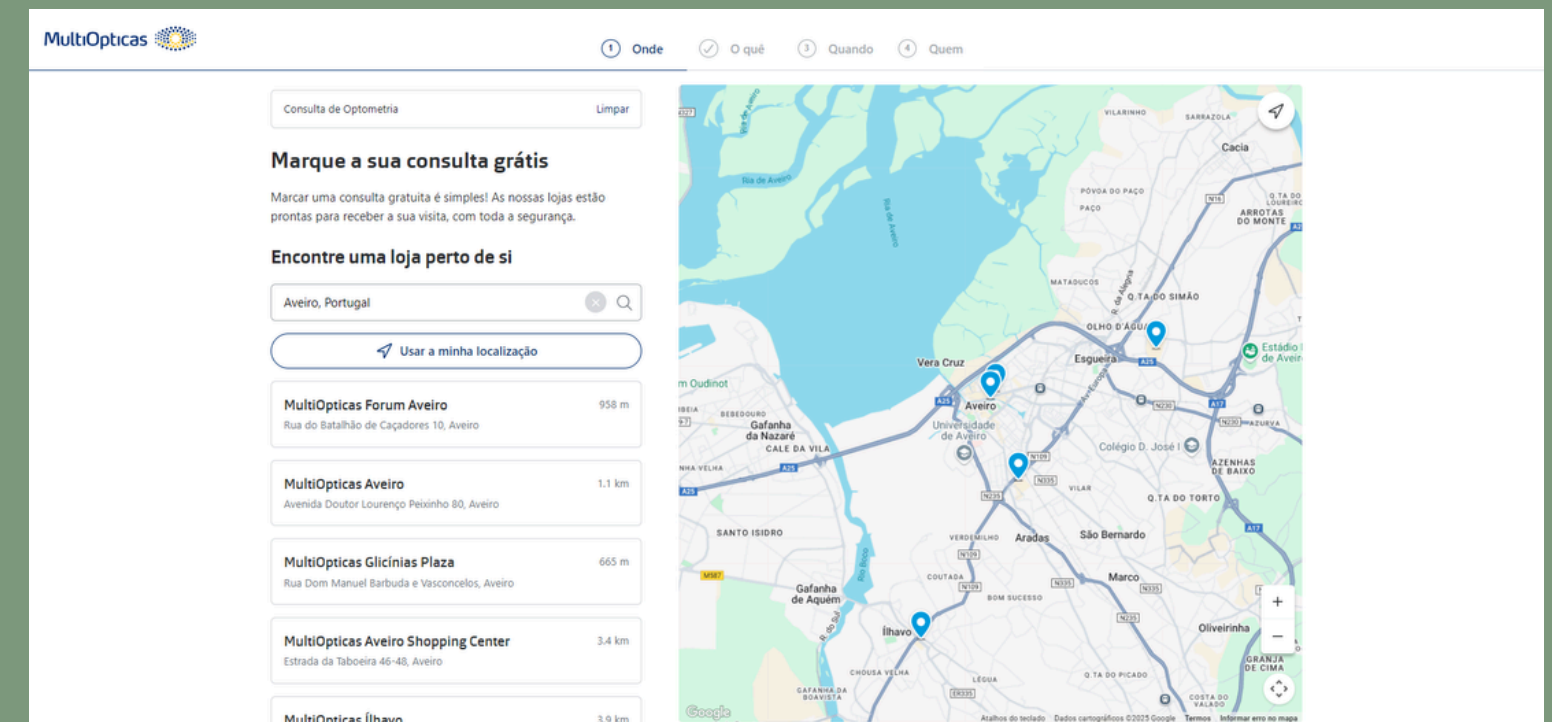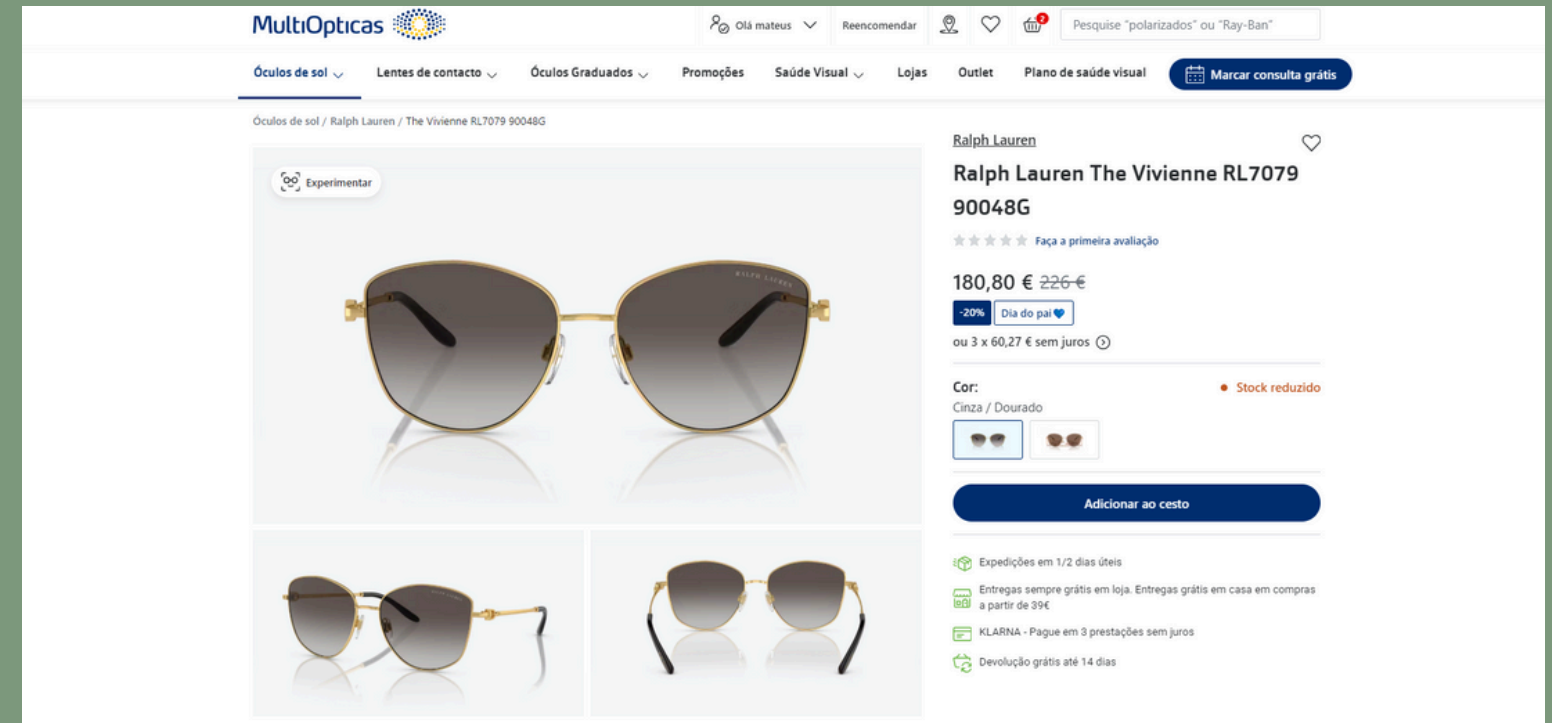
# Competitor Analysis - Opticalia

## Website Issues

- Spanish translation problems throughout the site
- "Add to Cart" button is non-functional
- Guest checkout option exists but lacks clear explanation of guest user limitations
- No feedback message when attempting to complete purchase as a guest (e.g., "Registration/login required")
- Unable to add items to cart while browsing as a guest user

# Competitor Analysis - MultiOpticas



- MultiOpticas is one of Portugal's largest optical retail chains, offering a wide range of eyewear products and vision care services.
- Sells prescription glasses, sunglasses, contact lenses, and optical accessories.
- Provides eye exams, vision consultations, and personalized lens fitting.
- Operates numerous physical stores across Portugal while also providing an online shopping experience.

# Competitor Analysis - MultiOpticas

## Website Issues

- Inability to purchase prescription eyeglasses online using an existing prescription, requiring the scheduling of an in-person eye exam instead
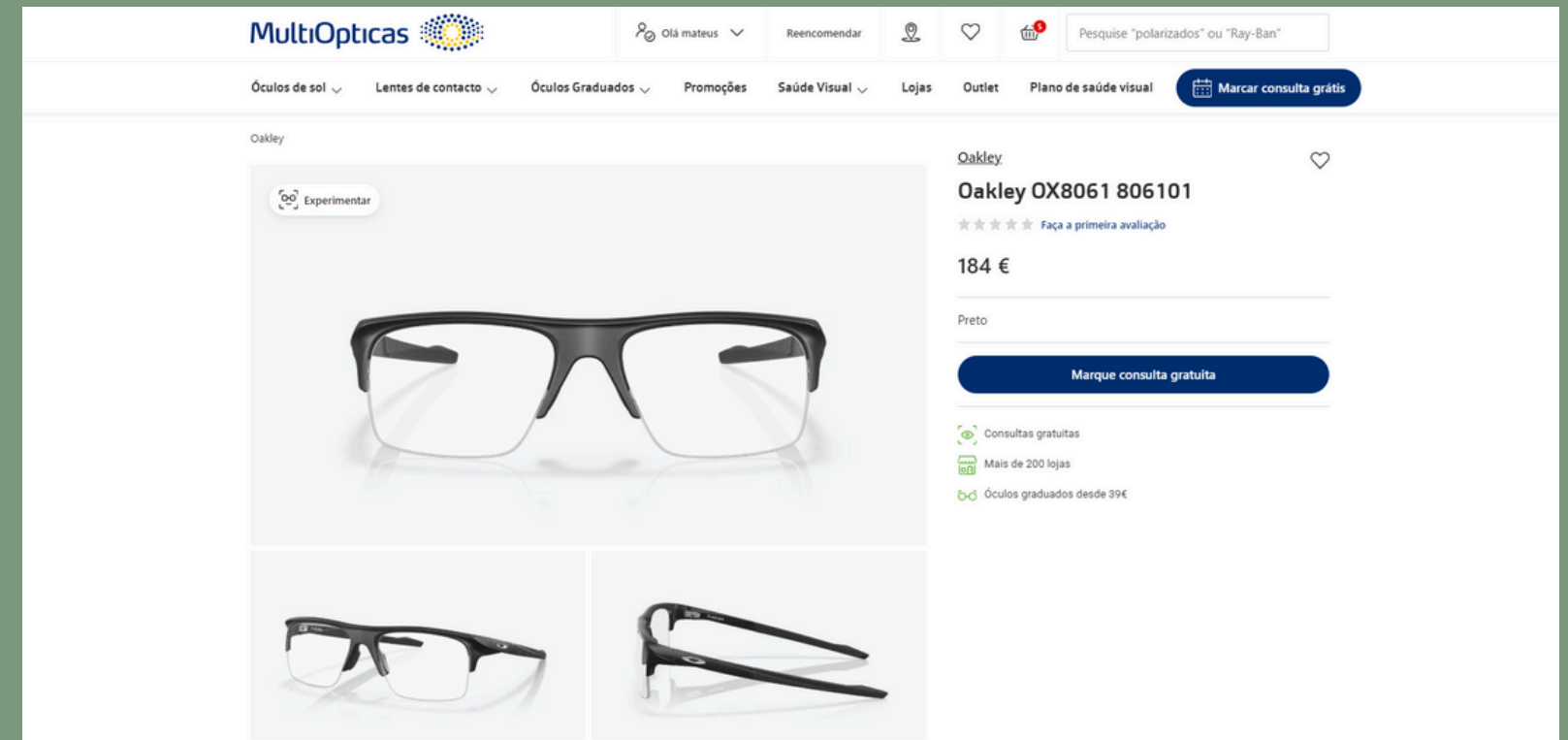
# Methods used to analyse the main competitor Opticalia

- Purchases online,

- Appointments for consultations.

- Test the glasses virtually.

# Methods

## Heuristic Evaluation Method
We evaluated the Opticalia website based on Nielsen's 10 heuristics

## Method for cognitive walkthrough
We simulate common tasks, like adding an item to the cart, to identify points of confusion

# Heuristic Evaluation

| | Mateus | Edivaldo | Recommendation |
|---|---|---|---|
| **Lack of feedback when adding an item to the cart (as a guest or logged in).** | 4 | 4 | Provide a clear error message explaining why the item cannot be added to the cart. |
| **There is no feedback when clicking the "Checkout" button as a guest.** | 5 | 4 | Add a clear message informing the user that they need to register or log in to complete the purchase. |
| **Translation problems into Spanish (Spanish phrases and words).** | 4 | 3 | Review and correct translations to ensure consistency in the user's chosen language. |

| | Mateus | Edivaldo | Recommendation |
|---|---|---|---|
| "Continue as Guest" button does not explain the limits of this option. | 3 | 3 | Add a clear explanation about the limitations of purchasing as a guest. |
| Unable to add products to cart even after logging in. | 5 | 4 | Fix the technical issue and ensure the cart works properly after login. |
| To create an account, you need to add a store. | 4 | 3 | Simplify the registration process by removing the requirement to add a store. |
| Interface can be confusing due to functionality issues. | 3 | 2 | Simplify the interface and ensure all functionality is working properly. |

# Heuristic screenshots
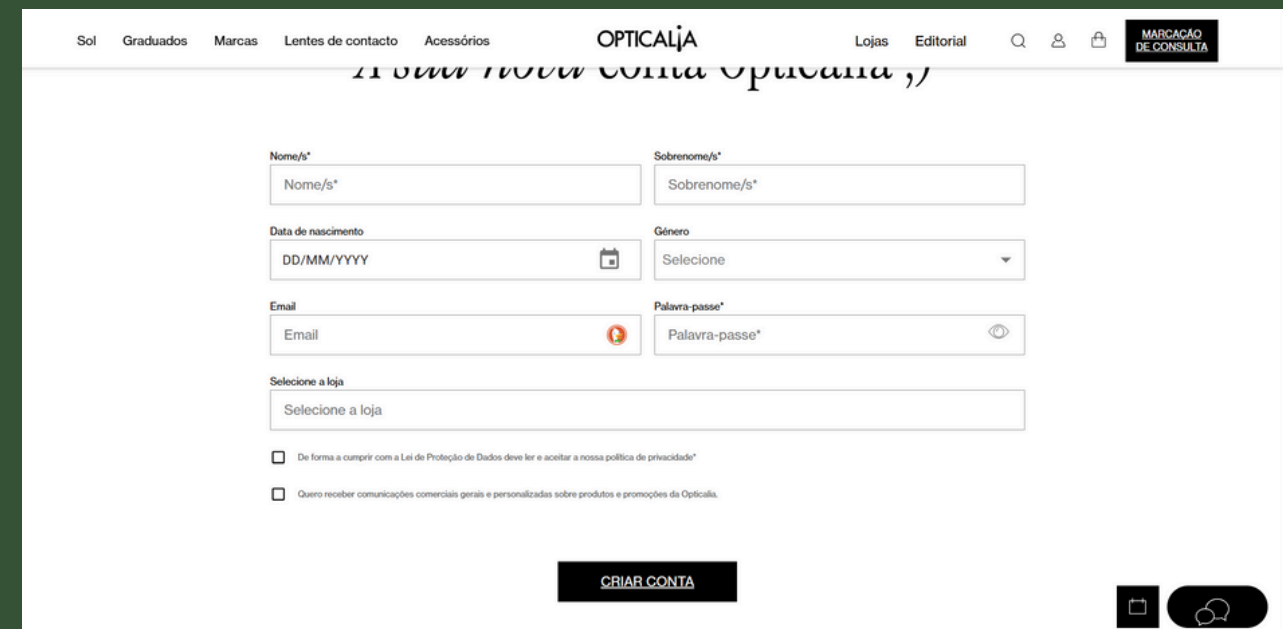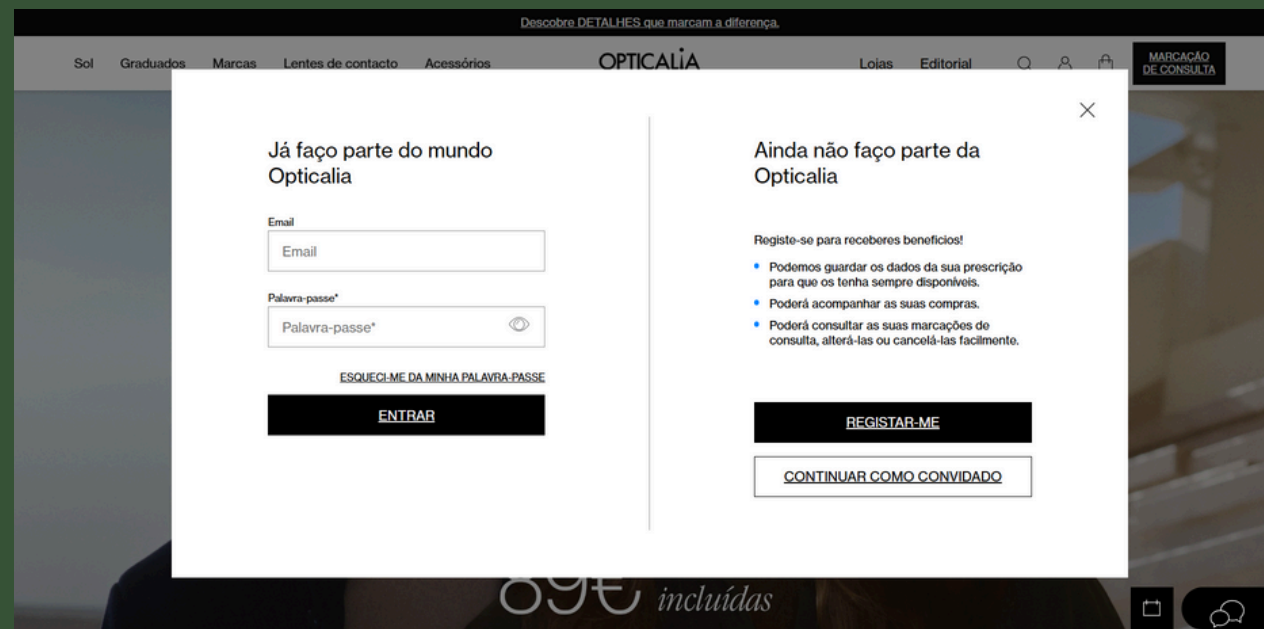
# Understing Users

## Customer Profile
Purchase cycle: Every 2-3 years, strong preference for physical stores, no online eyewear purchase experience.

## Online Requirements
Virtual try-on is essential. Key info: aesthetics, price, technical specs, prescription compatibility.

## Decision Factors
Reviews highly influential, transparent pricing, real people wearing the products.

## Services
Mixed interest in online eye exam booking, quick support expected.

## Loyalty
Positive reception to loyalty, Desire for personalized offers with frequency control.

# Personas

## João Santos

- 28 years old
- Male
- IT Developer
- Lives in Porto, Portugal

## About the User

João started wearing glasses in university. He's tech-savvy and comfortable with online shopping for most products, but has only purchased eyewear in physical stores. He's open to trying new shopping methods if they offer convenience without compromising quality.

## Behaviors

- Researches products thoroughly online
- Price-conscious but willing to invest in quality
- Reads multiple reviews before making decisions
- Updates his eyewear primarily when his prescription changes
- Values efficiency in shopping experiences

## Pain Points

- Worried about accuracy of online prescriptions
- Concerned about the return process if glasses don't fit properly
- Dislikes frequent marketing communications
- Limited time for in-person shopping appointments

## Motivations

- Finding modern, minimalist frames that suit his style
- Convenience and time-saving shopping options
- Technical information about products
- Value for money with loyalty benefits

## Goals/Needs

- Easy-to-use virtual try-on technology
- Detailed technical specifications about frames and lenses
- Ability to upload his prescription securely
- Flexible customer service options including chat
- Personalized recommendations based on face shape and style

## Maria Oliveira

- 42 years old
- Female
- Marketing Manager
- Lives in Lisbon, Portugal

## About the User

Maria has been wearing prescription glasses for over 20 years. She purchases new frames every 2-3 years, usually when her prescription changes or when she wants to update her style. She values quality and durability but is also conscious about price.

## Behaviors

- Shops exclusively at physical optical stores
- Researches options online before visiting stores
- Relies heavily on reviews and recommendations
- Prefers to try on multiple frames before deciding
- Concerned about how glasses complement her professional appearance

## Pain Points

- Skeptical about purchasing eyewear online without trying it on
- Concerned about fit and comfort when shopping online
- Limited time to visit physical stores during business hours

## Motivations

- Finding stylish frames that suit her face shape
- Ensuring comfort for all-day wear
- Getting good value for money
- Maintaining a professional appearance while expressing personal style

## Goals/Needs

- Convenient way to browse options before visiting a store
- Ability to visualize how frames would look on her face
- Clear information about frame materials, weight, and durability
- Transparent pricing including lens options
- Expert advice on which frames suit her face shape

# User Scenarios

# Scenario 1: Maria's Replacement Glasses

## Persona: Maria Oliveira

Maria has been wearing the same pair of glasses for almost three years. Last week, while cleaning her glasses, she noticed a crack in one of the lenses. Since she has an important client presentation next week, she needs to get a replacement pair quickly. However, her schedule is packed with meetings during normal business hours, making it difficult to visit a physical optical store.

## Key Needs

- Ability to shop outside of business hours
- Easy prescription upload
- Virtual try-on capability
- Clear delivery timeframes
- Professional-looking frames for work environment

## User Journey

1. Maria remembers she has her prescription from her eye exam six months ago
2. During her lunch break, she visits the optical website on her desktop computer
3. She searches for frames similar to her current style, filtering by women's frames and professional appearance
4. She uploads her existing prescription via the prescription management tool
5. She uses the virtual try-on feature to see how different frames would look on her face
6. She reads reviews from other customers about frame durability and comfort
7. She selects a frame and completes her purchase, choosing express delivery
8. She receives confirmation that her glasses will be ready in 3-5 business days

# Scenario 2: João's First Online Eyewear Purchase

## Persona: João Santos

João's prescription has changed, and he needs new glasses. As a tech-savvy person who regularly shops online for other products, he's considering trying an online optical shop for the first time, but he has concerns about getting the right fit and quality without trying frames on in person. He wants to explore options during evening hours when he has free time.

## Key Needs

- Mobile-optimized shopping experience
- Technical specifications about materials and weight
- Expert advice about lens options for strong prescriptions
- Flexible support options during evening hours
- Confidence in return/adjustment policies

## User Journey

1. João browses the website on his smartphone after dinner
2. He uses the face shape analyzer tool to determine his face shape
3. He filters frames by face shape compatibility, material (lightweight titanium), and minimalist style
4. He uses the virtual try-on feature to visualize several options
5. He has questions about lens thickness for his high prescription and initiates a WhatsApp chat with customer support
6. After receiving answers, he selects a frame but saves it to his wishlist to consider overnight
7. The next day, he returns to complete the purchase, entering his prescription details manually
8. He selects the option for frame adjustment at a local partner optical shop if needed

# Requirements

# Requirements and Proposed Solution

Make a purchase online

Schedule eye exams

Blog for eye information

Prescription Integration

Virtual Try-on - Personalizate

Glasses recycling

Add favorite

Clear user feedback

# Evaluation and Next Steps

# What Went Right and What Went Wrong

**01** User interviews brought valuable insights.

**02** Detailed analysis of competitors.

**03** Difficulty testing broken features on the Opticalia website.

**04** Time constraints to interview more users.

**05** Clear identification of Opticalia's usability problems.

# Next steps

**1**

**Solution prototyping**

**2**

**Perform usability testing with prototypes.**

**3**

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