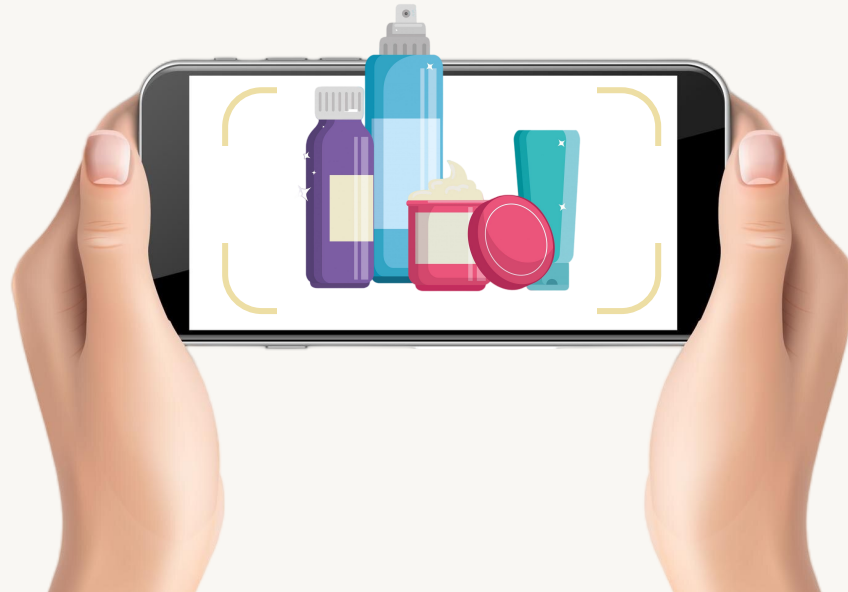


an app that guides consumers to healthier product choices

CLEANCOMPASS





AGENDA OVERVIEW

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ROLE & DURATION

UX/UI Designer

Info Design & Strategy Student @ Northwestern University

Product Design, User Research, Interaction, Visual Design, Prototyping & User Testing

Duration: Jun 17, 2024 - Aug 23, 2024



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BACKGROUND

With social media platforms often disseminating conflicting information about product safety, the need for a reliable, easily accessible source of information is more critical than ever.

After conducting extensive research on the issues surrounding product safety and performing a thorough competitive analysis of existing solutions, I've identified a significant gap in the current market that CleanCompass is uniquely positioned to address.

The initial scope of this project is to iterate the design of **CleanCompass**, a user-friendly mobile app that provides comprehensive, easy-to-understand ingredient safety information across various product categories, **empowering consumers to make healthier, informed choices.**






PROBLEM STATEMENT

This solution focuses on helping consumers easily identify and avoid potentially toxic ingredients in everyday consumer products

Many everyday products like cleaning supplies, cosmetics, and personal care items contain potentially harmful ingredients hidden behind ambiguous or complex labels. Consumers often lack the knowledge, resources, or tools to easily identify these toxins in their purchases. This pervasive issue puts people's health at risk and prevents them from making fully informed choices about the products they use daily.



OUR GOALS

01

Simplify the process of identifying toxic ingredients in products

02

Empower individuals to make safer and healthier choices

03

Reduce the use of harmful chemicals in consumer goods over time

04

Increase transparency and accountability among manufacturers

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OUR USERS

All age groups, but specifically for health-conscious consumers, individuals with allergies, respiratory issues or other sensitivities, or families with young children or pets.

OUR KEY DIFFERENTIATORS



01

AI-powered visual recognition beyond barcodes

02

Multi-category product coverage

03

Personalized health-based recommendations

04

Combined **safety analysis** and **education**

05

Region-specific product information



PROCESS

RESEARCH OBJECTIVES



The primary objective of this research is to gain a comprehensive understanding of the challenges consumers face in identifying and avoiding toxic ingredients in everyday products, and to explore the potential for a mobile application solution.

OBJECTIVE 1


Identify the gaps in current regulations and product labeling that contribute to consumer confusion and potential health risks.

OBJECTIVE 2

Understand the needs, behaviors, and pain points of health-conscious consumers when shopping for personal care, cleaning, and household products.

OBJECTIVE 3

Evaluate the current market landscape to identify opportunities for a unique and effective solution that empowers consumers to make informed, healthier product choices.





SECONDARY RESEARCH

Conducted secondary research to understand the current regulations surrounding ingredient disclosure and safety in consumer products.



PERSONA

Crafted a user persona to better understand the target audience for CleanCompass.




COMPETITIVE ANALYSIS

Examined existing solutions in the market to identify their strengths and weaknesses. This analysis helped position CleanCompass uniquely and informed the development of key differentiators.

METHODOLOGY

530 unique volatile organic compounds (VOCs) were detected across **30 cleaning products**, including multipurpose cleaners, glass cleaners, and air fresheners.

Of these, **193 VOCs** were identified as hazardous, with potential to cause health harms, including respiratory system damage, increased cancer risk, and developmental and reproductive effects.^[1]



Two-thirds of consumers believe chemicals in cosmetics are already reviewed by the FDA.

Only 11 out of 10,000+ chemicals used in cosmetics have been banned or restricted by FDA. Some chemicals in cosmetics are linked to cancer, reproductive harm, and developmental delays.^[2]

KEY RESEARCH FINDINGS



KEY TAKEAWAYS



CleanCompass should feature a comprehensive database of products and chemicals, with easy product identification via image recognition or barcode scanning.

The app must provide clear health risk information and personalized recommendations for safer alternatives.

By focusing on user-friendly design and valuable information, CleanCompass can empower consumers to make healthier choices in personal care and cleaning products, ultimately reducing exposure to toxic chemicals in everyday life.



"I want my kids to grow up healthy and strong, and that includes protecting them from toxins lurking in everyday products. It's not always easy to decipher the ingredient lists, but it's worth it for my family's health!"

Sophia Lee

The Eco-Conscious Mom



Age/Identifying Gender
34/Female



Location
Portland, Oregon



Occupation
Marketing Manager



Family Status
Married/2 Kids

Bio

Sophia is a 35-year-old Marketing Manager living in the suburbs of Portland, Oregon. She's married to David, a software engineer, and they have two children: Emma and Marcus. Sophia's interest in eco-friendly living began after the birth of her first child, when she started to pay more attention to the products she was bringing into her home. She worries about the impact of harmful chemicals on her family. Sophia wants to create a safe and healthy home for her family while minimizing their environmental footprint.

Goals

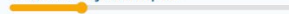
- Efficiently identify and avoid harmful ingredients while shopping.
- Find safer alternatives for her family's everyday needs.
- Reduce her family's exposure to harmful chemicals.
- Create a healthier and more sustainable home environment.

Motivations

Make Informed Decisions



Reduce ecological footprint



Get the Best Price



Protect her children's health



Minimize Long-term exposure of harmful chemicals



Pains

- Deciphering complex ingredient lists on product labels can be time-consuming and confusing.
- Challenging to distinguish between genuine "clean" products and greenwashing marketing tactics.
- Finding eco-friendly alternatives that fit within the family budget
- Feeling overwhelmed by conflicting information about product safety

Devices

(% of Use When Researching)



iPhone
60%



Tablet
10%



Macbook
30%

Primary tool for quick, on-the-go research while shopping, uses for social media to stay up to date on news.

Occasionally used for casual browsing while relaxing

Used for in-depth research sessions, comparing multiple products side-by-side. Engaging in online forums and writing detailed product reviews

Apps or Website Used



For this case study, CleanCompass focuses on health-conscious moms as a primary persona. Mothers often serve as the primary decision-makers for household products and are typically more attuned to health and safety concerns, especially regarding their children.

INSIGHTS



01 Overload vs. Simplicity

While moms want detailed information, they need it presented simply and quickly. CleanCompass should focus on clear, concise product ratings with easy-to-understand health impact explanations.

02 Trust and Credibility

Moms are skeptical of marketing claims and seek trustworthy, science-based information. CleanCompass can emphasize the app's use of reputable sources and third-party certifications.

03 Practical Decision-Making

Moms balance ideal choices with practical constraints like budget and availability. CleanCompass can offer a range of alternative products at various price points based on their preferences.

04 Community and Sharing

Moms often share health and safety information within their social networks. CleanCompass should incorporate easy sharing features and consider a community aspect within the app.

COMPETITIVE ANALYSIS

Objective: To identify Clean Compass's unique value proposition and potential areas for differentiation in the market of product safety and ingredient analysis apps.




Key Competitors

- **Yuka:** A mobile app that scans food and cosmetics, providing health impact scores and better alternatives.
- **Think Dirty:** A mobile app focuses on cosmetics and personal care products, offering detailed ingredient breakdowns and cleaner options.
- **Consumer Reports:** A trusted non-profit organization providing unbiased product reviews and ratings across various categories.

Focus Areas for Comparison

- Solution
- Content / Tone
- Design
- Call to Action
- Target Audience
- Pricing Structure
- Pros
- Cons
- Other key callouts



	Solution	Content / Tone	Design	Call to Action	Target Audience	Pricing Structure	Pros	Cons	Other key callouts
 Yuka	<p>Mobile application that scans barcodes of food and personal care products to provide an analysis of their health impact.</p> <p>Assigns a color code (green-yellow-red) based on ingredient safety and suggests healthier alternatives.</p>	<p>Informative and user-empowering content with a focus on health. The tone is supportive.</p>	<p>Clean and intuitive design with clear visuals and easy navigation. Uses a rating system that is easy to understand.</p>	<p>Clear calls to action such as "Scan products", "learn about ingredients", "find safer alternatives".</p>	<p>Health-conscious consumers looking for quick assessments of food and personal care products.</p>	<ul style="list-style-type: none"> Free Version: Basic functionality with limited features. Premium Subscription: Approximately \$20/year for additional features like offline mode, access to historical data, and advanced search filters. 	<ul style="list-style-type: none"> Comprehensive ingredient analysis Simple and easy to use Provides healthier alternatives A wider range of products (food and cosmetics) 	<ul style="list-style-type: none"> Limited information on specific risks May not consider individual sensitivities, Limited to products in its database Requires barcode accessibility 	<ul style="list-style-type: none"> Strong community engagement with user reviews and feedback.
 Think Dirty	<p>Mobile applications that allows users to scan barcodes of cosmetics and personal care products to reveal their ingredients and potential toxicities with a 0-10 "dirty meter".</p>	<p>Educational, uses emojis to convey a playful yet informative tone. Focuses on ingredient transparency.</p>	<p>Modern and visually appealing design with clear labeling, a rating system, and easy navigation.</p>	<p>Clear calls to action such as "Scan products", "learn about ingredients", and "find cleaner options."</p>	<p>Consumers who are concerned about the safety of cosmetics and personal care products.</p>	<ul style="list-style-type: none"> Free Version: Basic functionality with limited features. Premium Subscription: Approximately \$27/year for additional features like unlimited scans, detailed ingredient reports, and personalized recommendations. 	<ul style="list-style-type: none"> Extensive database of cosmetic ingredients, suggests cleaner alternatives. Detailed ingredient information Easy to use 	<ul style="list-style-type: none"> Limited to cosmetics and personal care items 	<ul style="list-style-type: none"> Includes a shopping feature for safer alternatives
 Consumer Reports	<p>Available as website and mobile application. Provides in-depth reviews and ratings of various consumer products, including safety assessments.</p>	<p>Extensive and detailed content with a professional and authoritative tone.</p>	<p>Functional but less visually engaging.</p> <p>Focuses on content depth rather than visual appeal.</p>	<p>Clear calls to action like "Read full review" and "Compare products."</p>	<p>Consumers seeking detailed and reliable product reviews and safety information.</p>	<ul style="list-style-type: none"> Free Content: Limited access to articles and reviews. Digital Subscription: \$39/year for full access to online content. Print & Digital Subscription: \$59/year for both online access and physical magazine delivery. 	<ul style="list-style-type: none"> Comprehensive and unbiased reviews Trusted source of information Covers a wide range of product categories 	<ul style="list-style-type: none"> Not specialized in ingredient analysis Requires paid subscription for full access. Less engaging interface Dense Information overwhelming for some users. Less accessible for quick, on-the-go checks 	<ul style="list-style-type: none"> Strong reputation and credibility.

Analysis Summary - Main Takeaways




- Use some form of rating system or score for easy understanding.
- A simple and intuitive user interface with clear calls to actions to engage with users.
- Provide alternatives to potentially harmful products.
- User reviews and community feedback are valuable features that enhance credibility and user engagement.
- Barcode scanning is a common feature among mobile applications, making it easy for users to instantly access product information.
- All services offer a basic free version with limited features and a premium subscription for advanced functionalities.



DESIGN ITERATIONS

KEY AREAS TO IMPROVE

1. Budget Options
 2. Safety Score Explanation
 3. Product Information Display
 4. Product Scan Verification or Accuracy Check
 5. Enhance List Management Feature
 6. Additional Filtering Options & Clear Sort Functionality
 7. Engagement and Rewards
 8. Sharing & External Integration
- 

FEEDBACK & USABILITY TESTING

CleanCompass started with low-fidelity prototype to iterate on ideas and design.

Through rounds of feedback and conducting usability with 5 key users, the team has identified a few key areas to improve in producing the final design.

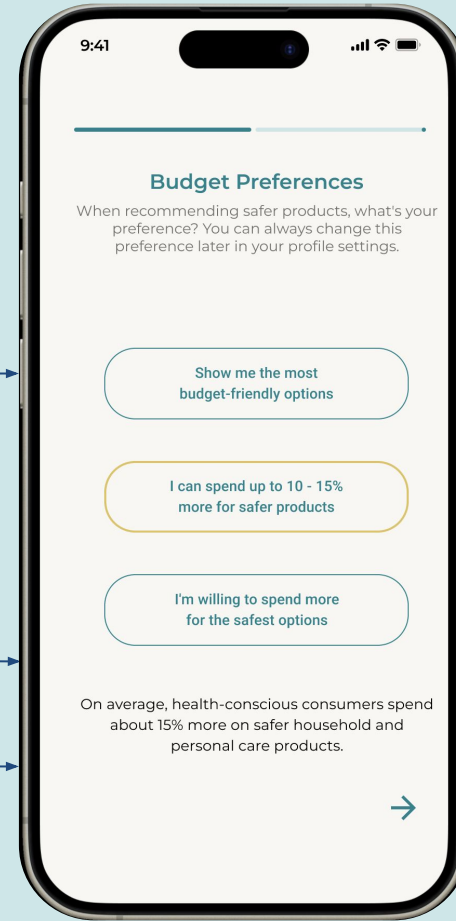
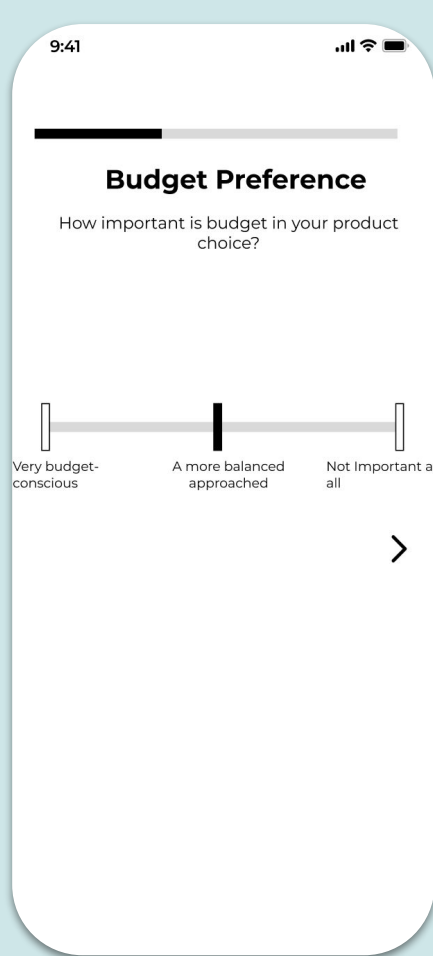
This iterative process of prototyping, testing, and refining based on user feedback is crucial for developing a user-centered design that meets the needs of CleanCompass's target audience.

BUDGET.

Initial design caused confusion with the slider design.

The user felt the options were hard to pick with lack of context.

Texts were too small to read



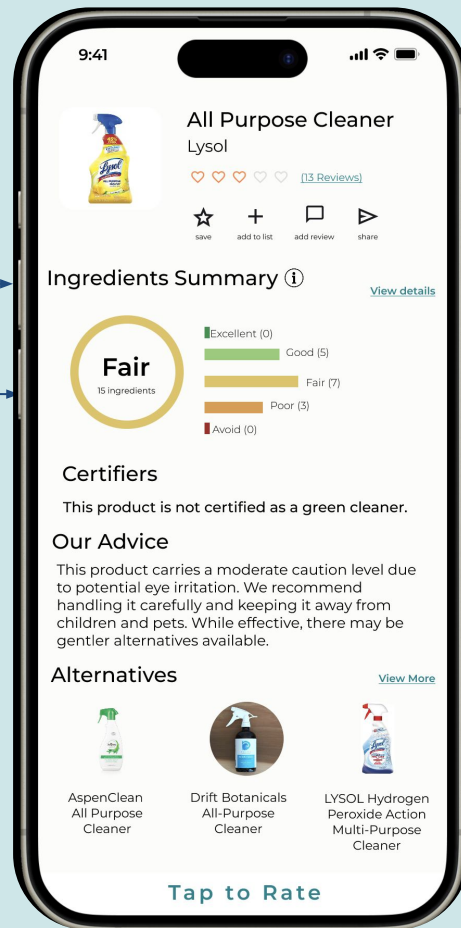
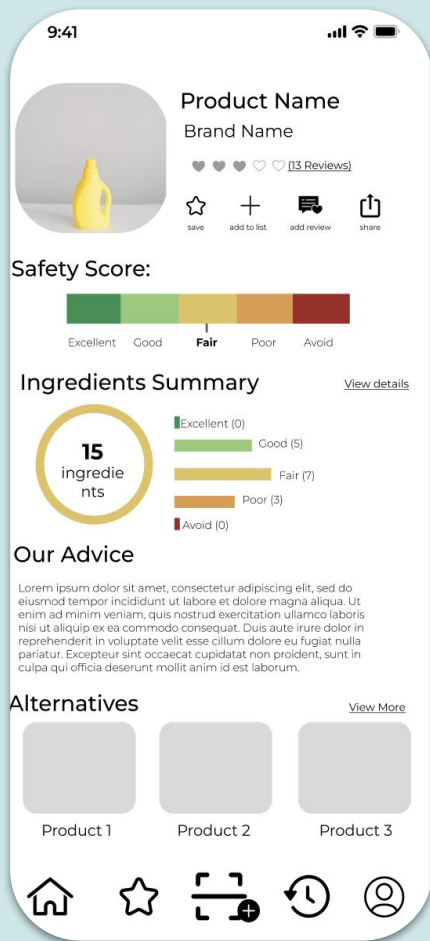
Options are switched to buttons, front size is larger.

Each option provided clear definition of each level and additional context are provided.

PRODUCT

Initial design did not include an explanation of the safety score.

The placement of the summary and view details caused some users skipped over the details view



An information button is placed right next to the Ingredient Summary title, helping user to quickly understand how the score is being calculated.

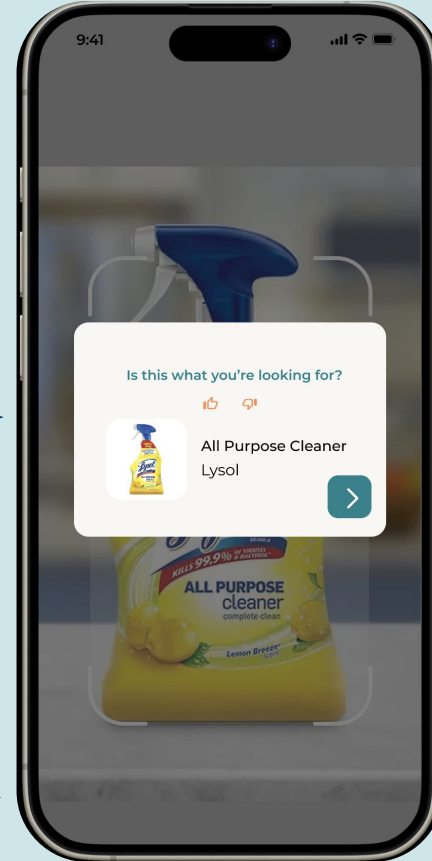
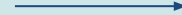
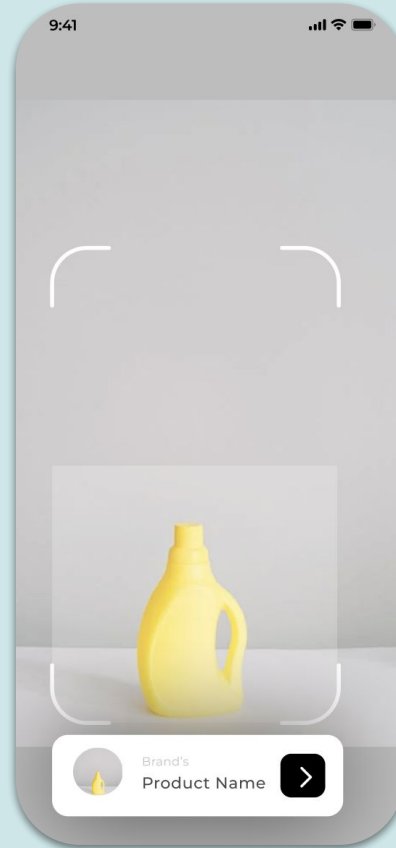
The Safety Score is being incorporated within the Summary circle with a bolded View Details call to action.

SCAN



Initial design assumed the algorithm will be 100% accurate and lacks a feedback mechanism for users to verify if the scan works or not

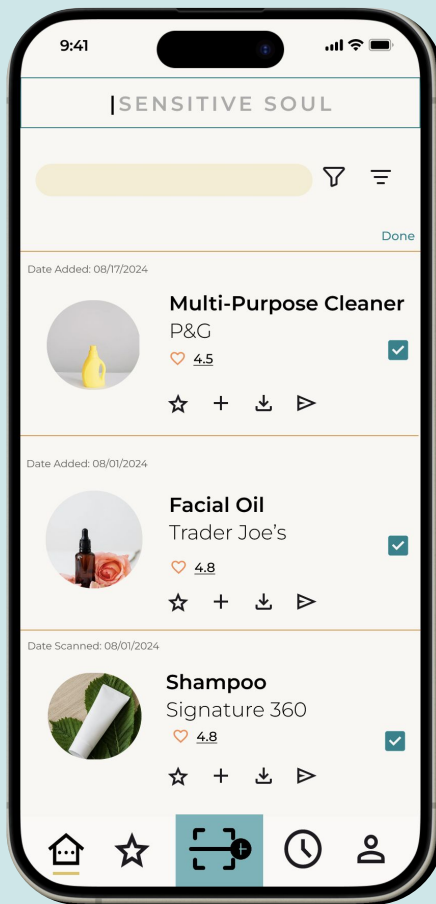
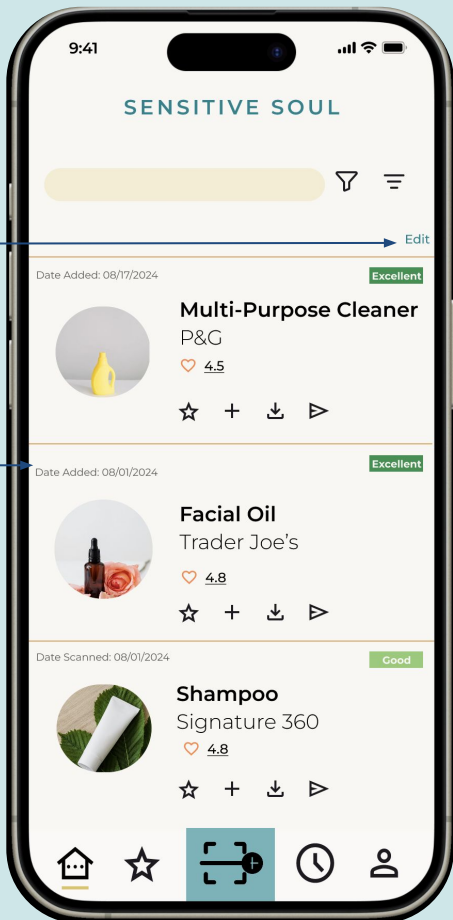
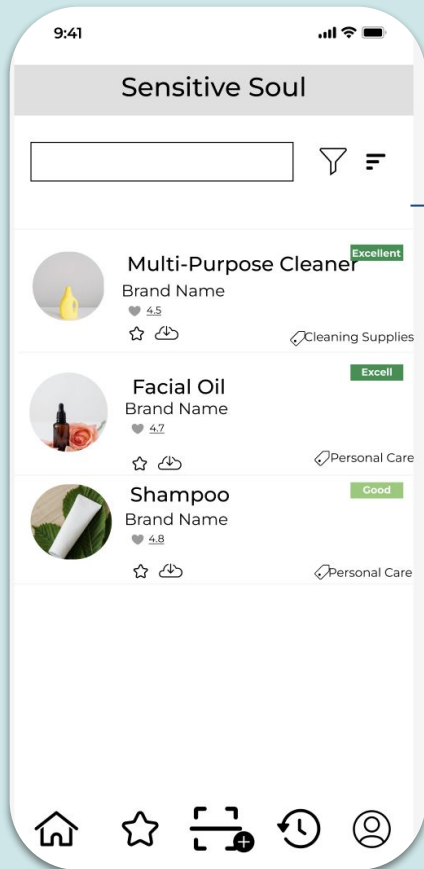
In addition, user had missed the call to action as it was placed at the bottom of the screen.



The new design has a thumbs up or down mechanism for users to verify if the scan works properly.

In addition, the tile has moved to the center for better visibility

LIST



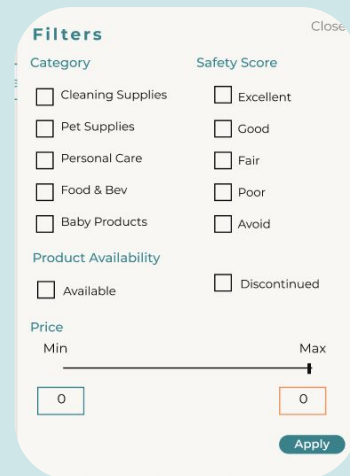
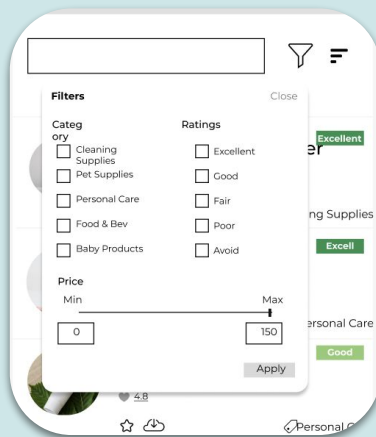
Initial design had minimal management on list items. While the sort by date was an option, there was not clear indication of when the products were being added to the list.

The improved design included a "Date Added" on display.

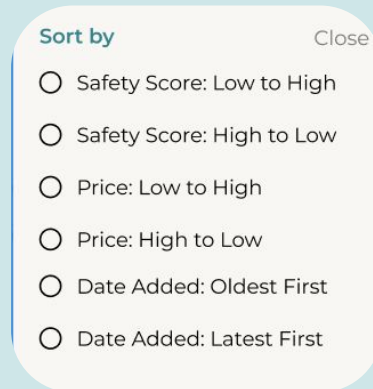
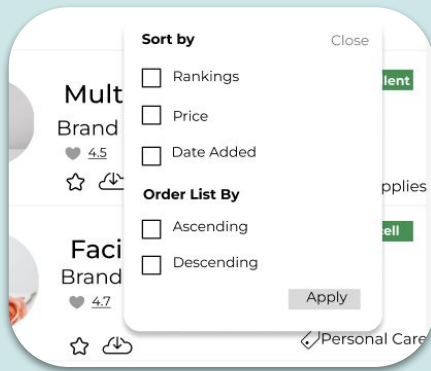
an "Edit" action is also added for users to click on, helping users to rename, reorder, bulk select items to rearrange or delete.

FILTERS & SORT

Peer feedback had suggested to add in Product Availability as an option for filtering so users can remove older products that are no longer available.

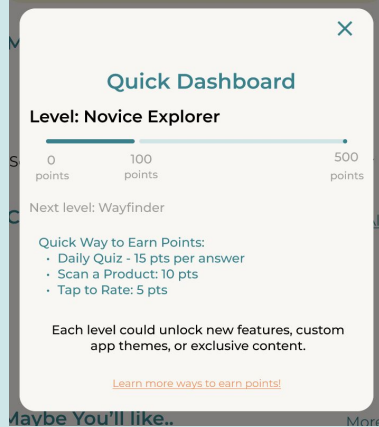
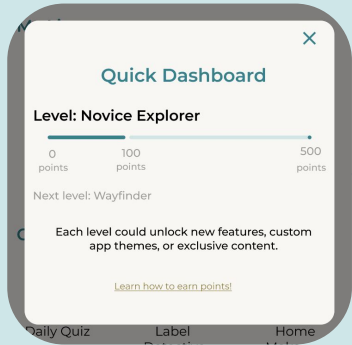


Users were confused with "Rankings" as it was unclear if it is by Safety Score or User Ranking. The 2 step selection also caused delay in action.



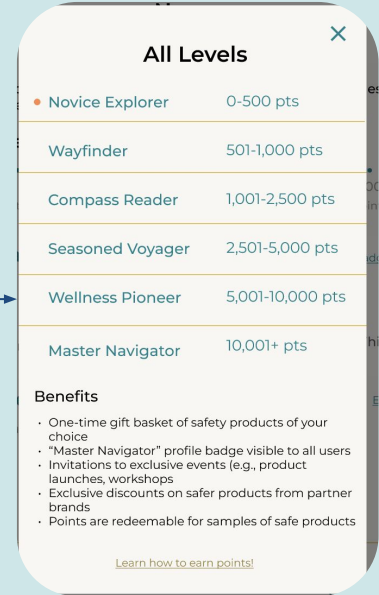
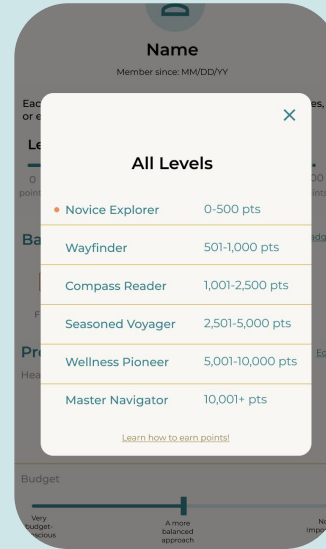
New design simplified the options and has consistent language for Safety Score.

Users would like to see quick actions or a “checklist” to earn points when they click on Quick Dashboard.



REWARDS

To further incentivize usage of CleanCompass, improved design has included some of the benefits of being the highest level to give an idea on what to look forward to when users reach the Master Navigator level.

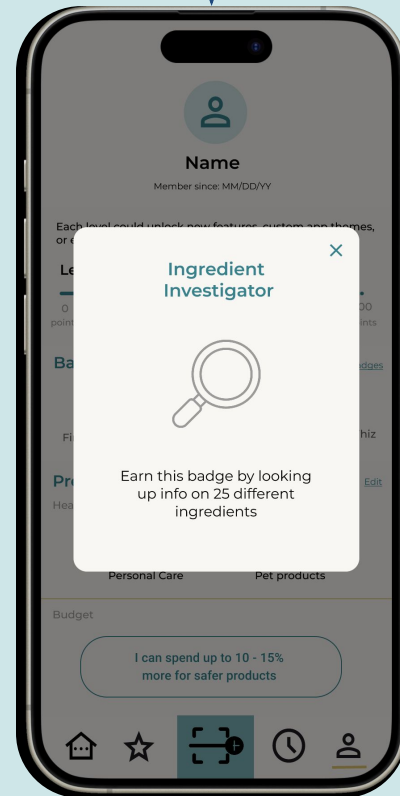
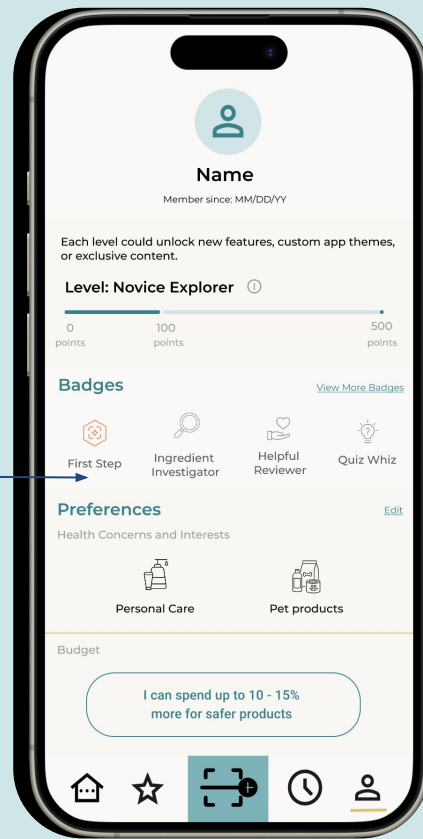
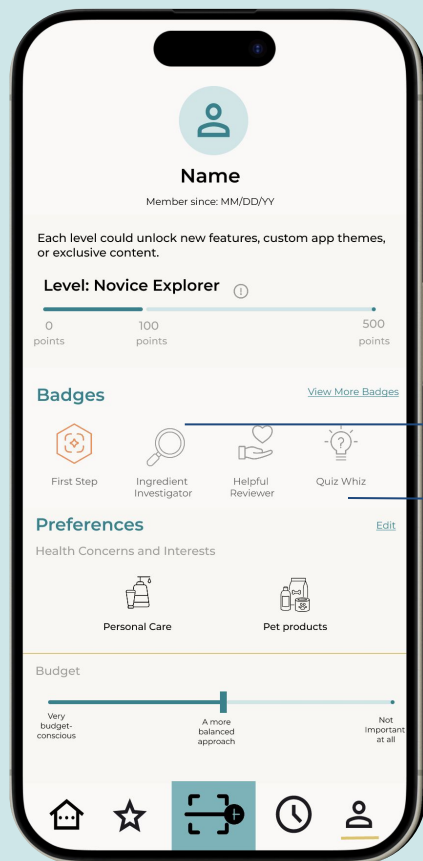


PROFILE

Users had provided feedback on accessibility issue on the profile screen due to small font.

Also, they'd like to have explanations on the badges.

The improved design makes badge clickable, as well as bolded and enlarged the texts to increase readability.

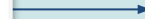
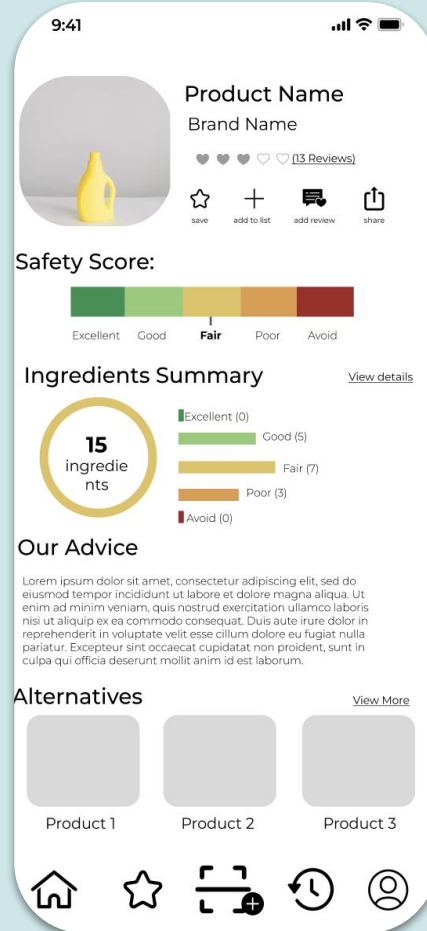


SHARING



Export was an option from previous design but the functionality was not built out.

In the improved design, users can share the information to their contacts, as well as opening Amazon, Sephora, or Instacart to directly search this particular item on the desired platform for purchase.





FINAL DESIGN

HIGH FIDELITY PROTOTYPE

The following frames include the implementation of feedback from each week, as well as from usability testing to help the user have a streamlined experience on the app.

To view the full interactive prototype, visit the link below.

[High Fidelity Prototype Link](#)

