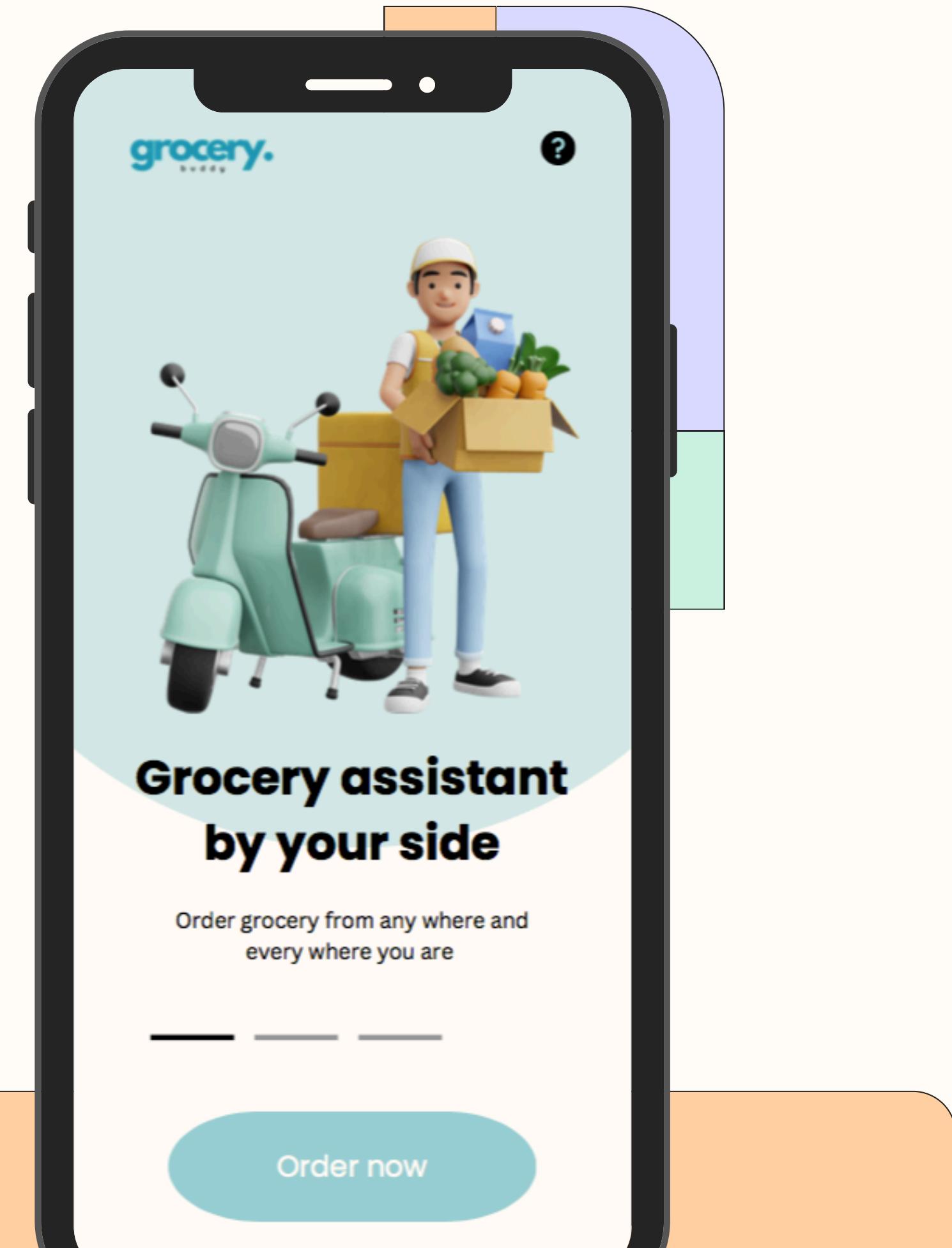


AI SHOPPING BUDDY

- SYAZMIN NADIA BINTI AHMAD LUTHFI (A24CS0300)
- WAN AMNI ZAHIRAH BINTI WAN AHMAD NAZARUDDIN (A24CS0208)
- NUR FATIN NABILA BINTI ZAINUDIN (A24CS0163)
- AYZA NASEHA BINTI ALI RAHMAT (A24CS0229)





Introduction

Design thinking is a problem-solving methodology focusing on human needs. It involves understanding problems, brainstorming solutions, and testing ideas using the five-stage model:

Empathize

Understand the problem through interviews, surveys, and observations.

Define

Analyze gathered information to identify core problems.

Ideate

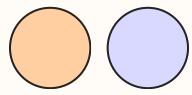
Brainstorm innovative solutions from different perspectives.

Prototype

Create models to explore and refine solutions.

Testing

Collect user feedback to improve the product.



Problem Statement

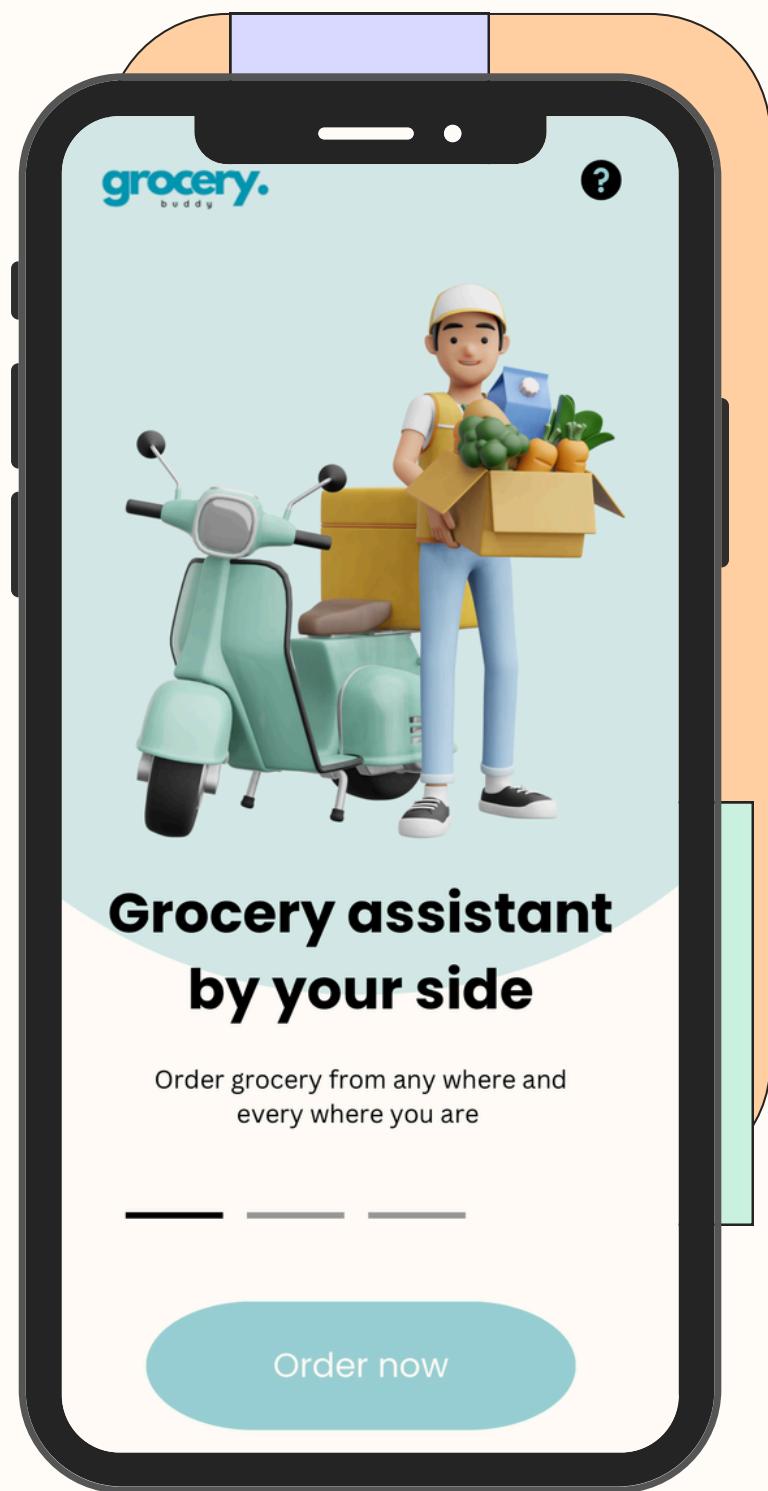
Grocery shopping is essential in Malaysia but presents challenges like:

Time consumption: Shopping takes up valuable time, especially for busy individuals.

Product availability: Stores often lack specific items, forcing customers to visit multiple shops.

Accessibility: Elderly individuals face mobility issues, travel difficulties, and crowded environments.





Solution

Introducing Grocery Buddy:

A mobile app powered by Artificial Intelligence (AI) to enhance grocery shopping by making it faster, easier, and more personalized.

Key Features:

Barcode Scanning:

- Scan products to add them to your cart.
- View prices and adjust quantities directly in the app.
- Pay seamlessly with online banking or show your account barcode at checkout.

Indoor Navigation:

- Guides users to find specific items using store layouts and inventory data.
- Especially helpful for elderly customers.

Stock Availability:

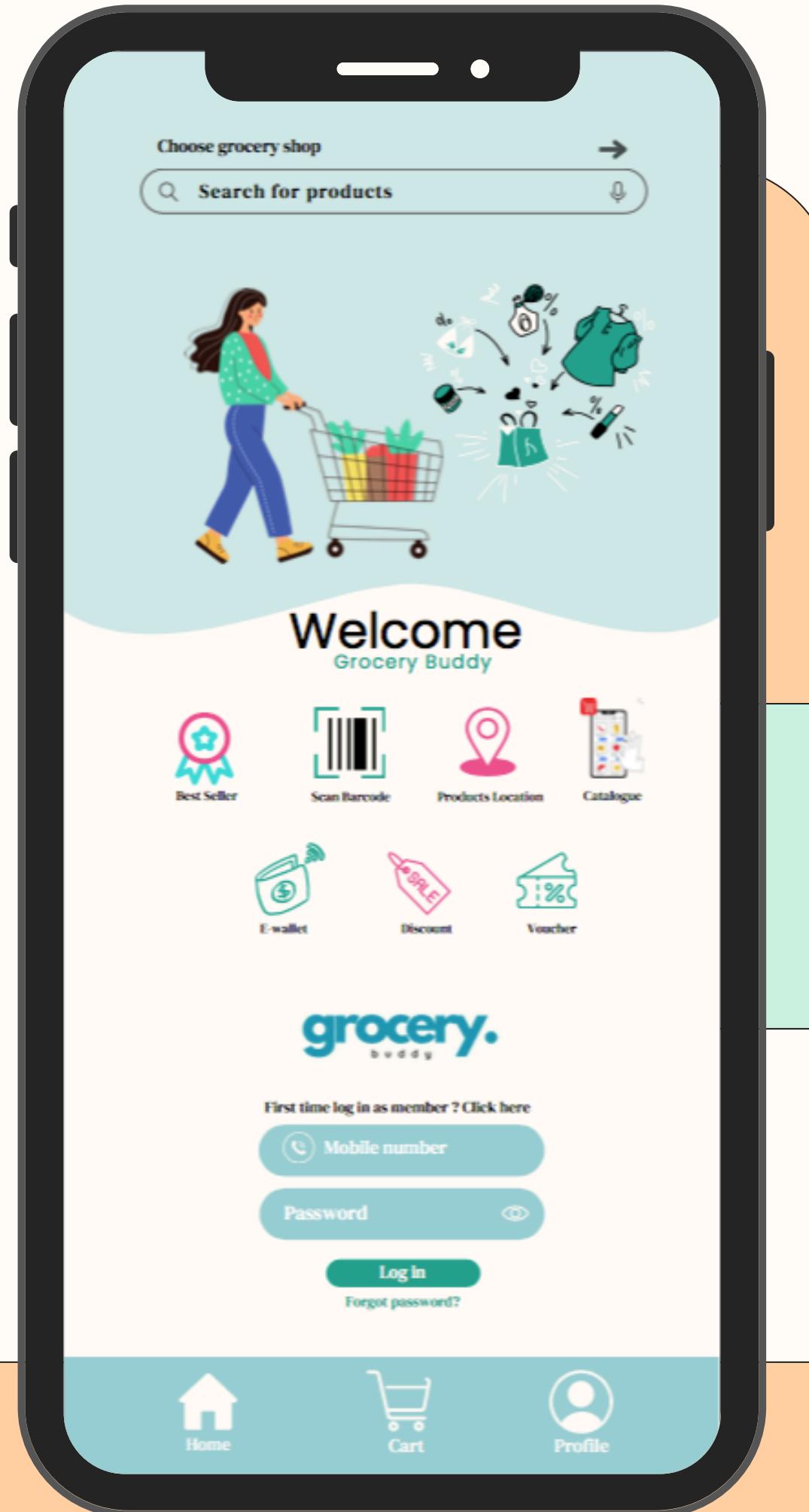
- Check if items are in stock before searching for them.
- Saves time and reduces frustration.



Key Features

Home page

The display on our application pays attention to the latest trends so that they relate to market desires.



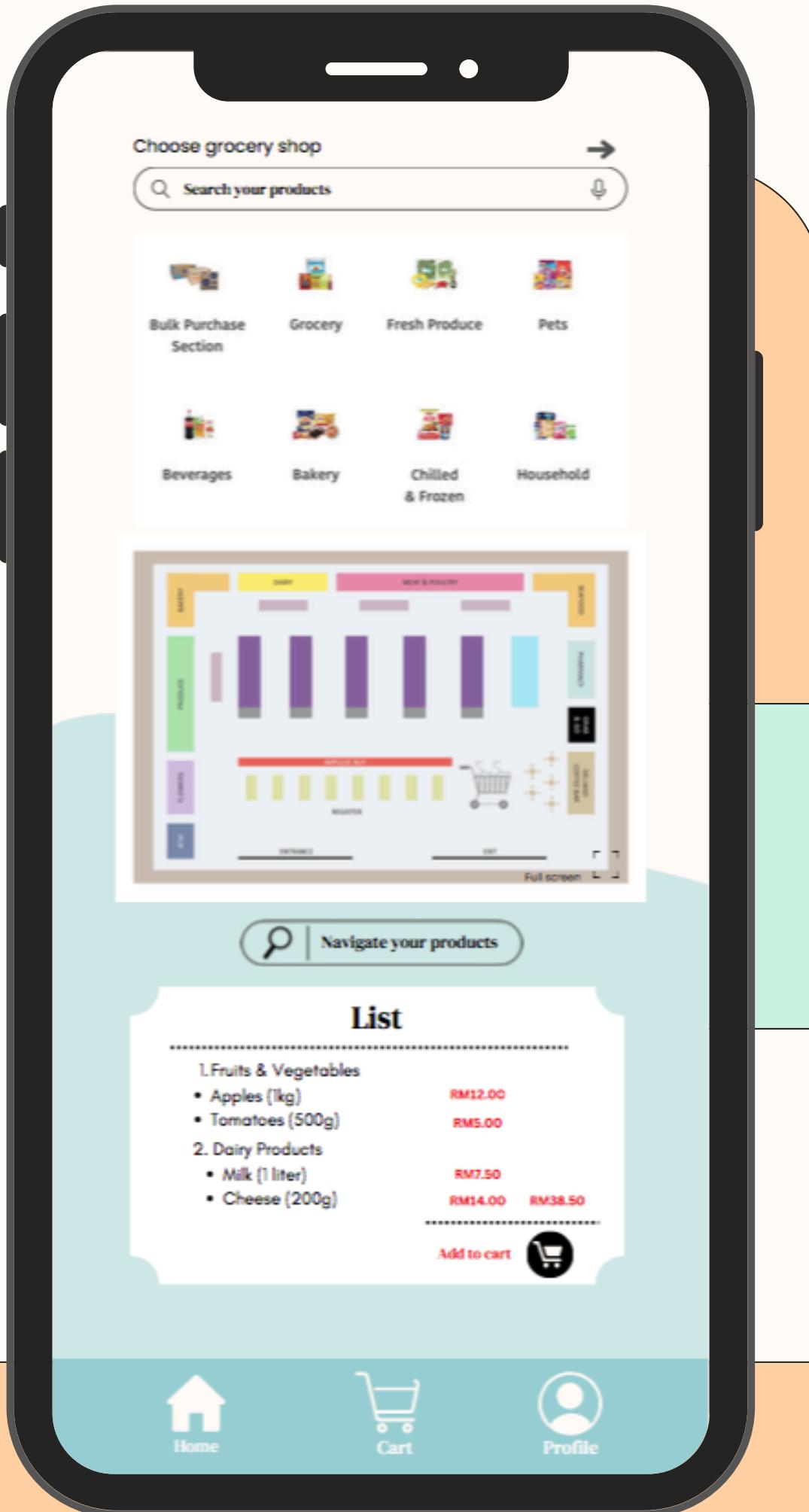
A friendly introduction to the app with options to log in or sign up for new users. Act as the central hub, displaying key features like product search, best sellers, and quick access to navigation, cart, and profile.



Key Features

Navigation Aisles

The display on our application pays attention to the latest trends so that they relate to market desires.



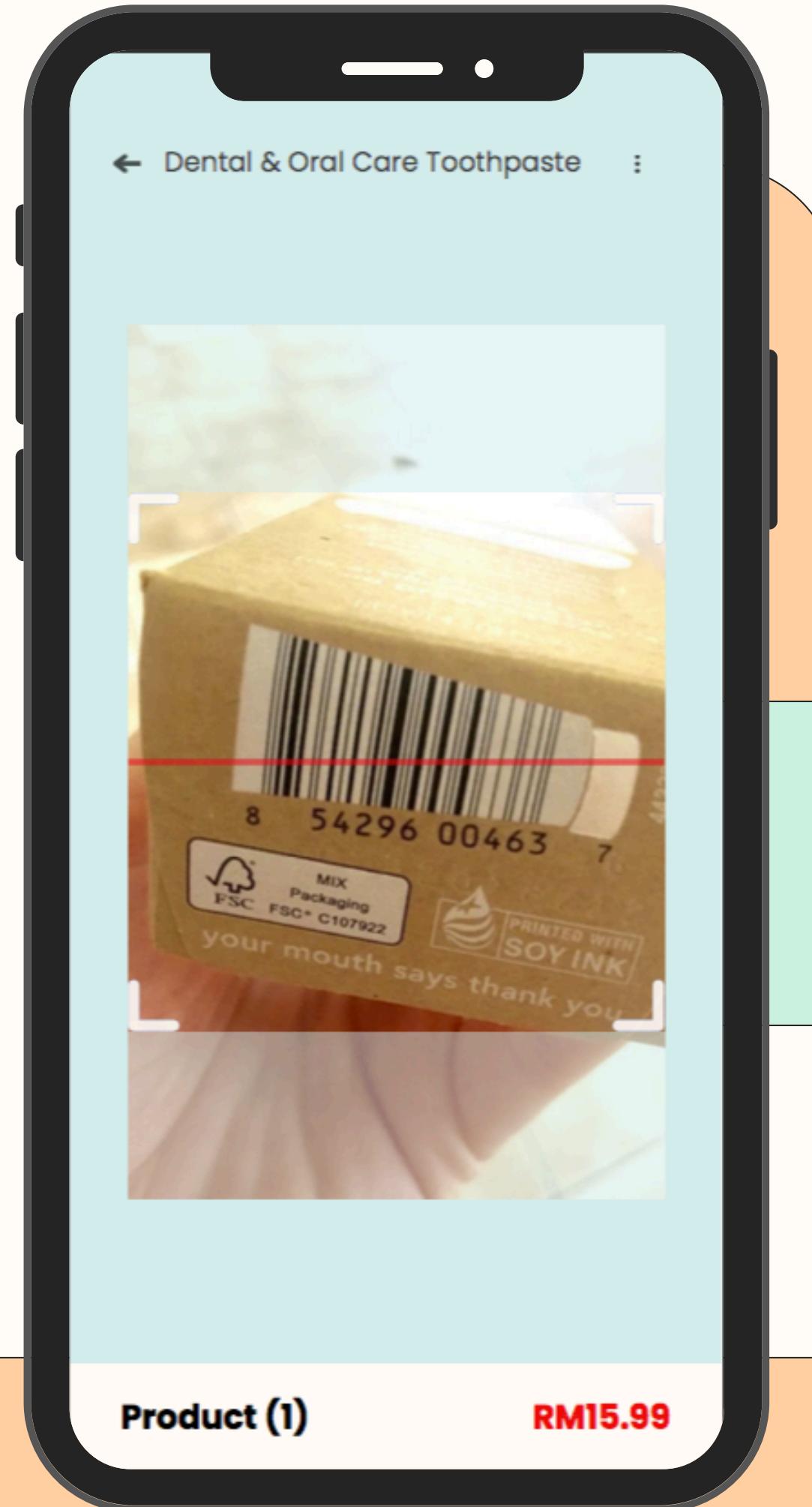
A guided map within the app that helps users find products in the store efficiently, saving time and reducing stress.



Key Features

Barcode Scanner

The display on our application pays attention to the latest trends so that they relate to market desires.



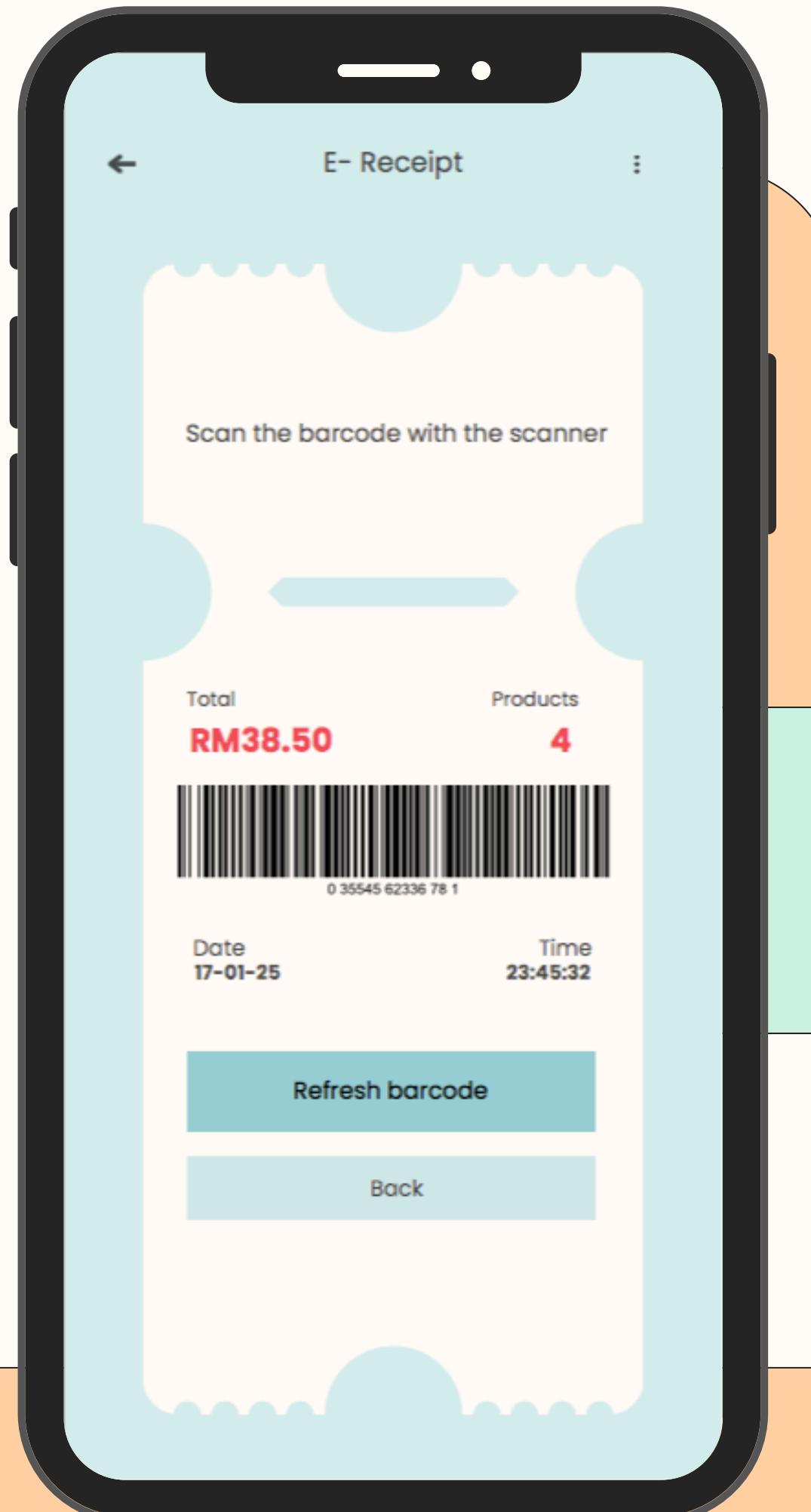
Allows users to scan product barcodes to view details, add items to the cart, and simplify checkout.



Key Features

E-ticket

The display on our application pays attention to the latest trends so that they relate to market desires.



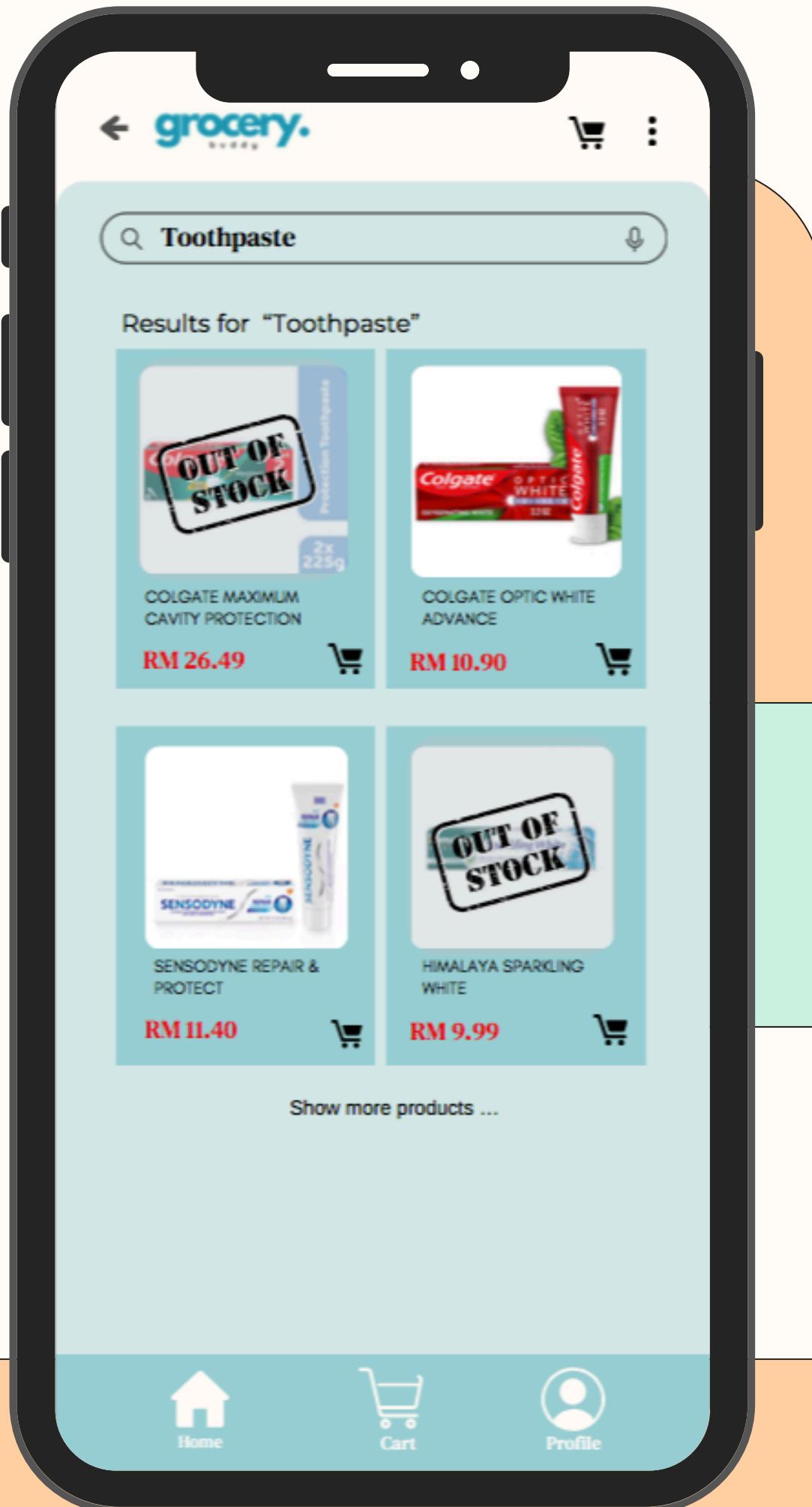
A digital receipt system for faster checkout, enabling users to scan a unique code at the counter or pay online directly.



Key Features

Stock Availability

The display on our application pays attention to the latest trends so that they relate to market desires.



Real-time updates on product availability, letting users check if items are in stock before shopping or while browsing the app.



Team Working

Team roles: Nadia was selected as the leader for her strong leadership skills.

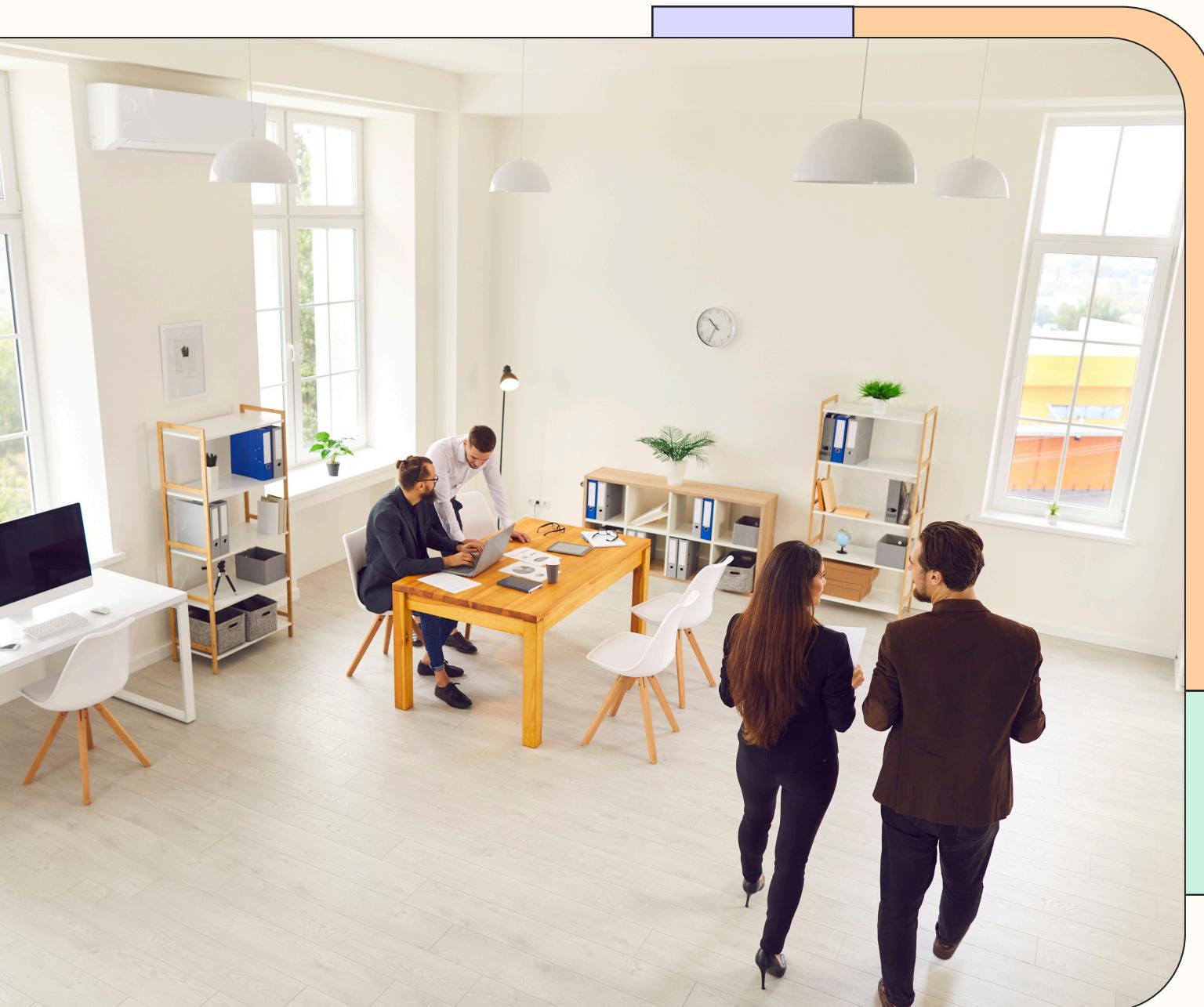
Collaboration: We worked together to research and brainstorm, deciding on 'Grocery Buddy,' to address key issues.

Information Gathering: To understand user needs, we interviewed Miss Ainur and documented her insights on challenges.

Task Division: Each team member contributed to specific app features

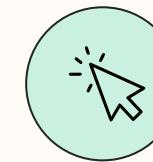
Team Effort: By collaborating closely, we successfully developed and refined our prototype.



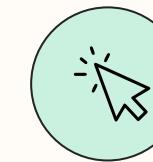


Design Thinking Phase

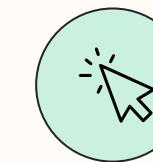
EMPATHIZE



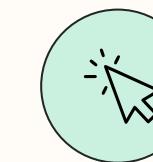
DEFINE



IDEATE



PROTOTYPE



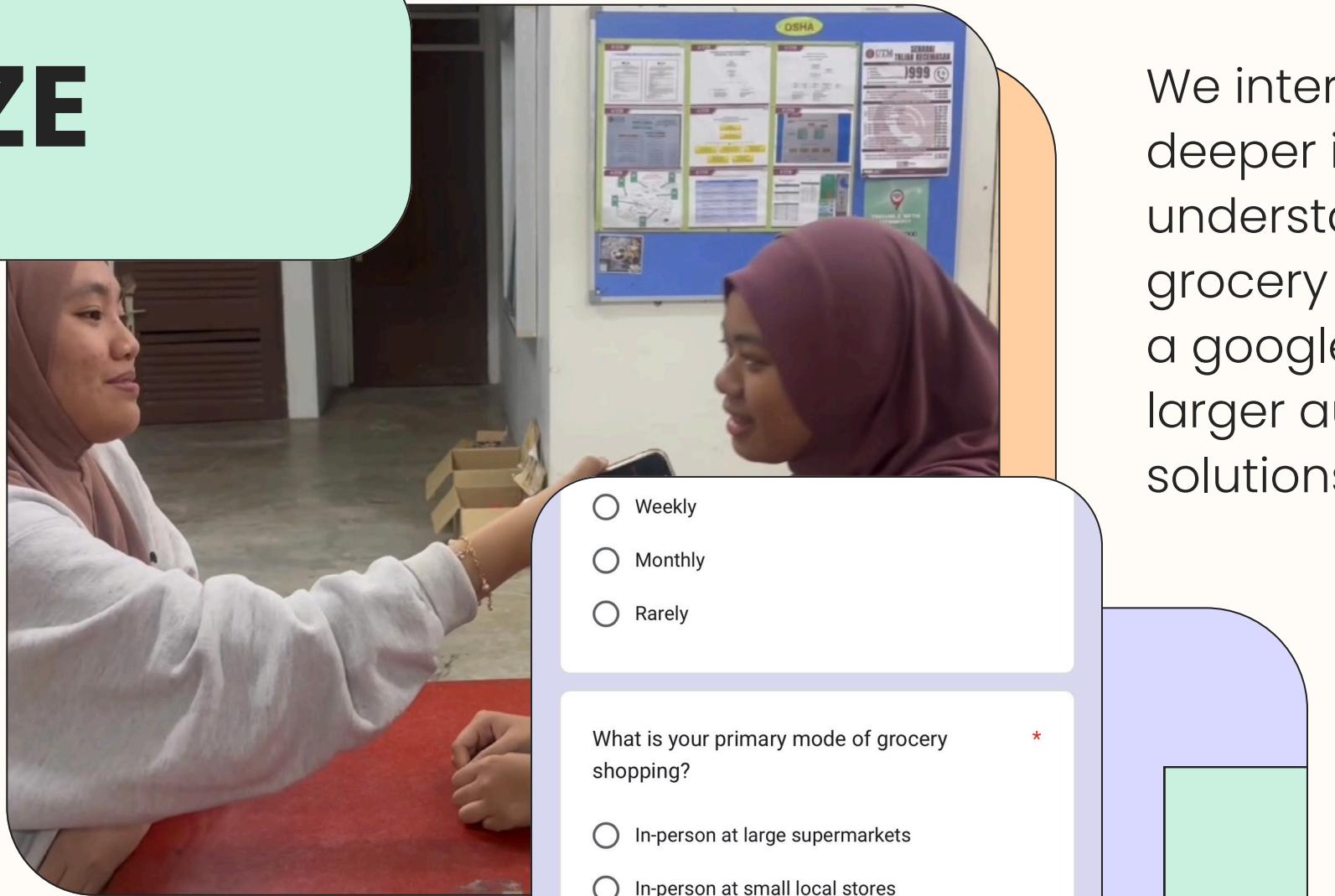
TESTING





EMPATHIZE

We successfully analyzed the problem faced by other people and provide the solution for the problem.



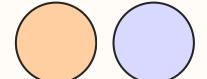
A photograph showing two women in a grocery store aisle. One woman, wearing a pink hijab, is holding a smartphone and appears to be conducting an interview or survey. The other woman, wearing a maroon hijab, is looking at the phone. In the background, there are informational posters on the wall, including one for OSHA and another for STEM.

What is your primary mode of grocery shopping? *

- Weekly
- Monthly
- Rarely

What are the most significant challenges you * face while grocery shopping?

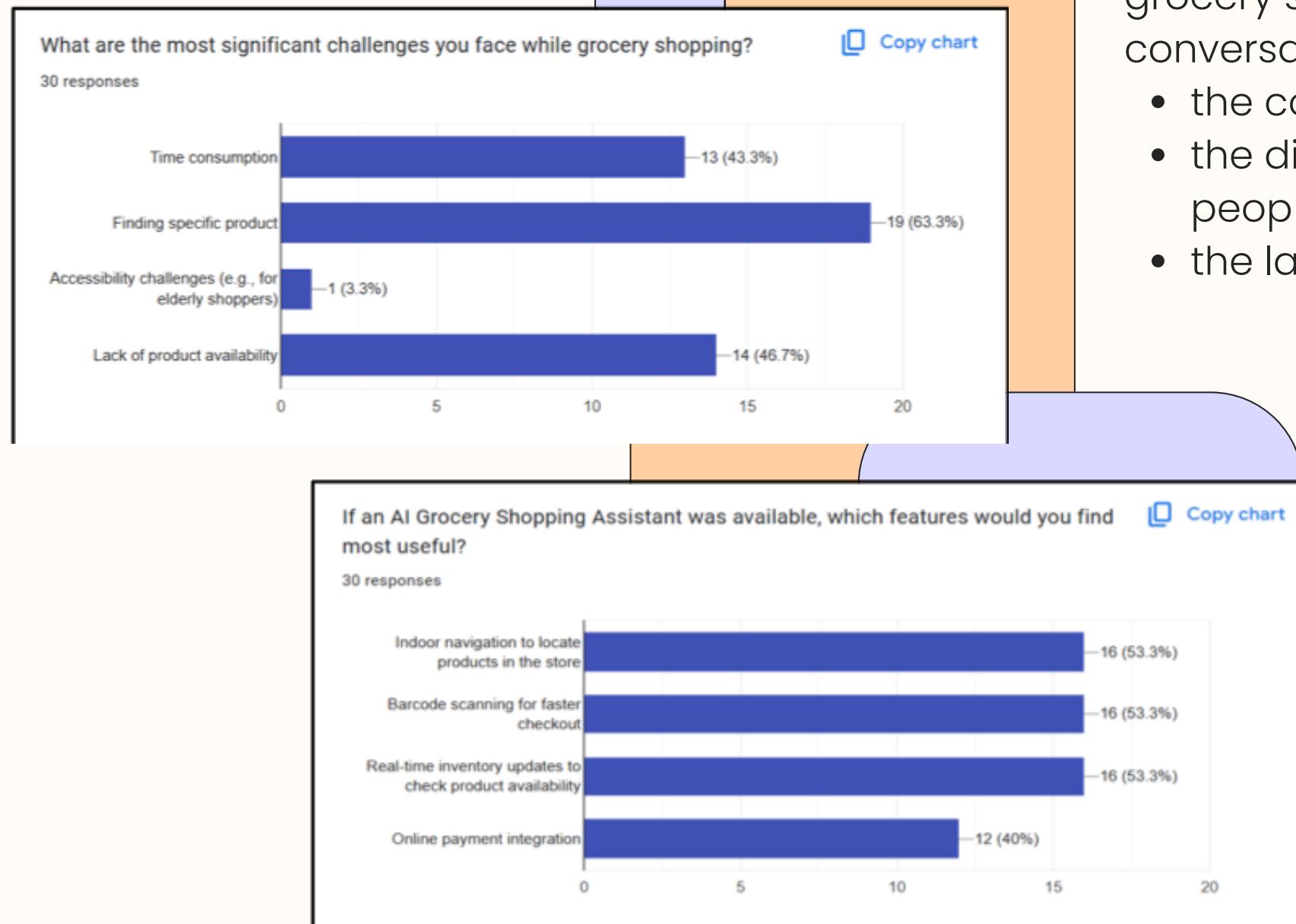
We interview a local shopper to gain deeper insights into her problem and understand her challenges during grocery shopping. We also conduct a google form to collect data from a larger audience to help us shape our solutions.





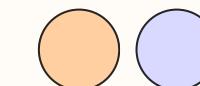
DEFINE

These issues show how much effective convenient and user-friendly purchasing solution is needed.



There are three main problems with the conventional grocery shopping procedure were noted during our conversation. These include:

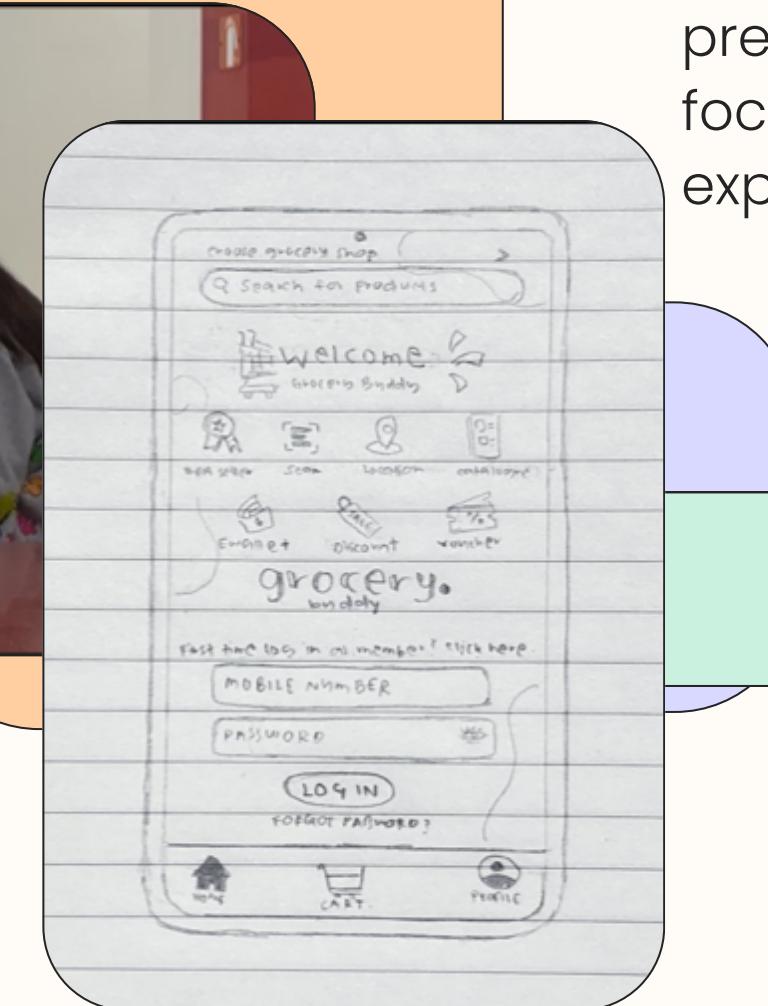
- the considerable amount of time spent
- the difficulties faced by senior citizens and busy people
- the lack of product availability in store



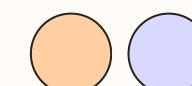


IDEATE

Through collaboration and creative thinking, we have developed various ideas to effectively address the identified challenges.

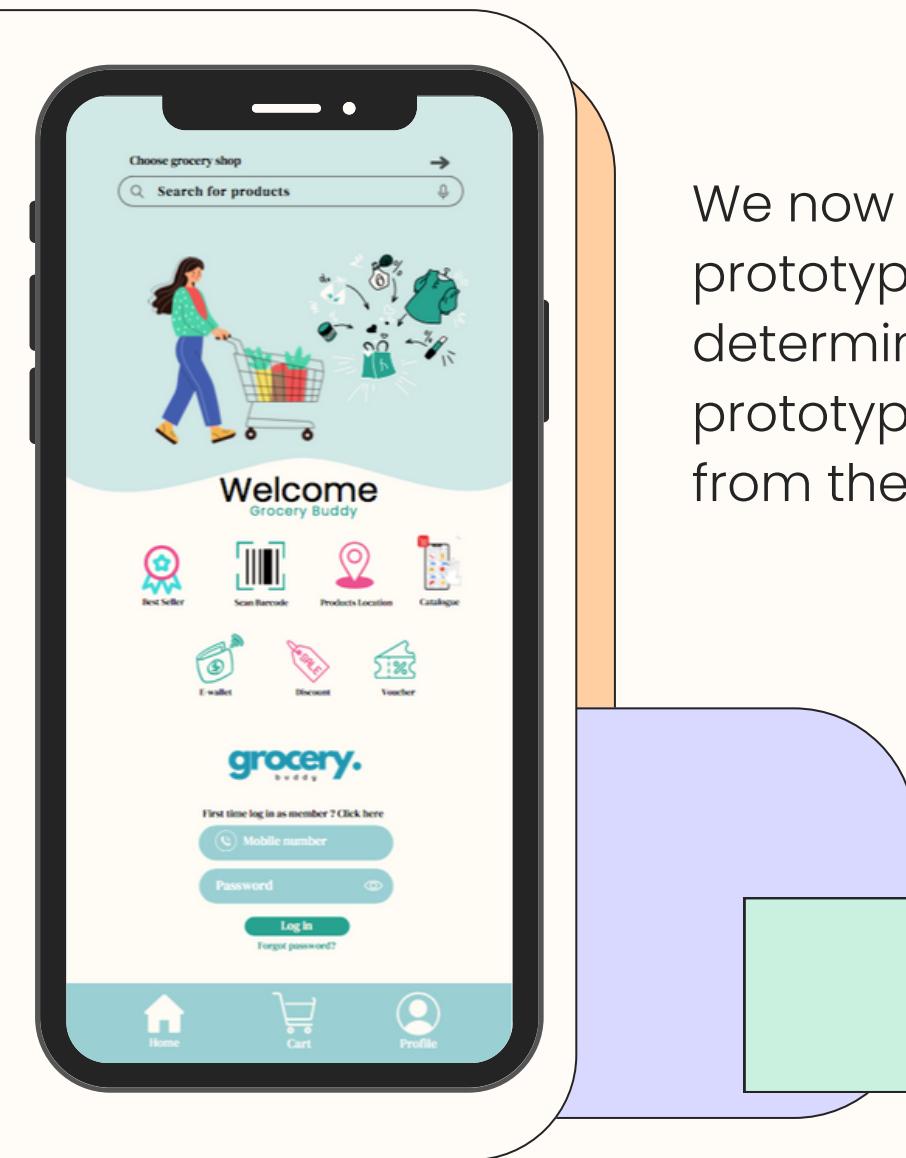


With a clear problem statement established from analyzing and organizing the issues in the previous stage, we are now focused on generating and exploring innovative solutions.

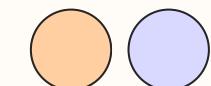




PROTOTYPE



We now start designing and creating our prototype. We divided up the work after determining the features and functions and the prototype was built using the ideas that came from the ideate stage.



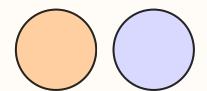


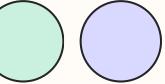
TESTING

we gathered user feedback to identify any potential issues for improvement. This valuable input will guide us as we refine and enhance our final product, ensuring the best possible experience for our users



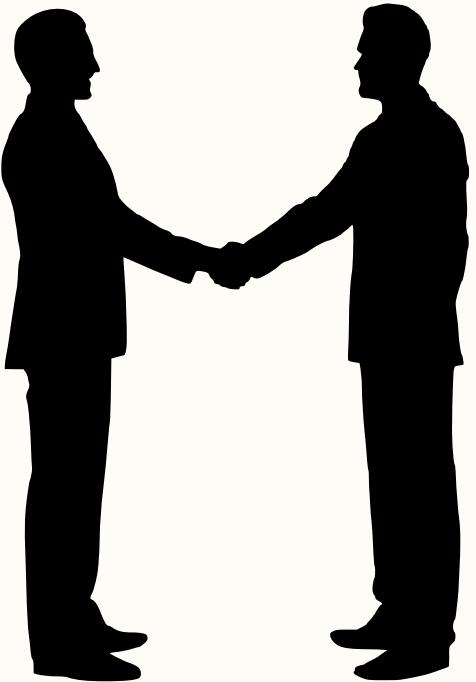
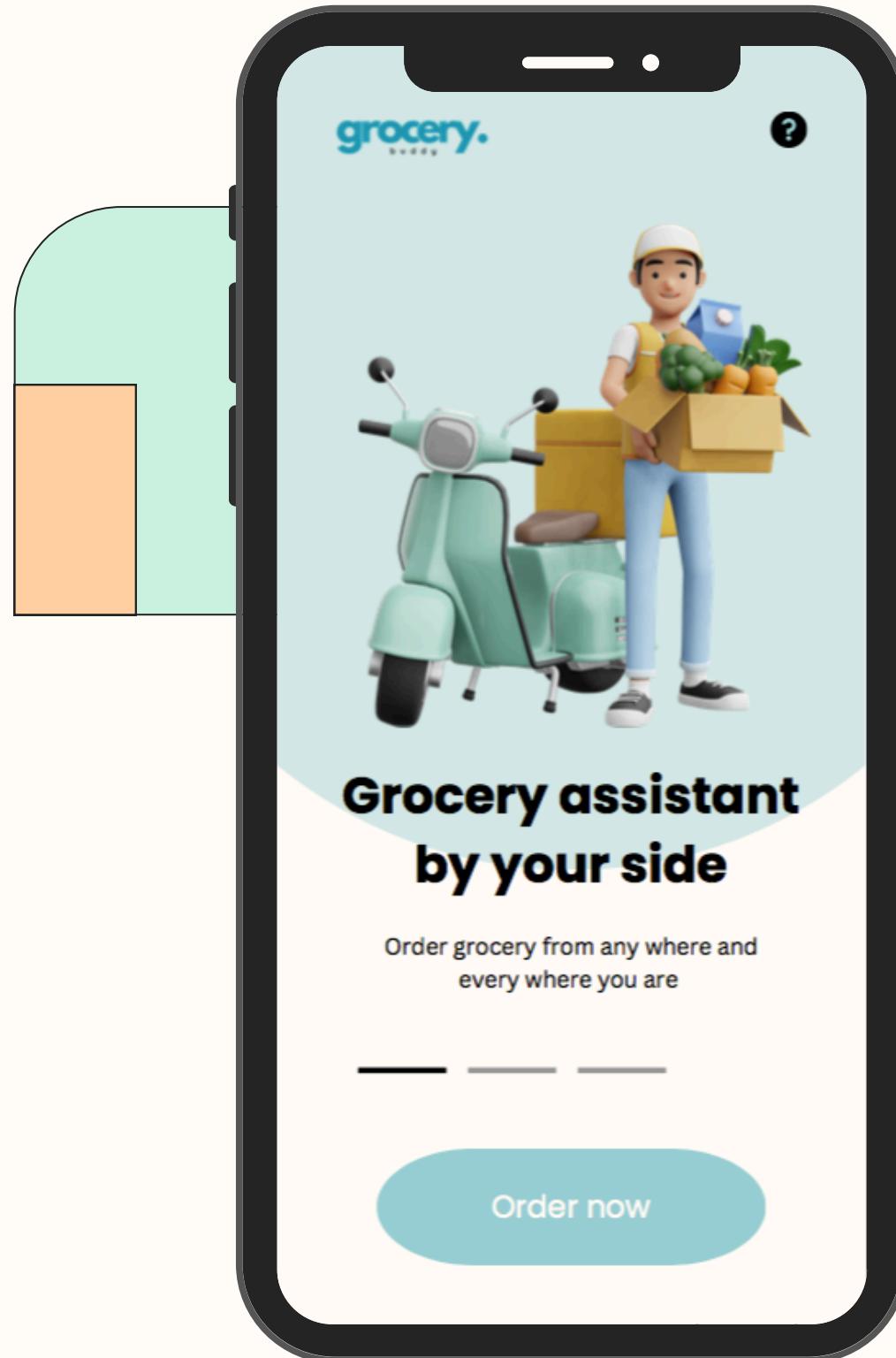
We have successfully completed the design of our prototype and moved into the testing phase to evaluate its functionality. We ensured that key features, including the barcode scanning system, performed as intended.





Conclusion

Grocery shopping can often be time-consuming and frustrating, with long checkout lines, hard to find items, and challenges faced by busy people and elderly. Our AI shopping buddy solution is designed to make shopping easier, faster, and more convenient. By optimizing checkout, providing smart recommendations, and enhancing in-store navigation, we aim to improve the shopping experience for everyone.





Thank You



Smart. Fast. Effortless. Your AI Grocery Buddy

