

Aisle

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Project overview



The product:

This product will be a mobile app that will help the user find specific product locations in their local grocery store and provide the option of creating an efficient store route based off a given shopping list.

Preview of selected polished designs.



Project duration:

July 2026 - Ongoing

Project overview



The problem:

User struggles to locate specific items in their local grocery stores, causing them to waste time wandering aisles.



The goal:

Allow the user to shop more efficiently and in a timely manner.

Project overview



My role:

Lead UX designer and UX researcher



Responsibilities:

User research, wireframing, and prototyping

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



During research, I combined explorations of user needs with observations of how grocery stores are laid out and how items are placed. I started with the assumption that store layouts are fairly stable and that locating and planning an efficient route would save a shopper time. As i've learned, layouts are constantly changed with promos, uncertain item location, and stock data is not always updated in real time. Collaboration with retailers will be critical to access floorplans, SKU maps, inventory signals, and to align on data refresh schedules and privacy protections.

User research: pain points

1

Inaccurate Stock

Real-time stock status is unreliable, causing frustrations when an item is out of stock or moved after a route was planned.

2

Aisle Wandering

Difficulty finding the exact shelf for a product due to vague or outdated location data, leading to backtracking and wasted time. This design will allow visual mapping of specific items.

3

Product Validation

Difficulty validating a product while in-store shopping and stopping to read labels (organic, non-GMO, dietary restriction).

4

Inconsistent Product Placement

Item locations are inconsistent across departments and constantly changed due to promos or seasonal displays, causing repeated detours and frustration.

Persona #1: Stella Vilda

Problem statement:

Stella Vilda is a busy mother who needs a faster, more efficient shopping route because searching for an item while in-store shopping is often frustrating and a waste of time.



Stella Silda

Age: 34

Education: Bachelor's Degree

Hometown: Austin, Texas, USA

Family: Married, 2 children

Occupation: Registered Dietitian

"There has got to be a quicker way of locating items in a store!"

Goals

- Save time due to tight schedules
- Find exact shelf to avoid aisle wandering
- Create efficient shopping list, by aisle
- Ensure she's grabbing the correct product

Frustrations

- Difficulty validating product while in-store (non-GMO, dietary restrictions)
- Inconsistent shelf labels, hidden behind displays
- Stores are cluttered, products get moved, searching wastes time

Stella is a 34 year old registered dietitian and a mother of two. Stella grocery shops weekly for her family of 4. She has a busy schedule with school runs and after school activities. She wants to find a way to shop in a more timely manner.

Persona #2: Jason Quad

Problem statement:

Jason is a 68-year-old retired accountant who travels frequently. During his travels, Jason often visits the Grocery store. He needs an easy way to locate items and navigate the grocery store because he's constantly shopping in unfamiliar store layouts, making shopping time-consuming and frustrating.



Jason Quad

Age: 68
Education: Bachelor's Degree
Hometown: Houston, Texas
Family: Married, 2 adult children
Occupation: Retired Accountant

"I like to get what I need and get on with my day. I don't want to walk around the whole store looking for one item."

Goals

- Find items on his grocery list quickly.
- Know exactly which aisle each item is in.
- Take the most efficient route through the store.
- Shop independently without needing to ask employees for help.

Frustrations

- Has trouble finding products when he doesn't know their aisle.
- Gets frustrated when familiar products are moved.
- Finds some aisle signs too vague or difficult to read quickly.
- Often has to backtrack across the store to find missed items.

Jason is retired and handles most of the grocery shopping for his household. He usually shops with a list and prefers to get in and out of the store efficiently. However, finding specific products can be difficult, especially when store layouts change or aisle signs are unclear. Jason values his independence and wants a simple way to locate items and plan the most efficient route through the store.

User journey map

This journey map shows how the user navigates through grocery store while shopping. Opportune ways that the Aisle app can help improve user's shopping experience.

Persona: Stella Silda

Goal: Find items quickly and finish checkout with maximum efficiency

ACTION	Planning	Enter Store	Shopping	Checkout Readiness	Post-Shop Reflection / Drive Home
TASK LIST	Tasks A. Check pantry and fridge B. Make a rough shopping list C. Decide which store to visit	Tasks A. Grab a cart or basket B. Brief route planning C. Start with nearest area (usually produce)	Tasks A. Look for specific items B. Can't find item or cannot remember where item was last located, recalculate route C. Backtrack and wander up and down aisles until item is found, and repeat for multiple items	Tasks A. Most items collected, some may still be missing B. Review list, head to checkout C. Last minute item remembrance, go back to quickly find D. get in line for checkout	Tasks A. Leave store, load up car B. assess time spent shopping C. Unload groceries, review any missed items, consider future trips
FEELING ADJECTIVE	User emotions Eager, Prepared	User emotions Overwhelmed	User emotions Confused, Lost, Frustrated	User emotions Unsure, Annoyed	User emotions Relief
IMPROVEMENT OPPORTUNITIES	Create a list through the app with exact item lookups	The app with cross reference items in user's list with selected store map to create efficient route options	The app will show exact shelf location on store layout map to reduce the time of searching	User can quickly look up item, minimal time wasted when going back to grab	Won't have to feel so unsure next time shopping with Aisle app

User journey map

Mapping out the flow of Jason's journey revealed the areas where we can improve the user's grocery shopping experience with the benefits of using an app.

Persona: Jason Quad

Goal: Find everything on his grocery list as efficiently and independently as possible.

ACTION	Planning	Enter Store	Shopping	Check Out	Drive Home
TASK LIST	Tasks A. Check pantry and fridge for needed items B. Choose which store to visit. C. Create a grocery list. Attempts to categorize based on his memory of the store	Tasks A. Grab a cart B. Start in a familiar section, usually produce C. Try to remember where items are located	Tasks A. Search aisles for items on his list. B. Read aisle signs for guidance. C. Walk around looking for items he cannot locate. D. Backtrack when he realizes he passed an item	Tasks A. Review his written list. B. Realize he may have missed an item. C. Decide whether it's worth walking back to find it. D. Head to checkout once everything is collected.	Tasks A. Leave the store and load groceries. B. Think about anything he may have forgotten. C. Consider how long the trip took. D. Remember difficult-to-find items for his next trip.
FEELING ADJECTIVE	User emotions Prepared, Motivated	User emotions Uncertain, Overwhelmed	User emotions Frustrated, Exhausted	User emotions Annoyed, Unsure	User emotions Drained, Relieved
IMPROVEMENT OPPORTUNITIES	Area to improve Allow Jason to create a digital grocery list and automatically organize items based on store location.	Area to improve Provide a simple store map showing where he is and the most efficient place to start.	Area to improve Show the exact aisle/location of each item and provide a clear route from one item to the next. Use large, readable text and simple directions.	Area to improve Automatically identify remaining items and show the quickest route to retrieve them before checkout.	Area to improve Save previous lists, frequently purchased items, and store layouts to make future shopping trips easier.