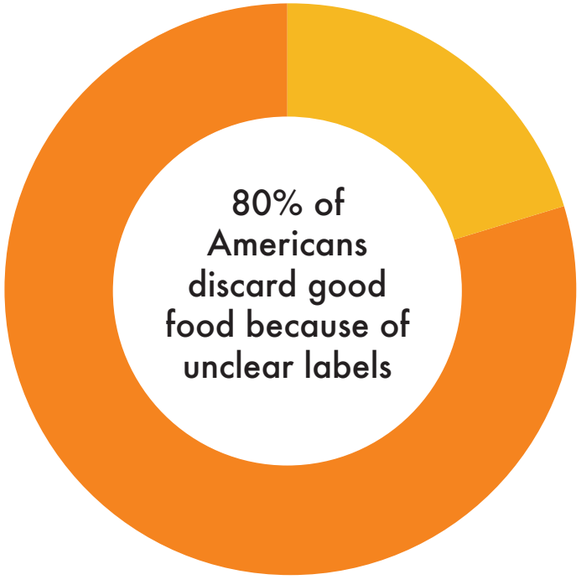
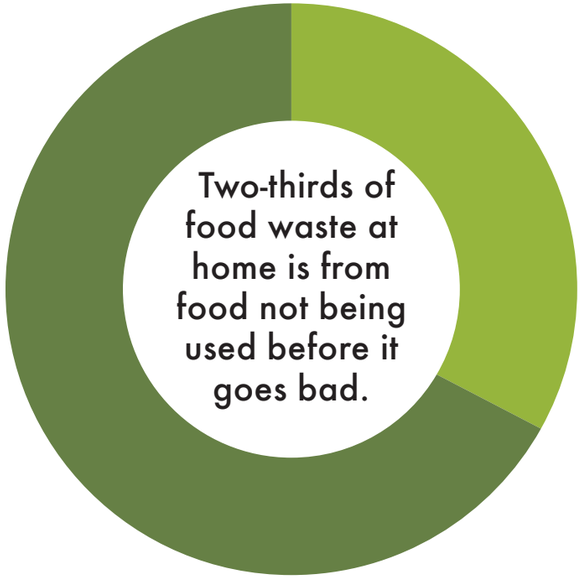
Pantry Pal

A smart grocery shopping device that connects to an app with virtual pantry features, meal planning, recipe searching, and expiration notifications - all aimed at helping reduce food waste.

Concept Overview

Sources of Food Waste In The US



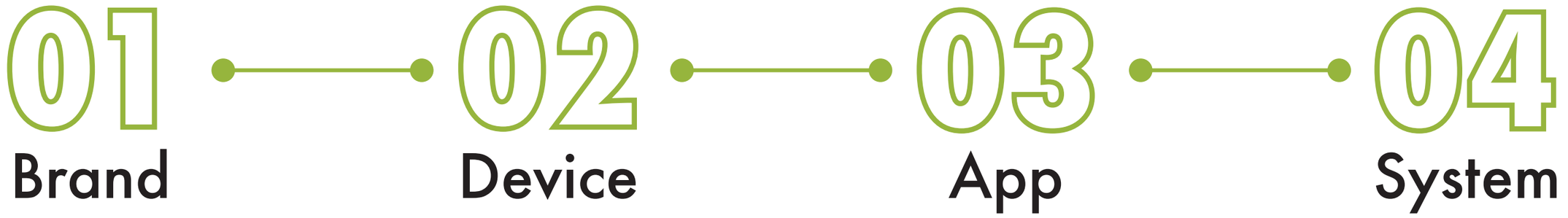


The Problems:

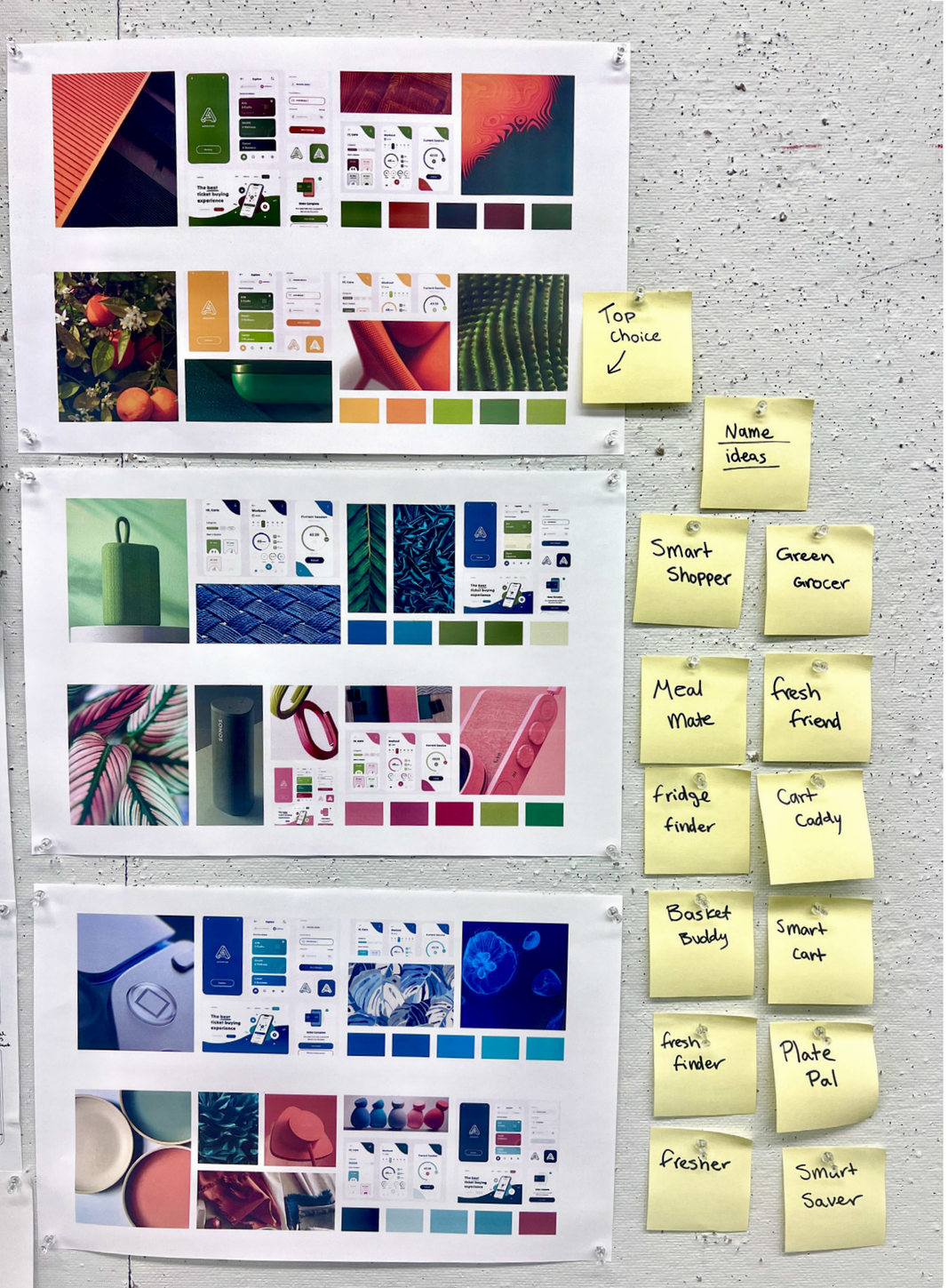
1. Misconceptions around expiration dates
2. Customer food waste
3. Single use plastic produce bags
4. Produce Stickers

System Overview:

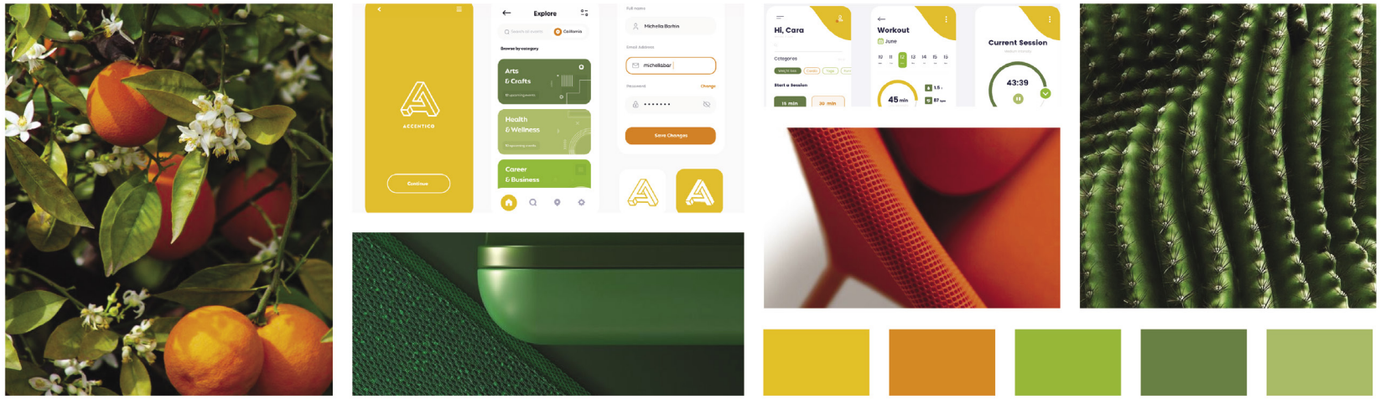
An all encompassing system that tailors the shopping experience to minimize food waste. The system includes an app and a device. The process of each step will be shown separately and will be combined at the end to explain the system.



01
Brand

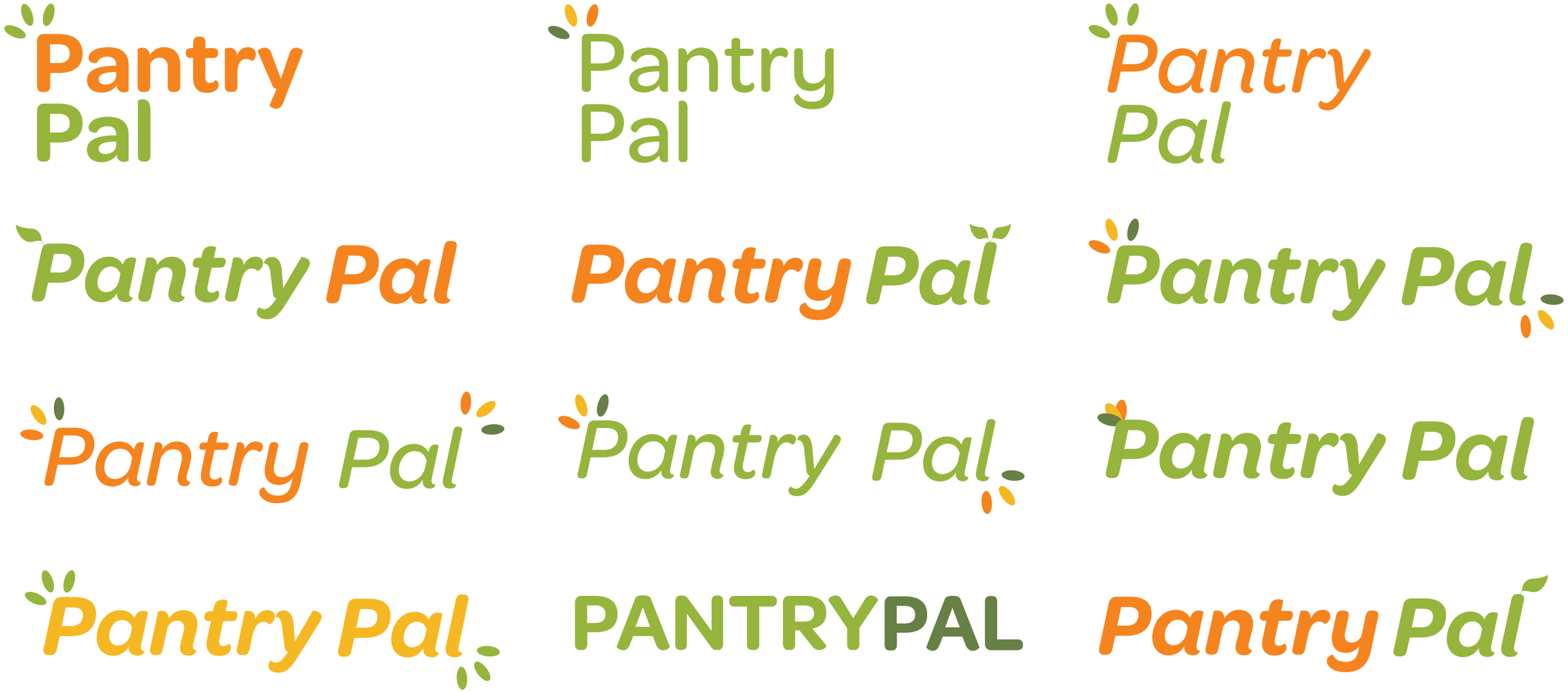


Selected Color Palette



Project title landed on: Pantry Pal

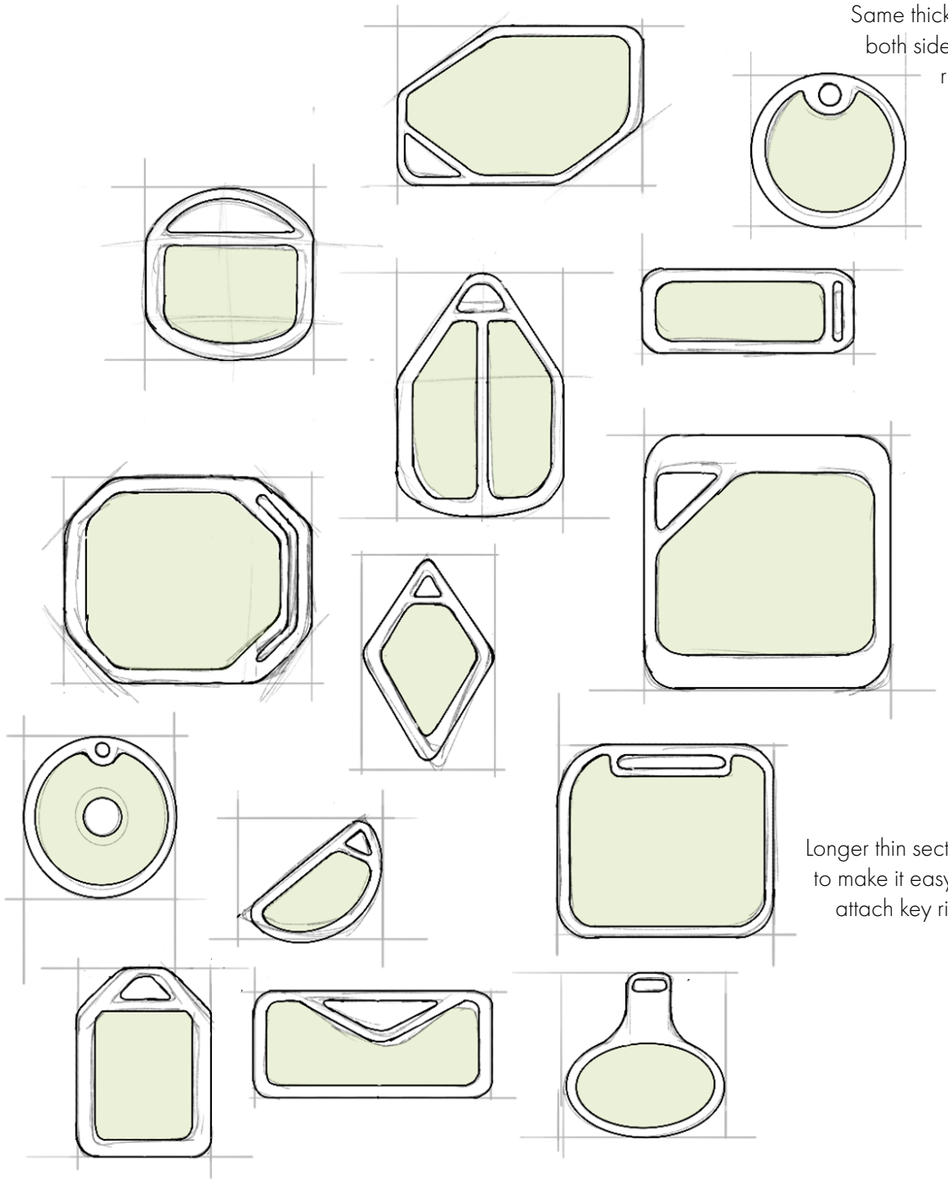
Logo Ideation



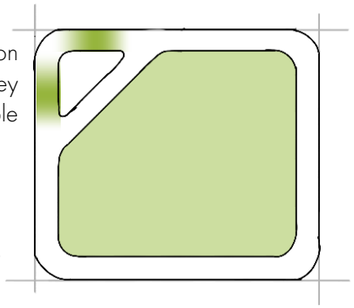
Pantry Pal
Pantry Pal
Pantry Pal

02 Device

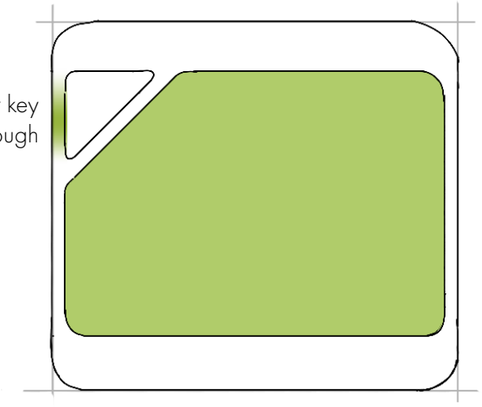
Device Ideation



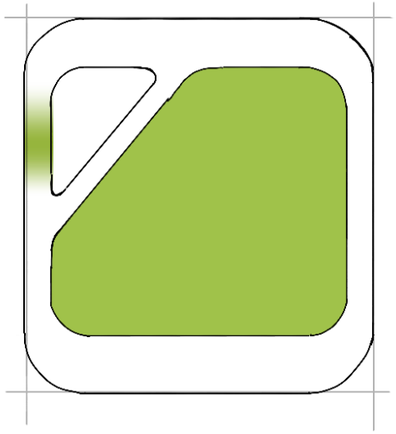
Same thickness on both sides of key ring hole



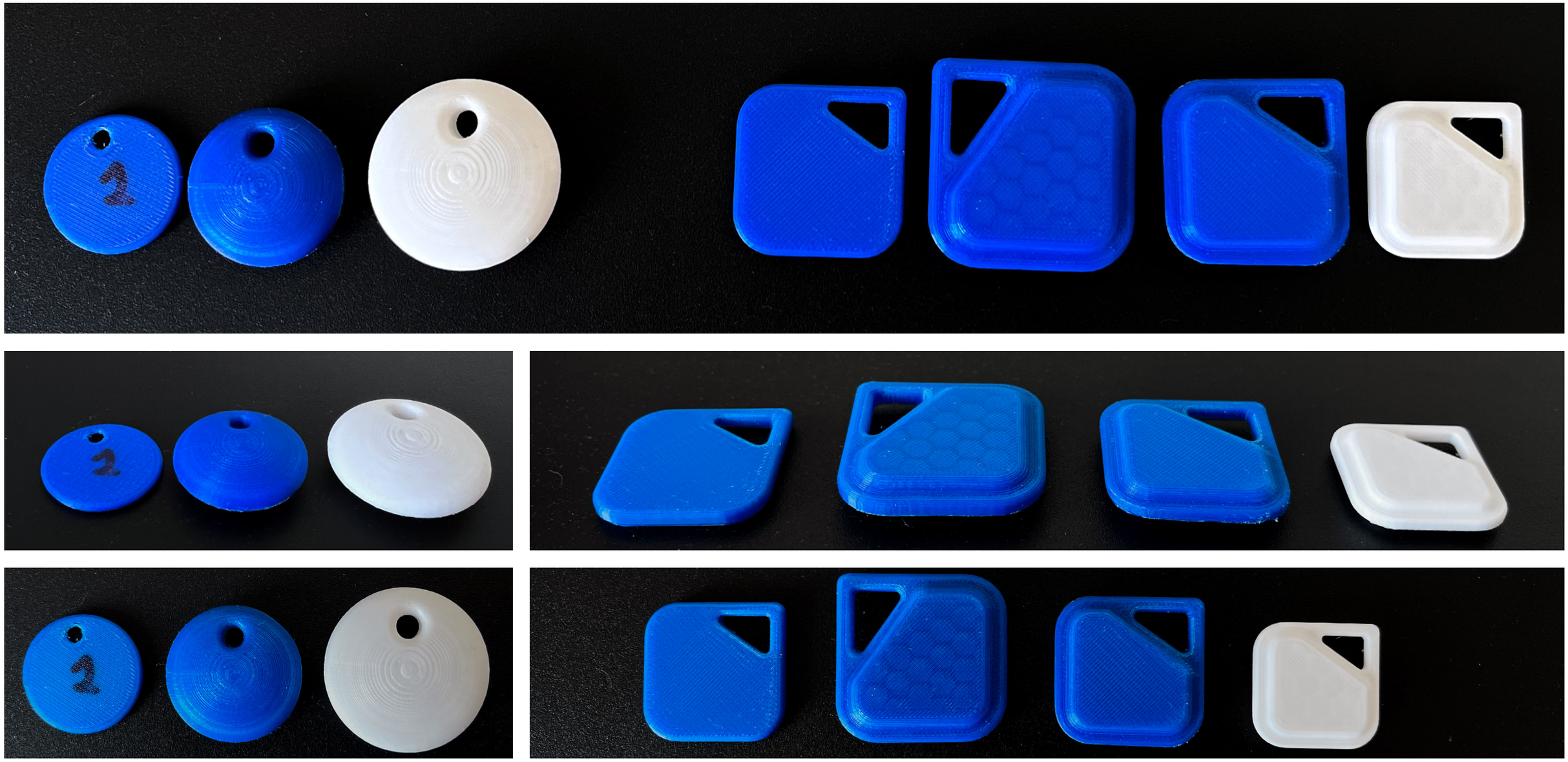
Thin section for key ring to pass through



Longer thin section to make it easy to attach key ring.



First Prototypes



Final Prototype

CMF Exploration

Very “kiddy”
Too friendly

Too techy and not
friendly enough

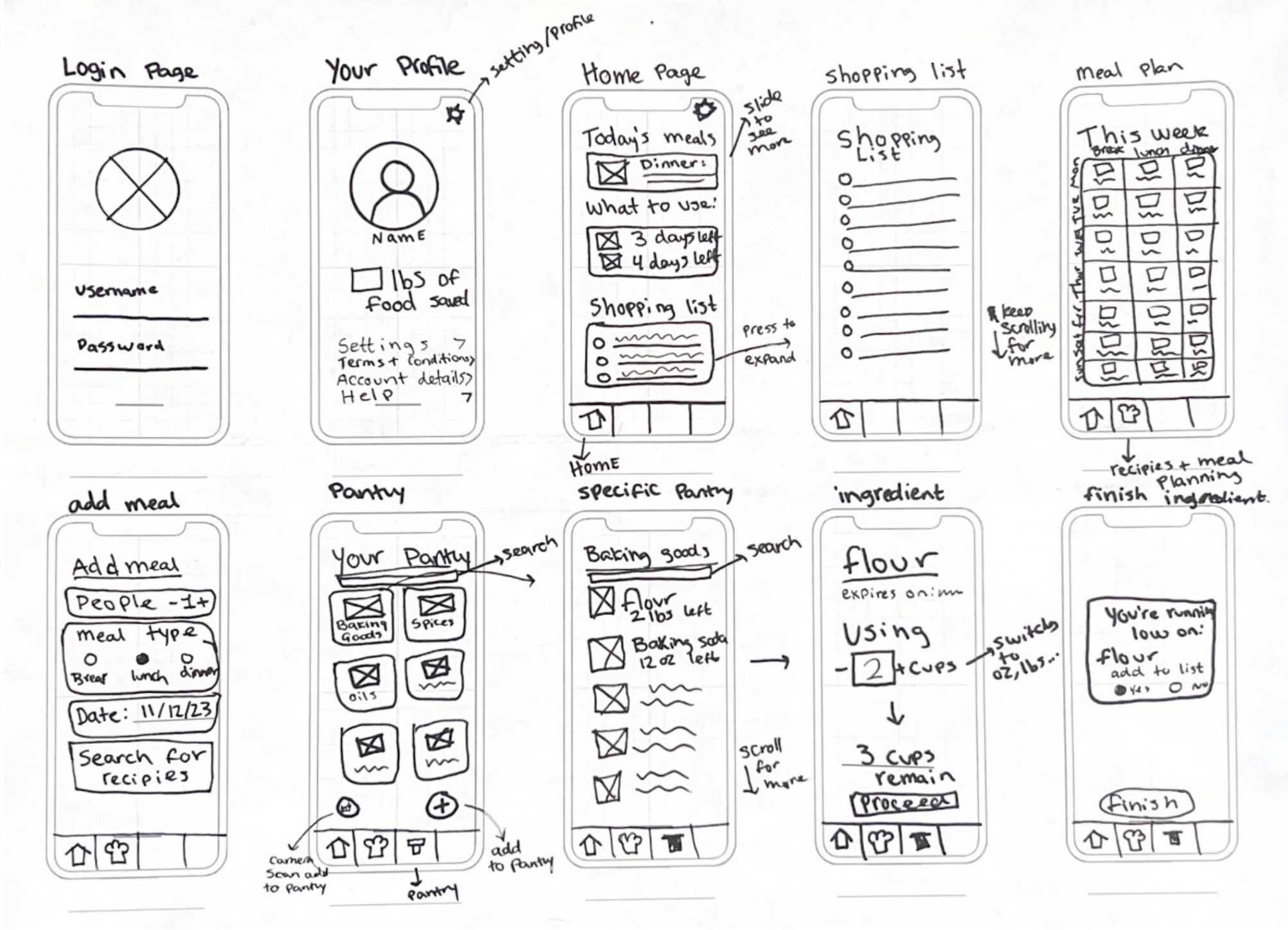
Color-blocking does
not feel cohesive

ALEKSANDRS
OCULT SIA
5355 49
bus
deb
ABLOY

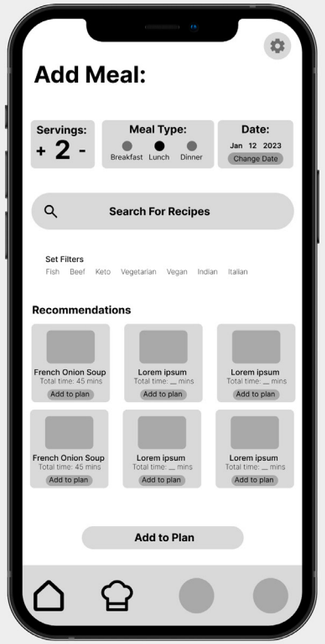
03

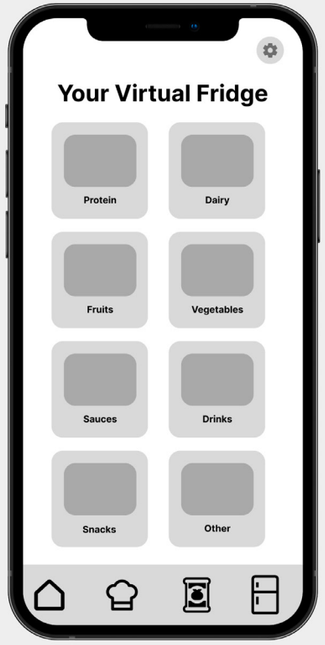
App

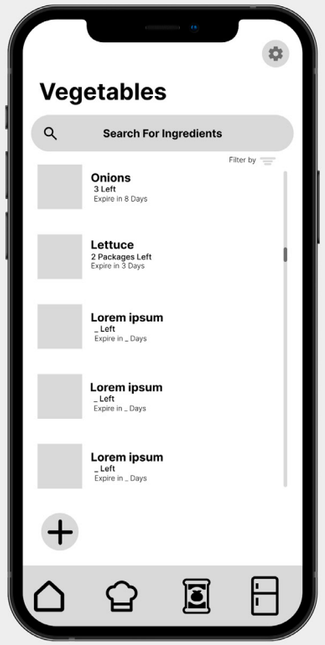
Layout Ideation

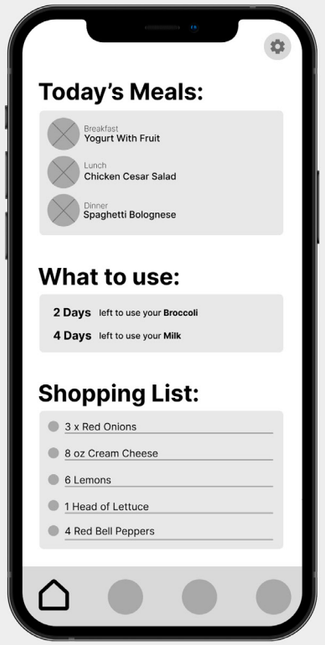


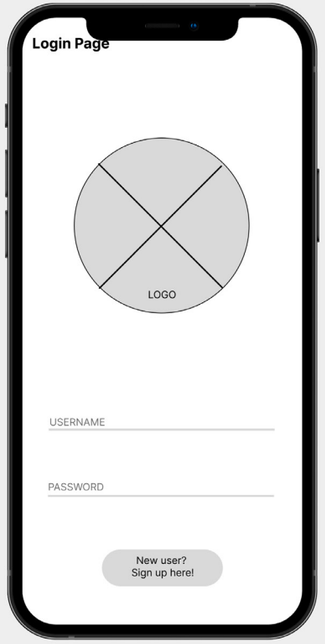
Grey-scale Wire-frames

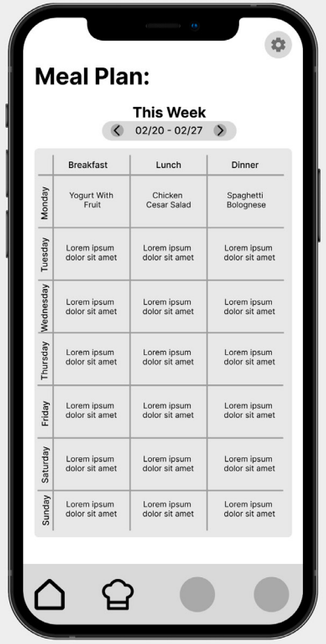


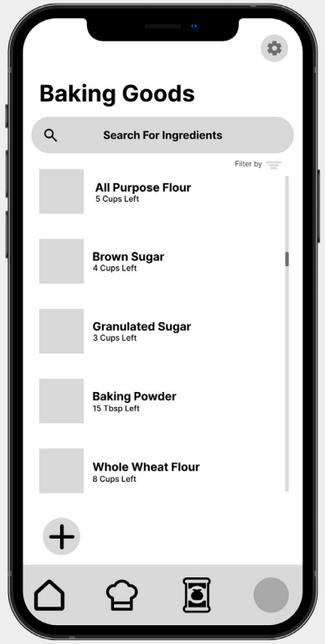


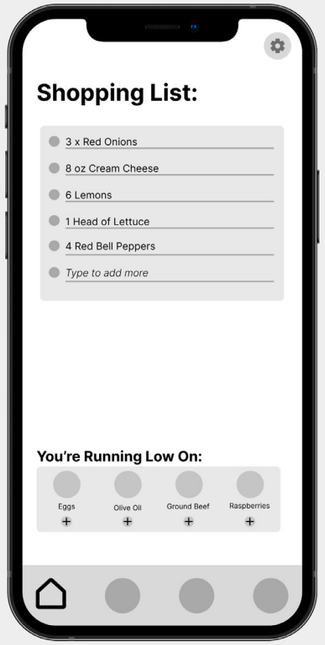












First Color Wire-frames

Today's Breakfast:

Yogurt With Fruit

Ingredients:

1/2 cup fresh or defrosted frozen strawberries

1/2 cup fresh raspberries

1 cup vanilla yogurt

1/4 cup granola

Directions:

Layer vanilla yogurt into the bottom of tall glass. Combine defrosted strawberries and juice with fresh berries. Alternate layers of fruit and granola with yogurt until glass is filled to the top. Serve immediately to keep granola crunchy

Today's Meals:

Breakfast
Yogurt With Fruit

Lunch
Chicken Cesar Salad

Dinner
Spaghetti Bolognese

What to use:

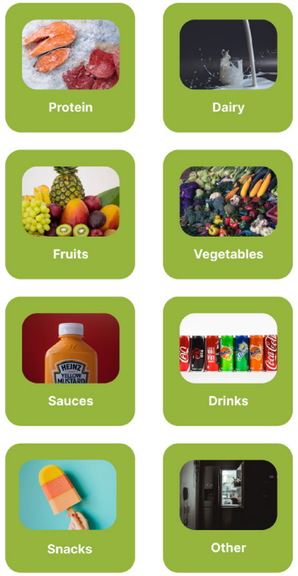
2 Days left to use your **Broccoli**

4 Days left to use your **Milk**

Shopping List:

- [ ] 3 x Red Onions
- [ ] 8 oz Cream Cheese
- [ ] 6 Lemons
- [ ] 1 Head of Lettuce
- [ ] 4 Red Bell Peppers

Your Virtual Fridge



Vegetables

Search For Ingredients

Filter by

Onions
3 Left
Expire in 8 Days

Lettuce
2 Packages Left
Expire in 3 Days

Eggplant
2 Left
Expire in 8 Days

Cucumber
1 Left
Expire in 6 Days

Broccoli
3 Left
Expire in 6 Days

Baking Goods

Search For Ingredients

Filter by

All Purpose Flour
5 Cups Left

Brown Sugar
4 Cups Left

Granulated Sugar
3 Cups Left

Baking Powder
15 Tbsp Left

Whole Wheat Flour
8 Cups Left

All Purpose Flour

Expires on 11/12/2023

Use
+ 2 -
Cups

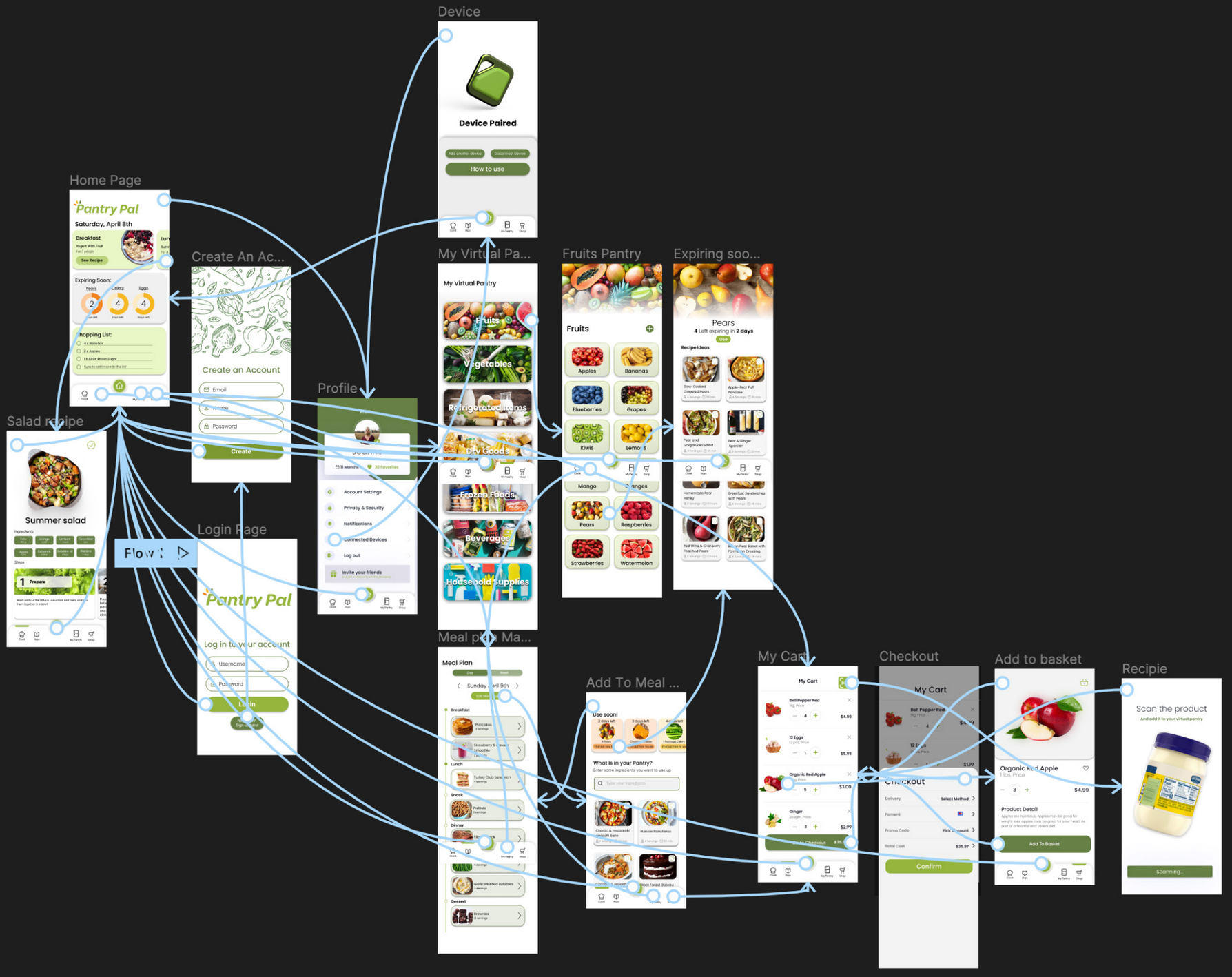
3 Cups remain

Proceed

Add to Grocery List

My Virtual Pantry
Fruits
Vegetables
Refrigerated Items
Dry Goods
Pantry Pal
Log in to your account
Username
Password
Login
New user? Sign up here!
Device Paired
Disconnect Device
Add another device
How to use
Pears
4 Left expiring in 2 days
Use
Recipe Ideas
Slow-Cooked Gingered Pears
Apple-Pear Puff Pancake
Pear & Ginger Sparkler
Pear and Gorgonzola Salad
Bananas
Apples
Grapes
Blueberries
Lemons
Kiwis
Summer salad
Ingredients
Steps
Prepare
Create an Account
Email
Name
Password
Create
Pantry Pal
Saturday, April 8th
Breakfast
Yogurt With Fruit
For 3 people
See Recipe
Expiring Soon:
Profile
Joanne
11 Months
Lunch
Snack
Dinner
Turkey Club Sandwich
Strawberry & Banana Smoothie
Pretzels
Ribeye Steak
Huevos Rancheros
Chorizo & mozzarella gnocchi bake
Black Forest Gateau
Coconut & squash
Cook
Plan
My Pantry
Shop

Figma Prototyping



04

System

Storyboard

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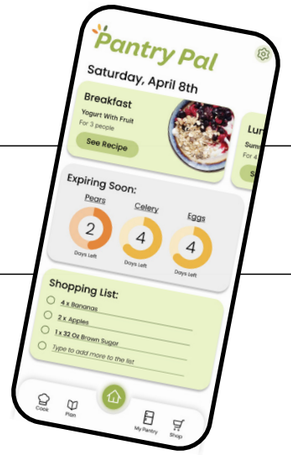

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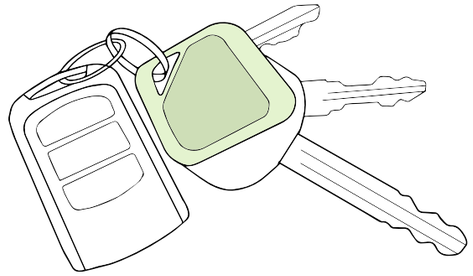

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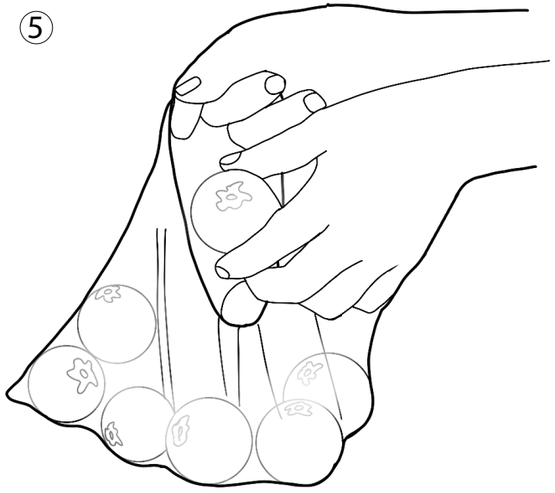

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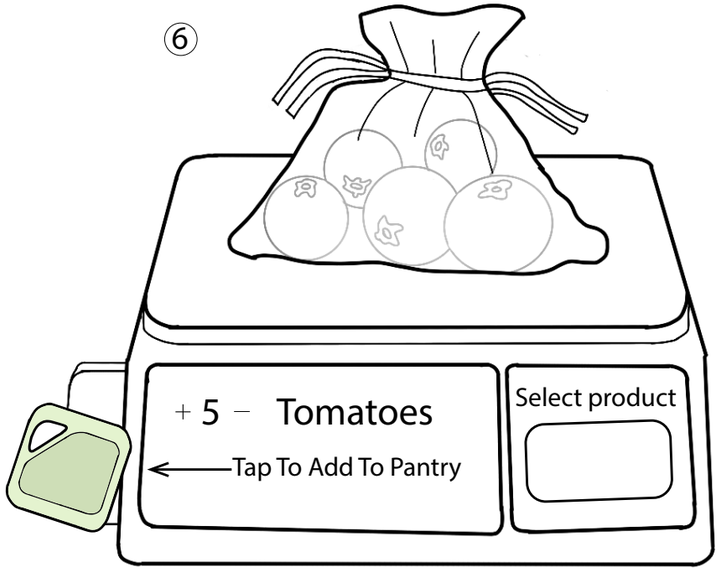

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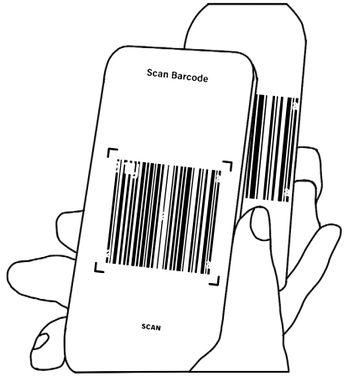

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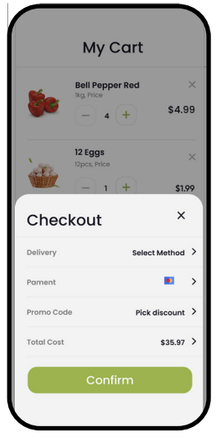

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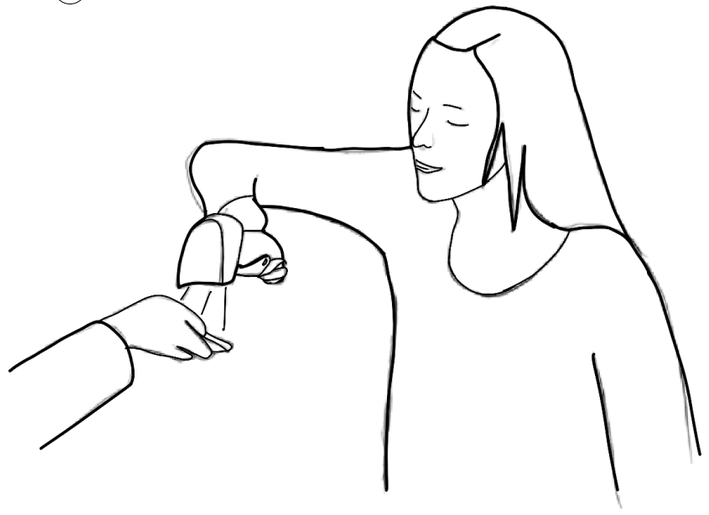

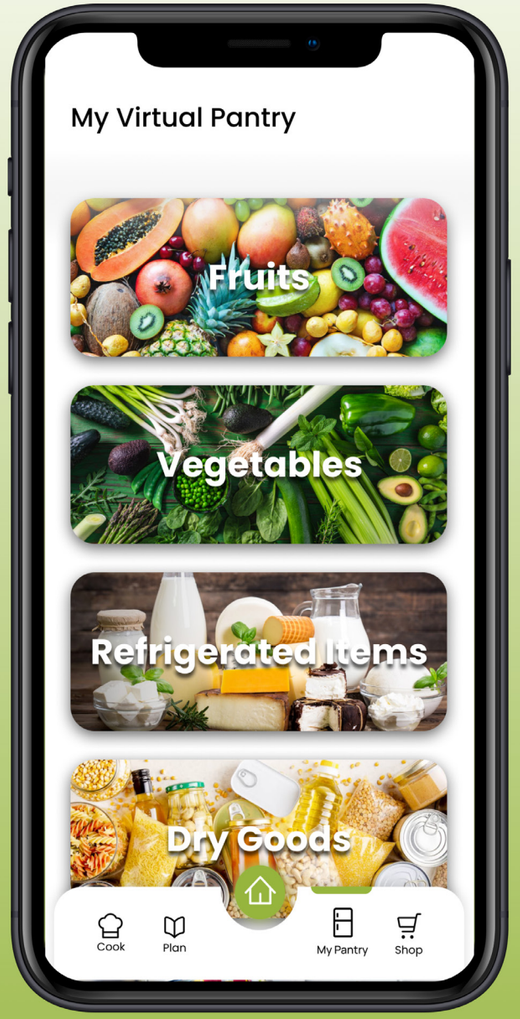

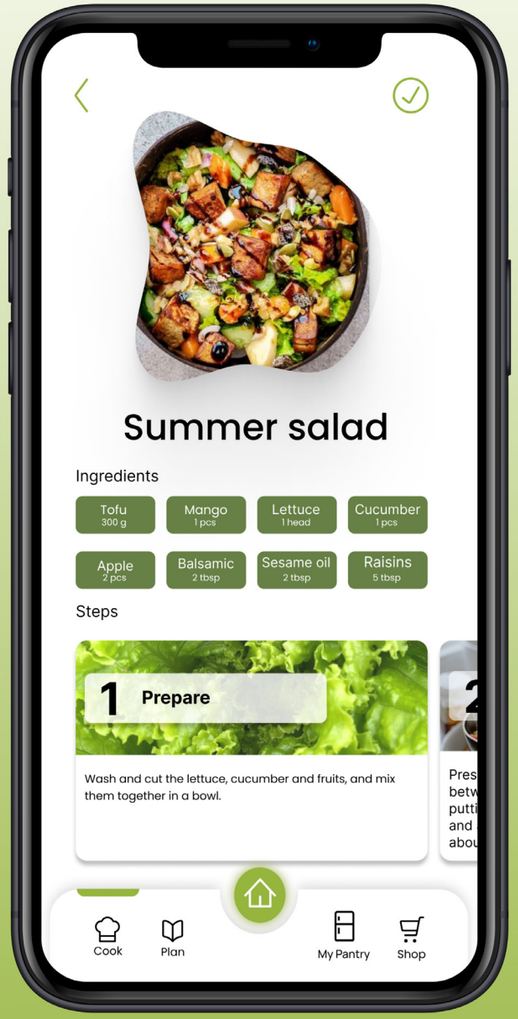

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A smart grocery shopping device with a companion app aimed at helping reduce food waste.