

SatisficingMeals

Project Description:

SatisficingMeals solves the problem of uninspiring meals, busy weeknights, and food waste by helping users track what's in their pantry, when items expire, and recipes they can make. Users add items to their virtual pantry - the system suggests expiry dates automatically. The dashboard highlights items expiring soon so nothing goes to waste.

The app goes beyond tracking. It suggests meals you can make with what you already have and generates a grocery list. It tracks leftovers with portion counts, suggests ingredient substitutions, and sends reminders for ingredient prep (like marinating tomorrow's chicken or setting pizza dough out to rise).

Users can look up unfamiliar ingredients via Wikipedia to learn what they are and where they grow. The app also tracks purchase history to show frequently bought items and smart suggestions.

User personas:

John the Busy Student

Age: 21 | Computer Science student, Boston

John grocery shops once a week and always buys too much. Half a bunch of cilantro, some limes, a random can of coconut milk, they sit in his fridge until they go bad. He gets bored eating the same thing every night but doesn't know enough recipes to use what he has. When nothing inspires him, he just orders DoorDash.

SatisficingMeals shows John what's about to expire and suggests recipes he can make right now. The Wikipedia lookup helps him figure out what to actually do with that weird vegetable he grabbed on impulse.

Alex the Forgetful Shopper

Age: 29 | Software engineer, works from home

Alex is perfectly capable of cooking, he just never has what he needs. He'll plan to make pasta, realize he's out of olive oil, and order delivery for the third time that week. He forgets essentials constantly and never remembers to defrost the chicken the night before.

SatisficingMeals keeps his shopping list stocked with things he always forgets based on his purchase history, and prep reminders tell him the night before if a recipe needs advance work.

Selena the Planner

Age: 34 | Marketing manager, two kids

Selena runs the household. She meal preps on Sundays and sends her partner to Trader Joe's every Saturday with a list she texts him. The problem is the list is always incomplete, she forgets to check the pantry first, so they end up with four cans of chickpeas and still no pasta.

SatisficingMeals keeps the pantry current so her shopping list only has what they actually need. Her partner checks items off in the store and moves them to the pantry in one tap when he gets home.

Taylor the Curious Health Shopper

Age: 27 | Pilates instructor, Somerville

Taylor is always buying exciting new ingredients at Whole Foods, black garlic, miso paste, cassava flour. She gets home, puts them in the pantry, and never touches them. Her fridge is a graveyard of ambitious purchases.

SatisficingMeals surfaces those forgotten ingredients in recipe suggestions before they expire, and the Wikipedia lookup tells her what they actually taste like and how to use them.

User Stories:

User Story 1: Account Creation & Authentication As someone who cooks at home, I want to create a personal account so that my pantry and shopping data stays private and is there every time I log back in. When I sign up I pick a username, password, and can optionally set a cooking goal like "eat at home more." The app remembers my session until I sign out, and my pantry items, shopping lists, and purchase history are all tied to my account.

User Story 2: Add Pantry Items with Smart Expiry As a home cook, I want to quickly add ingredients to my pantry without having to think too hard about expiry dates. When I start typing an ingredient name, the app suggests matching items from its database. Once I pick one, the expiry date is automatically filled in as two weeks from today, I can change it if I know the real date. If the ingredient isn't in the database yet, it gets added automatically so future users benefit too.

User Story 3: Expiry Dashboard As someone who hates wasting food, I want to see at a glance which items in my pantry are about to go bad so I can actually use them in time. The dashboard flags items expiring within 3 days in orange and within 7 days in yellow. I can also filter my pantry to just show expiring or expired items so I can decide what to cook or toss.

User Story 4: Edit & Remove Pantry Items As a user, I want to keep my pantry accurate as I use things up or throw them out. I can click the edit button on any pantry card to update the quantity, unit, or expiry date. If I've used something completely or it's gone bad, I can delete it entirely. Every pantry card also has a Wikipedia lookup button so I can learn more about an unfamiliar ingredient.

User Story 5: Shopping Lists As a grocery shopper, I want to build shopping lists for my trips so I don't forget anything. I can create multiple named lists and add items with quantity and unit using the same ingredient autocomplete as the pantry form. If I'm looking at a recipe and I'm missing some ingredients, I can add all the missing ones to a new shopping list with one click directly from the recipe card.

User Story 6: Shopping Mode & Move to Pantry As someone shopping in a store, I want to check off items as I put them in my cart so I can track what I've already grabbed. Checked items visually fade out and sink to the bottom of the list. Once I'm done shopping, I hit "Move checked to pantry" and all those items get added to my pantry automatically with suggested expiry dates no double entry needed.

User Story 7: Recipe Suggestions Based on My Pantry As a home cook who doesn't always know what to make, I want the app to suggest recipes using what I already have. The recipes page scores every recipe by how many of its ingredients I currently have in my pantry. Recipes that use ingredients expiring soon are bumped to the top and flagged so I can use those first. Each recipe card shows a Pexels food photo, the ingredients I have vs. what I'm missing, and buttons to view cooking instructions or prep reminders.

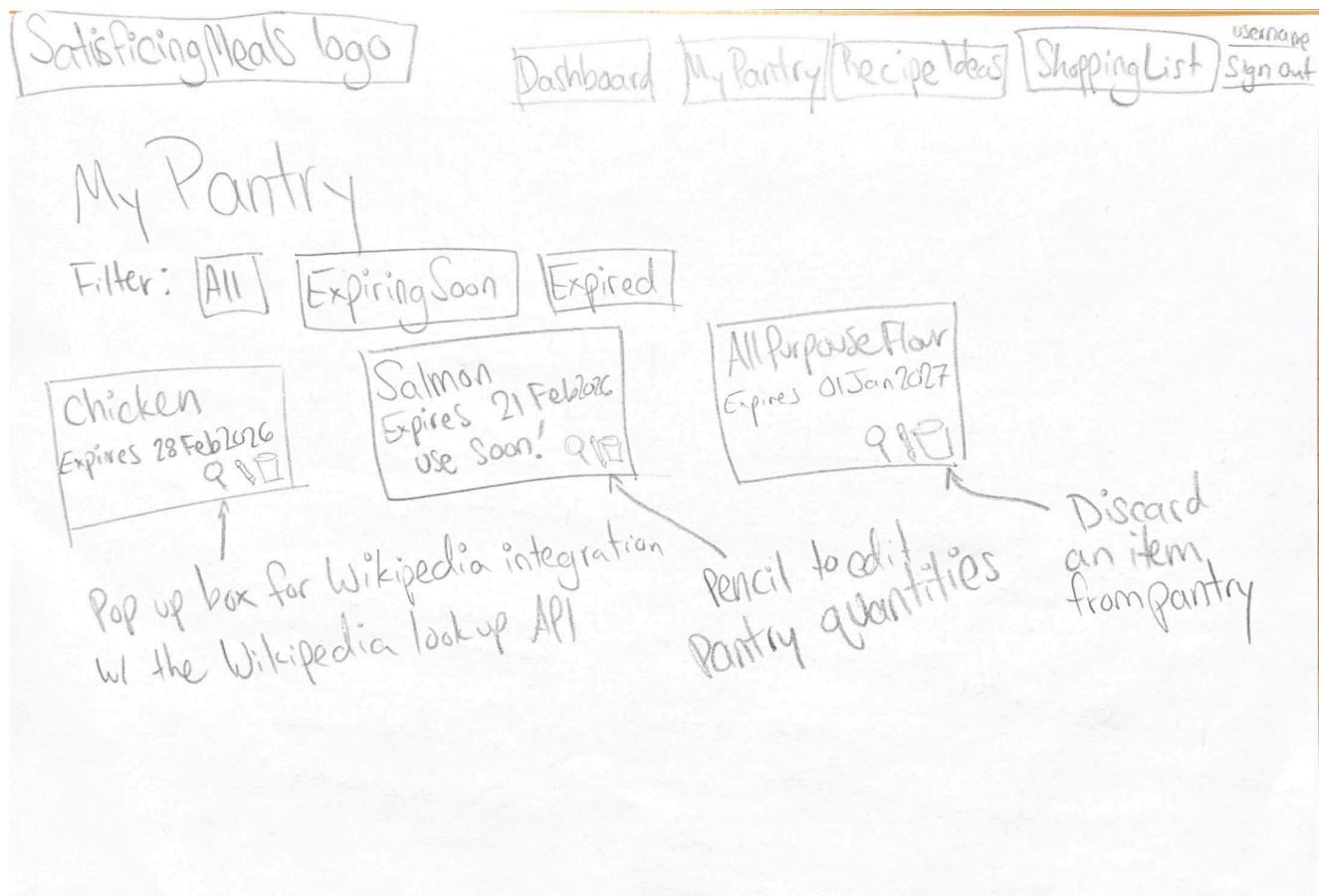
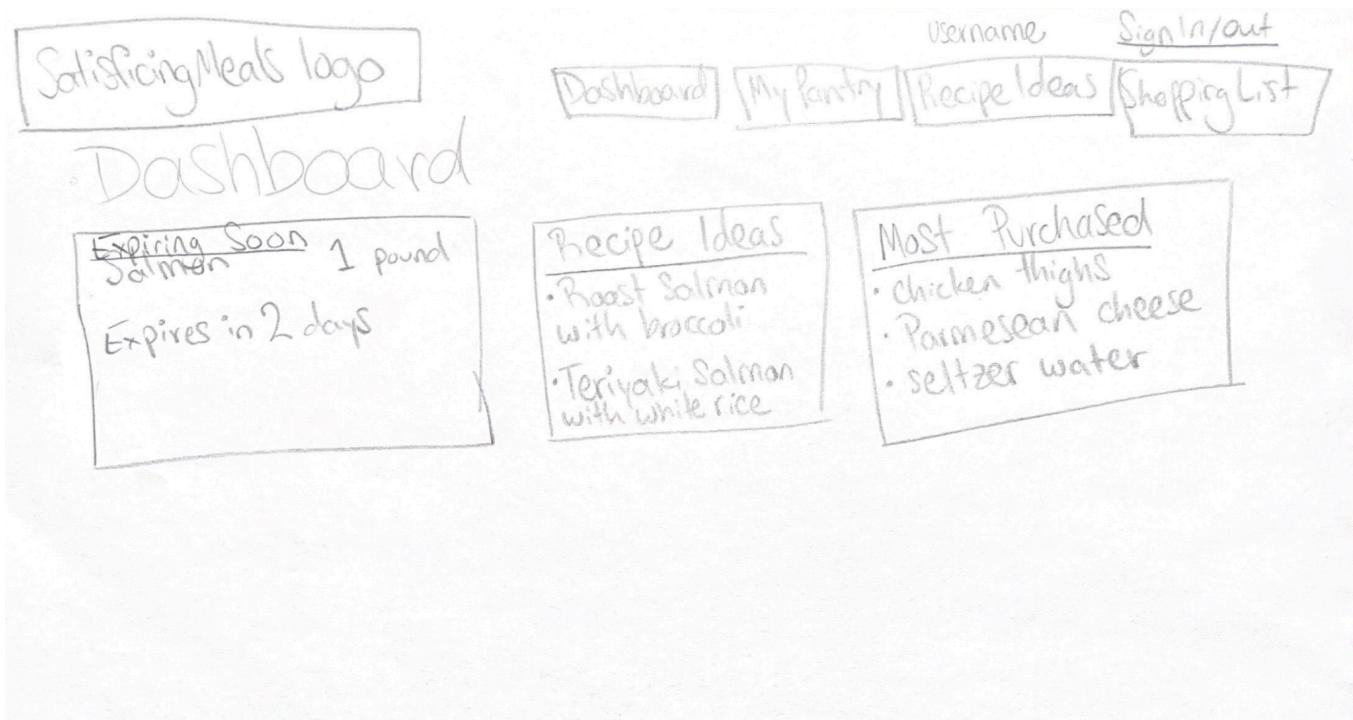
User Story 8: Cooking Instructions & Prep Reminders As a cook following a recipe, I want to see step-by-step cooking instructions without leaving the app. I can click "View cooking instructions" on any recipe card to open a modal with numbered steps pulled from our database. For recipes that need advance preparation, like marinating chicken overnight or letting dough rise a "View prep instructions" button shows me exactly how many hours ahead each step needs to happen.

User Story 9: Recipes of the Day & Dashboard Overview As a user opening the app, I want to immediately see something useful without having to dig around. The dashboard greets me by name, shows my cooking goal, and displays three random recipe suggestions with food photos as a "Recipes of the Day" section. It also shows my most frequently purchased ingredients and which pantry items are expiring soon, all in one place so I can decide what to cook tonight in seconds.

User Story 10: Purchase History & Analytics As someone trying to build better grocery habits, I want to see what I buy most often so I can plan smarter. The app silently tracks every item I add to my pantry or move from a shopping list, and the dashboard surfaces my top 5 most purchased ingredients. The shopping history endpoint tracks frequency over time so I can see my real buying patterns.

Design Mockups:





Satisficing Meals logo

[Dashboard](#)[My Pantry](#)[Recipe Ideas](#)[Shopping List](#)username
sign out

Recipe Suggestions

Italian Chicken match!

chicken thighs marinated in classic Italian seasonings
1 hour * prep ahead

- chicken thighs
- oregano
- basil

[View prep instructions?](#)

Pizza match!

oven-baked pizza with homemade dough
1/2 hour * prep ahead

- all-purpose flour
- basil
- tomatoes

[View Prep. instructions?](#)

Pasta missing 1 ingredient

pesto-topped pasta and tomato carbonara

1/2 hour

- basil
- tomatoes

NEED: PASTA
[Add PASTA to shopping list?](#)

Teriyaki Salmon missing 1 ingredient

ui Broccoli

Quick meal that feels fancy
1/2 hour

- salmon
- teriyaki

NEED: garlic
[Add GARLIC to shopping list?](#)

Roast Salmon missing 1 ingredient

w/ white rice

straightforward healthy meal
1/2 hour

- salmon
- salt
- pepper

NEED: rice
[Add rice to shopping list?](#)

Ravioli missing 2 ingredients

pockets of deliciousness

1/2 hour

- tomato

NEED: ravioli, garlic
[Add ravioli, garlic to shopping list?](#)

Satisficing Meals logo

[Dashboard](#)[My Pantry](#)[Recipe Ideas](#)[Shopping List](#)username
sign out

Shopping Lists

Star Market: 20 Feb 2026

- Goldfish crackers (1)
- Dunkin's dark roast (2)
- eggs (12)

[Add item?](#)

Trader Joes: 01 March 2026

- Salmon
 - Bubbly water
 - Onions
 - Garlic
 - Ravioli
 - kale (pick organic please!)
- [Add item?](#)

button to
delete the
entire list

Our design document on how to structure the database:

Best way to structure the recipes? —>

Name of recipe (string)

Description (string)

Ingredients as (array/string)

Time to prepare (string)

Meal prep required (boolean) if yes —> prep_instructions (strings)

prep_instructions dataset

Time in advance (24 hours)

Instruction (string) Ex. Marinate the chicken

Match to the recipes

users

(The ones we listed in our slack)

Name, username, password, goal (string - not required), date created

pantry_items

What the users have in their fridge —> users will manually add

Will also need to list the quantity (1 onion, 5 flour)

Select type of quality (grams, milliliters, integer)

If there is a missing item in our ingredients_db, can give an option to INSERT but not delete item in our ingredients_db.

shopping_lists

Name of item, and the quanta

Generated from the recipes —> users will manually pick recipes

purchase_history

Generated from the historic/current pantry items on the exact instant it is added to the pantry

Ingredients: created at, expiry