MealGenie

UX 2 Case Study

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Discovery

Problem Definition

Provide an easy and convenient way to plan and prepare meals and discover new recipes to make grocery shopping more efficient, which saves time for busy individuals and families.

Product & Industry Research

Competitor Analysis

- Meal Planning Apps are typically also weight loss apps
  - MyFitnessPal
  - Eat This Much
  - Macro Match
  - Meal Prep Planner & Diet Plan
- Build a meal plan from items already in your "Pantry"
  - Meal Lime
  - Cooklist
- There is one AI-assisted Meal Planning app without much personalization
  - ChefGPT ("MealPlanChef")

SWOT Analysis

Strengths

- Make/edit a list
- Shows nutrition info
- Some deliver groceries to you

Opportunities

- More variety of recipes
- More customization options

Weaknesses

- Time consuming to set up or scan pantry items

Threats

- AI

User
Research

Initial Archetypes (Assumptions)

- Busy people
- People on a budget
- Parents
- Home chefs
- Fitness people

Survey Results

- 91 responses (posted [the survey](#) to meal-planning Reddit group)
- Respondents were 60 female:40 male and most were primary cook
- Over half reported that they had very little time to plan/shop for meals
- Very few said they were on a tight budget
- Wanted: More flexibility with recipes (ability to swap/alternate ingredients); Wider range of recipes; Better recipe search UX

Interview Results

- Interviewed my sister over email
- She had to use many apps to plan her meals for the week
- "I usually use MyFitnessPal to track my calories"
- "I use Trash Panda to check for certain unhealthy ingredients"
- "I use Healthy Living to stick with healthy ingredients"
- "I use Lost Ease to make my list and it can connect the whole family to add or subtract things from the grocery list"

Personas

Busy Parent

- Expectations
    - Quick and easy to set up meals for the week
    - Effort put in will be worth it
    - Kids will be happy with the meals

Age: 38
Occupation: Nurse

Betty's so busy that she and her husband are forgetting things at the store. Sometimes they don't have time to make a list. Budget is not a concern for groceries. She is the primary cook for the household.

Fitness Diet

- Expectations
  - Nutrition information will be available
  - Wide range of recipes
  - Easy to swap items in recipes

Age: 25

Occupation: Gymnast Coach

Jango has a "Paleo" diet. He finds he's always eating the same thing over and over just because that's what he knows he can eat off hand.

Specialty Diet

- Expectations
  - Nutrition information will be available
  - Wide range of recipes
  - Easy to swap items in recipes

Age: 28
Occupation: Dog groomer

Her child has an allergy to gluten that she takes very seriously. Even she eats gluten-free stuff most of the time because she's adapted to it. Dinner is a big part of their family experience together with her son.

Top Insights

Insight: Money/budgeting is less of a factor than expected

- Survey results showed only 10% of respondents said they were on a tight budget and 30% don't budget at all
- Nutrition information (counting Macros) was more important than budgeting
- Decided not to focus on people on a budget (who want to use items already in their pantry)
- More of a focus on fitness enthusiasts

Insight: Some people use multiple apps to plan meals.

- Some survey respondents entered several apps that they currently use
- Interview showed people are looking for one app that does it all

Insight: Many people are looking for a better search UX

- Survey respondents reported wanting more recipe variety and more customization options when searching
- Users seemed dissatisfied with their search results and the tools they had available to find good recipes

Hypothesis

Could AI help people get more personalized meal plans?

- Users are looking for more customization options
- Rather of keeping a huge database of possible meal plans, could AI produce more personalized results?
- ChatGPT is trained on text from the Web, including recipes and blogs

App Features

Primary Features

- Gather user's dietary preferences
- Generate ideas for 7 days worth of meals
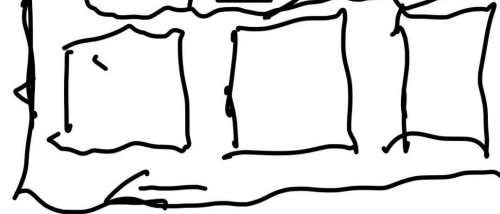- Offer the ability replace meals they don't like

Out-of-Scope Features

- Calculate Nutrition Information for each meal and daily macros
- Generate Shopping List with all the ingredients needed to make the meals
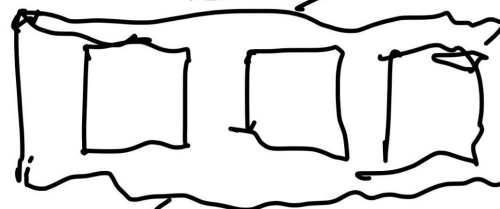
Design

Initial Sketches
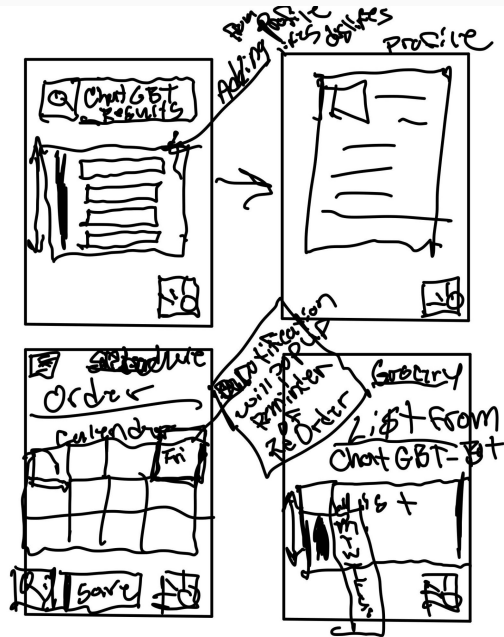
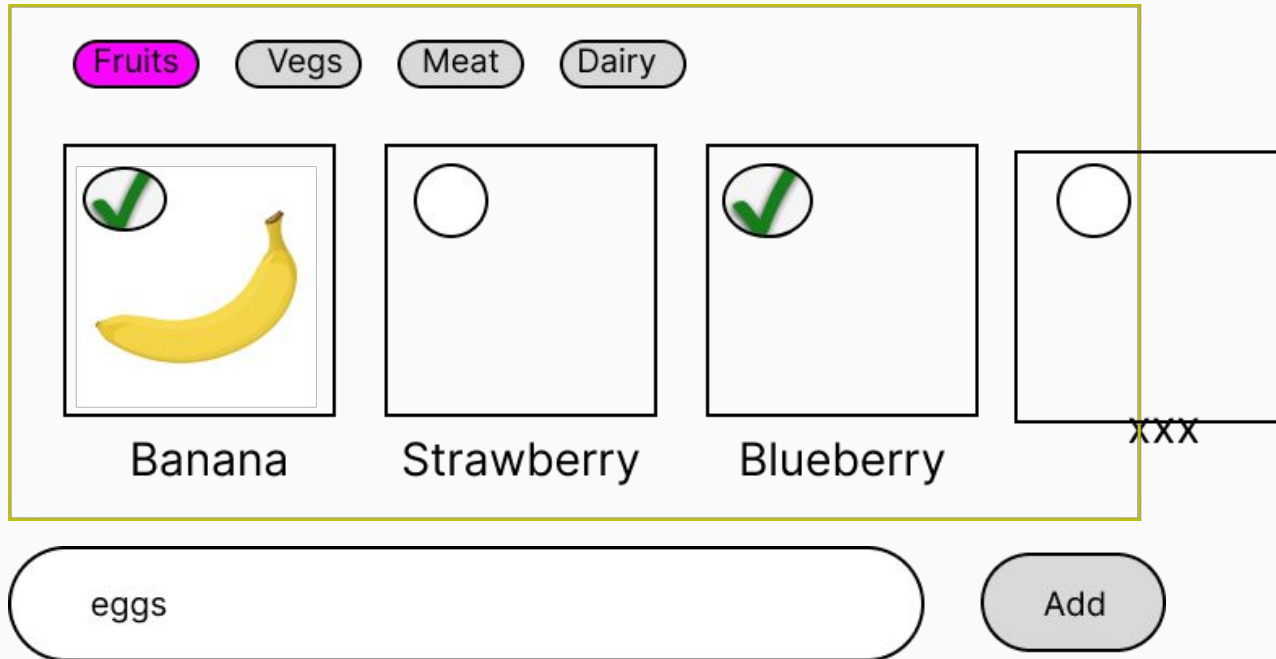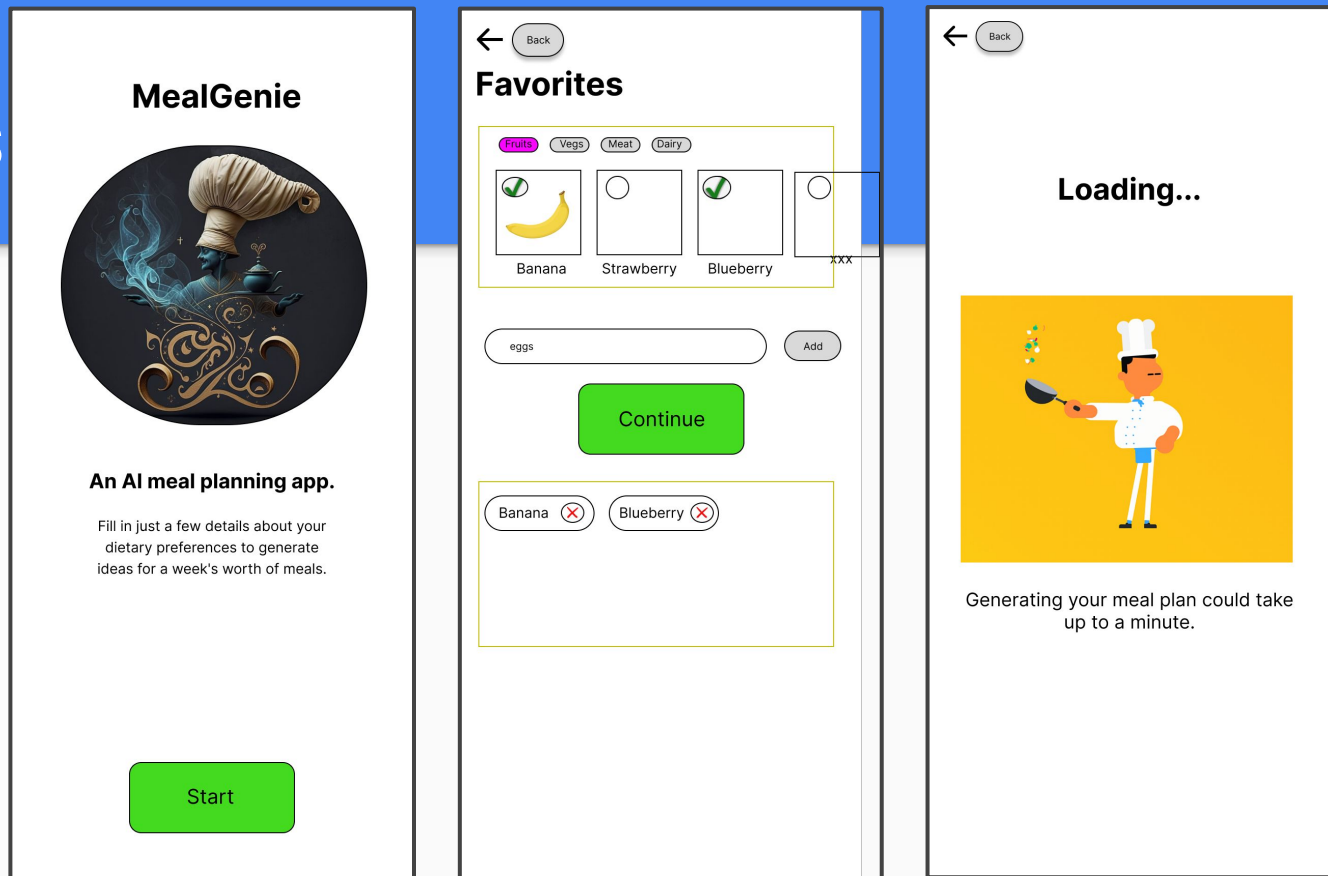# Brand

"MealGenie"

Logo created in MidJourney

UI Elements: Swiper and Text Search

Wireframes

- [Figma Link](#)

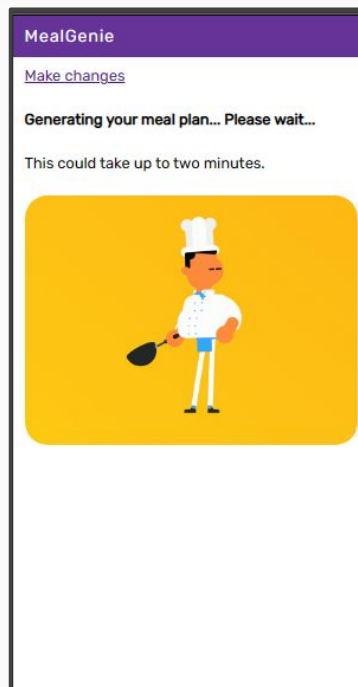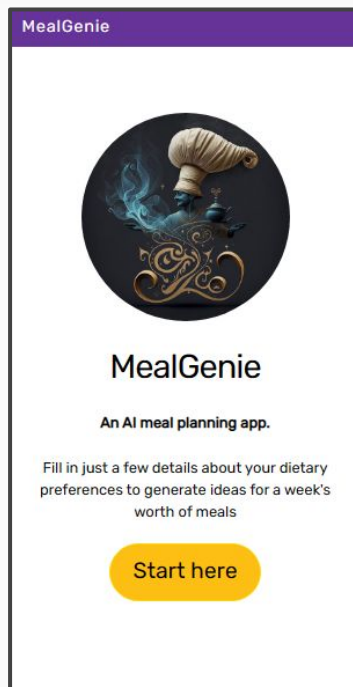**MealGenie**

An AI meal planning app.

Fill in just a few details about your dietary preferences to generate ideas for a week's worth of meals.

Start

Favorites

| Fruits | Vegs | Meat | Dairy |

✓ Banana · ◯ Strawberry · ✓ Blueberry · ◯ · xxx

eggs · Add

Continue

Banana ⊗   Blueberry ⊗

Loading...

Generating your meal plan could take up to a minute.

Delivery

Prototype (Link)
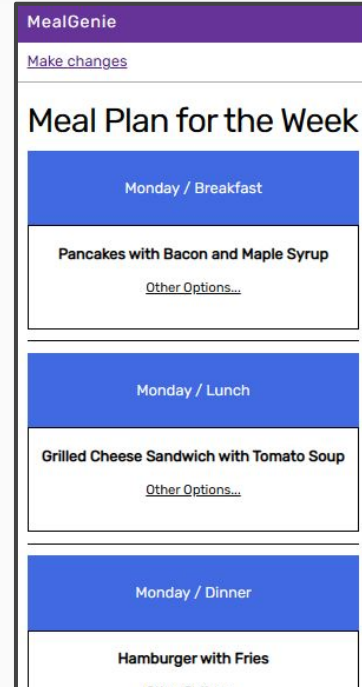
Usability Testing

- 20 testers using maze.co
- Half of testers didn't reach the end
    - Likely due to hiding the "Continue" button at the bottom the screen
    - Moved up "Continue" button in final prototype
- Of those that reached the end, 4/5 stars was the average rating

Top Insights

Insight: "Continue" button needs to be visible at all times

- During user testing the "Continue" button would go underneath everything else, including the user's list of likes/dislikes
- Some users couldn't find the "Continue" button and did not finish
- "The User Interface is not too intuitive, but the recipes provided are appealing to me and the ability to generate a meal plan with a list of wanted foods is great."
- Updated to make the button bigger, gold, and always visible on screen

Insight: AI can produce personalized results

- Many testers were excited and delighted that it worked at all
- "I was pleasantly surprised with the results I was given and how easy it seemed to generate a meal plan with the requirements I asked."
- Some wanted more pre-populated items, such as Italian food or Mediterranean food, instead of having to type it in
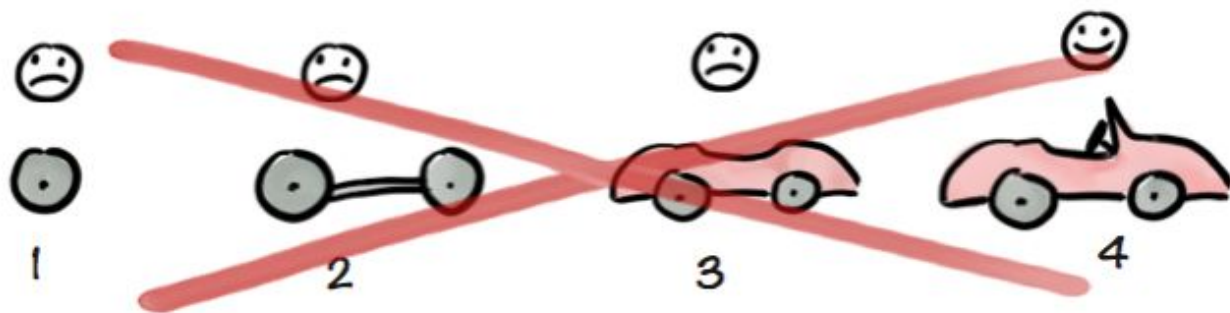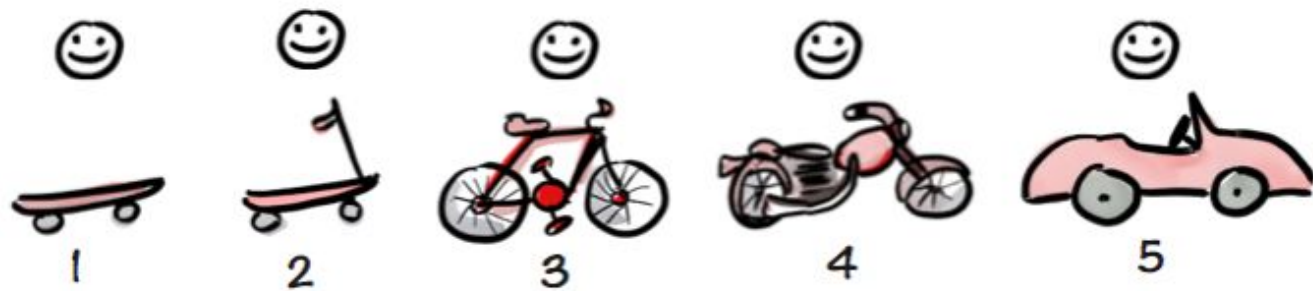
Lessons Learned

Lessons Learned

- AI is a coming threat to the business model of many apps
- AI can help provide personalized results

Next Steps

Not like this....

1   2   3   4

Like this!

1   2   3   4   5

Next Steps

- First calculate Nutrition Information for each meal and daily macros
- Next, generate Shopping List with all the ingredients needed to make the meals
- Eventually, integrate with shopping apps to handle grocery delivery

Q&A