

Assignment 2: POVs, HMWs, and Experience Prototypes

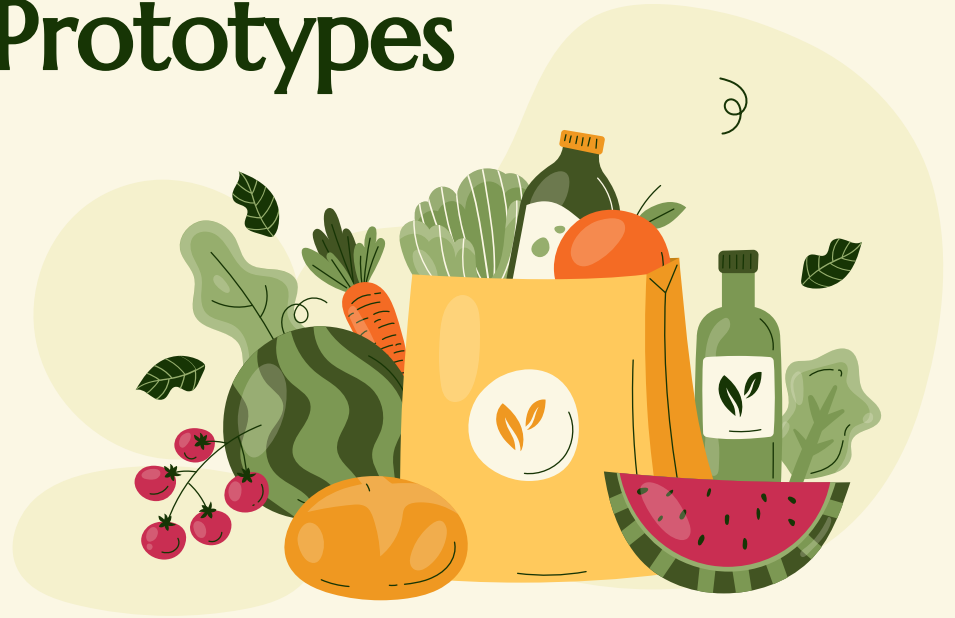
CS 147

Jeanette Han

Kevin Song

Maya Chandra

Megan Mou

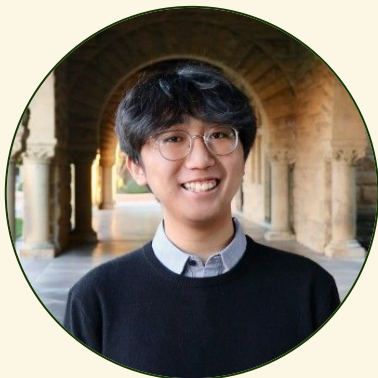




Team Spice Rack



Jeanette Han
Paprika



Kevin Song
Garlic

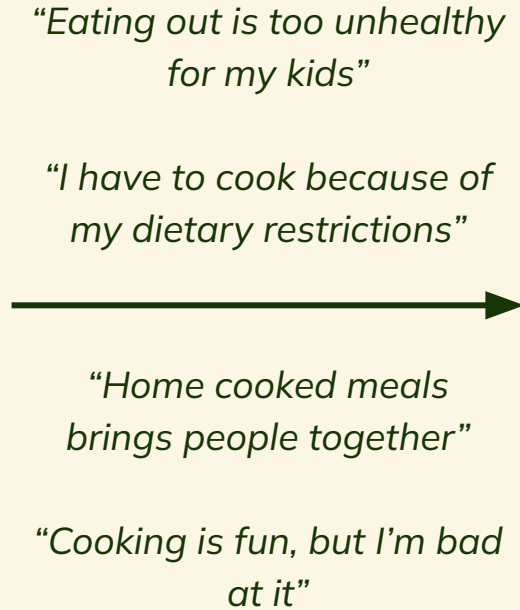
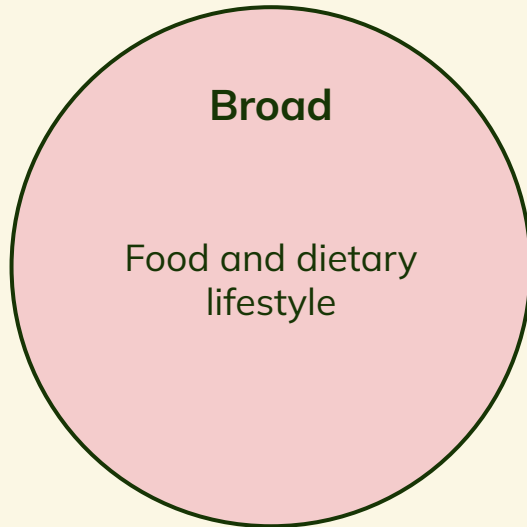


Maya Chandra
Cinnamon



Megan Mou
Cumin

Narrowing our Problem Domain



Additional Needfinding



Interview 1: Lisa

Context

- Local youth **sports coach** and **mom of two kids** in their late twenties
- Is **diabetic** and has various **dietary restrictions**
- Lives with her husband and normally cooks a series of **staple** dishes on rotation excluding **holidays** where she prepares a **large feast** for many relatives and friends

Learnings

- Views food as the **greatest uniter** of her family during holidays and various events, but also as an **“evil”** because of how she needs to consistently watch what she’s eating for her health
- Used to find meal planning **challenging** and **tedious** with kids but now with **Tiktok** and other social media platforms, feels **empowered** to try new things



Interview 2: Phillip

Context

- **Financial analyst** living **on his own** with an extremely busy work schedule (**100+ hrs/wk**) and currently no time to cook
- Cooked frequently with his friends back in college and often **reminisces** of those times
- Office culture promotes **ordering delivery** → receives a daily meal **stipend** and most people order **fast food** (ex: Five Guys)

Learnings

- Extremely busy young professionals **barely** have time to eat, much less cook, for themselves on a regular basis
 - Any extra time → relax
- Office workers **still really want** to improve their eating habits
- Feeling of **powerlessness** with regards to taking **control** of their health and **dietary well-being**



Interview 3: Stephen

Context

- Lives with wife, both **semi-retired classical musicians** → Very budget-conscious
- **Jewish heritage** → Feels extra **community** emphasis on food
- **Bay Area native** → Grew up eating many **cultural** foods
- Does the dishes, **doesn't cook** → Values taste first

Learnings

- Modern tech caters to the masses (younger generations) → older generations feel **overlooked**
- Food is **the** key way older people stay connected to younger gens
 - “Wife gets most **satisfaction** from the kids enjoying her food”
 - Joint custody of children → looks forward to Thanksgiving dinner
- Most important aspect to cooking process is **sourcing from multiple stores** → can pick **favorite** brands, **cheapest** products



POVs and HMWs



POV & HMW 1: Phillip



We met Phillip, a young financial banking analyst, who works 100+ hour weeks at his desk and eats 1 meal a day that is ordered on a delivery app using his \$30 work meal credit.

We were surprised to notice that he still grocery shops and stocks his fridge with fresh produce that often goes bad, despite rarely having time to cook on weekdays or weekends, since he used to cook frequently back in school.

We wonder if this means that he still feels a deep desire to cook for himself, but is too overwhelmed by his current lifestyle to properly plan meals and use the ingredients he has in time.

It would be game-changing to provide him with sufficient tools to better plan out when to buy and use groceries, and harness his nostalgia to incentivize him to actually use this extra time to cook.



HMW introduce and instill long-term, sustainable healthy eating habits in busy professionals?

POV & HMW 2: Richa



We met Richa, a working mom with 2 young kids, who juggles a busy schedule and is responsible for planning and cooking all of the meals in her multigenerational household.

We were surprised to notice that she home-cooks nearly every meal and shops at multiple different grocery stores — despite balancing work, her children’s extracurriculars, and personal commitments.

We wonder if this means that she will go to whatever lengths necessary to prioritize nutritional value and a variety of foods in her family’s diet.

It would be game-changing to centralize the grocery shopping and meal planning processes so she can spend less time and effort providing healthy, diverse meals for her family.



HMW satisfy the diverse nutritional needs and preferences of a multigenerational household?

POV & HMW 3: Derrick



We met Derrick, a Chinese-American software engineer who began cooking after recently graduating and moving in with his girlfriend in New York.

We were surprised to notice that he wants to branch out from what his parents taught him and learn how to cook dishes that he tries at restaurants, but rarely does so due to his defeatist, self-critical attitude.

We wonder if this means he has very high expectations for both his own cooking as well as the quality of cooking-related advice that he takes from others.

It would be game-changing if he could receive ramping guidance and feedback that he trusts at each step to develop his cooking skills, so that he can reach concrete cooking milestones and satisfy the very high expectations he sets for himself.



HMW mitigate the anxiety that home chefs feel surrounding cooking new foods or trying new recipes?

Solutions and Experience Prototypes





Solution 1



Solution: Cooking / eating habit tracker that rewards users for reaching milestones and maintaining streaks



Key Assumption: People are incentivized to pursue progress by reward systems that concretely track and show behavior

Prototype Pictures

Day 1

You've started cooking a new dish to add to your collection! Continue the streak to finish cooking your dish.



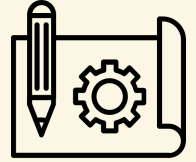
Day 2

You've finished cooking the Italian caprese pizza for your 2 day streak!



Did this reward make you feel motivated to cook more regularly and to unlock more recipe accomplishments?

Experience Prototype 1



Participants

- One person who is a **typical home cook** that makes meals at home a few days a week
- One person who does **not typically cook** for themselves / others (i.e. lives with parents who cook)

What Worked?

- Having a reward made the tester **feel inspired** to cook more regularly: **5 / 5** on level of motivation
 - *“I wanted to find out the final reward after unlocking the first image”*

What Didn't Work?

- The **reward itself** of unlocking new recipes was **not the most effective**
 - Other suggestions: themed milestone badges (ex. Peloton), local restaurant discounts, etc
- Inertia: difficult to encourage **starting** a new habit esp. without a clear destination



Solution 2

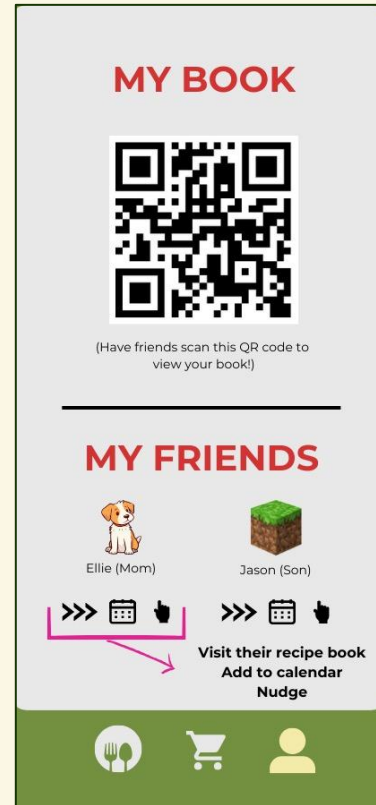
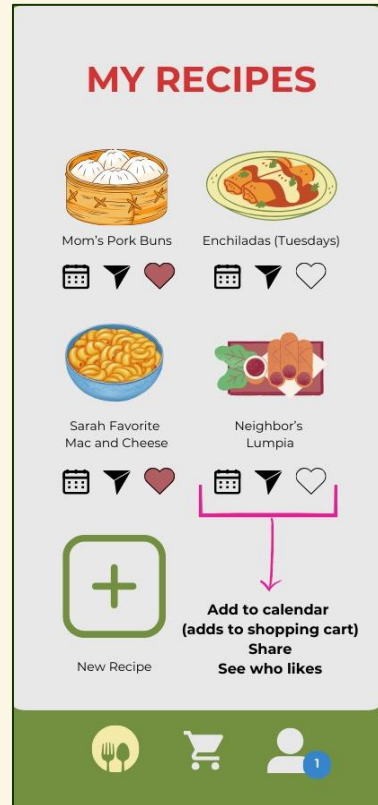
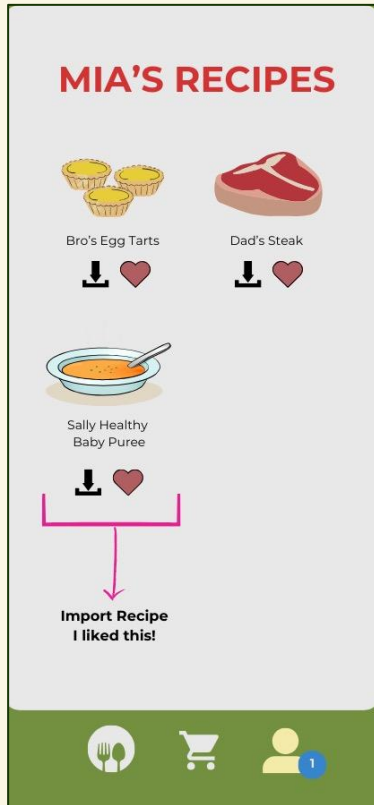


Solution: Digitized family recipe book and meal calendar with features to store, share, and plan recipes and meal times



Key Assumption: Busy families / parents would prefer saving and choosing from trusted recipes that they have already made before

Prototype Pictures

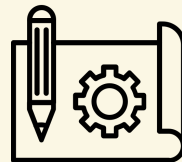


How does this app make you feel?

*What do you like about these screens?
What do you dislike?*

*Would you use this app over your current family recipe & meal organization method?
Why or why not?*

Experience Prototype 2



Participants

- Three-person family with various **familial roles** and **cooking-related responsibilities**

What Worked?

- Testers really appreciated the ability to **share** and **import** recipes to and from one another
- Testers really liked **visualizing** their recipes in one physical space
 - *Mom: “It sounds like a fun and aesthetic way to interact with friends, especially for users who enjoy food/cooking!”*

What Didn't Work?

- Testers wanted more ways to **organize** the recipes by grouping them together based upon culture, ingredients, dietary restrictions, etc
- Testers felt like this was **boring**
 - *Mom: “This is a little boring.”*



Solution 3



Solution: A platform with recipe packs for diverse cuisines organized into beginner, intermediate, and advanced levels that build upon each other




Key Assumption: People feel empowered to cook more dishes of a different cultural background if they are gently introduced with a beginner recipe

Prototype Pictures



Birria de Res (Beef Birria)

Recipe From Josef Centeno
Adapted by Tejal Rao




How difficult do you feel it would be for you to make this dish?



Chicken Fajitas

By Ali Sinaei




How confident do you feel in your ability to make this dish at home?



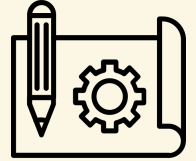
Elotes (Grilled Corn With Cheese, Lime and Chile)

By Melissa Clark



After reading through the first and second recipes, what would your confidence level for making the THIRD dish be?

Experience Prototype 3



Participants

- Three random people with different **cultural backgrounds** and **various levels** of cooking experience

What Worked?

- Testers felt **more capable** to cook a difficult dish after seeing beginner and intermediate recipes (**confidence level increased from 2 to 3**)
 - *“I became more confident because I felt reading [the easier] recipes gave me the confidence that I could make something I have never made before”*
- kTesters liked being able to **choose** which foreign cuisine they interacted with

What Didn't Work?

- Testers often felt uncertain **even when shown the simplest recipe**

What's Next?



Choosing Our Final Solution

Prototype Successes

Reward systems

Socializing food
(e.g. sharing recipes)

Incrementing skill levels



Real-World Examples

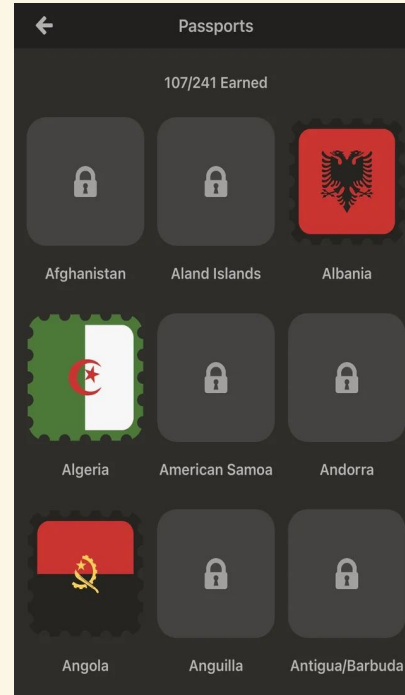
Shared Traits:

Motivation via collection completion

Stepped reward system (badges/stamps)

Rarity system

Friend v friend competitive challenges



Chess.com passports



Pokémon Pokédex

Final Solution

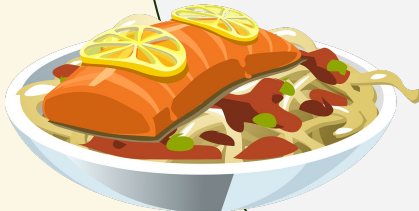
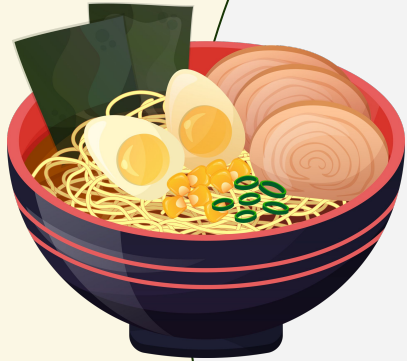


Food Dex — “collecting” dishes of various cultures

Dishes organized by culture, and difficulty within each culture

Earn badges for progression and completion of collections to gamify exploration

Friends can recommend dishes to each other and compete against each other in timed collection progress challenges



Ethical Considerations



What are the ethical implications of this solution?

- **Equal representation of cultures** when incorporating achievements for food collections
 - Need to conduct research into various cultures to prevent **oversimplification** or **stereotyping** dishes

Who does it serve?

- **Home cooks** — to incentivize ramping exploration of new cuisines and recipes
- Can also be used by **foodies** and anyone looking to diversify their palates

Who might it leave out?

- From our interviews: **older generations** who lack **familiarity with digital interfaces**
- Food is especially important for older people to **stay connected** with younger generations; we need to be careful not to **inadvertently isolate** older users



Thanks!

Appendix



HMWs for Phillip

1. HMW rediscover an enjoyment of cooking?
2. HMW gently introduce cooking as a habit?
3. HMW make mealtime a relaxing break from work?
4. **HMW introduce and instill long-term, sustainable healthy eating habits in busy professionals?**
5. HMW reduce food waste?
6. HMW evoke good memories and experiences through food?
7. HMW more evenly distribute meals and snacking throughout the day?
8. HMW create time to cook in a packed schedule?
9. HMW make eating a social bonding experience?
10. HMW reward busy people to make time in their day for cooking?
11. HMW develop ownership and pride in home-cooked food?

HMWs for Richa

1. HMW reduce the time needed to source different ingredients?
2. **HMW satisfy the diverse nutritional needs and preferences of a multigenerational household?**
3. HMW keep track of all the dietary needs of growing children?
4. HMW make a busy schedule exciting instead of stressful?
5. HMW spread out cooking responsibilities in a family?
6. HMW involve kids in the cooking process?
7. HMW make trying new foods fun for picky eaters?
8. HMW introduce flexibility and adaptability into the meal-planning process?
9. HMW make cooking more fulfilling and less like a chore?
10. HMW build a schedule around cooking?
11. HMW connect a family through cooking and food?
12. HMW provide kids with a range of culinary experiences?

HMWs for Derrick

1. HMW empower home chefs to feel gourmet?
2. **HMW mitigate the anxiety that home chefs feel surrounding cooking new foods or trying new recipes?**
3. HMW better combine cultural foods with healthy eating?
4. HMW make buying fresh ingredients more cost-effective?
5. HMW make cooking a bonding experience between partners?
6. HMW make replicating restaurant dishes exciting instead of intimidating?
7. HMW affirm the reliability of new recipes?
8. HMW keep track of when food will expire?
9. HMW plan meals so leftovers are sufficient for further use?
10. HMW gamify taking culinary risks?
11. HMW prioritize cooking during transitional periods?

Solutions for Phillip

HMW introduce and instill long-term, sustainable healthy eating habits in busy professionals?

Online platform with friends who each share cooked meals/meal plans daily for accountability

System that displays regular warnings/reminders on long-term health consequences of low-nutrition foods

App that allows you to bet with friends/family on who goes the longest without eating out/unhealthy

App for setting milestones and tracking cooking/eating journey over time; rewards you when you're on a streak (think Forest)

App that clearly displays the contrast in cost between eating out and cooking (shows you how much you're saving each time and in aggregate)

An app that comes up with fun recipes based on common leftovers

Online community of people in your area who want to cook more

A habit tracker app that rewards you for cooking __ times a week

A database of simple, quick recipes that are one pot / pan to minimize both cooking and cleaning time

A calendar or list system that tells you when your groceries expire

Meal plan/cooking tracker app counting days/weeks

Office coworker bring your own lunch/dinner (potluck in the office?) app

App that splits up recipes into multiple steps/chunks that can be done at different times (doing meal prep on different days)

AI that you link your google/outlook calendar with and figures out/blocks out time on your calendar to cook

App that partners with companies to provide stipends for groceries/healthy eating

Solutions for Richa

How will we satisfy the diverse nutritional needs and preferences of a multigenerational household?

App that stores family recipes and meals

Database of kid-friendly recipes from cuisines around the world

Videos explaining nutritional concepts to kids and why they need to eat certain foods

App that tells you which foods are important for children to eat at which ages

App that enables each family member to input their preferences and requests for food/meals each week

Online community for families to share nutritional meals

Gamify eating healthy meals/snacks by rewarding kids with prize, etc. if they reach goals

Educational platform that teaches kids how to pick healthy foods and cook simple healthy meals

AI-generated meals/recipes from a given input of nutritional goals and existing ingredients

App where you can find kid-friendly restaurants in your area

App that tracks dietary and nutrition restrictions

A when to meet/google calendar but it's meal times only

Voting app for the family to decide meals and times to eat

A database of recipes that include steps your kids can help with

Easy grocery list tracking system

Solutions for Derrick

HMW mitigate the anxiety that home chefs feel surrounding cooking new foods or trying new recipes?

Platform that compiles expert chef advice/tips from different cultural backgrounds

Crowdsourcing top-rated recipes for __ and synthesizing the best tidbits from each one

AR experience that walks through each exact step in process of cooking a new recipe

Camera-enabled tool that monitors each step of cooking process and provides feedback

Starter packs for new recipes that gradually increase in difficulty each time

A database of video tutorials that go through recipes step by step

An app that syncs calendars to find a time for you to cook something new with a friend or family member

An app with recipes organized beginner, intermediate, advanced for different cultures

A platform where restaurant chefs upload their recipes for people to try at home

A habit tracker app that rewards you each time you cook a new recipe

A chrome extension that allows people to comment on online recipes tips to make it more restaurant like

An app that searches the web and recommends restaurant "dupes" or similar recipes

An app where users can sort themselves by cooking level and experience

A live chatting bot or live professional service/live chat with friends to help you with recipe

A goalsetting platform that lets you choose a level and gives a personalized plan to reach that goal