

# Needfinding & Brainstorming

## P5 Life Logging - Cycle I

### NEEDFINDING PLANNING

**The activity you plan to observe:** Shopping at a grocery store

**High level goals or topics:**

- What's purchased vs. what's consumed vs. what's needed
- Motivation for choices
- Budgeting

**Guiding questions:**

- Can you describe your shopping experience so far today?
- Generally, how do you plan your trip?
  - Who do you shop for?
- How long does it take you to shop? What task is the most time consuming? Why?
- How often and where do you usually buy groceries?
  - Why do you want to go to a grocery store?
- **Do you budget?** If so, walk us through your through process when budgeting (for groceries).
- What types of foods do you usually buy? What influences these decisions?
- When buying an item, for example juice, how do you select which to buy? Why?
- Could you tell us a story about a time when you bought a lot of items that you did not need?
- Does everything you buy get eaten? If not, tell us why?
- What has been your most interesting/ memorable grocery shopping experience?
- **What might improve your grocery shopping experience?**
- Are there things you forget to buy?
- **When shopping how do you feel?**
- Is there anything that might improve your experience?
- *General follow-up questions*
  - How does it feel when that happens?
  - Why do you say that? Tell us more.

## NEEDFINDING: INTERVIEW SUMMARIES

All interviews were taken at a Berkeley Safeway  
between 5-6:30pm on Tuesday, 6/17.

**Link to detailed user interview transcript:**

[https://docs.google.com/document/d/1ZFFE5\\_dkEd1xPF4E9shL4R1G7DgruDu7nYGg6xPES\\_g/edit?usp=sharing](https://docs.google.com/document/d/1ZFFE5_dkEd1xPF4E9shL4R1G7DgruDu7nYGg6xPES_g/edit?usp=sharing)

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### USER #1



**Description:** Parent of three kids, shopping for their child's birthday party, estimated age range = 30's-40's.

**Summary:**

User typically visits the grocery store every two weeks and on special occasions. They prefer to shop at the Safeway grocery chain by themselves. Because they typically purchase the same categories of items, they don't usually rely on creating grocery lists each time that they shop. The user desires a reliable shopping experience where they can locate their desired items efficiently. Shopping for themselves and three children, the user is motivated to purchase healthy food options. Although they keep track of their monthly budget, they do not set a budget for each trip.

**Potential user needs:**

- User needs an up-to-date inventory of a store
- User needs to know the location (within store) of items that they need
- User needs to have a large enough overall budget/income in order to shop comfortably without restriction
- User needs to make better or more reasonable purchase decisions when hungry to prevent waste of food and money

## USER #2



**Description:** Estimated age range = 40's - 50's, on a regular shopping visit for household of 4

**Summary:**

This user visits the grocery store every two weeks on average in order to feed a household of four. They consider the task of grocery shopping to be tedious, and prefer to shop only when absolutely necessary. Would prefer to use a grocery delivery service, but the cost is too high. When shopping, they are mindful of whether the food is organic and rather than regularly buying specific brands, they prioritize buying items based on their price per ounce.

**Potential user needs:**

- User needs to monitor their home fridge/pantry inventory to know exactly when to shop
- User needs to be informed of differences between prices of certain items
- User needs to monitor freshness of produce/fridge items
- User needs grocery stores to reduce clutter as a result of a wide variety of items so that he can find the right item more efficiently

## USER #3

*This user did not consent to having their photo taken.*

**Description:** Working professional, estimated age range late 25's - 35's, shops for self, currently purchasing for a specific recipe

**Summary:**

The user makes frequent trips to the grocery store whenever they want to eat anything, especially Safeway because they live about a block away. They regularly shop from at least three stores that satisfies a different craving or staple item. They love to cook, and they maintain a balance of cooking staple meals and trying out new recipes. They are motivated to cook their own food to control what they eat and to eat healthier. They prefer going to the store in person to select their produce.

**Potential user needs:**

- User needs a wide variety of food items when shopping, and recipes to cook
- User needs stores within close proximity to shop as frequently as they do
- User needs to know how to use a given grocery item/ingredient, and its ease of use

## SYNTHESIS

In order to synthesize our findings and better understand our users, we created **empathy maps** to understand what each of our users say, do, think, and feel.

### Link to empathy maps:

<https://docs.google.com/document/d/1G0tMtOgg1PnQyWstRylMF-F6ORLSJk6RYSZAYVHyvSs/edit#>

**Reference/resource:** [https://www.thedesignexchange.org/design\\_methods/61](https://www.thedesignexchange.org/design_methods/61)

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## COMPILED USER NEEDS

1. All of our users need to eat healthily, but they may not be able to when they are busy
2. All need to know the availability of items they are looking for, and the information must be up-to-date and accurate
3. User #3 needs to know how to use a given grocery item/ingredient, as well as the ease and feasibility of using the item, especially when she is a busy working professional
4. All users need stores within close proximity to shop regularly
5. All users need to be able to monitor the freshness of their fridge/pantry items
6. All users need to be able to inspect the freshness of grocery items that they buy; although this is time-consuming, they prefer to inspect in person
7. All users need to have a large enough overall budget/income in order to shop comfortably within a reasonable price point
8. All need to save money by looking for cheap prices, and need prices standardized based on the same unit
9. All need to navigate the store more efficiently without forgetting items they need to buy; coming back to the store just for a forgotten item is a hassle and users prefer to shop less often
10. User #2 needs grocery stores to reduce clutter as a result of the number of choices presented; needs a better way to organize/rank items based on user's priorities
11. Users #1 and #3 need to have a wide selection/variety of items to shop from
12. All users need to have minimal distractions when shopping to be more efficient with their time
13. All users need to know what food their family members would like to eat, but it is a hassle to call their family back and forth while in grocery store
14. User #1 needs to know how to make better purchase decisions, especially when she goes shopping hungry which is when she buys excess food that may be wasted in the end

## APPLICATIONS BRAINSTORM

1. Generates healthy recipes with nutritional information + option to simplify ingredients list to reduce unnecessary purchase (Needs #1 and #3)
2. Provides real-time grocery store inventory information, and accurately informs users of the availability of items that they look up (Need #2)
3. A compilation of recipes that uses a given ingredient, which also informs users of the time, effort, and skills needed for each recipe/way to incorporate a given ingredient into their diet (Need #3)
4. Finds the closest grocery store(s) with desired item using a maps service (Needs #2 and #4)
5. App maintains diary of grocery trips/perishables purchased, sends users reminders of certain items' expiration (based on average expiration of items) (Need #5)
6. Yelp-inspired app that rates grocery stores on quality of their produce/perishables in real time (Need #6)
7. App that compares up-to-date prices of different products/items across stores, and it ranks the same grocery items based on price per unit/ounce (Need #8)
8. App that store employees use that compares purchasing rates/trends of items over time, to determine how to arrange internal layout of store (Need #10)
9. Minimalistic and simple design yet highly functional to minimize distractions the app may cause while supporting user's tasks well (Need #12)
10. Reminds users of the items they still need to buy, and shows the aisles that the items are located. Optimizes user's route in store using shortest path algos to save time. Stops reminding if users buy the item (need #9 and #10)
11. Google-docs inspired app that allows multiple users to contribute to a shared grocery list (can have admin feature that determines which user gets final approval) (Need #13)
12. Predicts one's appetite, calories intake, and nutritional needs based on past data. Suggests the amount of groceries to buy based on this prediction, thus reducing food waste (Need #14)