Portfolio: Virtual Aisles

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Part 1: Evaluation Plan: Cognitive Walkthrough

Why we chose this method

Our platform is intended to mimic real life shopping. The process starting from store select to check out has to be as simple if not simpler than the user going to an actual store. Therefore, we will use a cognitive walkthrough protocol. A CW will identify usability issues in our design. Utilizing a CW will ensure that users can learn our system just by launching it, rather than having to be instructed on the right way to proceed.

What were our goals and how we measured them

1. Determine where bottlenecks exist in the system
    a. Was there any moment that the user was unsure about how to proceed
2. Ensure that correct options are visible and obvious
    a. Did the user ever click an incorrect option
3. Ensure that the user understands the action performed by the correct option
    a. Was the user ever surprised by the action performed.
4. Ensure the user realizes that the action has been completed
    a. Did the user ever move forward without clicking the option or did they click the option multiple times

Script and Tasks

Task 1: Pick an aisle

Script

The user wants to shop using our platform. They launch our platform and select a store from a list of nearby options. The platform loads several options based on the store chosen. The user then selects the cereal aisle.

Actions: 3

1. Launch the platform
2. Click store
3. Select aisle

Task 2: Add an item to cart

Script

In the cereal aisle, the user sees two lines of items, one on the left and one on the right. The user moves their cursor to click on a box of cereal. They are taken to a new screen that shows the nutrition, price, and any possible deals for the item they selected. From here, they can choose the quantity that they wish to purchase. Since the default is one, the user ignores it and clicks add to cart. They are then taken back to the aisle screen.

Actions: 2

1. Select item
2. Click add to cart

Task 3: Check out

Script

The user has their item, so they click the checkout button. They are taken to the checkout screen, where the item selected is showcased. They are instructed to select delivery or pickup. Then they are asked to input their payment information to complete the transaction.

Actions: 3

1. Click checkout
2. Select delivery or pickup
3. Enter payment information

What to change:

- **Need to add some type of notification for when an item is added to the cart**
- **Need to make obvious how to move throughout the aisle/store**
- **Need to make obvious how to switch aisles**
- **Provide some indication of what the Checkout option performs**
- **Inform the user that they can pick any item in sight to inspect**
- **Add a profile so that the user does not have to repeatedly input their information.**

Part 2: UX Portfolio

1. Problem Statement

Problem Statement:

Many people don't have any experience with online grocery shopping due to the fact that they shop in stores, so they'll have issues buying if their schedules don't allow them time to do so.

Why It Matters:

Many people within our target demographic (20-30-year-olds who live in cities) don't have the time or ability to get groceries comfortably. This could be due to time restrictions such as traffic or not having proper transportation to go to the grocery store and back. There are also those who eat most of their meals out or get them delivered, so they don't rely on going grocery shopping for food. By creating a means for users to shop online, it good relieves the stress of in-person grocery shopping as well as cut down time. This also helps lower the stress of people afraid of contracting COVID since they would be interacting with less people.

2. Explain Your Users

User Demographic:

The target demographic for our users is college educated 20-30 year olds who live in urban environments.Many of these individuals have time constraints due to their career as well as their social life that want to maintain good nutrition without putting in as much time and energy. This demographic includes people who rely on ordering take-out, UberEats, packaged foods, and even inexperienced cooks. With the pandemic having many people at home, there is a rapidly increasing amount of adoption for online grocery shopping and food delivery.

Persona Example:

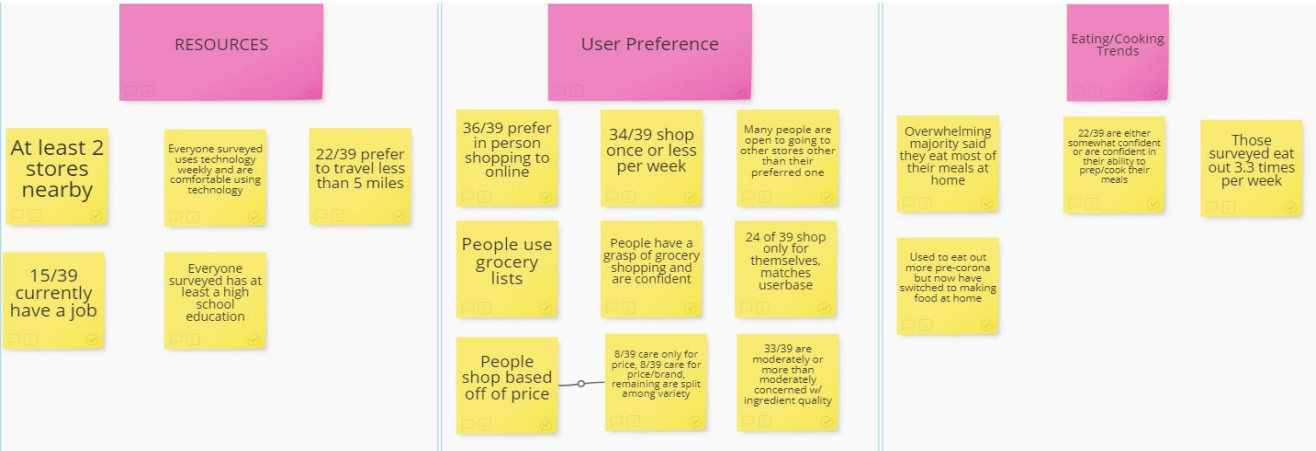
McKenzie is a 20 year old who is a rising junior in college. She does go to the store, but is many times too busy to plan out meals so will either go out to eat or just cook something fast like pasta. She does want to have more complex meals.

3. Explain Data Gathering Methods

Our methods to collect data included getting people within our target demographic to fill out a survey as well as conducting an interview with some of them.

4. Explain Data Analysis

To analyze the data we collected from our survey and interviews we used affinity diagramming. We looked for trends among the data and grouped them together in order to help us create our prototypes.



5. Findings

Problems with the current experience:

We found that people are very visual shippers, so with online shopping, although people make grocery lists, they forget to buy certain items if they do not see them on the shelves and might not have thought of everything they need. If there are circumstances prohibiting shoppers from going to the stores, they do not have experience with online shopping.

Pros of the Current Situation:

Many of the people are comfortable with in person shopping and the majority of people are comfortable with cooking for themselves, so they have the overall experience of meal prep under control when in store shopping.

Products That are Part of the Current Experience:

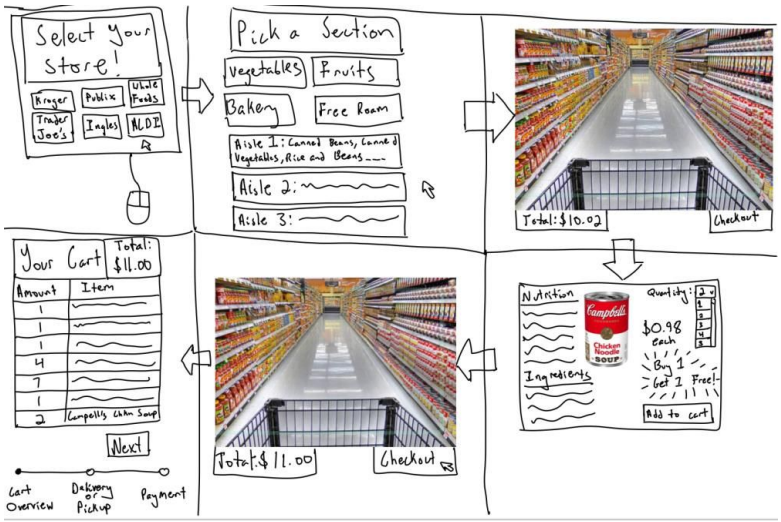
A physical grocery list is a tool that many individuals use in their grocery shopping experience.

Systemic Issues:

Overall, healthier options and nicer grocery stores are in more gentrified areas, so lower income people do not have the same access to quality nutrition as others. For college students, there is normally a grocery store with healthy options on or near campus; however, the healthier options are more expensive and sometimes outside the price for students' budgets.

6. Different Prototypes

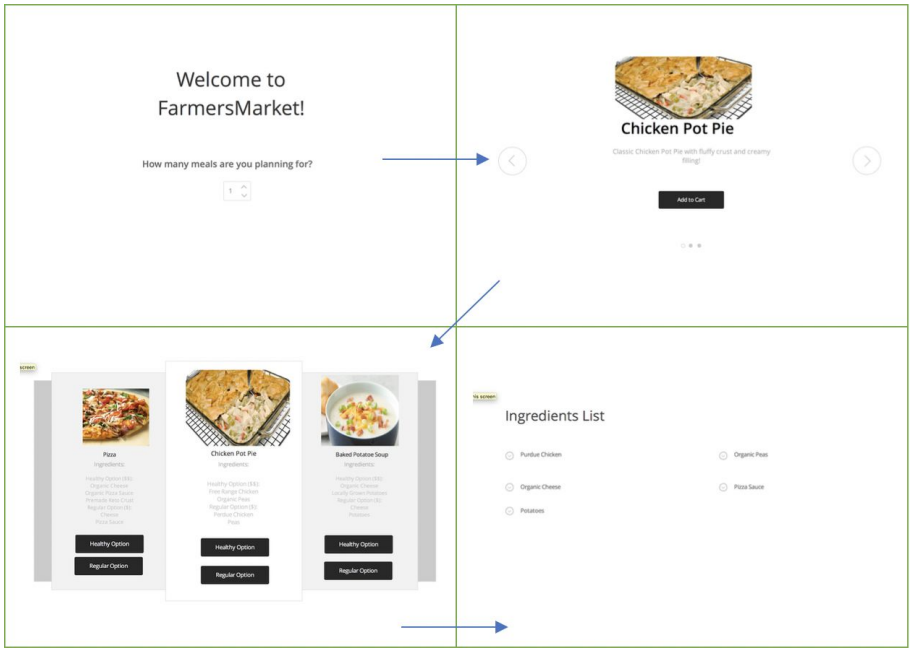
Prototype #1: Virtual Aisles



Description: A platform (like a website or computer application) that simulates aisles virtually where people can view different items and visualize being in a store.

Rationale: Based on the data we collected from our interviews, people like shopping in stores and sometimes forget to grab all the items they need if they don't see them.

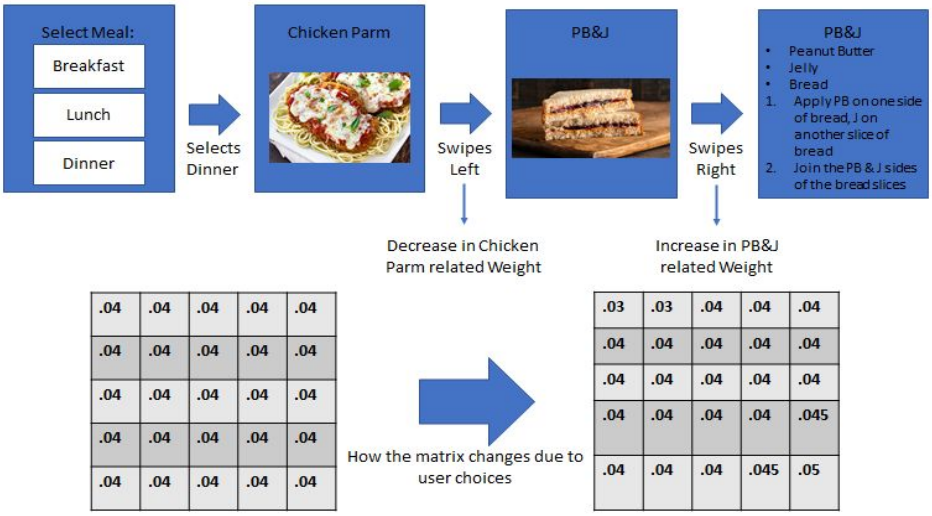
Prototype #2: Meal Planner



Description: A platform that allows the user to plan their meals for a given week. Based on the meals that the user suggests, the platform then recommends what ingredients would be necessary.

Rationale: This platform requires less time for a user since all they would do is select what meals that they want to eat instead of planning out every ingredient.

Prototype #3: Tinder for Dinner



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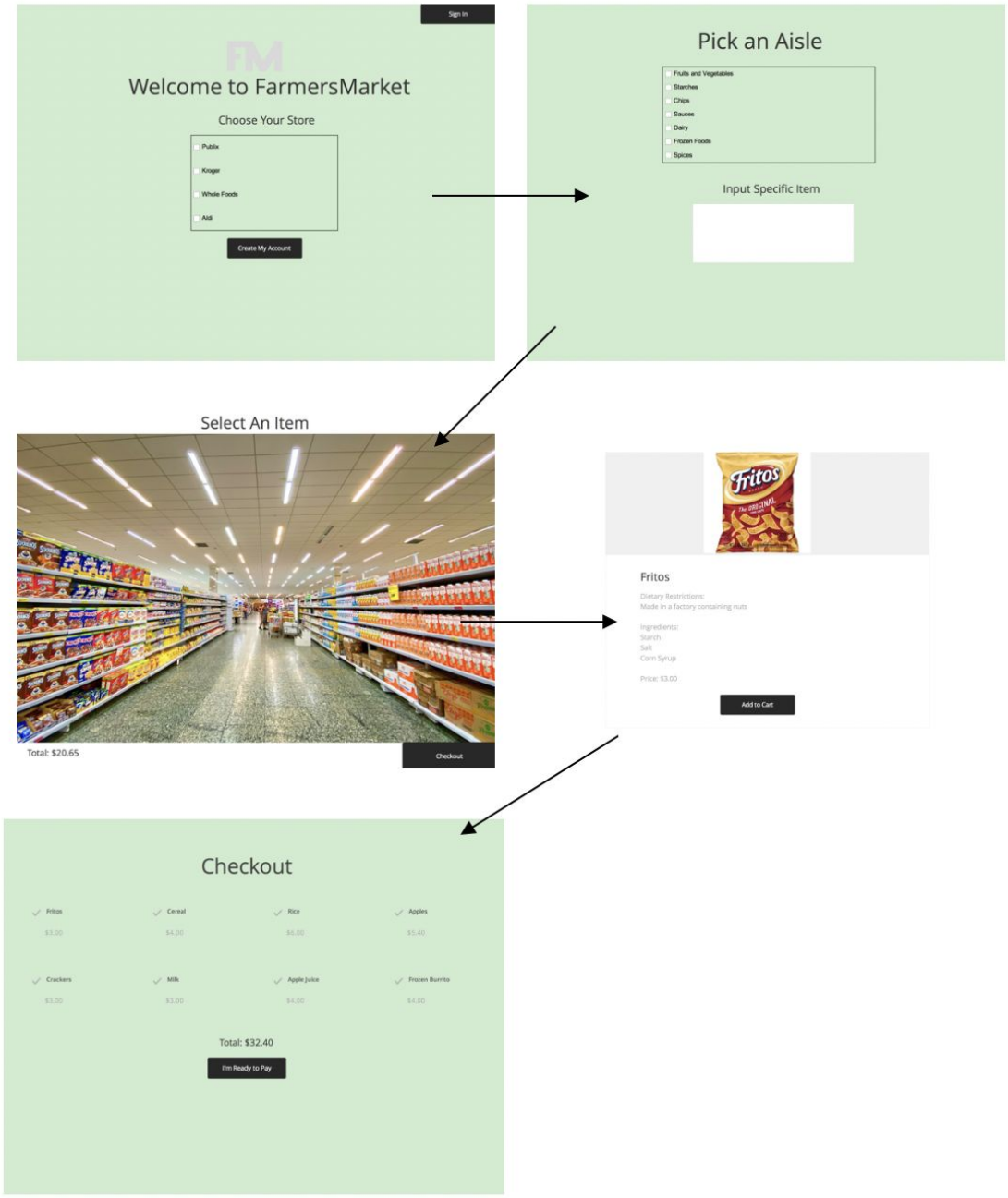
Description:

An Application that recommends a recipe for breakfast, lunch, and/or dinner. As the user cooks more, the application will learn what type of meals they prefer and will begin to recommend similar ones.

Rationale:

Our survey results indicate that the users would like to cook a large variety of meals but they're unsure of where to start. This application would help solve that problem.

7. Final Solution



Based on our original findings and the feedback from our initial three prototypes, we chose Virtual Aisles as our solution. We incorporated some of the user feedback we received to create our final solution.

8. Usability Study and Findings

Based on our usability studies using a cognitive walkthrough, we developed findings on our final solution. Our biggest usability issue was the lack of visual cues throughout the platform. Our biggest usability flaw is that it is not intuitive how to switch aisles and move through the store which we will need to denote with visual cues. We did add a sign in option to go to old selections, but there needs to be better visuals on how to save their selections for their next visit to the platform. Lastly, the option to select a specific item and go to it is extremely helpful if you have a grocery list; however, if you have a dietary restriction you still have to go to each individual option to read, so the ability to filter the store for dietary restrictions will be important in the future for usability for all.