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CRUNCH & MUNCH

PROJECT 2

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INTRODUCTION

The grocery shopping landscape has been dramatically transformed in recent years due to technological advancements and the COVID-19 pandemic. While online grocery shopping and delivery services have gained significant traction, there remains an opportunity to reinvent and enhance the in-store shopping experience for those who still value the tangible aspects of selecting their own products. Traditional grocery store layouts and designs have relied on methods such as the "racetrack" concept to increase consumer exposure to products, but these approaches no longer cater to the changing needs and expectations of contemporary shoppers. .

This project aims to identify the desires and requirements of the modern grocery shopper, using this information to develop a refined and immersive experience that fosters meaningful, positive, and empowering interactions within the physical store environment. By examining the factors that drive customer engagement and satisfaction, we will explore innovative solutions that merge the convenience of digital shopping with the sensory appeal of in-person grocery visits.

Through a combination of research, customer insights, and design thinking, we will reimagine the grocery store experience to meet the evolving demands of today's consumers. By doing so, we will not only create an environment that delights and engages patrons but also supports the continued success and relevance of brick-and-mortar grocery stores in a rapidly changing world.

DESIGN SPACE

Our team would like to research and optimize the shopping experience for anyone who uses Crunch & Munch. We focused on busy college students to start our project and opened up to everyone who has the ability to download our product onto a mobile device. We would like to create a new benchmark for grocery shopping apps that will help to improve navigation and efficiency through stores.

PROBLEM SCENARIO

When it comes to grocery shopping there are some problems that occur to all of us. The problems are time management, locating items, and making sure you get everything you need. This is where Crunch & Munch can help the everyday shopper.

As a busy college student who has to deal with a lot of time management in order to finish homework and still have a social life, it was always hard for me to go grocery shopping within a given time frame. I either rush too much and forget an item that I needed or I am late for my next plan. This is why Crunch & Mumch has a built-in algorithm that gives you can the estimated time needed for the shopping. It also creates an optimized path of shopping so that I won't waste time looking at other things and also be able to grab the frozen at the end right before I go to check out.

DESK RESEARCH

We began our research with a focus on large grocery stores like Costco and Walmart, and during our investigation, we found some common customer pain points highlighted in various articles and reports.

Why It's So Easy To Get Lost In Costco

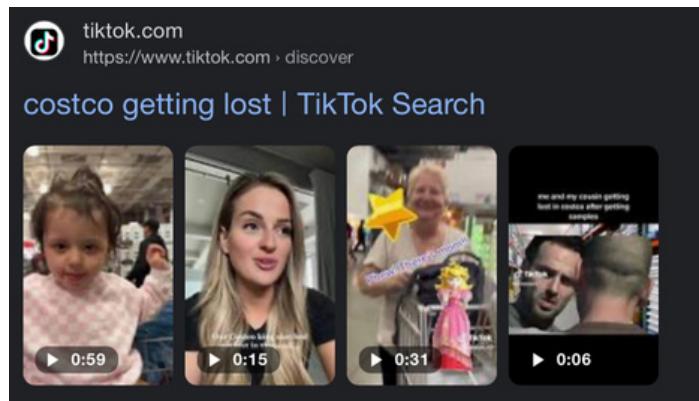


BY HANNAH BEACH / OCT 28, 2022 1:27 PM EST

We get it, **Costco** isn't for everyone. It's a huge store, and that can be intimidating to a new shopper. However, if you're considering a Costco membership and the confusing layout of the store is what's stopping you, let us reassure you of two things. One, you aren't the only one struggling to find your way through Costco in an efficient manner. Two, that Costco confusion is actually intentional.

[HTTPS://WWW.MASHED.COM/1076056/WHY-ITS-SO-EASY-TO-GET-LOST-IN-COSTCO/](https://www.mashed.com/1076056/WHY-ITS-SO-EASY-TO-GET-LOST-IN-COSTCO/)

Customers often face challenges navigating these massive stores due to their overwhelming layouts, making it particularly difficult for new visitors. Furthermore, the vast product selection, while appealing, can lead to decision fatigue and difficulties in choosing between similar items.



INTERVIEWS

Purpose: We interviewed a grocery store worker and a grocery store shopper to understand the problems that can occur from either viewpoint, and how they could benefit from our app.

Grocery Worker Interview: Works at a Walgreens. Valuable insights from this interview are:



- It is difficult to work and answer location questions at the same time
- If the app was in action, it would help a lot of people
- In addition to customers, employees could also benefit from the app and Walgreens could use it to train new employees

Reflections: From this interview, we have found a new hidden feature that we missed. This app can help the shoppers inside the store it can also help the workers of the store. The workers can use this app to train others where to stock certain items and when to stock them. Also, this app frees the workers' time a little bit so that they could do other work like restocking, cleaning up, opening another register, etc...

INTERVIEWS

Purpose: We interviewed a grocery store worker and a grocery store shopper to understand the problems that can occur from either viewpoint, and how they could benefit from our app.

Grocery Shopper Interview: Shops at the grocery store every week. Valuable insights from this interview are:

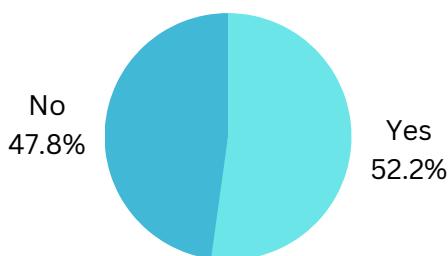
- Does not have trouble navigating the store, but only because they go there often and have memorized the layout
- Would be interested to use the app to find new food items and thinks the app would be most helpful when going to a new store for the first time
- Would like to see a feature showing out of stock items because it is an issue they encounter frequently

Reflections: From this interview we have found that even an experienced shopper can get a use out of our product. The app can be used to discover new food items or help out whenever there is a change in the store layout. It would be helpful if the app could keep track of out-of-stock items so shoppers don't waste time going to a product's spot on the shelves only to discover they are empty.

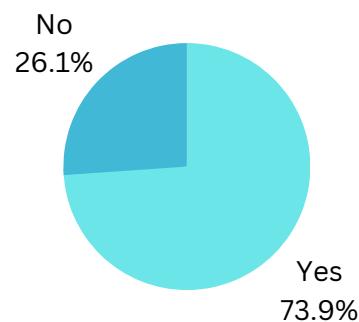
SURVEY ANALYSIS

Purpose: A great way to understand problems and issues that arise in grocery stores is to ask customers about them. We sent out a form asking simple questions to learn more about their experience. We were able to get 115 responses that helped us focus in on our main problem that we should solve.

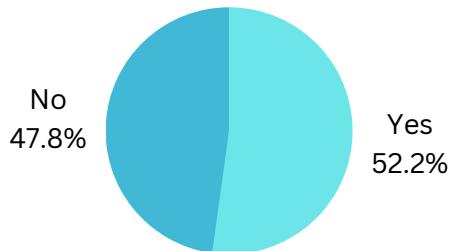
Question: Do you get lost easily in big stores?



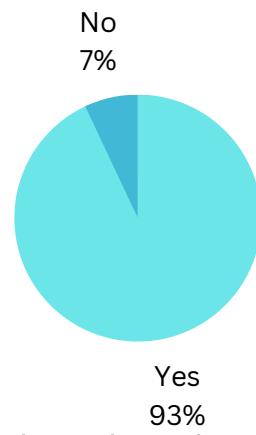
Question: Do you go to wholesalers like Costco and Sams?



Question: Would it be helpful to have a simple navigation app that allows you to input a product and give you the aisle number?



Question: Would it be helpful to have a simple navigation app that allows you to input a product and give you a direct pathway to get there?

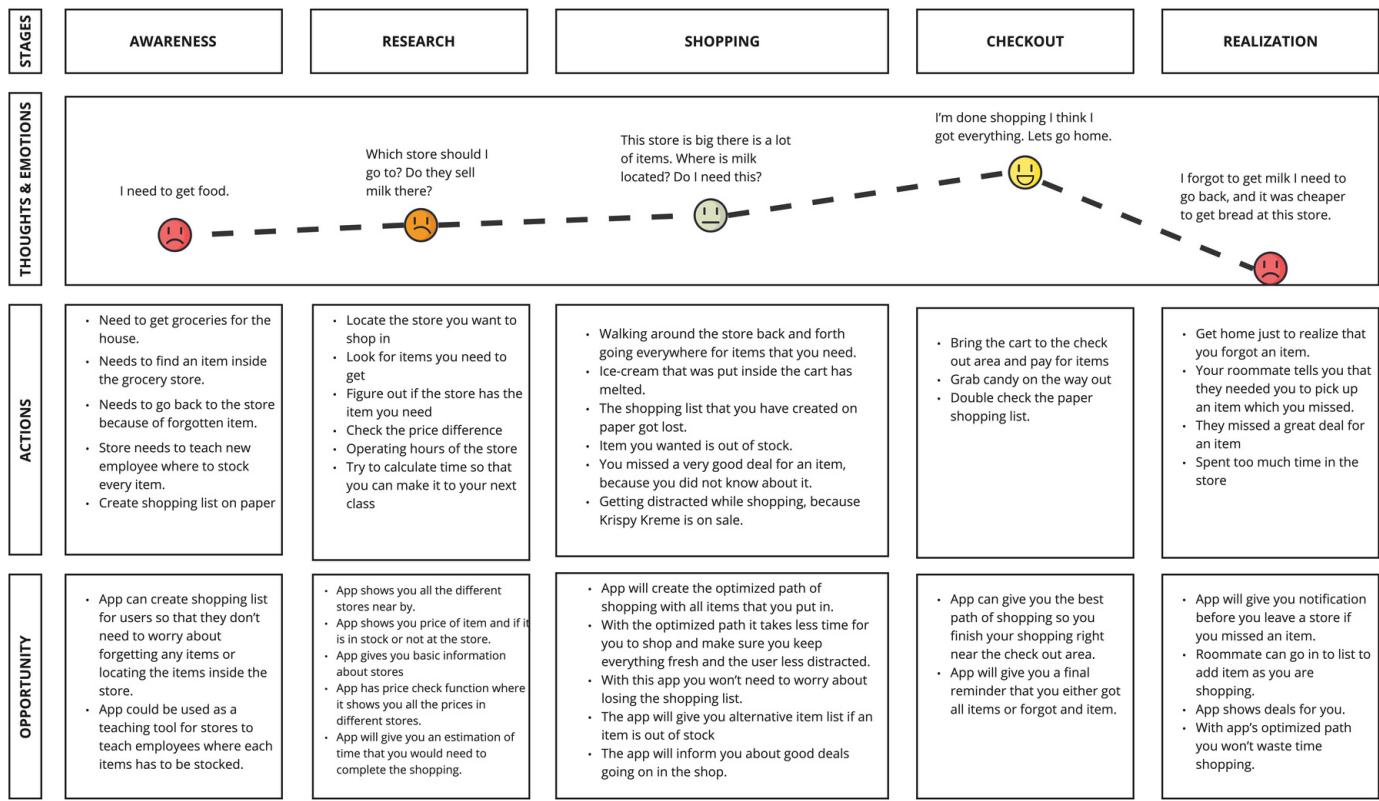


Reflection: Around 52% of responses mentioned that when shopping at big grocery stores like Costco and Walmart, they are more likely to get lost, which increases their shopping time. So, a majority of the responses found it helpful if these big chains would have some type of **navigation/aisle selection application that would minimize confusion**.

[Link to survey](#)

JOURNEY MAP

Purpose: From this journey map we wanted to find out what the users were doing during a normal grocery shopping trip, and figure out where we had opportunity to improve their experience.



Reflection: We have found out that there are a lot of opportunities in creating a shopping list, creating paths of shopping, and sharing a shopping list. We can see that one of the worst things a shopper could experience is when they forget to buy an item after they get home, and they are the happiest when they are done shopping. This means grocery shopping is not a happy experience they enjoy doing. We would need to create an optimized path so that the user could finish their shopping as fast as possible and still not forget items they need.

INSIGHTS

Purpose: We are trying to summarize our findings for the research phase of our project. We want to narrow our scope.



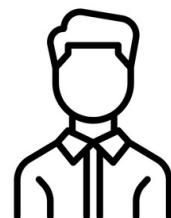
Customers can get easily get lost when they are shopping inside of large grocery stores like Costco and Walmart.



Many time, customer forget something in their groceries lists



A very low number of grocery store provides indoor navigation, and even those navigations are poorly designed



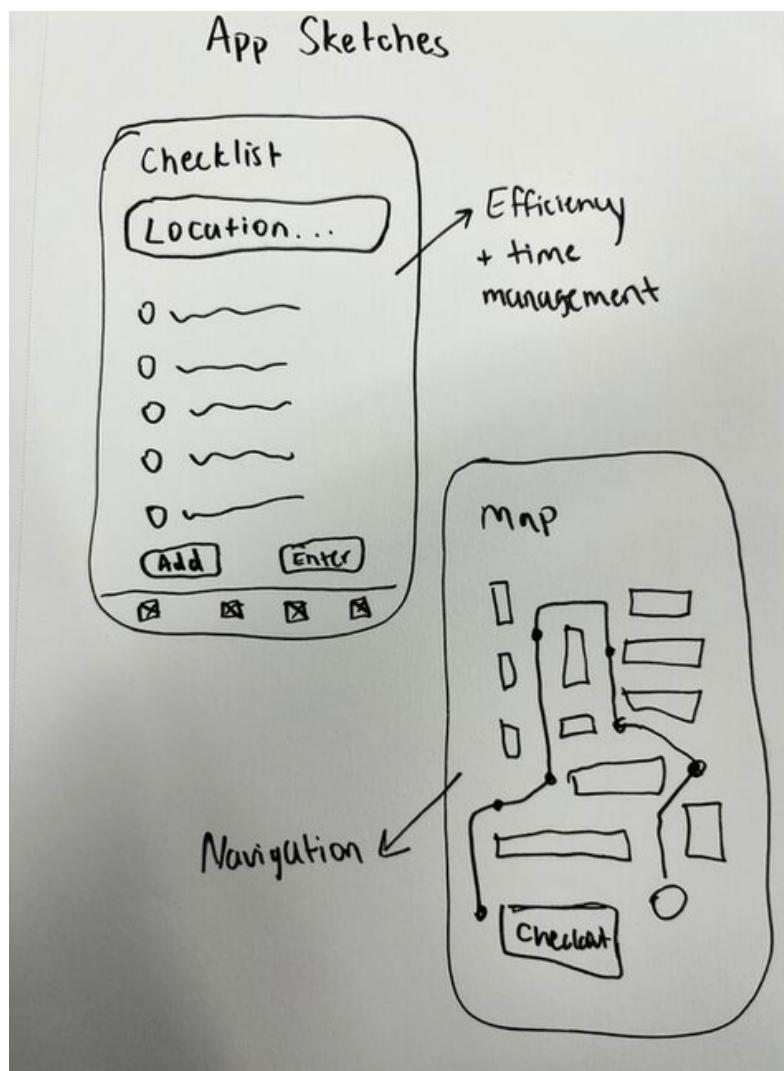
Hard to find the employee members when the customer wants to ask for the location of the product they are looking for

Reflection: We need to come up with a product that will hit at least one of these problems that the current customer base is dealing with. We should try to solve as many as possible without sacrificing the quality of our product.

IDEATION SKETCHES

Purpose: Now that we have specified our design space we decided to sketch out the interface and functionalities our application will provide.

Sketches: Example of the different interfaces that our application will have

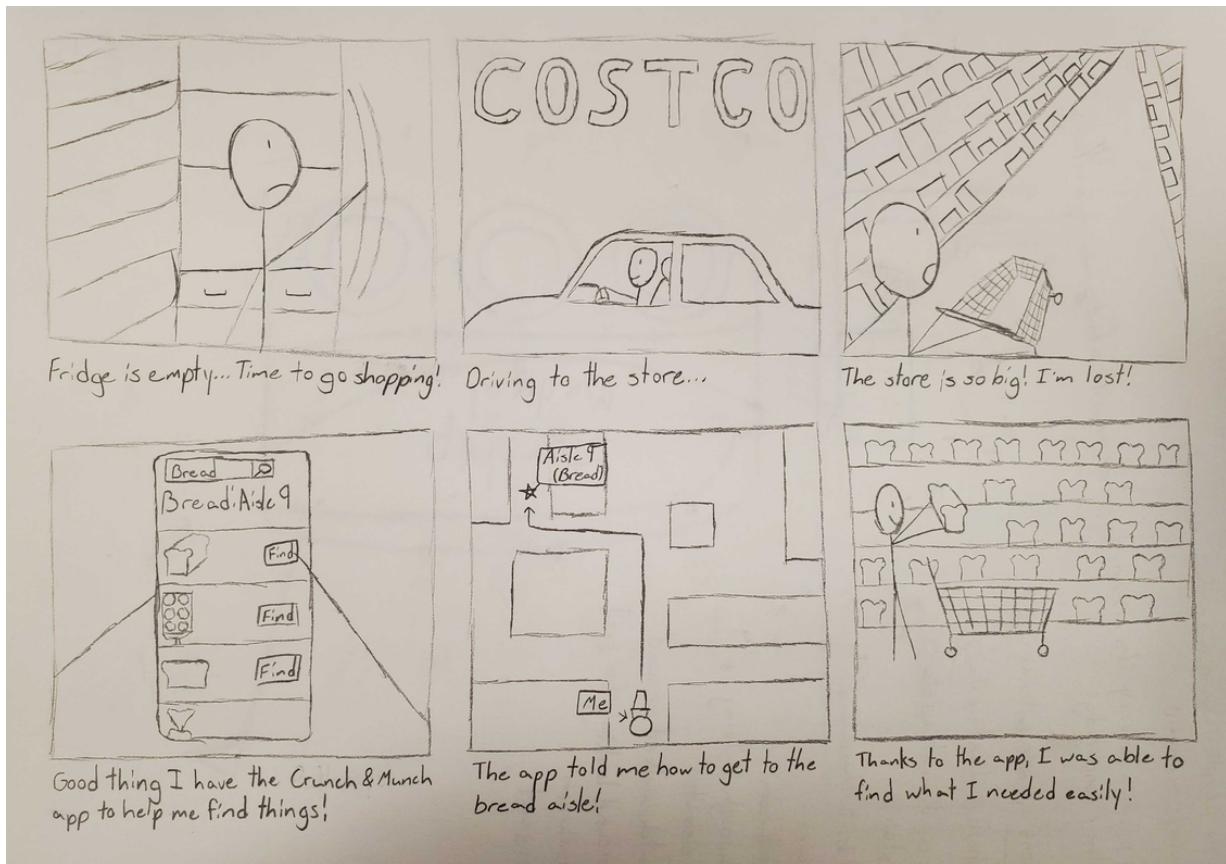


Design Rationale: After narrowing our design space we wanted to focus on time management and navigation. Here are two sketches that roughly visualize what we are thinking of right now. The top sketch will hold the checklist portion, so users will have one place to add all their items. The bottom sketch will have the store layout that will show the user where they can get their items in the store.

IDEATION STORYBOARDS

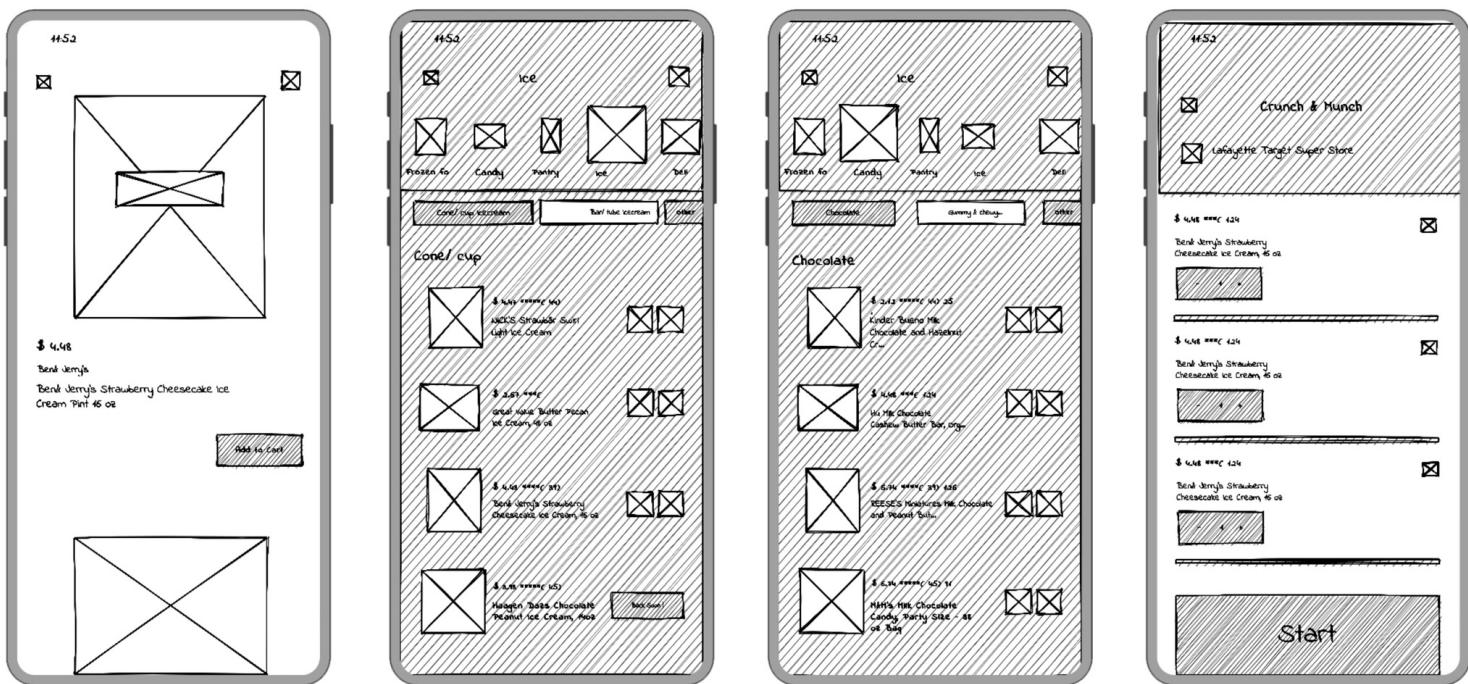
Purpose: Now that we have specified our design space we decided to sketch out interface and functionalities that our software will provide.

Storyboard 1: Simple example showing how our product could be used



INITIAL DESIGN

Purpose: From the sketches, we created a low-fidelity mockup of the application. This mockup focuses on items that are out of stock, and the location of the item in the store, and maximizes the options of each product in category form.



User Testing/Evaluation (Iteration One):

User 1: After looking at the initial design of the app I like the idea of creating a shopping list before I get to the shop and the fact that this app tells me which items are out of stock would be very handy. I'm not certain I understand how the app will decide that since it's not affiliated with the stores. I would say to redesign that feature.

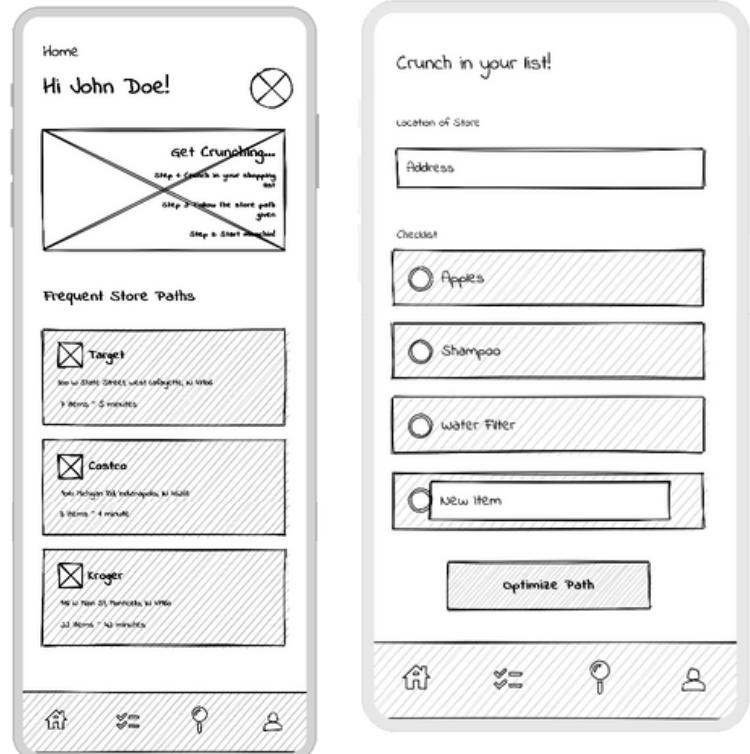
User 2: After looking at your sketches I will say I like the idea of the app. I think it can be really helpful especially when you are going to a new store for the first time. I think it would be better if there was a navigation feature to the app that showed you the best route rather than just telling you the aisle number. Shopping in a big store can feel overwhelming and I sometimes have trouble even finding the aisle numbers.

SOLUTION + LOW FIDELITY

01

Crunch in your shopping list

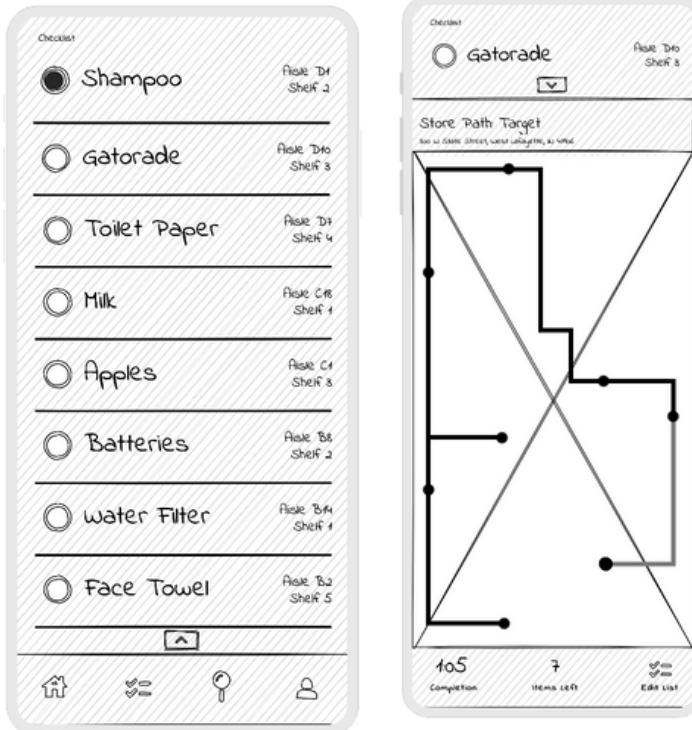
- GPS-based search system to help the search for new location process
- Keep track of the lists of the grocery store that users previously visited so they can start creating the shopping lists in one click



02

Optimization

- Optimized the route for shopping products within the user's shopping cart to maximize freshness while minimizing time consumption.
- Easy modification of the shopping list
- Detail information related to the current shopping journey

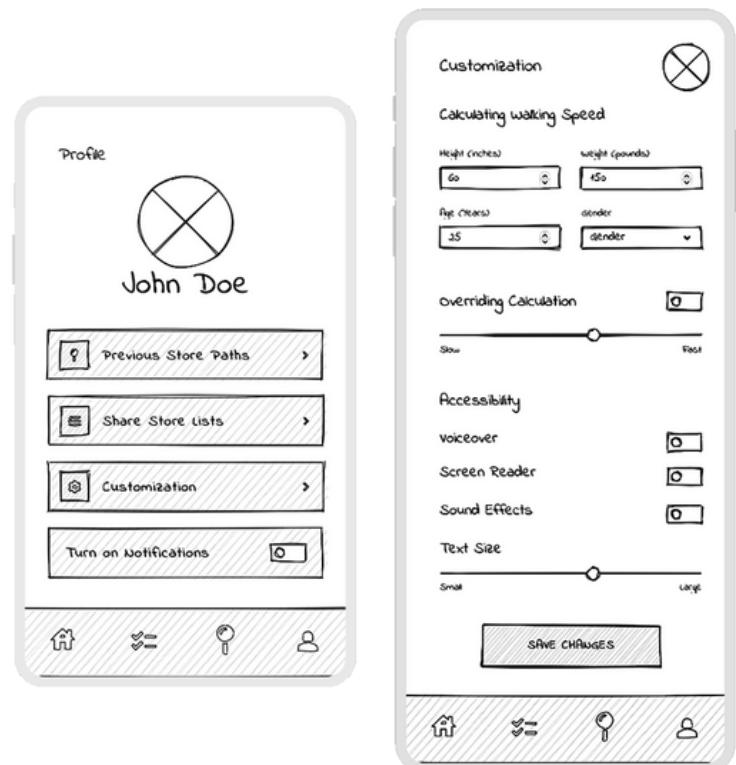


SOLUTION + LOW FIDELITY

03

Personalize the algorithm

- Share and edit the shopping lists with friends and family in one click
- Option to customize the walking speed for accurate time calculation and freshness of products
- Maximize the usability feature for all kinds of users

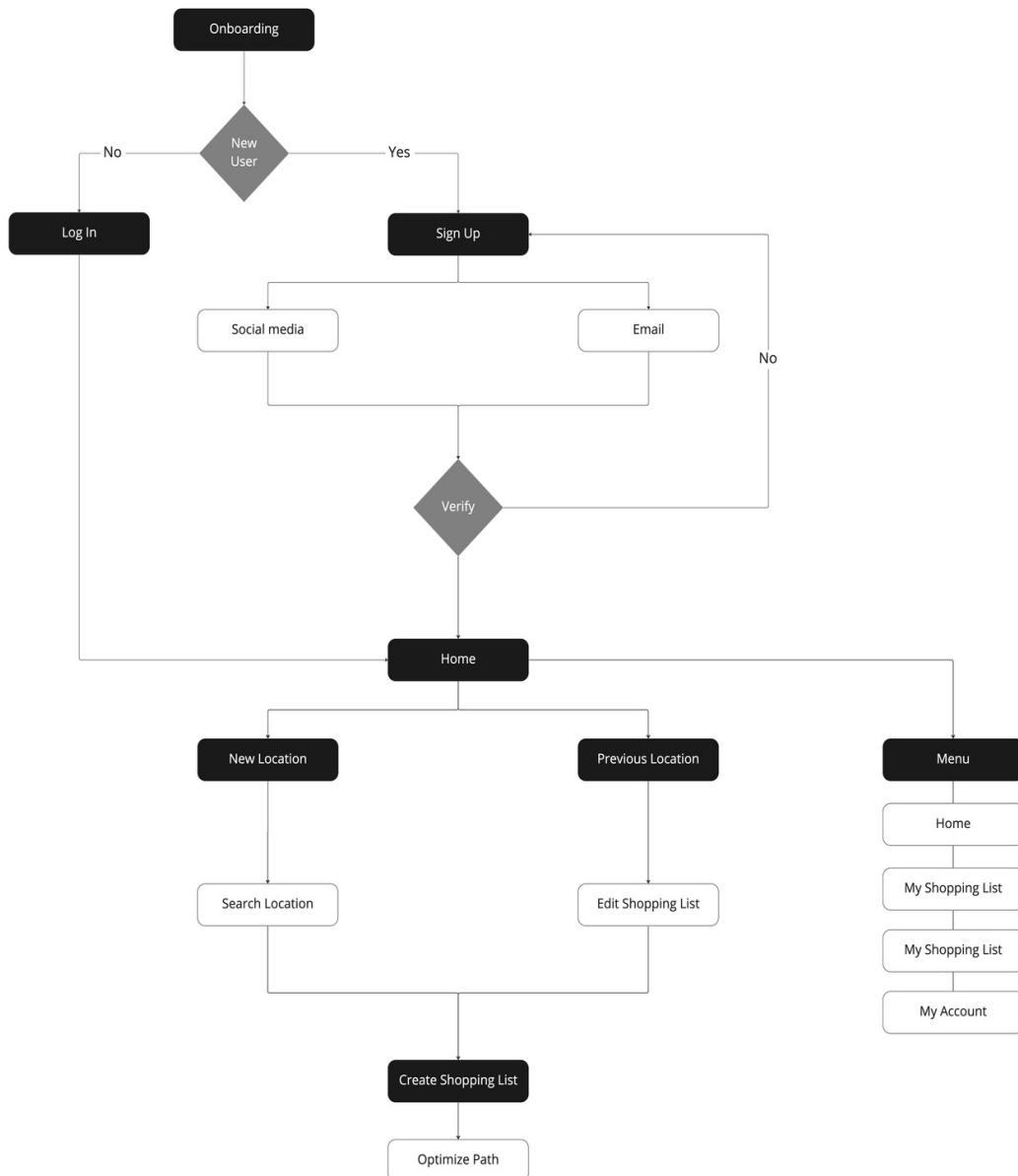


Purpose: We decided to go back a step and redo the low-fidelity mock-up since our evaluations made it clear that certain features were inaccessible and not what they intended the app would be used for. So, we spent time designing the app focusing on the navigation and checklist portion this time.

Reflection: The process went super smoothly, we did a bit of sketching and brainstorming, and finally reached our final low-fidelity design. We decided to not do another round of user testing since our deliverables are due soon. We definitely want feedback and user evaluations for our high-fidelity prototype. Our next step is to start working on that and the video!

USER FLOW

Purpose: We wanted to see how the user would interact with the app and map it out so that we would be able to see where need to improve the app.

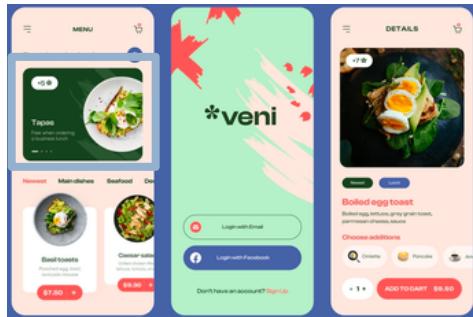


Reflection: From this user flow we have found out the best way to structure our service so that it is easy for all users to use.

DESIGN RATIONALE

Purpose: By researching current grocery shopping/food app designs, we can see the trends, features, and dislikes. This will help us inform our design decisions to the best of our ability.

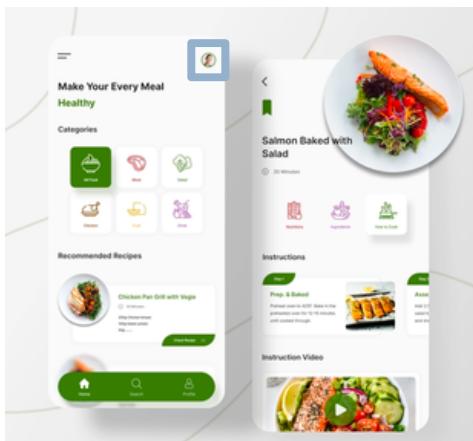
01



Large Button on the home page

The "Sales of Today" button is a great eye-catcher. It's probably the first element the user will see. Adding this as the "Get Crunching" button will look good.

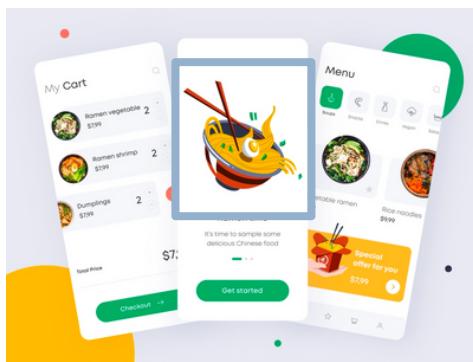
02



Building user and interface relationships

The avatar or profile icon at the top makes the user feel that the interface is customized to them and it creates a stronger relationship.

03



Logos

A large icon on the "get started" or "sign in" page can help attract attention and set the theme for the rest of the app. It will be the first impression users have of the app.

Reflection: After going through several designs and layouts we selected the 3 most important features we felt should be on the first 2 pages of the application. The other pages of the app were designed from user evaluations, critiques, and past work.

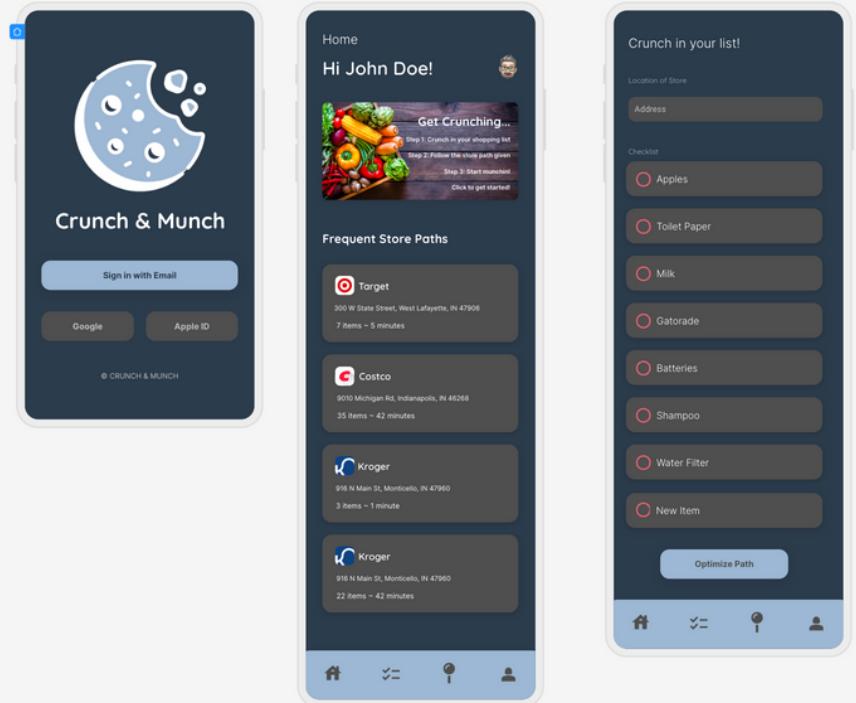
FINAL PROTOTYPE

01

Crunch in your shopping list

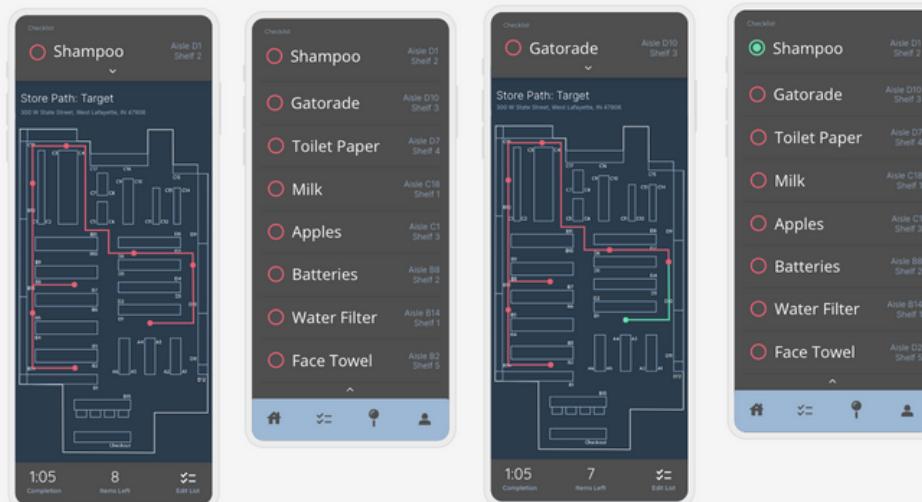
- GPS-based search system to help the search for new location process

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02

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FINAL PROTOTYPE

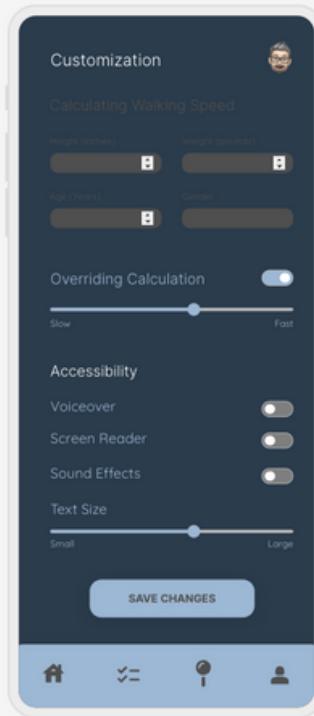
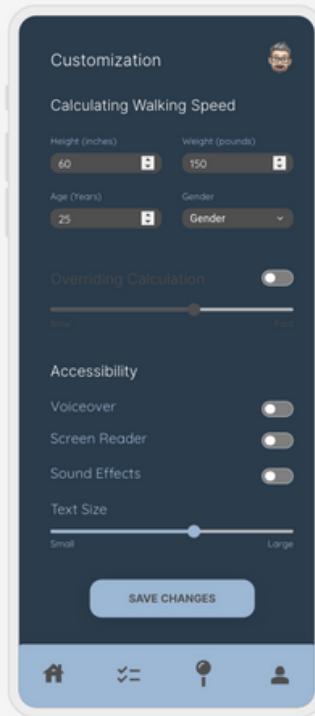
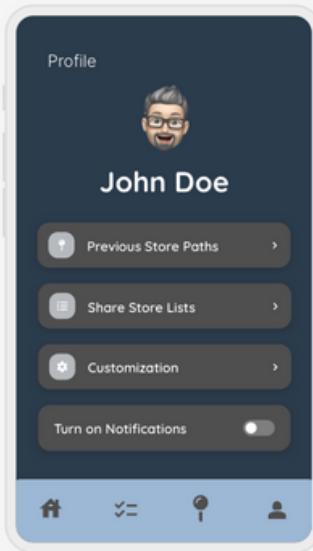
03

Personalize the algorithm

- Share and edit the shopping lists with friends and family in one click
- Option to customize the walking speed for accurate time calculation and freshness of products
- Maximize the usability feature for all kinds of users



SCAN TO EXPLORE



HIGH-FI USER EVALUATION

Purpose: After finishing our high-fidelity model we wanted to see what the users enjoyed, and what we needed to change to improve the user experience of our product.

- Time Algorithm
 - Change in the time estimation system instead of having the user put in their biometrics for the calculation we can just use their walking speed (if not specified average walking speed)
 - We would need to create a time frame so that we can tell the shoppers when the shops are busy so the users and avoid that time if possible.
 - The algorithm is a good idea however, it may make users uncomfortable.
- User Interface/User Experience
 - The app looks clean and easy to navigate, user friendly.
 - The share function is great for users who have roommates so that they could share what each of them gets at a store so they don't overlap buying the same item.
- Next Steps to add...
 - The personalized algorithm would be useful for showing hot deals and telling the user to restock an easily forgotten item they might need at home.
 - The optimization feature of the app would be able to help the shoppers who are in a hurry, but if the user is not in a hurry and wants to look around the whole store before leaving they should be given the option to turn the path off but keep the list open.

Reflection: We have learned that we need to rework the time algorithm to best fit our users' goals. There are a bunch of new ideas to integrate that we should look into during the next iteration phase.

PROJECT VIDEO

Purpose: A 3-minute pitch explaining our design space and application features walkthrough.



Reflection: We received a lot of negative feedback on the personalization section. We are going to remove the customization section in the profile and end the video right there. Others also suggested the idea of having a place on the app that can compare stores near the one chosen to see which store is the least busy.

SURVEY VIDEO ANALYSIS

Purpose: We contacted the participants from the survey and sent our project video. Our goal is to have them send us their feedback on how we were able to solve a problem they mentioned.

Quote: "This would definitely help me navigate my way through any store!"

Analysis: We were able to hit on our design space of navigation.

Quote: "Why would I need to add my weight and gender?"

Analysis: We need to rethink how we can add customization to make the app more accessible to all users.

Quote: "The sharing feature on the shopping list is very helpful, didn't even think about that."

Analysis: Hopefully it will ease communication between users that live together or share groceries.

Quote: "Super professional and very well thought-out. Would I be able to shop without the map feature and just use it as an interactive checklist?"

Analysis: This is a great point, we will take that into consideration next time.

Quote: "We need this in the app store like right now! Great way to solve the time management and navigation issue."

Analysis: This was the exact design space we were attacking so we are glad it was conveyed through the video.

Quote: "The time completion feature is super cool. It's like Google maps, I can plan my day by knowing how much time I would need to pick up the items."

Analysis: That was also something we wanted to focus on. Glad it was able to help!

Reflection: We think this was very beneficial especially since we were able to ask around 115 people about their problems and main concerns during their experience. Having them give us verbal and clear feedback from all around the country can help us inform our design decision for the next iteration.

CONCLUSION + REFLECTION

Reflection

Overall, we believe that project 2 was a success! We were able to spend time properly researching and understanding our design space. We interviewed stakeholders and learned how 115 customers feel about their experience of grocery shopping. We then used our research to inform our sketch and storyboard designs. Which then helped us create our first round of low-fidelity mockups. Although we hit a bit of a snag during user testing cycle one, we were able to redesign robust and sound mockups for the second round. From there we approached the user flow and structure that the app was going to follow and then started researching high-fidelity mockups that are used in the market today. We were able to gain loads of knowledge and applied it to our final solution prototype. The responses during user testing cycle 2 were tremendous! We realized that there isn't a need to include biometrics for calculating walking speed and that our application perfectly solved the design space we were planning for. All in all, the entire process was challenging, yet highly rewarding. If we could go back and change a few aspects we would clearly state that app is currently not meant for understanding personal store problems like how long the line is for checkout, or if a product needs restocking. Our goal right now is to help customers feel more confident when navigating through any type of store, and help them move from item to item in the most efficient way possible. From our ending application prototype and video, we believe we were able to achieve that!

Next Steps:

- Tells when the shop is busy and when it is going to take longer for checkout.
- Tells the user about deals that they might be interested. (users would have to go into settings to check what types of deals they want to see in order to personalize this feature)
- Change the estimated time for shopping so that it could tell the user the time they want to know about rather it be check out, time getting the items, parking.
- Tells the user which cash register is open so that the shopping path could be optimized to end around the open register.
- Add features that can help handicaps that might effect their ablity to shop.
- App tells user what types of payment is accepted at the store.
- App has a function where it asks if you need this item if you haven't added that item into a list in a while. For example, if you haven't added milk to your list in two weeks the next time you create a list the app asks if you still have milk.

TEAM CONTRIBUTIONS

Nicole:

- Storyboard Sketches
- Grocery Store Shopper Interview
- Interview Protocol
- Documentation
- Insights

Jason:

- Ideation Storyboard
- Journey Map
- Low-Fidelity user feedback
- Interview Protocol
- Problem scenario
- Grocery Worker Interview

Aashika:

- Survey and Quote Analysis
- Survey Video Analysis
- High-Fidelity User Evaluation
- User Testing Protocol
- Ideation Sketches
- Low-Fidelity Solution Mockups
- Design Rationale Research
- High-Fidelity Solution Prototype
- Video Script and AI Narration
- Video Editing and Production

YounSung

- Initial design
- Desk Research
- Competitive Analysis
- Initial Design Low-Fidelity Prototype
- Persona
- User Flow
- Journey Map
- Insights

APPENDIX

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MORE DESK RESEARCH

In terms of customer service, experiences can vary greatly in these large retail environments. Some customers report difficulties finding assistance when needed, causing frustration when trying to locate specific items or gather product information. This issue is further compounded by the fact that stores like Costco and Walmart are constantly evolving, making it harder for customers to adapt to changing layouts and product selections.

COMPETITIVE ANALYSIS

Purpose: A good UX designer always researches products that closely fit into the field of interest of the one that they're designing. We wanted to see if any third-party corporations or grocery stores have already enabled the features we want to create.



Reflection: Most major retail corporations have their own applications or services to enhance customer journeys while shopping. However, in many cases, the quality of these applications does not meet customers' needs. Instead of focusing on the customer experience in physical stores, large corporations tend to prioritize the online experience. An overwhelming amount of unrelated information makes customers hesitant to use the applications. Although most stores want to offer assistance in navigation, it's mostly unclear and does not have enough information. Currently, there are currently no store applications on the market that have the same goals that we do.

QUOTES

Purpose: Analyze the feedback and verbal critiques that we got from the survey to narrow in our design space.

“

"Finding where certain products are within a store"

"The store size can feel overwhelming and I don't know where some things are. Also, sometimes the things I need are out of stock."

"Sometimes it takes me several back-and-forth processes before finding the product I was looking for."

"Spending more time in the store looking for the signs for a specific item I'm trying to buy rather than actually buying the item"

"Not knowing where they are stocked as sometimes grocery stores change their layout"

"Finding the exact product I want quickly"

"Locating items and getting acclimated to new stores."

"Items out of stock and unclear directions"

”

Reflection: We realized a lot of customers had difficulty navigating big stores and they seem to spend more time trying to find the product even if they shopped there before.

INTERVIEW PROTOCOL

Protocol: Grocery Store Worker

Goals:

Finding out how many customers need assistance locating an item they need.
Finding out if this system would be beneficial for the customers.

Qualifications:

Works at a grocery store: Walgreens
Has been working there for a long period of time: 5 months
Had interactions with customers during their shift: Yes

Questions:

- Do you work at a grocery store?
- How long have you been working at this store?
- On average how many times do you need to help a customer locate an item they need?
- How much time on average do you spend helping customers during your shift?

(After telling them about the app)

- Do you think this would be helpful?
- Is there anything that you would like to add to our app?
- Any more comments for our app?

End

Thank them for their time.

INTERVIEW PROTOCOL

Protocol: Grocery Store Shopper

Goals:

Find out which aspects of the grocery store shopping experience cause frustration or are in need of improvement

Qualifications:

Goes grocery shopping regularly

Shops for family of four

Years of experience as a shopper

Questions:

1. Ask permission to copy/use the interview
2. Introduce yourself
3. How often do you go grocery shopping?
4. Which grocery stores do you usually shop at?
5. How long does it normally take you to do shopping?
6. While in the store, are you able to easily navigate and find all of the products you need ok? Do you ever get lost?
7. Do you frequently encounter items that are out of stock?
8. How would you feel about having an app similar to Google Maps that helps you navigate the grocery store? You can choose a product and the app will tell you where it is.
9. Would you like a feature that updates you if an item is out of stock?
10. Would you be interested in putting your grocery list on the app and having it give you an optimal route for how to get the items in the store?
11. Would you be open to being interviewed again to give your opinion on our prototype?

End

Thank them for their time.

PERSONA

Purpose: To better understand our target users and structure our solution to attack the issue we created 2 personas. We listed their bio details, personality, user story, goals, and pain points.

01



Brennan

About		Personality	
Age	32	Introvert	Extrovert
Occupation	Nurse	Dependent	Independent
Status	Married	Planner	Procrastinator
Location	Indianapolis		

User Story

As a 32-year-old nurse with a hectic schedule, I find it challenging to squeeze in grocery shopping during my limited free time. Visiting unfamiliar stores makes the task even more difficult, as I struggle to locate items and store employees. I wish there was a better way to navigate these stores and find what I need quickly, making my life easier and giving me more time to relax and unwind.

Goals

- Efficiently navigate unfamiliar stores to minimize time spent on grocery shopping.
- Quickly locate desired items and store employees for assistance.

Pain Points

- Difficulty finding items in new or unfamiliar stores due to lack of time. Struggling to locate store employees for
- Struggling to locate store employees for assistance when needed.
- Always missing the good deals

02



Tarek

About		Personality	
Age	23	Introvert	Extrovert
Occupation	Student	Dependent	Independent
Status	Single	Planner	Procrastinator
Location	New Jersey		

User Story

Hello, my name is Tarek and I'm 23 years old male student. Since I live in the suburb I usually take a bus or other public transportation which took me about 30-35 minutes. So, the most important thing for me is the freshness of goods. To maximize the freshness of the goods I'm buying, I have to plan out and keep thinking while I'm shopping at the grocery store, which is a very stressful process.

Goals

- Maximize the freshness of groceries purchased during shopping trips.
- Easily share and collaborate on shopping lists with others.

Pain Points

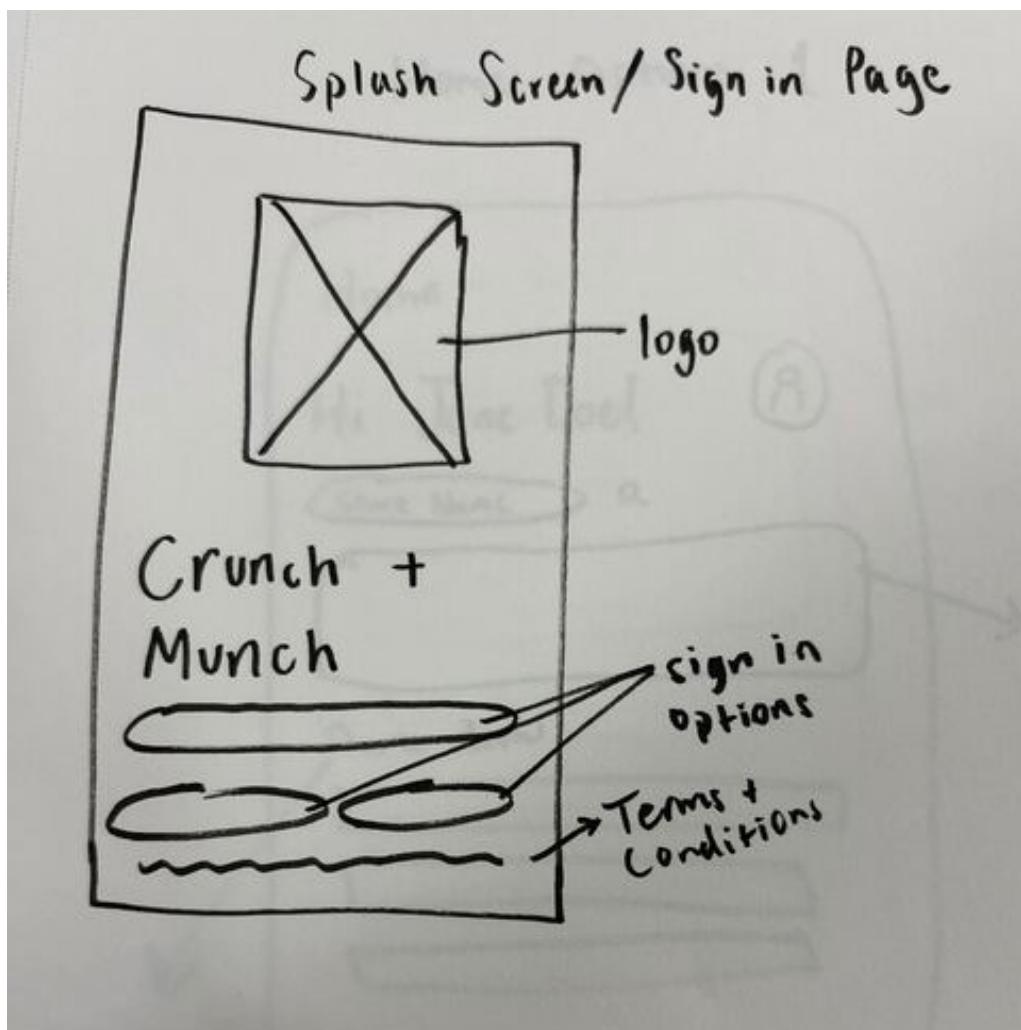
- Difficulty in maintaining freshness of goods, especially temperature-sensitive items like ice cream, due to travel time.
- Struggles with navigating and planning for new grocery stores.

Reflection: From the insights provided by Brennan and Tarek, we gained a better understanding of our stakeholders (shoppers) and the current challenges they face. Based on this information, we identified three key points for our MVP and used them as a foundation for developing our initial solution.

IDEATION SKETCHES

Purpose: Now that we have specified our design space we decided to sketch out the interface and functionalities our application will provide.

Sketches: Example of the different interfaces that our application will have

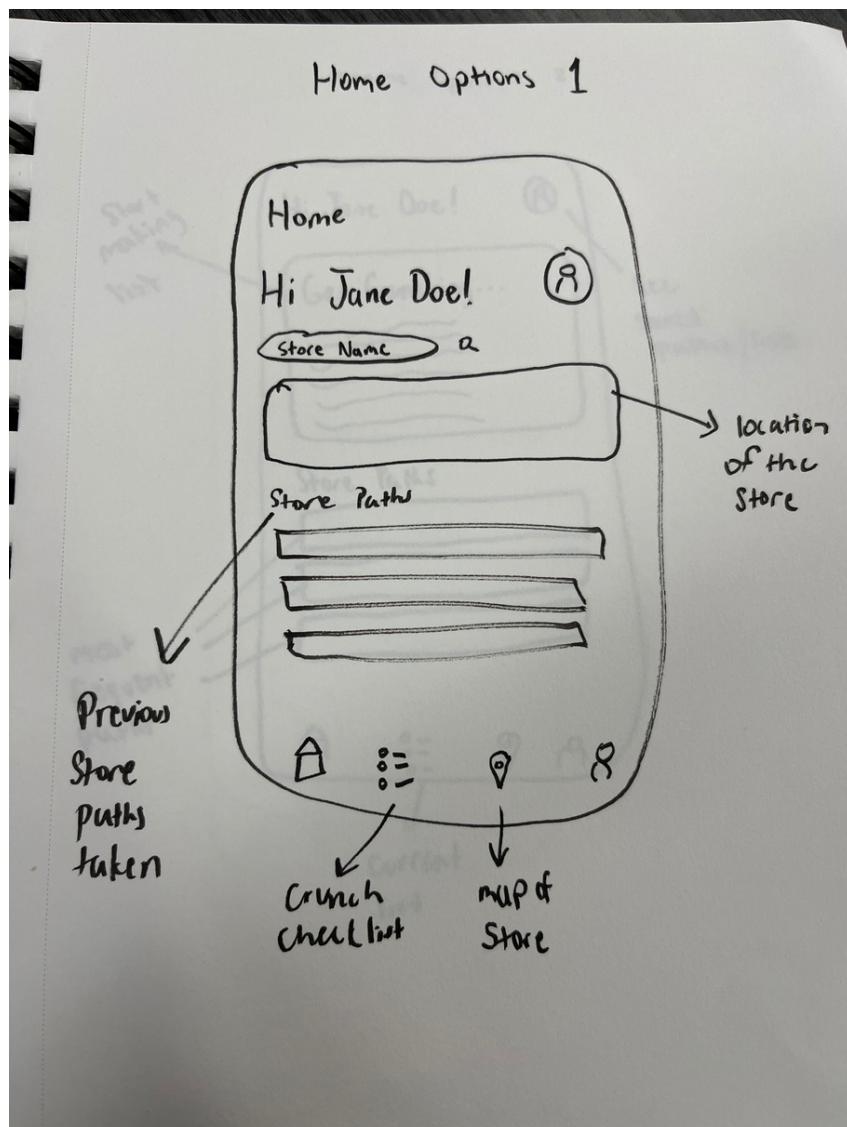


Design Rationale: This page will only be shown to new users signing up for the service. Old users will jump straight to the home page when entering the app. The logo is shown at the top to draw attention to our app. The title will be located right under and the 3 sign in/out options will be offered.

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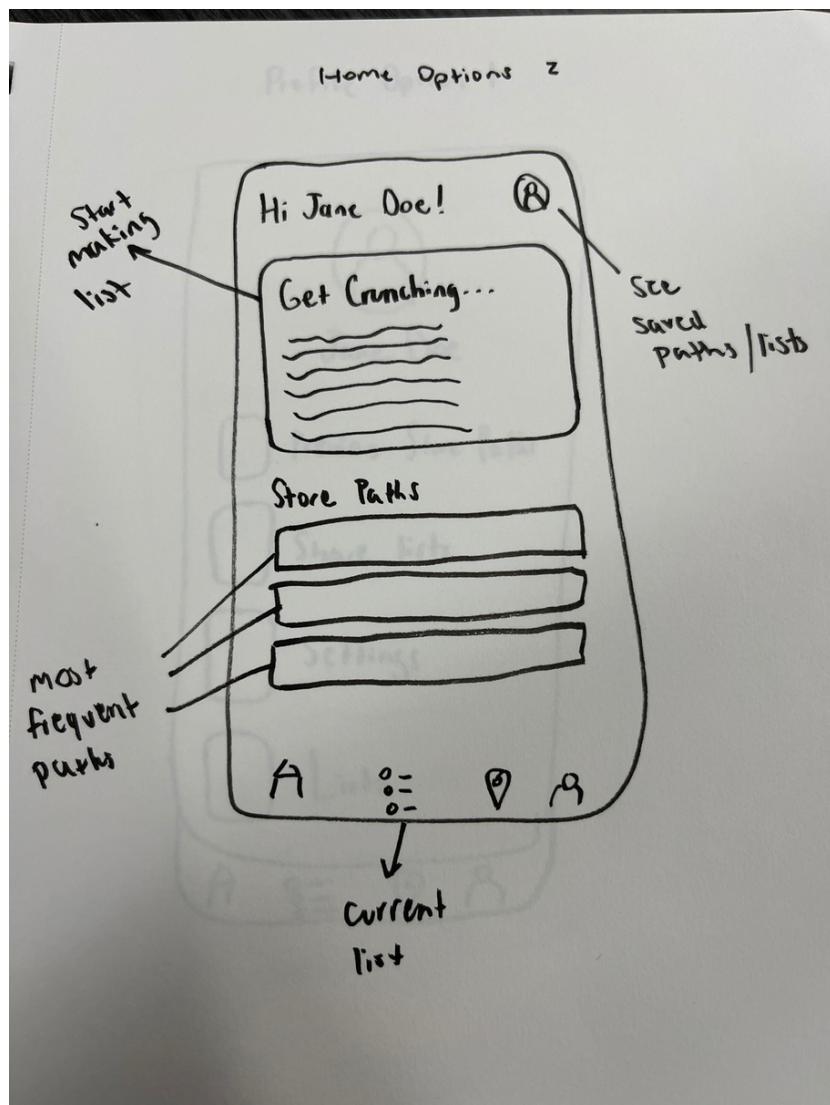


Design Rationale: This is option one of what the home page could be like. We want a spot where the user can go to previous store paths much faster than heading to the profile spot first.

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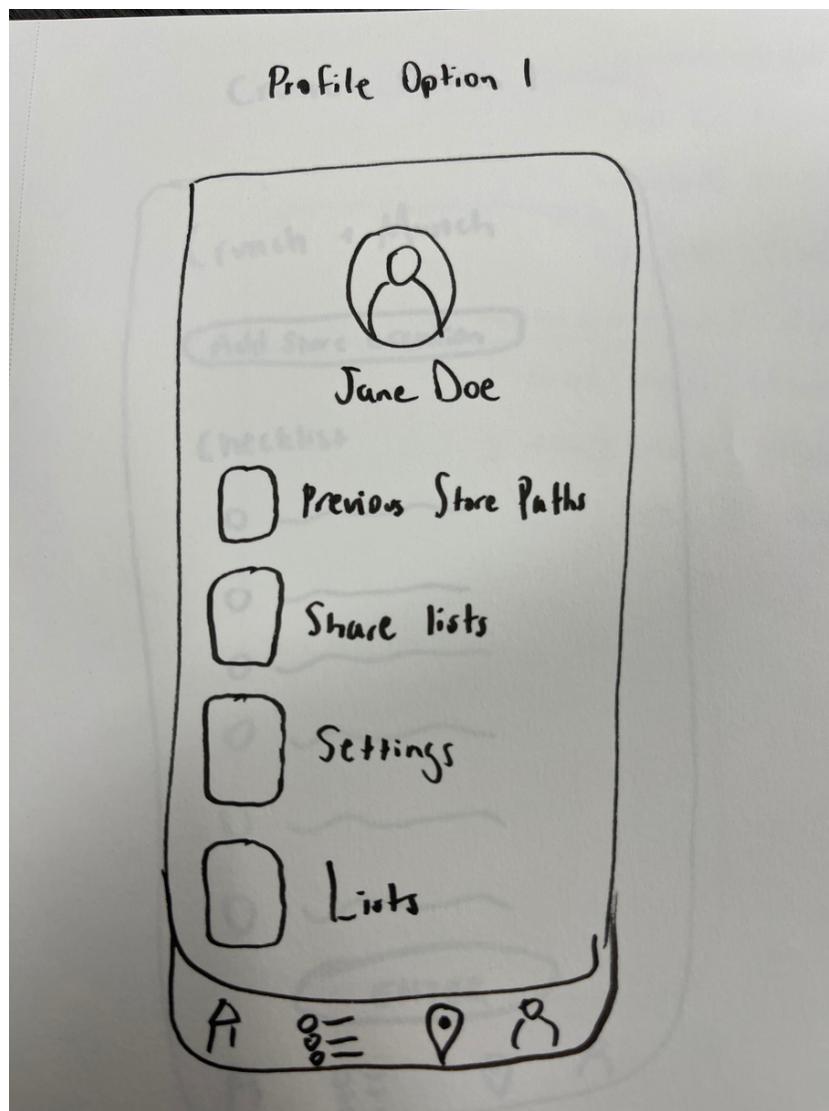


Design Rationale: This is the second home option. Here we have a much simpler view of the home page. We have one big button to take the user to the checklist page and no area to add the store name yet. Our goal is that this will make it easier for the user to understand how to use the app.

IDEATION SKETCHES

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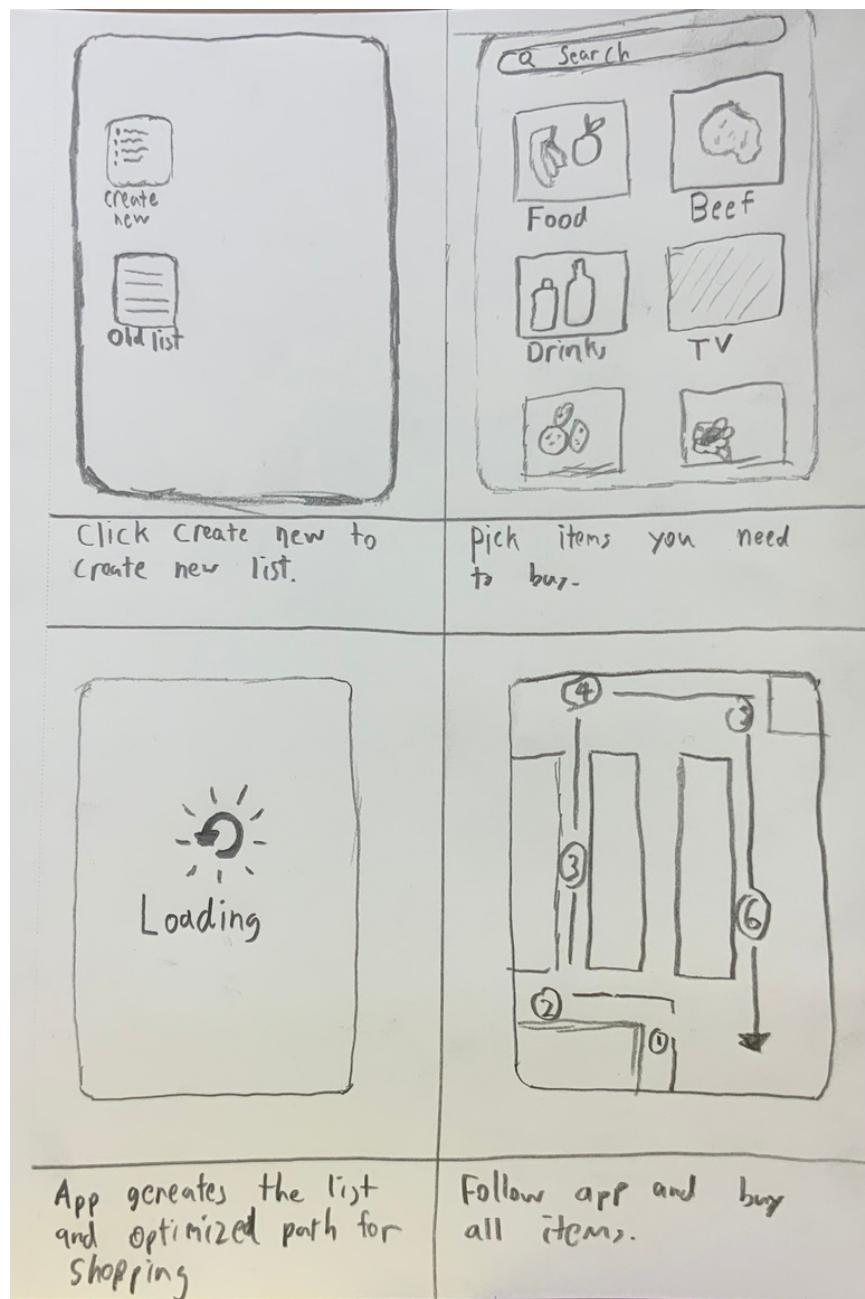


Design Rationale: We want to add customization and a sharing option to make it more accessible for users. This is a rough layout of how that page will be structured. The settings button will lead to profile personalization to make the app experience well-suited for the specific customer.

IDEATION STORYBOARDS

Purpose: Now that we have specified our design space we decided to sketch out the interface and functionalities our software will provide.

Storyboard 2: Example of the user creating a shopping list and what happens after the shopping list has been created the app generates an optimized path considering the type of items needed and the location of the item to minimize wasted time while shopping.



USER TESTING PROTOCOL

Protocol:

1. Give an explanation of the design space
 - a. "After spending time researching similar products, interviewing grocery shoppers and workers, and surveying 115 people, we believe that our solution should be focused on making the grocery trip experience more efficient. Many people mentioned that they get lost in big stores and spend a lot more time trying to find the desired product. Our goal is to ease and quicken that process by creating an application that will direct customers exactly to the product that they want to buy. We are going to start by walking step by step through the interfaces."
2. Give 5 minutes to the user to explore the sketches/application
 - a. "You will be given 5 minutes to view the sketches/application. Please try to verbalize your thoughts to the best of your ability!"
 - b. ***Tester takes physical notes on the participant's behavior and thoughts
3. Have the participant give a summary of their first impressions of the sketch/app
 - a. "Please describe your experience and initial impressions of the sketches/application. Any and every detail is important!"
4. Ask questions related to the sketches/application
 - a. "Does it seem easy to use?"
 - b. "What colors do you feel best symbolizes the grocery shopping experience?"
 - c. "Would this feel helpful when shopping or would it come in the way?"
 - d. "Any specific element that you are unclear on?"
 - e. "Is there a flow between pages?"
 - f. "What stood out to you the most? Any element that felt out of place?"
 - g. "Do you feel that altering walking speed specifications is necessary?"
5. Thank the participant for participating in our user testing phase
 - a. "Thank you for giving us your time in helping us improve our design! We greatly appreciate your feedback and assistance."

VIDEO SCRIPT

Purpose: In order to effectively pitch our product during the class presentation we needed to come up with a script to voiceover during the video.

Around 32 million Americans shop at grocery stores each day! In order to keep up with the demand, stores like Costco, Target, Walmart, and Giant need to find a way to appeal to the most customers by selling a large number of supplies. Having a vast variety of food is great, however, it increases the store size, changes the layout, and creates distractions. Oftentimes, due to the volume of different brands and choices, store employees have trouble assisting customers. They also have a tough time trying to find the right product that best fits their need.

Buyers need a better way to navigate large and confusing stores!
Introducing Crunch & Munch!

A quick 3-step process, to enhance your grocery shopping experience. Step 1: Crunch in your shopping list, Step 2: Follow the store path given on the app, Step 3: Start munching!

To get started, simply log in with Email, a google account, or Apple ID.

In order to get crunching, click the top button on the Home Screen.

First, type in the exact address of the store you decided to shop at. This is crucial in order to give you the most updated layout of the store.

Then, start adding to your list of groceries.

Once, your done go ahead and hit the optimize path button.

The next screen should show a full 2D layout of the store.

The application will automatically update the order of the list which will allow you to finish shopping in the least amount of time. To view the new order, click on the down arrow at the top of the interface.

VIDEO SCRIPT CONTINUES

Here you can see the aisle and shelf number of each item. To return to the map, click the up arrow.

The filled-in red circles on the map are pinpoints of where the items are located in the store.

Currently, there are 8 items left to shop for. Once you've retrieved an item click on the red circle. This will automatically update the list and map.

The new position of your avatar shows the item that is next on your list to retrieve. The retrieved item will be now shown in green. A full view of the list can be seen again using the down arrow.

In case you need to change items or add new items, simply click the edit list button on the bottom right of the app. Feel free to delete and add to the checklist as many times as needed.

The home page also offers a shortcut to the most frequent store paths that you will take. By clicking on any of the paths, it will bring you to the checklist page with the location and list already filled in.

The Crunch & Munch application has a built-in algorithm that can calculate the completion time of each shopping journey before checkout. For the most precise calculation visit the profile page by clicking the avatar at the top of the profile button at the bottom.

Here you can check out all your previous store paths. As well as a place to share your lists in case your roommates or family members want to crunch in an item at the last minute.

To personalize the algorithm click customization.

Crunch & Munch offers 2 options:

Either crunch in your height, weight, age, and gender and let the algorithm do its thing

OR

override the calculation and choose a speed

VIDEO SCRIPT CONTINUES

The app also offers accessibility features like voiceovers, screen readers, sound effects, and text size manipulation

Once you're satisfied with the changes click the blue button save changes button at the bottom

You are all set!

Remember crunch, follow, and munch!

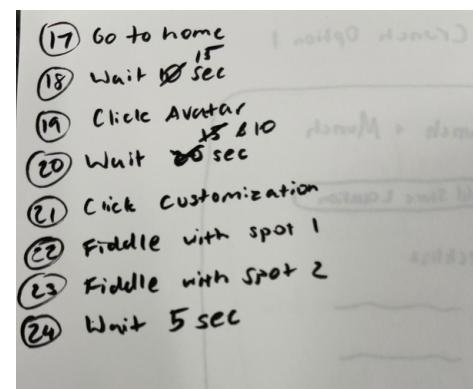
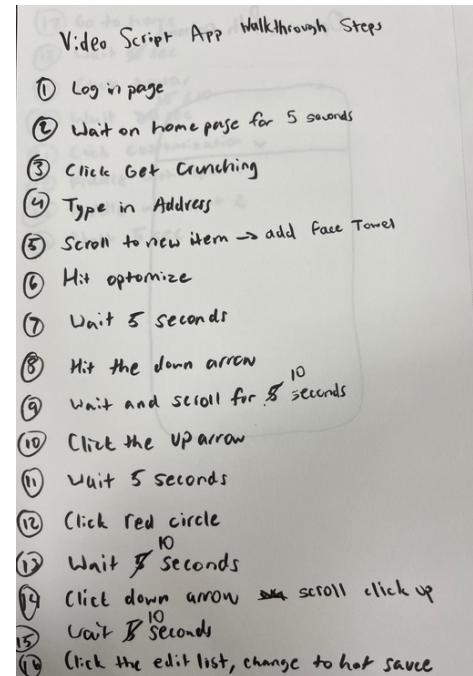
Crunch & Munch, shopping reimagined!

VIDEO APP WALKTHROUGH

Purpose: To correctly represent all parts and features of the app, it's essential to plan out the flow of the video. We listed the steps that needed to record in order for the audience to understand how the app works.

App Steps

1. Log in to the page
2. Wait on the homepage for 5 seconds
3. Click "Get Crunching"
4. Type in Address
5. Scroll to the bottom where it says new item
6. Add "Face Towels"
7. Wait 5 seconds
8. Hit the down arrow
9. Wait and scroll for 10 seconds
10. Click the up arrow
11. Wait 5 seconds
12. Click red circle
13. Wait 10 seconds
14. Click the down arrow and then up
15. Wait 10 seconds
16. Click the edit list and change to hot sauce
17. Go to the home page
18. Wait 15 seconds
19. Click Avatar at the top
20. Wait 10 seconds
21. Click Customization button
22. Fiddle with Spot 1
23. Fiddle with Spot 2
24. Wait 5 seconds
25. Go to Profile page



REFRENCES

Desk Research:

- Why It's So Easy To Get Lost In Costco
- TikTok Costco Videos

Design Rationale:

- Picture One
- Picture Two
- Picture Three

Video Stock Filmography:

- Kampus Productions
- Ivan Samkov
- Jack Sparrow
- Gustavo Fring
- Engin Akyurt
- Tiger Lily

Audio Narration:

- Kai M - Well Said Studio