

# HCI – M5 Assignment (Summer 2021)

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**Abstract**—In 1989 Peapod, one of the first grocery ecommerce companies in the US, first started accepting online orders for groceries.<sup>1</sup> But online grocery ordering was slow to catch on. Exactly 30 years later, in 2019, only 24% of grocery consumers in the US had ever purchased groceries online for delivery or pick up.<sup>2</sup> However, the COVID-19 Pandemic is changing the trajectory for grocery ecommerce. By the end of 2020 online grocery ordering doubled to 51%<sup>2</sup> (Appendix 5.1). Now retailers are trying to figure out how to keep up the momentum. This includes making big investments into the consumer experience of shopping for groceries online.<sup>3</sup> One of the most time-consuming steps of online grocery ordering for the consumer is compiling their virtual shopping cart with the items they want to purchase. This assignment will complete one cycle through the design life cycle for this task.

## 1 QUALITATIVE EVALUATION

The wireframe prototype shown in Appendix 5.3 was evaluated using qualitative evaluation. The method of qualitative evaluation used was a survey.

The survey was taken by 25 participants. The survey was conducted one time using George Tech's PeerSurvey and no changes were made while the survey was active. All survey participants were OMSCS 6750 students. While I would make no major changes to the survey, a pilot survey was not completed with friends and family ahead of posting the survey on PeerSurvey. There was a risk of question(s) in the survey needing edits and potentially wasting participant's time. If I were to conduct another survey I would do a pilot survey ahead of time.

### 1.1 Raw Survey Results

All survey questions and available responses are shown in Appendix 5.4. Detailed raw survey results are attached in Appendix 5.5. The following is a descriptive summary of those results.

Questions 1-3 collected the demographics of the participants including their experience with online grocery shopping. Survey results for questions 1-3 can be seen in Figure 1.

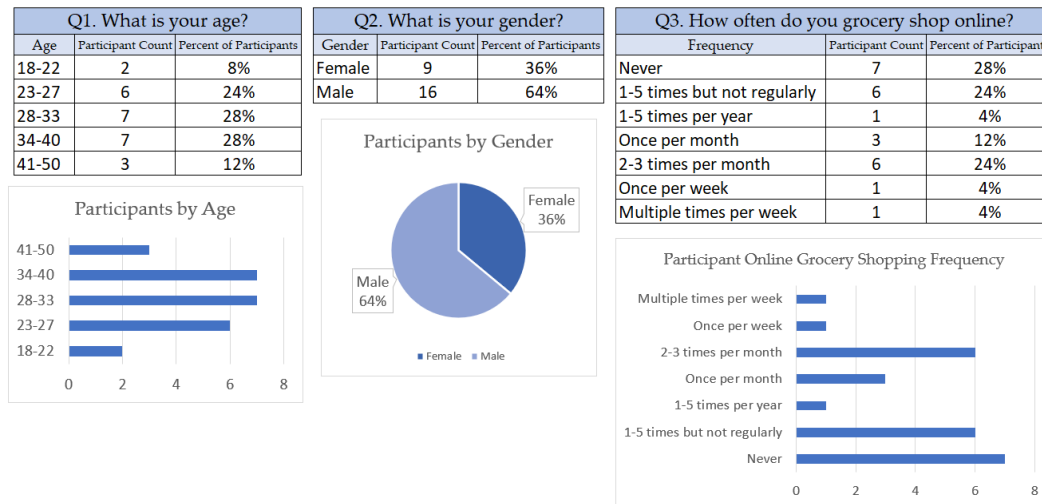


Figure 1. Q1-Q3: Demographics of Participants

Questions 4-11 collected the participants thoughts and concerns, likes and dislikes about the interface. Question 4 and Question 5 were open ended questions asking for general comments. Those comments can be seen in Appendix 5.5. Question 6-11 focused on specific features of the interface. Survey results for Questions 6-11 can be seen in Figure 2.

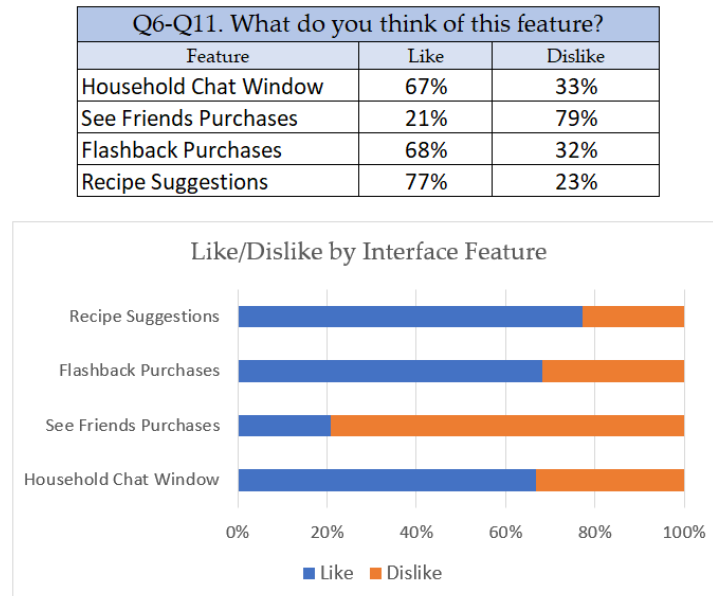


Figure 2. Q6-Q11: Participant Likes and Dislikes by Interface Feature

Questions 12-16 collected data on how the participants felt the interface would save time, cause stress, and generate inspiration. Question 12 and Question 13 were meant to set a baseline for the current time spent and stress experienced while compiling a grocery cart either in store or online. Survey results for Question 12 and Question 14 can be seen in Figure 3.

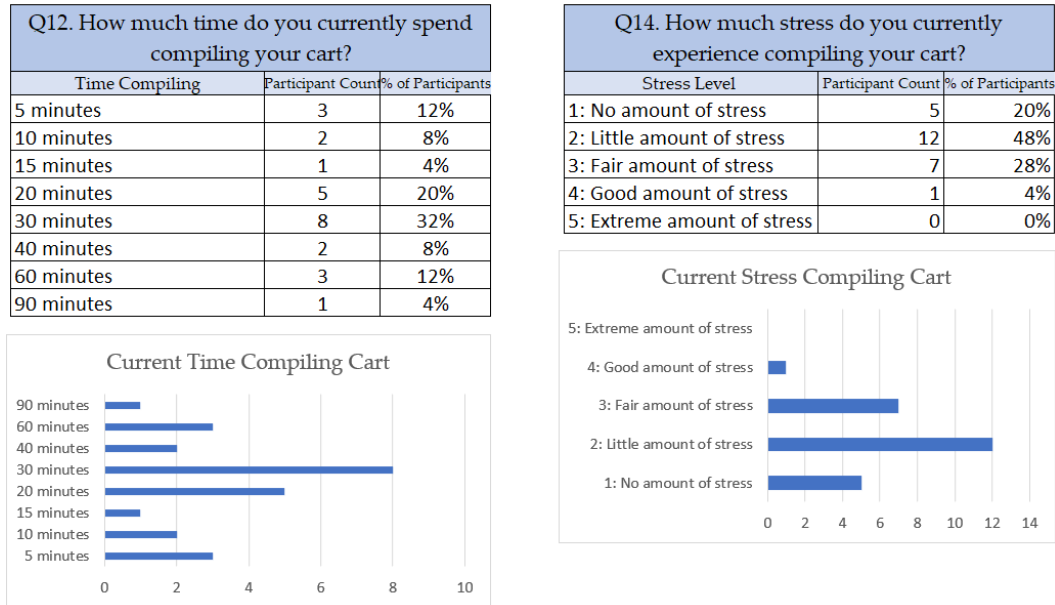


Figure 3. Q12 & Q14: Current time spent and stress experienced while compiling a grocery cart.

Question 13 and Questions 15-16 ask users how they felt the interface would save time, cause stress, and generate inspiration. Survey results for Question 13 and Questions 15-16 are shown in Figure 4.

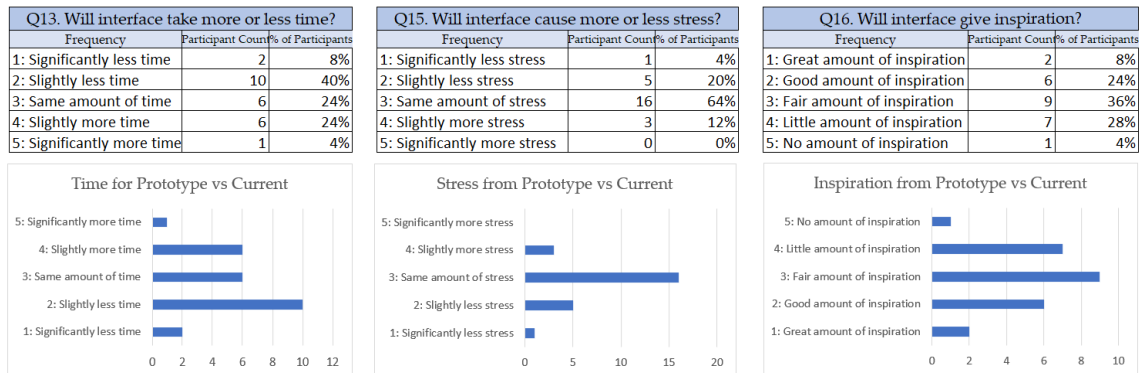


Figure 4. Q13 & Q15-Q16: User feelings prototype – Time, Stress, and Inspiration.

## 1.2 Survey Results Analysis

The majority of the participants were male and were in the age range from 23-40. Of the 25 participants, 14 participants complete their grocery shopping online less than once per month. These 14 participants can be considered novice users. Two participants complete their grocery shopping online once a week or more. These two participants can be considered expert users.

There were several takeaways from the questions that collected the participants thoughts and concerns, likes and dislikes about the interface:

- Many participants liked the “buy again” feature which shows frequently purchased items. When I analyzed product reviews of existing grocery ordering interfaces this was something that existing users really liked, so I expected my survey participants to like this feature as well.
- Another well liked feature is the emphasis on using large, visual icons. Participants commented that they found them easy to understand and easy to find what they need. However, several participants commented on how the interface was too cluttered and needed to be streamlined.
- The biggest dislike about the interface was the See Friend Purchases features. Over 75% of participants stated they did not want or see a use for this feature. Many participants specified that they felt it was a security issue. I thought this might not be the most popular feature in the interface, but I was surprised by the strong negative reaction to it.
- A popular feature with the participants was the Household Chat feature. Many stated they would find this useful, especially if other household members could add items to the cart. When asked if participants would like to add other friends and family to the chat, most participants answered that they would only want their immediate household members in the chat.
- The most polarizing feature for participants was the flashback feature. Over half (65%) of participants like the feature and said they would use it. But several participants commented very negatively on the feature and said they would never use it.

The participant’s feelings regarding if the interface would save time, cause stress, and generate inspiration were generally positive. Majority of participants felt this interface would cause them the same or less stress while compiling their grocery cart compared to their current method and give them fair to great amounts of

inspiration. Participants were more mixed on if they felt the interface would save them time with the most common answer being that they would spent the same amount of time compiling their grocery cart.

### **1.3 Proposed Changes to Wireframe Prototype**

The following are changes that might result from this qualitative evaluation:

- Remove See Friends Purchases feature.
- Refine Flashback feature to better convey to user how they might use this feature to streamline their grocery shopping.
- Refine icons to reduce clutter but keep the visual, easy to understand aspect of the interface.

## **2 PREDICTIVE EVALUATION**

The textual prototype shown in Appendix 5.6 was evaluated using predictive evaluation. The method of predictive evaluation used was a GOMS model shown in Figure 5.

I believe the majority of the methods below are fairly efficient. However, the method that needs the most improvement in the area of efficiency is the Add from Tour the Market Feature method. The intent of this method is to provide a shopper a methodical way of compiling their grocery cart. This is similar to an in-store shopper following the same route through the store every trip. But when creating the GOMS model I realized this method of adding items to a cart could become very long and cumbersome due to the number of departments in a grocery store. More needfinding and evaluation is needed to optimize this trade off between designing the “tour” so that the shopper is led through the virtual store in a methodical way, but does not force them to click through a bunch of screens filled with items they are not interested in and waste time.

Another item where a potential inefficiency may lie is the amount of scrolling required for the Add from Pantry, Add from Saving Page, Add from Search, and Add from Recipe Book methods. All 4 methods follow a similar flow of going to the page, scrolling to look for items, and adding items to cart. If items are in a random order, then a large amount of scrolling could be required for the shopper to find what they are looking for. But if the items are grouped by category then this could require extra clicking and complexity for the interface.

## 2.1 GOMS Model

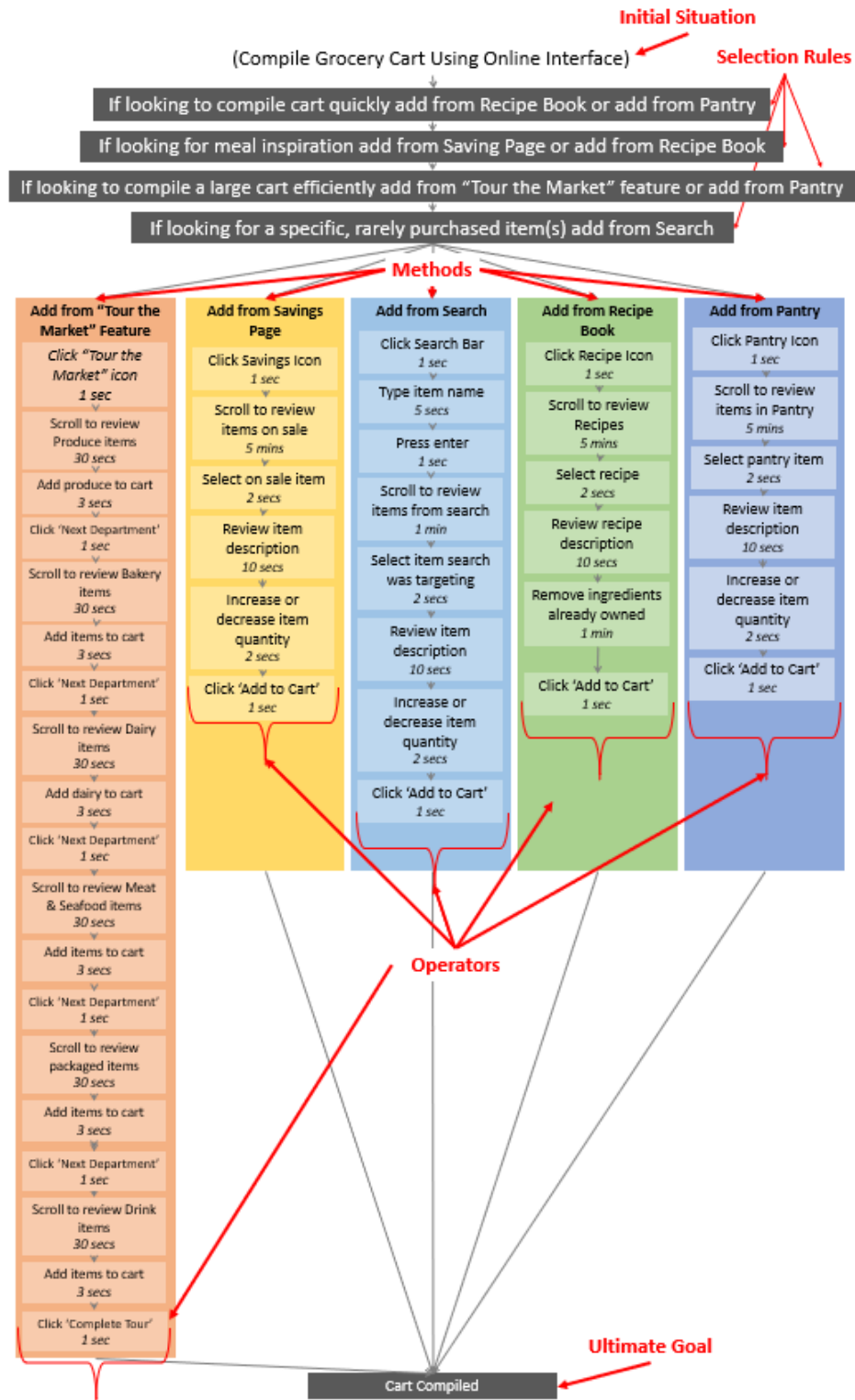


Figure 5. GOMS model for compiling a grocery cart online.

### **3 EVALUATION SUMMARY**

#### **3.1 Additional Needfinding Exercises**

The following items learned during needfinding need to be investigated more thoroughly:

- Additional needfinding in the form of interviews or surveys should be done to understand more about where shoppers source their recipes and how they plan meals. This would give insight into how the interface could be further optimized and speed of the meal planning and cart compiling process. One of the functionalities evaluated in both the wireframe prototype and the textural prototype was the ability to add all ingredient to cart for a particular recipe. Some participants in the qualitative evaluation survey were adamant that they only cook with their own recipes and would not want to see recipes from other sources. However other participants love the idea of seeing recipe suggestions either directly from the retailer or promoted by a celebrity chef. This conflict should be investigated further.
- Additional needfinding in the form of naturalistic observation or think aloud interview should be done to further develop the “Tour the Market” feature from the textural prototype. The intent of this method is to provide a shopper a methodical way of compiling their grocery cart and mimic in-store shopper following the same route through the store every trip. There are still several questions to investigate. What is the route shoppers tend to take in the store? What are some of the first items shoppers pick out?

#### **3.2 Additional Design Alternatives**

The following are additional design alternatives to explore in a second iteration of the design life cycle:

- Adding/expanding the chat feature to include being able to chat with a store representative. My survey participants mentioned this would be helpful.
- Functionality for the interface to recommend a recipe based on ingredients that are in your cart. This was an idea from one survey participant.
- Adding a top menu to the interface. Two survey participants pointed out that the wireframe prototype did not have one when many grocery ordering sites do.

### 3.3 Prototype Revision Brainstorming

The feedback on both the wireframe prototype and the textural prototype was generally positive. The following are recommended changes to the prototypes to raise the fidelity:

- The aesthetics of the interface face should be explored. Specifically, around how the products will be represented visually. Today the products are represented by generic icons. This will likely not work in the long run because the product icons need to be more representative of that specific product. However, these icons should be easy to read and understand. They should also not result in the interface appearing too cluttered. Another aesthetic that should be introduced to the interface is color. The current interface uses mostly blue and black. A more diverse and refined color palette should be explored in the next prototype.
- For the textural prototype, more detail should be added about what buttons and menus will be available for the users to navigate between the screens and pages. The first prototype just focused on describing the available functionalities.

### 3.4 Revision Evaluation Plan

After revising the prototype, additional qualitative evaluation should be conducted. These evaluations should include:

- A Think Aloud Protocol: A think aloud interview using a card prototype or a wireframe interface would be useful to dive into how the user sees the interface, how they interpret what the different buttons and features will do, and what they think will happen while using the interface. This type of evaluation is important before developing a real, working interface and pursuing empirical evaluation.
- Focus Group: Conducting a focus group would be useful to collect better explanations for what the participants like and dislike about the different features highlighted in the two prototypes. This would result in a more defined consensus about what should and should not be changed.

After these two evaluations are complete it would be recommended to develop a working interface that could be evaluated empirically to conclude if this new interface saves the users time and is truly more efficient.



#### 4 REFERENCES

1. Wyher, T. (2019, August 2). The Progress of Online Grocery Shopping. Influencive. <https://www.influencive.com/the-progress-of-online-grocery-shopping/>
2. Keyes, D. (2021, March 5). THE ONLINE GROCERY REPORT: Coronavirus is accelerating US online grocery shopping adoption. Business Insider. <https://www.businessinsider.com/online-grocery-report-2020?international=true&r=US&IR=T>
3. Neren, J. (2021, February 19). The Future Of E-Commerce Grocery Has Arrived: 2021 Industry Outlook. Forbes. <https://www.forbes.com/sites/forbestechcouncil/2021/02/19/the-future-of-e-commerce-grocery-has-arrived-2021-industry-outlook/?sh=648c20163089>
4. Wikipedia contributors. (2021b, May 17). List of cognitive biases. Wikipedia. [https://en.wikipedia.org/wiki/List\\_of\\_cognitive\\_biases](https://en.wikipedia.org/wiki/List_of_cognitive_biases)
5. Dsouza, M. (2020, December 2). Clustering Illusion - How Superstitions Fool The Best People. Productive Club. [https://productiveclub.com/clustering-illusion/#1\\_Get\\_more\\_data](https://productiveclub.com/clustering-illusion/#1_Get_more_data)
6. Koch, L. (2019, June 17). Amazon, Walmart and Kroger Lead US Grocery Sales Online. Insider Intelligence. <https://www.emarketer.com/content/amazon-walmart-and-kroger-lead-us-grocery-sales-online-how-do-they-do-it>

## 5 APPENDICES

### 5.1 US Online Grocery Penetration Forecast

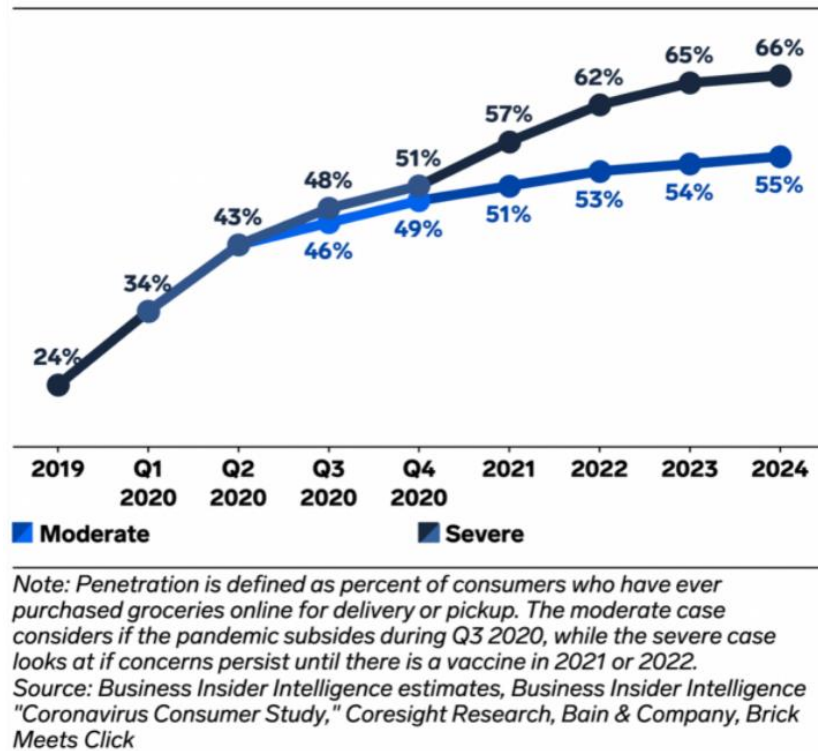


Figure 1 — US Online Grocery Penetration Forecast<sup>2</sup>

## 5.2 Top 10 Digital Retailers, Ranked by US Retail Ecommerce Grocery Sales, 2018

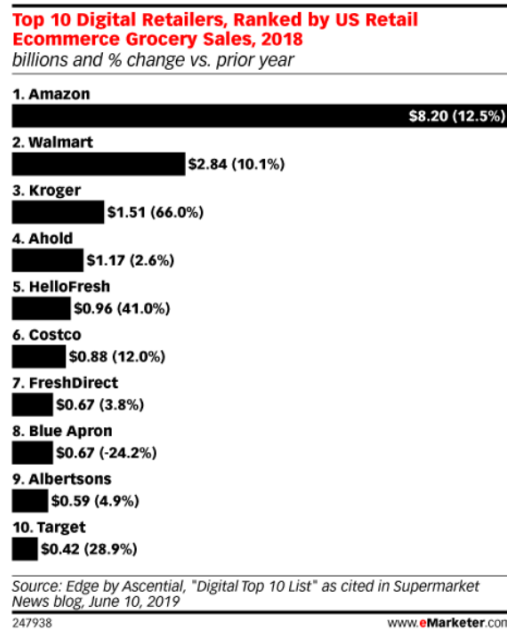


Figure 2 — Top 10 Digital Retailers, 2018<sup>6</sup>

## 5.3 Wireframe Prototype



## 5.4 Qualitative Evaluation Survey Questions and Available Responses

#	Question	Available Response
1	What is your age?	18-22, 23-27, 28-33, 34-40, 41-50, 51-60, 61+
2	What is your gender?	Male, Female, Prefer not to respond
3	How often do you grocery shop online?	<ul style="list-style-type: none"> <li>• Never grocery shopped online</li> <li>• 1-5 times but not regularly</li> <li>• 1-5 times per year</li> <li>• 1 time per month</li> <li>• 2-3 times per month</li> <li>• 1 time per week</li> <li>• Multiple times a week</li> </ul>
4	What do you like about this interface?	Open ended response
5	What do you not like about this interface?	Open ended response
6	This interface includes a chat feature. What do you think of this feature? Would you use this?	Open ended response
7	If you would use the chat feature, who would you want to be able to chat with?	<ul style="list-style-type: none"> <li>• Household members only</li> <li>• Select friends &amp; family</li> <li>• Social media friends</li> <li>• Other</li> </ul>
8	This interface includes the ability to connect with friends and see what they are purchasing. What do you think about this feature?	Open ended response
10	This interface includes a “flashback” feature to see what you purchased a year ago. What do you think about this feature?	Open ended response
11	This interface includes a recipe suggestion feature. What do you think about this feature? How would you use it?	Open ended response

#	Question	Available Response
12	On an average shopping trip (online or in store) how much time do you spend compiling your grocery cart?	Open ended response
13	On a scale of 1 to 5, do you think this interface would take more or less time to compile your grocery cart?	<ul style="list-style-type: none"> <li>• 1: Significantly less time</li> <li>• 2: Slightly less time</li> <li>• 3: Same amount of time</li> <li>• 4: Slightly more time</li> <li>• 5: Significantly more time</li> </ul>
14	On an average shopping trip (online or in store) how stressed are you while compiling your grocery cart?	<ul style="list-style-type: none"> <li>• 1: No amount of stress</li> <li>• 2: Little amount of stress</li> <li>• 3: Fair amount of stress</li> <li>• 4: Good amount of stress</li> <li>• 5: Extreme amount of stress</li> </ul>
15	On a scale of 1 to 5, do you think this interface would increase or decrease your stress level while compiling your grocery cart?	<ul style="list-style-type: none"> <li>• 1: Significantly less stress</li> <li>• 2: Slightly less stress</li> <li>• 3: Same amount of stress</li> <li>• 4: Slightly more stress</li> <li>• 5: Significantly more stress</li> </ul>
16	On a scale of 1 to 5, does this interface give you inspiration for grocery purchases?	<ul style="list-style-type: none"> <li>• 1: Great amount of inspiration</li> <li>• 2: Good amount of inspiration.</li> <li>• 3: Fair amount of inspiration</li> <li>• 4: Little amount of inspiration</li> <li>• 5: No amount of inspiration</li> </ul>

## 5.5 Raw Survey Data

response	Q1	Q2	Q3
1	23-27	Female	I have never grocery shopped online
2	34-40	Male	2-3 times per month
3	41-50	Male	1 time per month
4	34-40	Male	2-3 times per month
5	28-33	Male	1-5 times per year
6	41-50	Male	I have never grocery shopped online
7	28-33	Male	1-5 times but not regularly
8	34-40	Female	1-5 times but not regularly
9	28-33	Female	1-5 times but not regularly
10	34-40	Female	1 time per week
11	18-22	Male	2-3 times per month
12	28-33	Male	1 time per month
13	23-27	Male	I have never grocery shopped online
14	28-33	Male	1 time per month
15	23-27	Male	I have never grocery shopped online
16	34-40	Female	1-5 times but not regularly
17	34-40	Male	1-5 times but not regularly
18	41-50	Female	1-5 times but not regularly
19	34-40	Male	I have never grocery shopped online
20	18-22	Male	I have never grocery shopped online
21	23-27	Male	I have never grocery shopped online
22	28-33	Female	2-3 times per month
23	23-27	Female	Multiple times per week
24	23-27	Male	2-3 times per month
25	28-33	Female	2-3 times per month

Q4
it's like a social media website but for groceries
most often used categories are first and share cart
beautiful icons
1. Easy to understand visual icons 2. The frequently purchased item list
The cart has a running sub total. Each category at the bottom shows the number of items in that category, recipe.
The search bar
Buy Again, Cart
The notes from other users is kind of fun! And possibly useful - you see reminders from other household members, frequently purchased items, the recipe ideas
I like how you see a breakdown of number of items from each category (dairy, produce, meat...)
Lots of icons and things I bought recently. I like the chat interface. I'm assuming it's for sharing with family
I liked the fact that everyone can have a say. the cart, and the menus.
ability to navigate to many categories
i like that the different products are grouped together at the bottom so i can find what i want quickly
The icons make it clear of the categories. It's nice to see the grocery list and shopping cart on the right side of the screen
nice large visual graphics
I like the messages on the right side of the screen
Clear pictures of options, neatly laid out interface
The icons are representative of the product
"Frequently purchased items" section, easy-to-understand icons, "A year ago" section is useful for year-end reflection
Frequently purchased items are the first thing I see. The ability to share the cart with household members is helpful
the icons make the items pop, so I can easily find what I need; buy again is a great feature as they are easy to find
ability to look at frequently purchased items
Provides a history of the items previously purchased by other members of the household
Q5
it may be difficult for older people to navigate or figure out how to use this. it may be a learning curve
No Top level or left menu that most users are familiar with
Who's Sandy? Me, a family member, or a random customer?
1. Flashback - I'm not sure showing a list of items purchased a year ago makes sense to what I might be looking for
Flashback. I don't really care about what I purchased a year ago. The social feature showing what other people are buying is interesting
it can get busy with icons showing for all purchased items.
The social aspects, the recommendations aspects.
No Discounted grocery
Not so much dislike, but there's quite a bit I don't understand. I think I'd find the recipes distracting, I don't like the icons
the colours (Assuming they will stay black and white)
First look, I am a little confused about the messaging functionality on the right side.
Not sure what the flashback's purpose is - things I bought a year ago. I probably don't need that stuff
nothing. I like it a lot.
a little too cluttered
i don't like the social feature on the right hand side, i feel like that's not really necessary to include in a grocery app
Are the recipe suggestions related? If not, it seems like it may just be in the way.
cluttered, no logical order to the items
It seems a little cluttered
N/A
It looks like it has a lot of clutter
Social media addition -- I really don't care what other people are buying, and it is just clutter on my screen
Not sure how frequently I would use the "purchased a year ago" feature
I would like a "recommended for you" section after buy again as this can facilitate purchase decisions
Chat interface
N/A - I like it



Q6	Q7	Q8
I'm not sure how useful it would be when we have other means of messaging	Household members only	
yes among the different family members in the household. I do not see its much use for outside fam	Household members only	
Nice feature. Yes, I would use it.	Social media friends	
It's nice, but if the chat only serves as another place to see items that are needed, that would frustrate	Household members only	
No. I typically either sit next to my family members to make a list ahead of time, or call people when	Select friends & family	
not sure if employees would like this feature. maybe just a button to get assistance.	Other	employee for assistance
Nope. I don't want the app analyzing my messages. I would use a separate texting app.	n/a	
chatbot Q&A	Social media friends	
I think it could be valuable! It might be useful to let others add items to a grocery list - I imagine it m	Select friends & family	
i will possibly use it	Select friends & family	
I think I would need it explained to me more on how it will overall work with the rest of the app.	Select friends & family	
Maybe. What about a shopping list instead? Shared with some people.	Household members only	
Yup!	Household members only	
potentially	Select friends & family	
I don't think i would use this	n/a	
Not sure I would find use with a chat feature since I don't typically need to ask questions to custom	Select friends & family	
good to chat with employees at grocery store	Select friends & family	
It's a great feature that I would use	Select friends & family	
Yes it looks useful for deciding on a list together	Household members only	
I think so	Household members only	
Never	Household members only	
I do see value in having the chat located on the same interface as the grocery app, but I wonder if I	Household members only	
depends, for older family members maybe they find it hard to learn, but for friends I think it is great!	Select friends & family	
No	n/a	
To discuss with the several members of the household the products needed	Household members only	
Q9		
interesting		
Not very useful for grocery purchase		
Nice feature!		
not something I would use, but I could see others using it		
No thanks. Interesting idea, but I don't think I'd ever use it. I don't use many social features though.		
not sure why you need this, you have cellphone.		
The social features are useful only for the store's targeted advertising. Screw that.		
good		
I'm not sure that I'd want my friends to be able to see what I'm buying. Although it could definitely b		
creepy unless you personally added		
I would not want this feature.		
I don't really care what they bought.		
Will never use. Have no friends. just kidding :-). I am privacy oriented so I would not use this.		
neutral - not really too strong on this		
I don't like this. I would probably choose not to use this application because of that feature. I would		
I don't think I would like it. Some items feel personal and wouldn't want friends to know what I am b		
would be helpful with friends		
This could be useful if a friend recommends a product or a recipe		
Privacy invasion		
It's ok, I am not sure if I would use it often		
Completely unnecessary		
Not sure I would use it, but other people might like it. I'm not sure I care about what my friends are		
I do not like it, unless it is part of event planning group, otherwise i do not like my personal purchase		
Why is this necessary? Don't think I'd ever use it		
I don't think I would use this feature		

Q10	
like it, can help people make decisions about what they want to purchase	
good	
Nice feature!	
I don't think this feature is useful. It's rare that I might buy something a year ago that I want to see	
No thanks. I don't really care about what I bought a year ago. The only time I would care about this	
nice	
Mixed. Unless it's a consumable, I probably bought it because it would last a decade and thus I don't	
not useful	
Interesting around the holidays! But might not be that useful most of the time. However, seeing pas	
interesting	
I like this feature.	
Nah.	
No opinion.	
very helpful	
that's a good idea, would probably save me time	
This is helpful in case I want to purchase items I liked	
I'm not sure, it depends on what I saw and if I found that interesting.	
I am not sure how useful that would be on the main page	
Useful for remembering items	
I am not sure it is useful	
Interesting -- I would mainly use this for yearly events and holidays, such as birthdays or Christmas	
I think I'd only use it on major holidays and during different fruit seasons. Not sure it's an important	
I think it is unnecessary, buy again is more reflective of my current purchase habits	
I like it. I'm more likely to purchase things I bought before and it's helpful because sometime I can't	
That would be super helpful	
Q11	
good, useful for meal prepping	
good. If this can be linked to all the ingredients from the recipe page.	
Nice feature! I would use it to explore new cooking protocols.	
If the recipe suggestion automatically pulled in items to purchase based on ingredients in the recipe,	
I would not use it.	
nice for weekend cooking	
Most recipes from stores or from the internet are flaming garbage, with the only goal of selling me r	
good to have	
I think I'd find it distracting in this particular app.	
like it	
I like this feature.	
Yes! I'm not sure if it would show me recipes given my list, or if I could look up recipes and then it w	
No opinion.	
neutral	
not very likely to use this. I cook with my own recipes and have a good idea of where I can find high	
this could be useful if the recipes are related to the items I am buying. Sometimes it is nice to see ne	
I take it with a grain of salt unless it is guaranteed to be a favorite recipe for me	
I like this feature. If it could pre-populate the cart with the recipe ingredients that would be great	
N/A	
This is nice, it could help me get ideas for what I should buy if I find a good recipe	
Fantastic -- I often struggle with buying ingredients for a single recipe, then not knowing what to do	
Yes, I'd love this if the recipes were rated and reviewed or vetted in some way.	
it is cool, but then again it depends on the type of recipes it shows, my usage will increase if the reci	
I like it, but I probably wouldn't use it much unless I see a very good recipe.	
That would be awesome, I am not a great cook and often need creative/ new recipes	

Q12	Q13	Q14
30 mins	3: Same amount of time	3: Fair amount of stress
20 mins	2: Slightly less time	1: No amount of stress
5 mins	5: Significantly more time	1: No amount of stress
30 mins	2: Slightly less time	2: Little amount of stress
20 mins	4: Slightly more time	2: Little amount of stress
5 mins	4: Slightly more time	3: Fair amount of stress
40 mins	3: Same amount of time	2: Little amount of stress
60 mins	2: Slightly less time	3: Fair amount of stress
30 mins	3: Same amount of time	3: Fair amount of stress
10 mins	1: Significantly less time	1: No amount of stress
20 mins	2: Slightly less time	2: Little amount of stress
30 mins	2: Slightly less time	2: Little amount of stress
10 mins	4: Slightly more time	2: Little amount of stress
30 mins	3: Same amount of time	4: Good amount of stress
20 mins	2: Slightly less time	1: No amount of stress
20 mins	4: Slightly more time	2: Little amount of stress
5 mins	4: Slightly more time	2: Little amount of stress
90 mins	4: Slightly more time	3: Fair amount of stress
60 mins	3: Same amount of time	1: No amount of stress
30 mins	3: Same amount of time	2: Little amount of stress
30 mins	2: Slightly less time	3: Fair amount of stress
40 mins	2: Slightly less time	2: Little amount of stress
15 mins	2: Slightly less time	2: Little amount of stress
30 mins	2: Slightly less time	3: Fair amount of stress
60 mins	1: Significantly less time	2: Little amount of stress

Q15	Q16
3: Same amount of stress	2: Good amount of inspiration
3: Same amount of stress	4: Little amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
2: Slightly less stress	3: Fair amount of inspiration
4: Slightly more stress	4: Little amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
4: Slightly more stress	5: No amount of inspiration
2: Slightly less stress	2: Good amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
3: Same amount of stress	2: Good amount of inspiration
2: Slightly less stress	3: Fair amount of inspiration
3: Same amount of stress	1: Great amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
3: Same amount of stress	4: Little amount of inspiration
3: Same amount of stress	4: Little amount of inspiration
4: Slightly more stress	4: Little amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
3: Same amount of stress	4: Little amount of inspiration
3: Same amount of stress	3: Fair amount of inspiration
2: Slightly less stress	4: Little amount of inspiration
3: Same amount of stress	2: Good amount of inspiration
2: Slightly less stress	2: Good amount of inspiration
3: Same amount of stress	2: Good amount of inspiration
1: Significantly less stress	1: Great amount of inspiration

## 5.6 Textual Prototype

The following is a textual prototype for the home page of a grocery ordering interface desktop application:

*The homepage will have the following features: a cart, a savings feature, a pantry feature, a recipe book feature, and a search bar.*

*A key feature of this interface will be a "Tour the Market" functionality. This will automatically launch for new users and be available for returning users. This tour will guide the user through department by department in a logical, structured order. On this tour users will be encouraged to set their favorites for different items or pantry staples.*

*The cart will be displayed on the home page. The cart will show the current cart total price and the last 5 added items. For each of the last five items in the cart there will be the ability to toggle "+" or "-" to add more or less of that item.*

*The savings feature is a section of the homepage where sales are displayed. These sales will be categorized by different themes. The items on sale will have a countdown displayed with them for how much item will be on sale. Items could be added to cart with one click from this section.*

*The pantry feature is a section of the homepage where each department is listed: produce, dairy, bakery, meats, etc. When the department is hovered over, the user's favorites for the staples in that department will be displayed. For example, if "Dairy" is hovered over then the user's favorite brand and quantity of milk, eggs, sour cream, etc. will be displayed and the user will be able to add to cart with one click.*

*The recipe feature is a section of the interface where different recipes are listed and all the ingredients for that recipe can be added to the cart with one click. For example, clicking "Cheeseburger with Fries" would add ground beef, sliced cheese, buns, frozen French fries, etc. to the user's cart. The user would also be able to add their own recipes to the feature. The interface would remember these recipes and show them on the homepage under the "Recipe Box" feature to add to cart with one click. At the end of the "Tour the Market" functionality there would be a prompt for new and existing users to add recipes to their recipe box.*

*The search bar will be displayed on the homepage. When the user starts entering search terms a dropdown will appear suggesting items based on what is entered. From this drop down the user will be able to add an item to their cart*