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Introduction

We conducted a usability study that tested the Target website. This website is utilized by many users across the world. The website offers groceries as well as other retail items that people are able to purchase and pick up at the store or have the items shipped to you. You are able to create a Target account that will offer you discounts and other perks. The website is created as a site for any age group to use and maneuver through easily. It allows people of all ages who are interested in buying retail items like electronics, appliances, and pharmaceuticals.

Purpose and Goals

Our purpose for the study is to identify the usability of the navigation system, as well as the users ability to locate specific items throughout the site's grocery section. The reasoning for this focus is to test Target's adaptability to new methods shoppers have attained due to the pandemic setting. We plan to test the ease of use of online shopping for groceries because many people have switched over to this format because of the pandemic. This method of shopping has become important during the pandemic because it offers a safer way to shop due to having less human interaction between people. Our main objectives of this study involves rating this area of the target website, by conducting usability studies with six different participants. Along with rating the current system, we plan to find ways to improve it by analyzing the feedback from our users, after conducting different tests.

Methods and Participants

The participants that we will recruit are middle aged parents (40-60 years old) who are looking to purchase retail or grocery items for pickup at the store or to be delivered to them. We chose this age group for this study because it relates to the current pandemic, this age group of older adults are more concerned about going out to grocery stores because the risks of Covid-19 are far greater for this age group. Adults of this age may not be as digitally literate and have less experience online compared to other younger age groups, so we want to focus on if the target website is easy to navigate for them. We will be having six participants who are going to complete our study. We did not use any screening questions because we chose participants that fit our criteria for users.

Study Session

Session details

For our studies we will be conducting the testing in the participants home, the moderator will be there in person to assist the participant and the note takers will be there virtually through Zoom meetings. We plan to record six different sessions for our study, we plan to use the screen recording feature on zoom to record the participants. Each study is expected to last around 20 minutes or until the participant has completed the four tasks. We plan to start our testing this weekend and go into early next week (Saturday, Apr 9 - Tuesday, Apr 13). We will be working around our participants schedules so the participants are relaxed when completing our study. During the study our participants will be given the task of navigating through the target website to demonstrate the overall usability and ease of use. The moderator will be responsible for giving

the tasks for the participants to complete. We chose to do these tasks to see how easily the website is to navigate through and locate certain items geared towards different users.

Task overview

One of our tasks will ask the participant to make a list of five grocery items and add them to the cart. We chose this task to simulate the process of a user thinking and creating a list of groceries they need, and then using the website to locate those items. Another task will be to test the navigation of setting up a drive up grocery order. We chose this task because this is one of the key features being used to help avoid being in contact with people during the pandemic. We want to see how easy or difficult it is to navigate through the website to get to this feature, along with actually setting up an order. Another task will be to ask the participant to find a deal for a drink/beverage and add it to the cart. The last task will ask the participant to start from the grocery page and find a vegan item.

The overall goal of each task is to simulate some of the goals the everyday user would aim to perform in order to cut down on social interaction due to the pandemic. With the implication of new shopping methods, buyers of all backgrounds and technological skill sets should be able to locate items, add them to their cart and schedule a pick up/ drive up order. We plan to highlight the strengths and weaknesses of the system Target has designed for users. The recording equipment we will use is the screen record feature of zoom. This will capture the tasks while they are being completed by the participant on the actual target website interface.

Data collection

We will collect data in the form of notes from the moderator while the participant completes the task. We will also time the participant to see how long it takes to complete the task and record that data. We will ask our participants to use the think aloud method when they are completing each task. This will be collected from the screen recordings we have for each participant.

Metrics and Analyses

We will use a performance metric to measure the participant's ability to complete a task. This metric is the task success metric and will be measured with difficulty ratings. There will be four different difficulty ratings ranked 1-4. A difficulty level of 1 is no problem, 2 is a minor problem, 3 is a major problem and 4 is that the participant was not able to complete the task. We will also use an issue based metric and will write detailed examples of issues that occurred with completing tasks. We will compare the common issues we find between each of the users. We will also use the efficiency metric by measuring the time it takes participants to complete the tasks.

Deliverables

We plan to report findings based on how well our participants were able to navigate through the target website, and if it has adapted to suit the new methods of shopping for all age groups and technical backgrounds. We will deliver a report based on the data we collect while doing the usability testing. Due to the pandemic, many people have resorted to online shopping

for the things they need. Our main focus will be on evaluating the Target website to see if buying groceries online is usable to our target audience of older parents.

Findings and Recommendations

Findings

The video tapes of our usability study sessions were analyzed for critical incidents. We compared the incidents from each session to see if there were any common usability problems among the participants. As shown below, there were a total of 10 usability issues and 2 good features in the sessions

Usability Problems

- UP1 The backwards navigation feature would change positions on different pages causing issues with navigation (1 occurrence)
 - The participant had trouble locating the backwards embedded navigation feature that the website has on the grocery page, so it was hard for the user to get back to the grocery tab on the navigation. The participant used this feature on the "Cart" section, and it was located on the upper left of the screen. But when the user tried to navigate backwards on the grocery page, the backwards navigation moved to the middle of the screen so the participant thought that the feature wasn't there. The user tried to resort to using the normal navigation, but it was customized to what was on the page from the last item they selected. You can see below how the backwards navigation changed from the top left to the top middle. The participant pointed this out in detail and was confused. The backwards navigation in the picture below is right above the participants mouse cursor and below the "okemos" tab under the main navigation on the top left.



Breakfast & Cereal

Target / Grocery / Breakfast & Cereal (456)

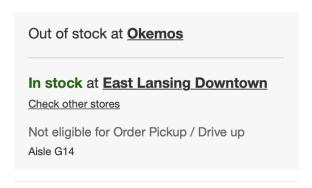
- UP2 No "add to cart feature", options to deliver it, pick it up or ship it confuse participants (5 occurrences)
 - When clicking on an item to add it to the cart, the options are to deliver it or pick it up. This confused users when they were just trying to add the item to their cart. It took them a little while to figure out how to add an item to the cart.
- UP3 "Drive up" feature confused as "pick up" delivery option (5 occurrences)
 - The user began to add items to their order and thought that the drive up feature
 was the same as the pickup option. These were two different features, but the
 website did not make this very evident to the user.
- UP4 "Add for delivery" confused for "add to cart" (2 occurrences)
 - Participants often mistaken the add for delivery button for an add to cart button.
 The two buttons do not complete the same task causing users to believe items had been added to their cart when they had not been added at all.





(Add for delivery can be seen in the red button on the bottom of the image)

- UP5 Specific items are not eligible for drive up (1 occurrence)
 - When ordering an item for pickup there are specific items that are not eligible for pickup or drive up. This is a problem because users want specific items that are geared towards them and they may not be able to order that product.



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- UP6 Ineffective search bar in drive up grocery section (1 occurrence)
 - When ordering items from the drive up grocery section, the search bar for this section was not effective. The search bar failed to bring up the correct item that was searched even though the store had that item.

- UP7 Continue shopping alert became annoying/ frustrating to participant (2 occurrences)
 - After adding an item to the pick up order participants were presented with an alert asking them if they'd like to continue shopping or to view their cart. This became annoying for participants due to the constant need for extra input after completing a task.

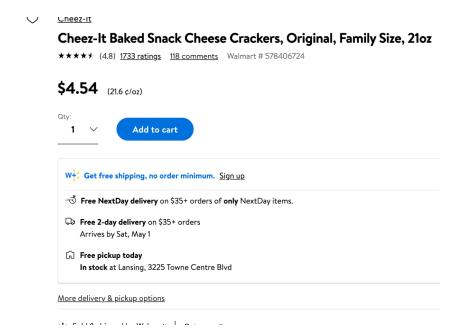
Good Features

- GF1 "Specialty diets section was well done and had an effective title" (6 occurrences)
 - When looking for vegan meatballs, users went straight to the Specialty Diets category. They were then easily able to find the Vegan section. This Specialty Diets section was named well and made it easy for the user to find the item they needed
- GF2 "Deals section was easy to navigate" (5 occurrences)
 - When looking for deals on pop, the deals section at the top of the screen on the navigation bar made it easy for the user to locate the deals. The weekly ad made the deals section easier to navigate as well.

Usability Recommendations

- UP1 The backwards navigation feature would change positions on the page causing issues with navigation (1 occurrence)
 - Make the backwards navigation feature uniform throughout the website. The
 website should put this feature on the same part of the page for all pages on the
 website. This will allow users to create muscle memory and to be able to use this
 feature more effectively.
- UP2- No "add to cart feature", options to deliver it, pick it up or ship it confuse participants (5 occurrences)
 - The solution would be to create just one button that says "add to cart" and then allow the user to select pick up or delivery when checking out. This would make the shopping experience much easier to complete for the user.



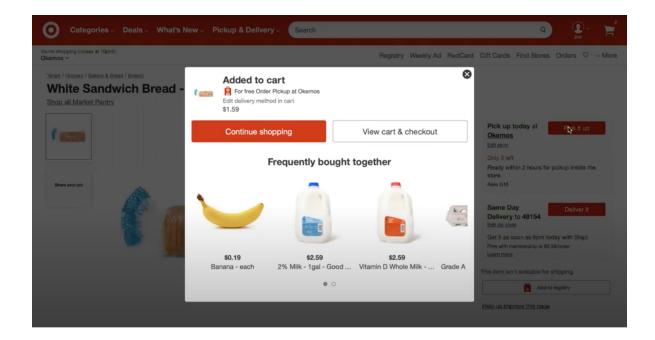


(Walmart has a simpler design with an "add to cart" button. Having this button would make shopping much easier for the user.)

- UP3 "Drive up" feature confused as "pick up" delivery option (5 occurrences)
 - o If the users of the feature skip over the directions and assume that they are supposed to look for a "drive up" button to add to cart, more information on the drive up feature should be presented on the item screen. Next to the "pickup" option on the items page there should be a message saying "eligible for drive up" so they know to use the pickup button to add the items to cart. At the checkout they should review the instructions again for the "drive up" feature, so they know that they have to use the app to indicate they are parked and ready to receive their items.
- UP4 "Add for delivery" confused for "add to cart" (2 occurrences)
 - The solution would be to change this button to an "add to cart" button and have this button add the item to the cart after clicking on it. In addition, having a delivery or pick up option at the end of the order when checking out would be more effective.
- UP5 Specific items are not eligible for drive up (1 occurrence)
 - The solution would be adding a page with the items that are available for drive up and pickup. This would be beneficial so the user would be able to look at all the items available for drive up or pickup instead of picking out an item and realizing that item they want they cant get.
- UP6 Ineffective search bar in drive up grocery section (1 occurrence)
 - The solution would be to create a more effective search bar in this grocery section

of the drive up orders so that it brings up the results the user is looking for. The user should be able to search and find the item they need when completing their drive up order.

- UP7- Continue shopping alert became annoying/ frustrating to participant (2 occurrences)
 - A solution to this problem would be to make the alert less intrusive. It's currently taking away time from the actions the users are trying to complete by having them confirm their actions for each item. Many online shopping sites make this alert more discrete where it doesn't block the entire page and users can continue to complete their task without clicking it away.



Appendices

Consent Form

Usability Study Background

We are studying computing in the Department of Media and Information at Michigan State University, working under Dr. Hee Rin Lee.

We are asking you to participate in a usability study to help us evaluate Target's website, as part of our coursework for MI 350, Evaluating Human Centered Technology. The purpose of this consent form is to give you the

information you will need to help you decide whether to participate. Feel free to ask any questions of us that you have before or during the study session. The usability study session should take about 20-25 minutes to complete.

In the usability study session, you as a participant will be asked to complete 4 task:

- First make a list of 5 grocery items, locate the groceries page and add those items into your cart.
- Locate the option for a Drive Up order, and add 2 items from groceries to your order.
- Starting from the home page locate the deal on pop and add the items into your cart.
- Starting from the groceries page find a vegan food option and add it to your cart.

We will record video of your on-screen actions, and audio of the study session, for later analysis. We will also take notes about your on-screen actions. Any information we collect will remain confidential and will be disclosed only to the other students in class and to Dr. Lee. No personally identifying information will be associated with any of the information we collect from you.

You have the right to stop participating at any time. Your decision regarding participation will have no adverse consequences. If you choose to stop participating you will still receive the study incentive of one chocolate bar or piece of candy.

Although you may not benefit directly from participation in the study, others may ultimately benefit from the knowledge we obtain. Your participation in this study will aid our understanding of how people use Target's website, and may help us to design products and systems that are more useful and usable for people.

Participant Consent

Participant: Signature

I understand that the information collected during this study session is for research and teaching purposes only and that my name and image will not be used for any other purpose.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Date

Moderator:

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered.

Signature		Date	
Permission to	Record		
0 1	mission for video and audio recordinology, and Dr. Hee Rin Lee. I reli	2 ,	,
may be copied without further	I and used by students in MI 350, I r permission.	Evaluating Human Centered Tech	nnology, and Dr. Hee Rin Lee,
yes	no (Please initial here)		

Usability Study Script

During this study today, I will be asking you to complete four different tasks to help us evaluate the Target website. Keep in mind that we are not testing you, there is no right or wrong to complete the tasks. The purpose of this study is to learn about the usability of the Target website, and with your honest responses this will be useful to help improve the website in the future. While you are completing the tasks, we will be looking for areas in which the system should be changed. If there is an area on the website that is difficult to navigate through, do not feel bad, this is the information that we are looking for in order to improve the website.

Also, participation in this study is completely voluntary. If you become uncomfortable in any way, feel free to stop at any time, and you will still receive your incentive for helping us out here today.

In this session, I'm interested in two things: how you go about completing the tasks, and what you think about as you complete the tasks. You'll be asked to "think aloud" while completing these tasks and I will teach you how to do this and give you a chance to practice in just a second if you would like. It is very easy to do, and we get a lot of good information from these kinds of studies about where people run into problems with websites. It's basically like you're talking to yourself, but loud enough for other people to hear.

Now, when I say, "think aloud", what I mean is that you should say whatever is on your mind while you complete the tasks. I want you to tell me everything that you are thinking from the time you begin a task until you finish it. I would like you to talk aloud as often as possible and even if the only thing you are thinking is "I am not sure what to do"

I want to hear about what you are looking for or what you're trying to do, even if it looks obvious. If you hesitate or indecisive, describe what's causing your hesitation. Don't try to plan out what to say or try to explain to me what you are thinking. Don't hold back hunches, guesses, wild ideas, or negative comments. These things will all help us a lot, just try to act as if you are alone, speaking to yourself just a little louder.

You can also ask me questions, but I am not able to explain anything about the Target website to you right now. If you do have questions, go ahead and say them out loud anyway so we can learn about the kinds of questions and problems people have, and I'll answer your questions at the end of the session. Don't worry, if you forget to "think aloud" I will jump in and remind you to keep talking. Do you have any questions about "think aloud"?

Now, I have some tasks printed out for you. I'm going to go over them with you and see if you have any questions before we start.

Here are the four tasks that you will be completing. Why don't you read the first task aloud, just so you can get comfortable with speaking your thoughts?

Do you have any questions about any of the four tasks? You may now begin with completing the first task.

Task Descriptions:

Task 1: You are a parent grocery shopping for your family online. First, make a list of 5 grocery items of your choice. Then, Starting from Target's home page, navigate to the grocery page and use it to locate your five items and add them to your cart.

Task 2: You are a parent and want to schedule an online groceries order because you want to avoid coming into contact with other people due to the pandemic. Starting from the homepage, navigate to Targets drive up feature, and add 2 items from the groceries tab to your order.

Task 3: You are a parent looking for the best deal on pop for you and your family. Starting from the Home page, navigate to the deals on pop and add the items to your cart that the deal applies to. Make sure the deal is applied in your cart.

Task 4: You are a parent looking to buy vegan food for you and your family. Starting from the Grocery page, without using the search bar, navigate to the vegan foods and add vegan meatballs to your cart.

Data Collection Form:

Participant:	Moderator:	Date:			
Usability Study Script	Time (Efficiency)	Notes	Difficulty Rating 1-4	Issues	Quotes
Task 1					
Task 2					
Task 3					
Task 4					

Usability Aspect Report

UAR #1

<u>ID</u>: DK #1, participant 3

<u>Name</u>: User had trouble locating the backwards navigation on the grocery page because it changed locations. -problem

Explanation: The participant had trouble locating the backwards embedded navigation feature that the website has on the grocery page, so it was hard for the user to get back to the grocery tab on the navigation. The participant used this feature on the "cart" section, and it was located on the upper left of the screen. But when the user tried to navigate backwards on the grocery page, the backwards navigation moved to the middle of the screen so the participant thought that the feature wasn't there. The user tried to resort to using the normal navigation, but it was customized to what was on the page from the last item they selected.

<u>Severity</u>: This issue is somewhat severe because when grocery shopping, you are looking for a lot of different items to buy, and if you get lost and are unable to get back to the main grocery page, it will be hard for you to find all of the items that you need.

<u>Solution</u>: Make the backwards navigation system uniform on all parts of the website. Either have it be in the top left corner, middle, or top right corner. This will allow the user to memorize where this feature is located so they will be able to learn how to use it overtime.

Evidence:

7:42 P3 "Unfortunately now I don't see at the top... I was looking for the categories to go back but it doesnt show it".

10:05 P3 "So now I have the menu path, it says target, grocery, breakfast, and cereal, so i don't know why I couldn't find this earlier".

9:25 P3 "When in doubt I'm gonna type in the search... alright here we go. so what i would like to know is what is the path that would have gotten me to cereal".

<u>Interpretation</u>: The participant used the backwards navigation on the "cart" page earlier in the study, and tried to look for this on the grocery page. Since the location of the backwards navigation moved to the middle of the page, which was different than it was on the "cart" page from the top left, they were unable to navigate with the backwards navigation back to the main grocery page. They expressed that it was difficult to navigate back to the grocery page so they ended up using the search bar. If the backwards navigation feature was in the same spot throughout the entire website this confusion could have been avoided.

UAR #2

ID: AK #1, Participant 2

Name: No option to "add to cart" - problem

<u>Explanation</u>: When the participant located their item and tried to add it to their cart they were met with a bunch of different options, but none said "add to cart" when that was what the task told them to do. They had options like "deliver it" or "ship it", which when clicked would add the item to their cart. This caused them issues with adding items to their cart.

<u>Severity</u>: This issue is severe because for the success of the task they needed to add items to their cart, and this issue made it confusing for the participant for whether or not the items were being added to their cart. With older people switching to online grocery shopping during the pandemic, it should be more clear to them if their items are being added to their cart. This issue caused a significant delay in the efficiency of completing the task for this participant.

<u>Solution</u>: Change the interface on the "item" screen. One way to make this more clear is to eliminate the "deliver it" or "ship it" options entirely and leave that for the checkout or cart page. Then instead add a "add to cart" button so that it is more clear to the user that they are adding the item to their cart.

Evidence:

8:48 P2 "I don't see a clear way to add this Item to my cart".

9:00 P2 " I see an option to deliver it but i think it would be more clear if there was an option for me to add it to my cart".

14:00 P2 "I clicked on delivery again".

<u>Interpretation</u>: The user initially scanned the item page for a button to add the item to their cart, but no such option was available. Instead options like "deliver it" and "Pick it up" were present which caused the user to take a significant amount of time adding the item to their cart. They tried "deliver it" and they saw that the item was added to their cart. The participant stated that it would be easier and more clear and convenient if there was an "add to cart" button.

UAR #3

ID: AK #2, Participant 2

Name: Deals section was easily navigated by the user - success

<u>Explanation</u>: When the participant was assigned a task to locate a deal on pop and add the items to their cart and make sure the deal was applied in the cart, the target website had a clear navigation pathway to the deal they were looking for. There was a deals section on the navigation that they were able to locate and use to locate the deal.

Evidence:

27:47 "okay deals are right at the top"

29:29 "I think I should add three pops to get the deal".

30:47 "Okay I see the cart... oh there's a little 3 on it so maybe i should click on that".

<u>Interpretation</u>: the user navigated to the deals section and quickly located the deal on pop that they were assigned to complete. The user was able to read the direction for the deal and was able to understand what they needed to do to get the deal on pop. the user navigated to the cart on the top right part of the screen and was able to quickly and efficiently make sure the deal was applied.

UAR #4

ID: DK #2, participant 3

Name: "Drive up" feature is unclear to the participant

<u>Explanation</u>: The participant was asked to locate the drive up feature in targets website and then proceed to add two items to the cart. The user was able to locate the drive up feature information but they did not understand exactly how the feature worked. They were unable to locate the information that they needed to add items to the cart for "pickup" then use the target application to use the drive up feature when they were there. The user thought that they were supposed to look for a "drive up" option to add the item to the cart.

<u>Severity:</u> This is a pretty severe issue, since this feature is designed to be used to enable a contactless pickup of grocery items for shoppers, it needs to be clear and easy to use. More clear instructions are needed

Solution: If the users of the feature skip over the directions and assume that they are supposed to look for a "drive up" button to add to cart, more information on the drive up feature should be presented on the item screen. Next to the "pickup" option on the items page there should be a message saying "eligible for drive up" so they know to use the pickup button to add the items to cart. At the checkout they should review the instructions again for the "drive up" feature, so they know that they have to use the app to indicate they are parked and ready to receive their items.

Evidence:

15:44 P3 "Why is it not giving me a drive up"

15: P3 "Okay so ready within 2 hours for pickup, so i guess drive up and pickup im gonna assume are the same thing but, so I guess the issue is that they should be consistent for how they name or categorize it"

<u>Interpretation</u>: the user was unable to figure out exactly what the drive up feature was or how it worked. They tried to look for a "drive up" option to add the Item to their cart, but they only needed to add the item for "pickup" and then use the target app to use the drive up feature when they got to the store. The user thought that this needed to be more clear.

UAR #5

Id: DS #1, Participant 3

Name: Add for delivery button problem

Explanation:

The participant wanted to add an item to their cart and the button that was there said "add for delivery". However, when the participant did this, the website said that the user had to enter their address. The participant just wanted to add the item to the cart and did not want to put in their address

Severity:

This problem is pretty severe because adding an item to the cart is confusing and hard to figure out for the user. The "add for delivery" button was ineffective for adding the item to the cart.

<u>Solution:</u> The solution would be to change this button to an "add to cart" button and have this button add the item to the cart after clicking on it. The user should be able to pick delivery or pick up at the end of the order when they are checking out.

Evidence:

2:12, "Same day delivery, um I'm not sure what am I supposed to do with that" 2:40, "I'm not sure what to do. I'm not sure if I want to put my address in for this"

Interpretation:

The participant wanted to add an item to their cart by clicking on the "add for delivery" button underneath the item because that was the only button available. Clicking on this button did not help the participant and made them confused about their cart. This button did not add the item to their cart because the user did not want to put in their address.

UAR #6

Id: DS #2, Participant 3

Name:

Ineffective Search Bar in Pick Up Grocery Section

Explanation:

When the participant was trying to create a drive up order, they used the search bar within the drive up grocery section to find Campbell's soup. However, when the user put this into the search bar, the results that returned were not Campbell's soup. The participant later used the regular search bar and was able to find Campbell's soup immediately.

Severity:

This is moderate severity because it is important that users can find the items that they need for their drive up order when the website takes them to this section. The grocery section for drive up orders is not effective in providing results for the user's searches.

Solution:

The solution would be to create a more effective search bar in this grocery section of the drive up

orders so that it brings up the results the user is looking for. The user should be able to search and find the item they need when completing their drive up order.

Evidence:

10:38, "Is this just stuff on sale?" 11:45, "I wonder if I click on that one, if it would take me to just the campbells"

<u>Interpretation:</u>

The participant searched for Campbell's soup from the searchbar of the grocery drive up section and was not given effective search results. The user was unable to find this soup within this section of the website and had to resort to using the search bar at the top of the website page.

UAR #7

Id: LS #3, Participant 4

Name:

No "Add to cart" button

Explanation:

The participant tried to add an item to their cart, but were given the option of "Deliver it" or "Pick it up". This confused the user when the user just wanted to add the item to the cart. After picking "Deliver it", the user was notified that the item was added to the cart, but was frustrated by this.

Severity:

This is high severity because adding an item to the cart is a basic function of a retail website that needs to be clear for the user.

Solution:

The solution would be to create just one button that says "add to cart" and then allow the user to select pick up or delivery when checking out. This would make the shopping experience much easier to complete for the user.

Evidence:

2:34, "I'm looking for add it to the cart, and um hm"
2:41, "I don't see an add it to the cart option, which I've run into this problem before on websites and I don't like that"
3:15 "I would like something that says add to cart, that's easy for me"

<u>Interpretation:</u>

The participant wanted to add an item to their cart but was presented two different options and neither were "add to cart". This confused the user and made them unsure of what to do. The participant eventually found how to add it to cart by choosing "Deliver it". The participant said that they wanted an add to cart button and that would be easier.

UAR #8

ID: LS #4, Participant 4

Name:

Specialty diets section well done - success

Explanation:

The participant was easily able to find the vegan section of the website because of the efficient category title name "specialty diets". The user went straight to this category when asked to find vegan meatballs.

Evidence:

13:53- "Specialty diets, I'm gonna go there first"

14:01- "I'm gonna go right to vegan"

14:04- "Vegan proteins stands out"

<u>Interpretation:</u>

The participant looked through the grocery categories given to find where vegan meatballs would be. The participant saw "specialty diets" and clicked on this right away. This was labeled well and made it easy for the participant to find what they were looking for.

UAR #9

ID: MT #1, Participant 5

Name: Start over through categories tab

Explanation: When the participant would navigate through the categories tab to groceries and get off that page to add an item to their cart, the website would make the user start from the very beginning of the categories tab to be able to add another item to their cart from the grocery.

Severity:

This is low severity because it is important that the users are able to navigate through the items easily without having to go back through all the steps to find the items.

Solution:

The solution would be to have the website should allow the user to click on the categories tab and have it bring the user back to the topic they were shopping for.

Evidence:

5:58 "I'm going to categories, oh I'm out of groceries already."

6:05 "Okay grocery. I'm not sure if I am going to be able to figure out where that's featured items"

<u>Interpretation</u>: Every time the user would navigate to the grocery tab and add an item to the cart, the website makes the user start from the very beginning of the categories tab to locate a new item under grocery, instead of keeping the user in the grocery tab allowing them to look into another item.

UAR #10

ID: MT #2, Participant 5

Name: Items not eligible for pick up

<u>Explanation</u>: The user located a frozen pizza that they wanted to order for drive up, after adding the number of pizzas they wanted the user noticed that the item was not eligible for pick up. The user then had to go back to the frozen pizzas to see which ones were eligible for pick up.

Severity:

The severity of this would be high because the user may not be able to order items that they would like since some products are unavailable for drive up.

Solution:

The items that are eligible for drive up should be located in an area where the user will be able to decide on items through that page instead of deciding on a product then realizing its unavailable.

Evidence:

11:59 "That looks delicious"

12:00 "Let's take a couple of those"

12:07 "Um how come I can't add that to my cart"

12:09 "I don't see that this is going to my..."

12:14 "Oh not eligible"

<u>Interpretation</u>: The user was looking for a frozen pizza that they wanted to order for drive up. After deciding on the type of pizza the user wanted was not eligible for drive up.

UAR #11

Id: DT #1, Participant 6

Name: Add for delivery misinterpreted with add for pickup

Explanation:

The user initially made the mistake of clicking on the add for delivery button assuming items would be added to cart. This was not the case the item did not complete the action the user initially thought it was intended to.

Severity:

This would be considered a high importance issue because users could unfortunately missout on important items by assuming they've been added into their cart for pick up.

Solution:

I think there are two solutions that would be viable fixes for this issue. 1) adding a "add for pick up" button under the add for delivery. This would potentially be more clarifying for users. 2) Removing the add for delivery and having users select all options when they click on the item.

Evidence:

- 6:55- The user clicked add for delivery instead of add to pick up. Meaning the item was never added to the cart.
- 8:13 The user had selected add for delivery when shopping for waffles and did not notice that the item was not added to the cart.

Interpretation:

When the user was trying to add items to their cart they had assumed the add for delivery button would have the same effect as the add for pick up button that's only accessible from clickin on the item and selecting the add for pick up button.

UAR #12

Id: DT #2, Participant 6

Name: Continue shopping alert became annoying

<u>Explanation:</u> The alert that appeared whenever the user added an item to her cart and it became frustrating for the user throughout the study.

<u>Severity:</u> This could be considered a low priority issue, it doesn't inhibit the user from completing any task. It mainly causes an issue as an aesthetic problem.

<u>Solution:</u> A possible solution to this problem would be to make the alert less intrusive. Many online shopping sites deliver a great user experience without the need of a user confirmation for continued shopping or viewing of the cart.

Evidence:

- 11:54-"That, continue shopping is so annoying "—referring to continue shopping alert after adding item to cart

<u>Interpretation:</u> The participant encountered this issue when they were shopping and adding items to their shopping cart. As the moderator in this study I also could see how this message that requires user input could become frustrating especially when shopping for a large amount of items.

Summary Data Tables: Performance Metrics

Participant				
Dan Sowers	Task 1	Task 2	Task 3	Task 4
Time	7:48	6:23	2:07	1:12
Difficulty Rating	3	3	2	1
Lynne Sowers				
Time	8:00	3:12	2:24	0:57
Difficulty Rating	3	2	1	1
Annette Kubeshesky				
Time	16:31	7:36	2:25	1.54
Difficulty rating	3	3	2	1
David Kubeshesky				
Time	10:44	6:02	2:45	1:12
Difficulty rating	3	2	1	1
Marianne Tucker				
Time	6:02	3:32	1:59	1:04
Difficulty rating	3	2	2	1
Diana Thomas				
Time	7:05	0:31	2:17	0:27
Difficulty rating	3	1	2	1

Performance Metrics

We collected two different performance based metrics while our users were completing each task. The first metric that we collected was the time, or how long it took them to complete each task. We collected the time to measure the efficiency of the navigation website. The higher the time it took them to complete the task, the less efficient they were. The next performance based metric we used is the difficulty rating. We used a scale from 1 (no problem) to 4 (unable to complete the task). We can use these ratings to establish the performance of the navigation of the target website.