ICM·512

MOD11 & 12: USABILITY TEST REPORT

Bite Organizer

STEVE RABOIN

USABILITY TEST REPORT: TABLE OF CONTENTS

TABLE OF CONTENTS

BITE ORGANIZER: OVERVIEW

People are busy enough. Planning, shopping, prepping, cooking and cleaning are time-consuming and exhausting. It takes a lot of planning if you're health conscious and conscious of your spending. Often times people get off track with their spending and healthy eating habits because they did not plan properly.

Bite Organizer is a recipe app that let's a user store recipes and find new recipes from a database. Ultimately the goal of the app is to go deeper and become more integrated into user's lives and taking some of the stress out of meal planning and prep.

Bite Organizer would include a pantry feature where users can add and track items they have on-hand. When the user finds a recipe they want to make, they can easily check their Pantry and see if they have all the ingredients required for the recipe.

If the user does not have al required ingredients, needed ingredients could be exported to an editable shopping list feature that serves as the user's main grocery shopping list organizer.

Bite Organizer's Meal Planner feature would allow users to plan meals for a specific time (like a week or month) and create a more robust shopping list that can revolve around sales and growing seasons.

All of this will allow users to get the most out of their grocery dollars and stay in control of their eating habits.

APP FEATURES

RECIPES

The backbone of the app. Here, users can search for recipes by category or specific ingredient.

Users can also store recipes they find online, from other Bite Organizer users, or input them into the database manually.

SHOPPING LIST

This feature allows users to create grocery shopping lists manually.

The app would also allow users to generate shopping lists based on recipes they want to make or have added to their meal planner.

MEAL PLANNER

This feature allows users to plan meals for a week or month. Using this feature would take this app to the next level in improving organization.
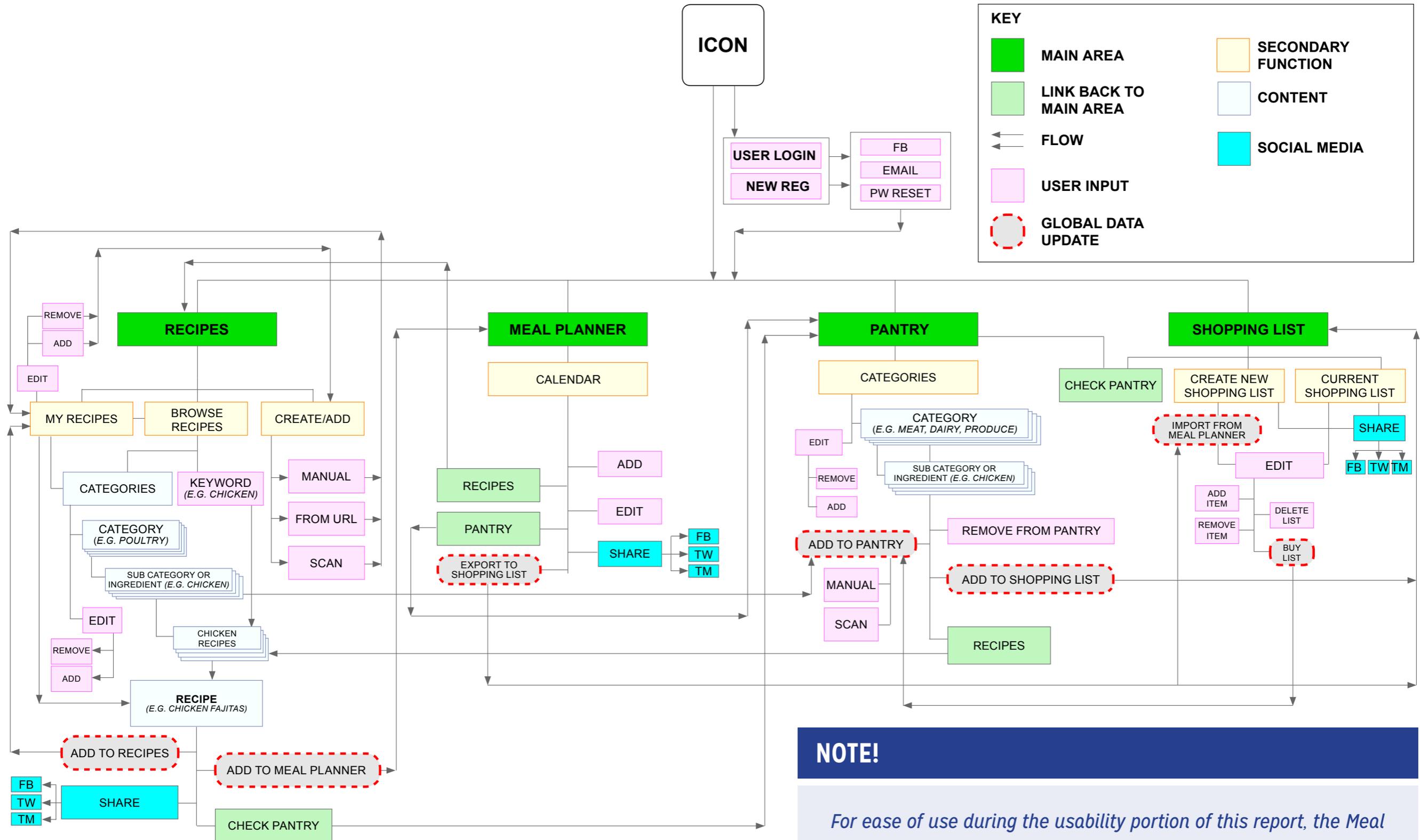
PANTRY

The pantry feature is an easy way users can to reference ingredients they have on-hand

Recipes will display a user's Pantry and show them if they have all ingredients required to prepare that recipe.

At the same time, a user could type in a few odd ingredients that don't obviously go together and the app will generate a recipe they could make.

BITE ORGANIZER: MOBILE INFORMATION ARCHITECTURE

ICON

KEY

	MAIN AREA		SECONDARY FUNCTION
	LINK BACK TO MAIN AREA		CONTENT
←	FLOW		
	USER INPUT		SOCIAL MEDIA
⬭	GLOBAL DATA UPDATE		

USER LOGIN
NEW REG

FB
EMAIL
PW RESET

RECIPES

REMOVE
ADD
EDIT

MY RECIPES
BROWSE RECIPES
CREATE/ADD

CATEGORIES
KEYWORD (E.G. CHICKEN)

MANUAL
FROM URL
SCAN

CATEGORY (E.G. POULTRY)

SUB CATEGORY OR INGREDIENT (E.G. CHICKEN)

EDIT

CHICKEN RECIPES

REMOVE
ADD

RECIPE (E.G. CHICKEN FAJITAS)

ADD TO RECIPES
ADD TO MEAL PLANNER

FB
TW
TM
SHARE
CHECK PANTRY

MEAL PLANNER

CALENDAR

RECIPES
PANTRY

ADD
EDIT

SHARE
FB
TW
TM

EXPORT TO SHOPPING LIST

PANTRY

CATEGORIES

EDIT
REMOVE
ADD

CATEGORY (E.G. MEAT, DAIRY, PRODUCE)

SUB CATEGORY OR INGREDIENT (E.G. CHICKEN)

ADD TO PANTRY
REMOVE FROM PANTRY

MANUAL
SCAN

ADD TO SHOPPING LIST

RECIPES

SHOPPING LIST

CHECK PANTRY
CREATE NEW SHOPPING LIST
CURRENT SHOPPING LIST

IMPORT FROM MEAL PLANNER
SHARE
FB TW TM

EDIT

ADD ITEM
REMOVE ITEM
DELETE LIST
BUY LIST

NOTE!

For ease of use during the usability portion of this report, the Meal Planner function was eliminated. During research and testing, the idea of a Meal Planner was suggested and will require further development and testing.

BITE ORGANIZER: USABILITY TEST

To effectively asses the usability of the Bite Organizer app, a paper prototype was developed a usability test was administered to three random subjects with varying backgrounds, interests and experience with technology. Usability tests showed what works well and what does not. Below are the set of tasks and questions given to each subjects.

Action 1: Please log into the app.

Question: Does the list of menu options indicate what this app is for? Please describe what you think this app is for.

Action 2: Please search and find a recipe for Chicken Fajitas.

Question: What did you notice? Were you confused or unclear where to go at any point?

Action 3: Please add the recipe for chicken fajitas to your recipes.

Question: Could you please describe anything odd or confusing?

Action 4: Please return to the Home screen.

Action 5: There is a recipe for Cola Pot Roast saved in the app. Can you find it?

Question: Was the path to finding the Cola Pot Roast recipe difficult to navigate? Did you have to stop and think at any point?

Question: Do you have all items required to make this recipe?

Action 6: Could you please add any missing ingredients to your shopping list?

Question: Could describe your experience?

Action 7: Please return to the Home screen.

Action 8: Could you please tell me what Produce Items are in the Pantry?

Action 9: Please remove the strawberries from your pantry.

Action 10: Please add strawberries to your pantry.

Action 11: Please return Home.

Question: Could you please provide feedback regarding the app? What works well, and what doesn't?

Question: Would an app like this be useful to you?

Question: How could this app be improved?

NOTE!

The Bite Organizer paper prototype can be viewed here:
https://popapp.in/projects/53dad07d3fd3ccd25b6b0077/preview

AUBREY: THE BUSY MOM

"I'm all for anything that would make grocery shopping and meal prep easier, but I don't need another chore."

BACKGROUND

Aubrey lives in central Connecticut with her husband and two children, ages two and four. She is a full-time clinical applications specialist at a hospital in the area. Her job is very stressful and takes up most of her mental capacity on a daily basis. Aubrey spend most of her work day compiling data and building software interfaces so she opts for pen and paper to organize her personal life. She admits to suffering from what she calls, "Interface Burnout" at times.

Aubrey has her hands full outside of work attempting to maintain her home and care for her two young kids. Busy doesn't even begin to describe her day.

Aubrey makes enough money to live comfortably, so she tries to save as much time as possible. She uses Amazon prime for bulk monthly purchases of household goods and has recently started scheduling a grocery delivery service to arrive at her home on Fridays when she works from home.

Aubrey is very health conscious and fitness is her passion. Aubrey likes to prepare most of the family's meals at home. This requires a lot of time planning and cooking.

When Aubrey's work schedule is busy, grocery shopping and meal plans tend to take a back seat. Mealtimes get especially chaotic toward the end of a busy week when a few staple ingredients run out.

USER PROFILE SNAPSHOT

AGE & STATUS
32, Married with 2 children ages 2 and 4

EMPLOYMENT
Clinical Application Specialist (Epic Builder)

INCOME
$85K

ACTIVITIES & HOBBIES
Playing with her two children, Health and fitness, Spending time with her husband

TECHNOLOGY
Heavy user at work. Extremely tech savvy.

MOTIVATION:
- Be more efficient with her meal planning and grocery shopping.
- Spend less time running errands, spend more with her family.
- Prepare healthy food for her family.

TASKS TO PERFORM:
- Organize meal plans and shopping lists.
- Find healthy meals that a 2-year-old and 4-year-old would eat.
- Send a shopping list to her husband so he can grab a few items she needs on his way home from work.
- Share fun recipes with her sister, who also has young children.

SITUATIONS FOR USING BITE ORGANIZER:
- Next week will be a busy work week for Aubrey. She will plan and prepare all meals for that week on Sunday so she doesn't have to cook. She browses healthy recipes ideas online from her iPhone.
- It's the end of the week and Aubrey is exhausted. Most have the groceries have been used up. Aubrey can't decide what to make for dinner. Frustrated, she grabs her phone and orders pizza.

TECH AUBREY USES:
- **Amazon Prime**
- **Stop & Shop Peapod**
- **Facebook**
- **Pinterest**

AUBREY'S EXPERIENCE:

Aubrey did well with the app.

She is an application analyst so tracking her test was difficult. She quickly clicked through section after section whenever she got stuck.

She was very quick to figure out the app and any deficiencies.

Action 1: Please log into the app.
SUCCESS: Jack logs in through Facebook.

Question: Does the list of menu options indicate what this app is for? Please describe what you think this app is for.
"Looks like its an app for recipes, shopping lists and keeping an inventory of ingredients."

Action 2: Please search and find a recipe for Chicken Fajitas?
Slight hesitation. Aubrey is successful.

Question: What did you notice? Were you confused or unclear where to go at any point?
"There should be a search field, somewhere at the top." "That's where I want to go first."

Action 3: Please add the recipe for chicken fajitas to your recipes.
SUCCESS,

Question: Could you please describe anything odd or confusing?
"After adding recipe, I want to go view my recipes." "The app sent me back to chicken recipes."

Action 4: Please return to the Home screen.
SUCCESS

Action 5: There is a recipe for Cola Pot Roast saved in the app. Can you find it?
SUCCESS

Question: Was the path to finding the Cola Pot Roast recipe difficult to navigate? Did you have to stop and think at any point?

Question: Do you have all items required to make this recipe?
"No, I need pot roast and cola."

Action 6: Could you please add any missing ingredients to your shopping list?
Clicks item. Confused. Hesitation. Clicks Back. Click Home Button. Jack experience a sever breakdown and fault in the paper prototype. "Well, this is not very intuitive."

Question: Could describe your experience?
Aubrey clicks on items. "Are they added automatically, or do I have to o something else?" She is confused. Does not know what to do after add

Action 7: Please return to the Home screen.
SUCCESS

Action 8: Could you please tell me what Produce Items are in the Pantry?
SUCCESS

Action 9: Please remove the strawberries from your pantry.
SUCCESS

Action 10: Please add strawberries to your pantry.
SUCCESS."Wait, how did they get there? Shouldn't I have to type in something?" "This part is confusing."

Action 11: Please return Home.
SUCCESS

Question: Could you please provide feedback regarding the app? What works well, and what doesn't?
"I think it has potential, but it need a lot of work." "The recipe to shopping cart was confusing."

Question: Would an app like this be useful to you?
"Yes, its nice to know what items I need while shopping."

"I would want to waste my time adding items to the pantry ... unless I could just click and add items sort of like Pinterest."

Question: How could this app be improved?
"It would be great if I could link this to my Pea Pod or Amazon account."

"I'd love it if it could link this to some sort of couping system, too."

Where Aubrey got stuck:

Aubrey didn't mess around when it came to testing the Bite Organizer. She clicked through various areas of the app very quickly in order to figure it out.

She got stuck on this screen and discovered a glaring error in the paper prototype.

This screen does not truly offer a way out that a user would really want.

Aubrey wanted to go view the saved recipe, that option is not available here.

JACK: THE MAN'S MAN

"I've been using pen and paper for my lists my whole life, why complicate things?"

BACKGROUND

Jack is a staff photographer for a hospital in Hartford, Connecticut. He's worked there for twenty years and plans to retire in a few years.

Jack is traditional, white American man. He's old-school, a guy's guy. Besides grilling and cooking the occasional breakfast on weekends, Jack's wife does the majority of the cooking, grocery shopping and home making while Jack fixes things around the house, maintains the yard and the vehicles. Jack lives a simple life. He has built himself a routine that works for him and see no need to change it.

His favorite activities include golfing, hiking, maintaining his perfect lawn, gardening, going to his vacation house on Cape Cod with his wife and visiting his two adult children.

USER PROFILE SNAPSHOT

AGE & STATUS
57, Married, 2 children ages 23 and 26 (out of the house)

EMPLOYMENT
Staff Photographer

INCOME
$70 - $100

ACTIVITIES & HOBBIES
Golfing, Hiking, Spending time with his wife, Gardening and yard-work.

TECHNOLOGY
Minimal user - only what is required for work (email, Photoshop). Not tech savvy.

MOTIVATION:

- Be more efficient with her meal planning and grocery shopping.
- Spend less time running errands, spend more with her family.
- Prepare healthy food for her family.

TASKS TO PERFORM:

- Find s new recipe when its Jack's turn to cook dinner.
- Jack's wife needs a few things from the store. She sends Jack a list to his phone reminding him to stop at the store on his way home from work.

SITUATIONS FOR USING BITE ORGANIZER:

- Jack's daughter is in town and he wants to prepare dinner. He's no gourmet chef, but wants to impress her. He flips through a cook book at home.
- Jack just got a smoker for father's day. He's not quite sure how to use it or have any recipes that require smoking. He googles smoking instructions and recipes online at work.

TECH JACK ALREADY USES:

- **iPhone (as a phone)**
- **Internet**
- **Email**

JACK'S EXPERIENCE:

Jack did well with the app due to his slow approach. He read every button before making a decision to move forward. Jack navigated through the app well and the icons seemed to be the easiest way for him to get around. He performed most of the tasks well and found some usability issues that need to be addressed.

Action 1: Please log into the app.
SUCCESS: Jack logs in by email.

Question: Does the list of menu options indicate what this app is for? Please describe what you think this app is for.
"Looks like its an app for recipes, shopping lists and keeping an inventory of ingredients."

Action 2: Please search and find a recipe for Chicken Fajitas?
"Do I Browse Recipes or is it in My Recipes?"Some hesitation, but Jack is ultimately successful.

Question: What did you notice? Were you confused or unclear where to go at any point?
"I wasn't quite sure where to go. I didn't know whether to "Browse" or look through My Recipes."

Action 3: Please add the recipe for chicken fajitas to your recipes.
SUCCESS, "I guess it was added, I'm not sure." "Should I log out now?"

Question: Could you please describe anything odd or confusing?
"I'm not sure where to go after adding this recipe." "Hmm … I guess I'd go view this recipe if I was planning to make it right now, otherwise, I assume its in My Recipe."

Action 4: Please return to the Home screen.
SUCCESS

Action 5: There is a recipe for Cola Pot Roast saved in the app. Can you find it?
"Hmm, is pot roast beef?" Some hesitation at meat choice screen, but Jack is successful.

Question: Was the path to finding the Cola Pot Roast recipe difficult to navigate? Did you have to stop and think at any point?
"I wasn't sure if pot roast was beef or pork."

Question: Do you have all items required to make this recipe?
"No, clearly I need pot roast and cola."

Action 6: Could you please add any missing ingredients to your shopping list?
Clicks item. Confused. Hesitation. Clicks Back. Click Home Button. Jack experience a sever breakdown and fault in the paper prototype. "Well, this is not very intuitive."

Question: Could describe your experience?
"I guess they were added, I'm not sure. Adding items from recipe to shopping list is not very intuitive. I think I found an error in the back button, it sent me to a page I hadn't been to before."

Action 7: Please return to the Home screen.
SUCCESS

Action 8: Could you please tell me what Produce Items are in the Pantry?
SUCCESS

Action 9: Please remove the strawberries from your pantry.
Some hesitation, Jack's not sure where to click. He is ultimately successful, but he has to think.

Action 10: Please add strawberries to your pantry.
"How did they automatically appear?" "I think I should have to type something."

Action 11: Please return Home.
SUCCESS

Question: Could you please provide feedback regarding the app? What works well, and what doesn't?
"Getting to the shopping list is difficult and confusing." "I think I should have to type in a search field to add items, not just touch them."

Question: Would an app like this be useful to you?
"Not the Pantry feature. I'm not going to waste my time cataloging and maintaining it." "I could see it being useful to a professional chef or restaurant owner who has to track items closely."

Question: How could this app be improved?
"Make the search function easier." "If pantry items could be added automatically by scanning a bar code or grocery receipt it would be good." "I think high quality photos would make this app better. I'd like to see pictures of the dishes." "You could allow users to upload their own photos of dishes they've prepared?"

Where Jack got stuck:
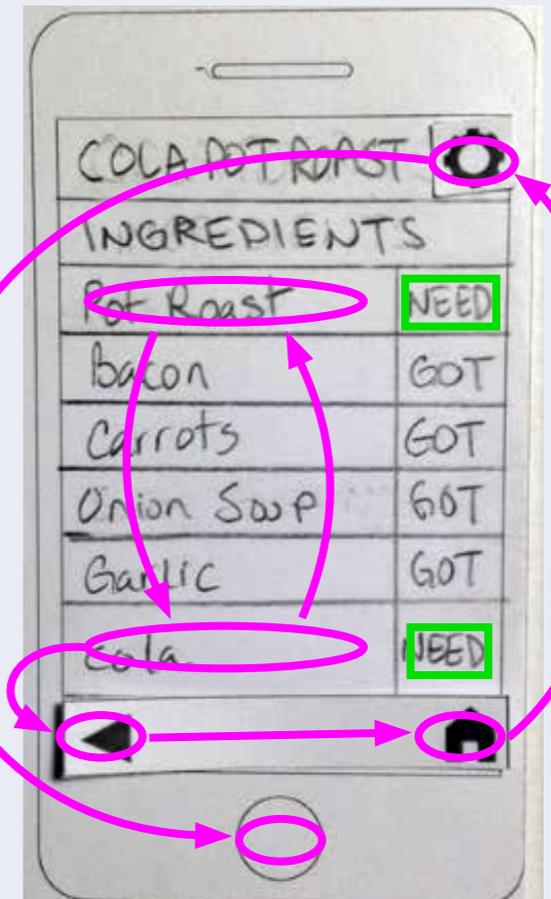
Jack gets confused when asked to add missing ingredients to his shopping list.

The prototype was designed for the user to click the need button indicated in green to add it to the shopping cart.

Jack clicked various buttons indicated in pink on the screen. This lead Jack to various areas of the app that he was not prepared to view, further adding to his confusion.

Jack's confusion exposed the fact this screen does not offer the user the option to "Add" items and assumes they can make the leap.

TINA: THE SOCIAL BUTTERFLY

"I don't cook much because I'm never home."

BACKGROUND

Tina is a graphic designer at a hospital in Hartford, CT. She lives in eastern Connecticut to be closer to her family.

Besides being very close with her family, she has a hyperactive social life. She spends two to three nights out a week with friends and participates in some sort of event on weekends. Some of her favorites include: 5K runs, Beer festivals and Red Sox games. Tina can't say no to an invitation or request from family and friends.

He social activity keeps her away from home most of the time. She doesn't cook for herself often, but will prepare a special dish to bring to her parent's home a few times per month. When she does cook, she goes all-out to make sure she has the very best ingredients possible.

Tina is very health conscious, she exercises a lot and eats out way more than she wants to.

She has a 1 hour commute each way on a good day.

The three hours spent commuting to and from work stresses her out most days. After her ride home and a trip to the gym, the last thing she wants to do is go grocery shopping.

USER PROFILE SNAPSHOT

AGE & STATUS
35, Single, 1 Dog

EMPLOYMENT
Graphic Designer

INCOME
$50 - $60

ACTIVITIES & HOBBIES
Anything new and exciting, fitness, running, trips, spending time with family

TECHNOLOGY
Heavy user of apps and social media. Tech savvy.

MOTIVATION:

- Be more efficient with her meal planning and grocery shopping she forgets what she has on hand and often overspends in the grocery store.
- Spend less time running errands, spend more with her friends and family.
- Eat healthier.

TASKS TO PERFORM:

- Keep track of food in her house.
- Quickly generate shoppings lists.
- Share recipes with her mom and friends.

SITUATIONS FOR USING BITE ORGANIZER:

- Tina's making dinner for her parents. She wants to prepare something special so she searches recipes online.
- Tina has an ingredient and doesn't know what to do with it. She flips through a cookbook her mom gave her to find a recipe.
- Tina hasn't had dinner at home in a few nights. Her pantry looks pretty sad, she doesn't know what to make and ends up eating out.

TECH TINA USES:

- **Facebook**
- **Pinterest**
- **Uber**
- **Twitter**
- **Foursquare**

TINA'S EXPERIENCE:

Tina surprisingly got stuck in a few spots during the usability test. She is constantly connected to her smart phone and uses apps regularly. Her errors were a result of assumptions by the designers. Tina is quick to blame herself when she encounters issues.

Action 1: Please log into the app.
SUCCESS: Tina logs in through Facebook.

Question: Does the list of menu options indicate what this app is for? Please describe what you think this app is for.
"I'm assuming its a cooking app or a recipe app." "I assume this app will tell me what I can make with ingredients I have."

Action 2: Please search and find a recipe for Chicken Fajitas?
Tina hesitates. "Do I search in the pantry?" "I'm looking for a search field." Tina goes back to home page, clicks back and forth between the home screen and "Browse Recipes" She finally finds the recipe after several failed attempts.

Question: What did you notice? Were you confused or unclear where to go at any point?
"I didn't know chicken was poultry, I'm stupid." "I didn't see chicken, I must have been paying attention."

Action 3: Please add the recipe for chicken fajitas to your recipes.
SUCCESSFUL. But Tina does not know what to do after adding. Unclear and confused.

Question: Could you please describe anything odd or confusing?
"It wasn't totally clear, I hit home instead of add." "That part wasn't clear."

Action 4: Please return to the Home screen.
SUCCESS

Action 5: There is a recipe for Cola Pot Roast saved in the app. Can you find it?
"That's pork, right?" Tina attempts to pull up a search field. No search function. Tina continues to click "Pork" link. Tina backs out to home screen. Tina cannot complete task.

Question: Was the path to finding the Cola Pot Roast recipe difficult to navigate? Did you have to stop and think at any point?
"Difficult." I don't cook and I don't eat much meat, I don't know the cuts." "I would have just searched in a field or something."

Question: Do you have all items required to make this recipe?
"No, I need pot roast and cola."

Action 6: Could you please add any missing ingredients to your shopping list?
SUCCESS

Question: Could describe your experience?
Adding missing items was not confusing, but maybe it should be a "+" instead of a "NEED"?

Action 7: Please return to the Home screen.
SUCCESS

Action 8: Could you please tell me what Produce Items are in the Pantry?
SUCCESS

Action 9: Please remove the strawberries from your pantry.
SUCCESS. "Items should just have a "-" next to them, not a "+", I'd only remove items that are already in my pantry, does that make sense?"

Action 10: Please add strawberries to your pantry.
SUCCESS "I was expecting to type in a field."

**Action 11:** Please return Home.
SUCCESS

Question: Could you please provide feedback regarding the app? What works well, and what doesn't?
"Adding and removing items to and from the pantry could be clarified." "The search field should be more evident." "It would also help if I knew more about cooking."

Question: Would an app like this be useful to you?
"Yes." "I make a lot of lists for myself, this would be great to have my shopping lists combined with a few recipes and my pantry in one app." I could see using something like this if I wanted to make something special."

Question: How could this app be improved?
"I'd improve the pantry editing system." "I'd also make searching easier, you could allow users to search by ingredient, listed by letter instead of type of food?"

Where Tina got stuck:
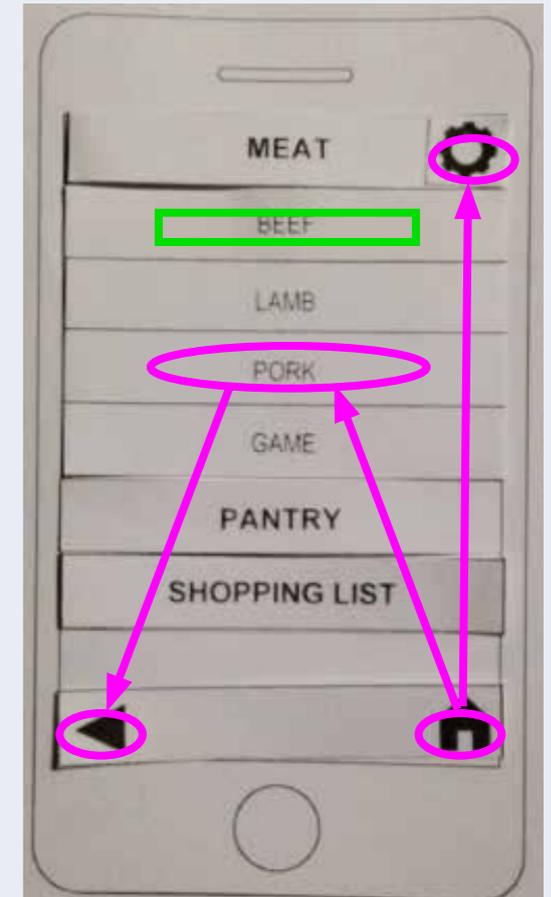
Tina got stuck because she didn't know pot roast was categorized under "beef".

To make matters worse, there was no way for her to search, so she continued to become confused as she clicked back and forth to other areas of the app.

Tina blamed herself every time she did not complete the task as if she was the problem, not the app itself.

Perhaps the app needs a better search function that allows users to search alphabetically rather than food category.

BITE ORGANIZER: SUMMARY

Bite Organizer is off to a great start but still needs a lot of work. The usability tests showed that nothing can ever be assumed of the user. Testing paper prototypes on three completely different users, showed completely different results. The outcome of our testing was as varied as the subjects we tested. There were consistencies among found among all three.

Some of the things that worked well are:

Icons
All subjects were successful able to navigate the paper prototype using the icon navigation system.

Simplicity
The subjects were able to assume what the app was for simply by looking at the home screen and the list of features.

Flow
The subjects were all able to follow the flow of the app in a logical manor. With some improvements this could become better.

There is also many things that can be improved, such as:

The Search Function.
All subjects mentioned the lack of search function. All three had an initial reaching to type in a search for things they could not find. The search function will need to be reworked.

Categories
We made an error by assuming users would know what a pot roast is. Two out of three of our users did not. We will implement an ability to browse alphabetically to allow users to find items they are unsure of.

More intuitive labels
Jack and Aubrey both got stuck when buttons on the screen did not offer them a choice they wanted. This only added confusion to their experience. To improve this, we will have to re-work how the user can save recipes in the app and also how users can add need ingredients to their shopping lists.

This exercise is a great start. A great deal was learned while testing paper prototypes with actual users. There is much to be done but making improvements will allow this app to be much better moving forward.