My goal was to find ways to improve and augment either the grocery shopping experience. I wanted to learn more about the habits some individuals have before, during, and after grocery shopping, as well as how different individuals dealt with different situations. In order to do this study, three participants were observed and/or interviewed, two of which were observed directly while the actions were taking place, and one of whom was asked to walk me through his routine.

Elaine:

Elaine is a student at UCSD who typically works the graveyard shift as a Community Service Officer. Being a college student, she generally has to budget very wisely and she has to plan out what she buys in advance to accommodate his current paycheck. She typically doesn't go grocery shopping very often, due to the fact that she doesn't have much time, as well as the fact that she doesn't cook very often. However, when she does go grocery shopping, she typically buys in bulk and makes sure she stocks up on enough food for the next month or two.

While following Elaine around in the grocery store, the first thing I noticed was that she was very susceptible to buying items that were on sale or in bundle deals. The first breakdown was that she did not prepare any sort of grocery list, and she practically just bought whatever she felt like she needed at the time. Whenever we passed by an item that had a yellow tag, she would always chime in with something along the lines of "Ooh! I need that". I asked her if she really needed it, and she confirmed with something similar to "Yes, I have to have it!" and proceeded to put the indicated grocery item into her shopping cart. Because of this, she did not really watch how much money she was actually spending and just bought whatever she saw on a whim.

As Elaine was buying vegetables and fruit, she would always feel them and/or "knock" on them as a scale for how ripe a particular item was. She does this for quite a long time, which makes me wonder whether knocking on fruit and feeling vegetables was more of a result of habit, because it seems quite difficult to differentiate which stalk of broccoli is better simply by probing them.

The other breakdown I realized was that Elaine finishes grocery shopping after about three hours. Maybe if she was notified whenever she was taking too long looking at a particular item, she could have cut down her shopping time. While unloading the car to bring the groceries into the house, she had to make multiple trips back and forth from her car due to the gargantuan amount of groceries she bought.

Brandon:

Brandon is also a student at UCSD but is on the other side of the spectrum as Elaine in the sense that he shops frequently. According to Brandon, he goes to the grocery store approximately two times a week. He does this because he tends to cook a lot, and has to go back and forth from the grocery store in order to buy fresh produce.

Before he enters the store, Brandon makes sure to get a shopping cart, even though it does not seem like he is buying many groceries on her list. He immediately walks towards the aisle of the first item on his grocery list, which is milk. Brandon grabs the milk and puts it in his shopping cart and starts heading over to the "bakery" section of the store, where he stops next to the donuts and complains a little bit about him being on a diet. He resists putting the donuts into his shopping cart and moves towards the vegetables/fruits.

Similar to Elaine, Brandon also knocks on the watermelons to test which one is the ripest. He says he does this because his mom used to do this as well, and that his mom told him that the more hollow a watermelon sounds when slapped means that the watermelon is riper. Furthermore, he explains how the riper watermelons seem heavier for their size. In addition to this particular habit, he would also check the expiration date of everything he bought and made sure to buy the product with the latest expiration date. However, he would spend a long time doing so, because of the fact that he must check nearly every single item.

As we complete going through the checklist, we go to the checkout line. Before we have a chance to pay, Brandon experiences a breakdown runs to grab the box of donuts we passed by before. The donuts were not a part of his grocery list, nor was it part of her budget. When I asked him why he decided to buy the donuts, he explained that the donuts were "calling to [him]", and that he "couldn't just leave [the donuts] uneaten".

Allison:

Allison is an experienced shopper. She is a stay-at-home mom with two children, and I asked her to relay her most recent shopping experience to me. Allison explains how she always brings her children, Timmy and Sarah, along with her because of the fact that she believes that grocery shopping is a learning experience as well as a bonding experience for her and her children. She always has to use a cart due to the fact that she cannot control both children if she were holding a basket, even if she only needs to buy a small amount of groceries.

Once they get inside the store, Timmy immediately runs towards the candy aisle. However, the candy contains nuts, which Timmy is allergic to. The first breakdown happens because he doesn't understand that the candy is bad for him and begins to throw a tantrum in the middle of the store. While Allison is trying to console Timmy, the second breakdown happens: Sarah ends up running off into the cereal section by herself. Allison picks up a bag of candy for Timmy that he is not allergic to and then runs after Sarah.

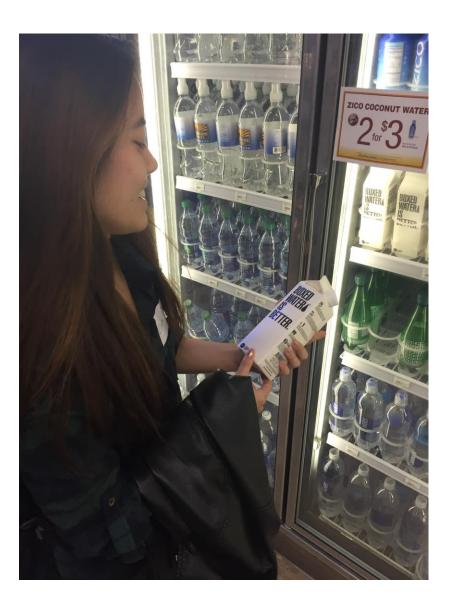
There are a couple minutes of peace and quiet when Allison is able to buy a couple of vegetables and bread. Timmy and Sarah both want peaches, and Allison has to explain to them that they are not in season.

As they begin waiting at the checkout line, a final breakdown happens, when Sarah notices the gum and candy placed above the conveyer belt and starts pointing at them furiously. It is not necessary for Allison to buy the candy for Sarah, but in order to avoid making a scene and leave the premises as soon as possible, Allison asks Sarah which one she wants and puts it on the belt.

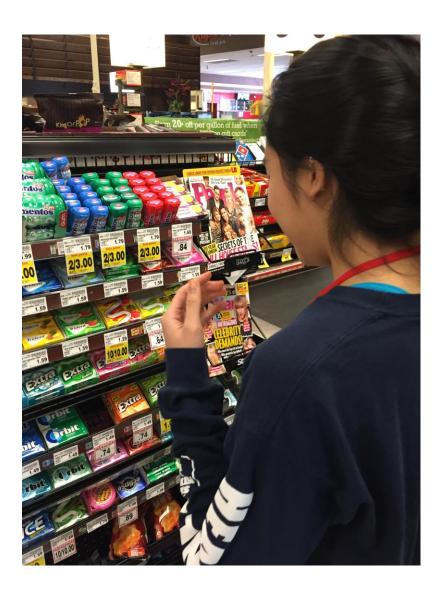
User Needs:

- 1) Shopper needs to find a way to stay within budget and make sure not to spend more than their amount of income
- 2) Shopper needs to find a way to resist buying products and items not on a set grocery list
- 3) Shopper needs to find a way to be able to find out sales beforehand to avoid being coerced into buying on-sale items the day of
- 4) Shopper needs to find an efficient way to determine which produce are riper/which produce are more worth their money
- 5) Shopper needs to find a way to get in, buy what they need, and get out in a timely and efficient manner.
- 6) Shopper needs a way to be able to bring in all their groceries inside in less trips, because multiple trips to and from a vehicle can be annoying and unnecessary
- 7) Shopper needs a way to determine whether they need a shopping cart or just a basket depending on the amount of items they are planning on buying
- 8) Shopper needs a way to be able to map out what the most efficient path is to buy all the groceries in one loop around the grocery store.
- 9) Shopper needs to be able to avoid buying products based on cravings when they see something they want to eat
- 10) Shopper needs an efficient way to check which product has the latest expiration date, because looking at every single item is not very time-friendly.
- 11) Shopper needs to find the most efficient way to spend his/her limited amount of money, because of the fact that many are broke college students who can't afford to spend carelessly.
- 12) Shopper needs a way to prevent children from influencing them to buy unnecessary products and food
- 13) Shopper needs a way to minimize the time spent waiting in the checkout line to prevent impulsively buying things such as magazines, gum, candy, etc. above the conveyer belt
- 14) Shopper needs a way to keep track of where their friends/children are in the store when separated
- 15) Shopper needs to know when the optimal time is to go shopping; for example, when produce first comes in, or when there is the least amount of people in the store

Caption 1: While going down her shopping list, Elaine comes across and contemplates buying boxed water, simply because of the fact that it is on sale. She stares at the boxed water for a while, and is extremely tempted to buy it because she has never tried boxed water before and believes it will be an enticing experience.



Caption 2: Allison reaches for the candy above the conveyer belt after Sarah demands for it. She does this as quickly as possible and pays for the overpriced candy in an attempt to avoid making a scene in the grocery store.



Caption 3: Brandon looks through the gallons of milk to determine which carton had the latest expiration date. He does this so that he is not rushed to finish the milk and has an extra couple of days to drink the milk before it goes bad.

