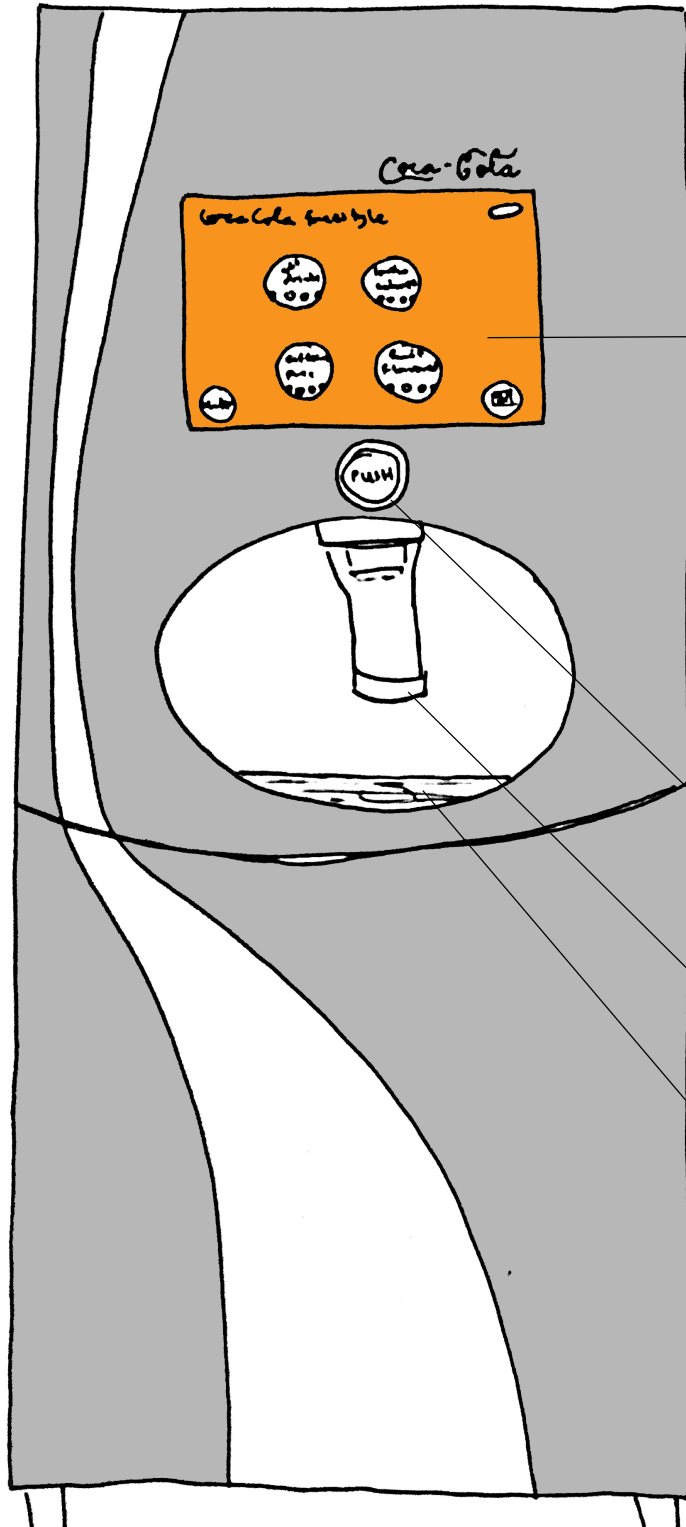


PERSONAS and STORYBOARDING

COCACOLA FREESTYLE KIOSK



The Coca-Cola Freestyle Kiosk, sketched in Figure 1, is a touchscreen soda machine found at Andrews, an eatery at Brown University. It categorizes different drink options by type, brand, and flavor. The machine allows users to choose from a plethora of drinks and even mix and match their own beverages.

TOUCHSCREEN INTERFACE

This is the main part of the soda machine because it is where the user can find all the drink options and where they choose their drink(s). The first screen displays 4 categories: *all drinks*, *low/no calorie*, *caffeine free*, and *fruit flavored*. Upon tapping on one of the first 3 categories, a screen with all the different brands appear. The user can then choose a brand and see the different flavors. The *fruit flavored* option leads to a screen with the different flavors rather than the brands.

PUSH BUTTON

A push and hold button that releases the selected beverage.

ICE DISPENSER

A pretty standard ice dispenser where the user pushes against the lever to get the ice.

DRAIN TRAY/BASE

Area where user can set their cup when filling it up with their drink of choice. It also functions as a drain for any spills.

Figure 1 A sketch of the public interface, The Coca-Cola Freestyle Kiosk

KEY OBSERVATIONS

PERSON 1

It's around 11:30am and the lines at Andrews are moderate. A person is carrying a bowl of pho in one hand and holding a 20-oz. cup in the other. The person looks at the screen and uses the middle bone on their index finger on the hand holding the cup to make a selection. They talk animatedly to their friend as they tap again on the screen. They put ice in the cup and fill it up with their drink. They do this while continuing to talk to their friend only glancing every so often to look at their cup.

PERSON 2

It's around noon and it's busy and loud at Andrews. Many people are talking and the music is blasting. All the lines for food are long and a lot of people are getting drinks from the water fountain and soda dispensers. A person holding an empty blue Nalgene bottle with their backpack on is staring at the touchscreen soda machine screen. They tap on the "water" option at the bottom left of the screen. They push the push button and watch the water come out of the machine. They put their water bottle beneath the fountain and push the "push" button once and look up at the screen. They push, hold, release until their water bottle is filled.

PERSON 3

It is past peak lunch time at Andrews (around 2pm) and the lines have died down. A person sets their pho on the counter to the left of the machine and grabs the cup from their mouth to put some ice in it before setting it down below the touchscreen soda machine dispenser. They choose an option on the first screen and make a selection on the next. They then push the push button filling up their cup about halfway with their gaze on the cup. They go back to the original screen and navigate to another screen with different selections. They trace the options with their pointer finger before tapping on a selection. They push the push button until the cup is filled and step aside to the counter to cover it with a lid.

PERSON 4

A person with their phone in their left hand and a 20-oz cup on their right is in line for the touchscreen soda machine. They are watching the person in front of them while checking their phone. When it is their turn, they choose a category on the first screen and they put their phone in their back pocket. They set their cup down and look at the screen and furrow their eyebrows looking at all the options. They tap on an option and hold their cup and push the push button once, looking at their cup. They take a sip of the drink and pour out the drink. They choose another option and try it again. They then fill their cup with ice halfway and hold the push button until their cup is filled.

PERSON 5

A person walks with a companion to the touchscreen soda machine and the person continues talking to their companion while filling their cup with ice. The person taps on a category then makes a selection and fills their cup about 2/3 of the way. They go back to the previous screen and tap on another selection and fill their cup, all while having a conversation with their companion.

PERSON 6

A person holding a sandwich in one hand and a cup in the other walks to the touchscreen soda machine and leaves their sandwich on the counter to the left of the machine. They put ice in their cup and go through each drink category displayed on the first screen. They choose a category, scan the options by pressing different tabs and options, go back to the main menu and repeat. They do this until they've looked at all options then finally choose a category on the main menu and a beverage on the next screen then push the button to fill up their cup.

SUMMARY OF INTERVIEW QUESTIONS & RESPONSES

- | | | |
|---|--|--|
| 1. What do you like about the machine? | <ul style="list-style-type: none">• “I like that there are a lot of options. I can make my own drinks so I usually get Sprite and lemonade. I also like that there are different categories because sometimes I choose the low/no calorie when I’m trying to be healthy but want a flavored drink. It’s also easy to use.” | <ul style="list-style-type: none">• “I like that there are different categories. I also like that there are a lot of options.” |
| 2. What don’t you like about the machine? | <ul style="list-style-type: none">• “Nothing really... Well actually, sometimes it lags when you touch something and you accidentally end up pressing something you didn’t want cause the machine made you think you didn’t press the button.” | <ul style="list-style-type: none">• “I guess there are too many options and it can be overwhelming” |
| 3. When was the last time you used the machine? | <ul style="list-style-type: none">• “Yesterday. I like coming to Andrews for lunch and I usually get the pizza combo which comes with a drink so I always get my drink from this machine.” | <ul style="list-style-type: none">• “This is actually my first time using it” |
| 4. Recall the first time you used the machine. How did you feel? | <ul style="list-style-type: none">• “It was my freshman year because I lived in Morris so I came here more often. I think I might have felt excited...because there were so many drink options. I also already was in the habit of mixing drinks whenever I went to the Ratty so I guess I thought it was cool to have it all in one machine...although it does take a little longer with all the button pressing” | <ul style="list-style-type: none">• “It was a little intimidating since I’ve never used it before, but I saw other people use it so I thought it shouldn’t be too difficult. And it wasn’t. It’s an intuitive machine.” |
| 5. What do you think would make the machine better? | <ul style="list-style-type: none">• “The screen to respond faster or some type of confirmation to let me know that I tapped on something. It would be nice to have some premade drinks maybe based on what’s popular” | <ul style="list-style-type: none">• “I think it takes too long to choose a drink so if there was a way to show the most popular drinks first that would probably save time” |
| 6. Why did you choose to use this machine over the other soda dispensers? | <ul style="list-style-type: none">• “Like I said, I like mixing my drinks and this has more options than those other soda machines here at Andrews” | <ul style="list-style-type: none">• “I just wanted to try it. I don’t think I’ll be using it again or at least not regularly. The people who use it probably have favorite drinks here and I don’t know if I want to dedicate time to looking for a favorite drink. I’m fine with what they have at the other soda machines” |

NOTES:

- New users took longer on the machine and switched between different categories.
- Returning users knew what drink they were getting and knew where to find it. They used the machine efficiently because they were familiar with the interface.
- There was some confusion with the “Push” button.
- Several returning users made mixed drinks.

MENTAL MODELS

USER 1

A user who regularly uses the touchscreen soda machine knows exactly what kind of drink they want. They get the same drink every time, Minute Maid and Fanta, so they don't really need to pay full attention to the screen when making their selection. This is a drink they discovered a long time ago so they can multitask when using the machine and they are very efficient when getting their drink. They are usually in a hurry and are constantly thinking about the next thing on their agenda.

EMPATHY MAPS

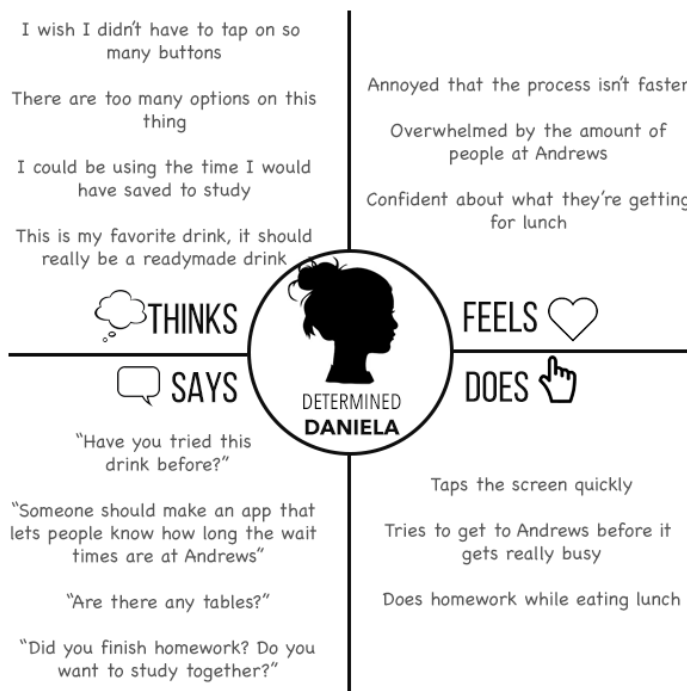


Figure 2 Determined Daniela is a junior concentrating in Biology. She is taking 5 classes and is on the e-board of 2 clubs. She's on club basketball and always has a full schedule. She usually has 11-12 free on Mondays to get lunch.

USER TYPE 1

The user in Figure 2 is meant to be a personality that encompasses busy students who are already familiar with the interface and have no time to waste. I observed and interviewed several users who efficiently used the machine and knew where to tap on the screen, these users seemed to exhibit similar characteristics of multitasking and efficiency, so I made this persona to represent this type of user.

USER 2

A user whose favorite soda is Sprite is intrigued by the touchscreen soda machine, something they hadn't used before but something they have observed a lot of other people use. It is their first time using the machine and they don't want to inconvenience anyone by holding up the line so they try to use the machine when it isn't busy at Andrews. They scan the categories carefully and decide to choose the "all drinks" option to get an overview of what kind of drinks the machine has, and ultimately choose Sprite.

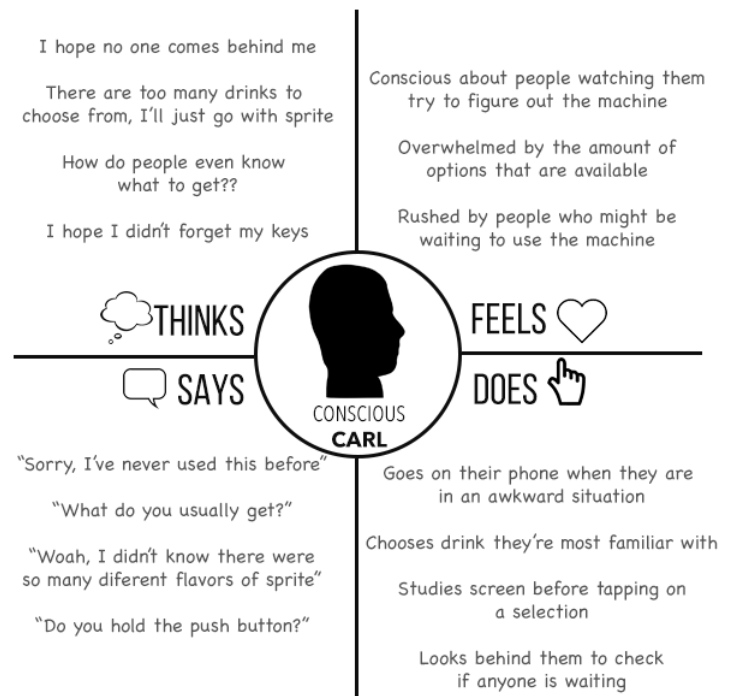
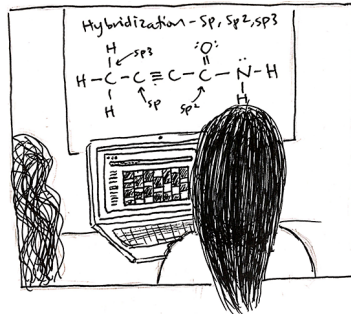


Figure 3 Conscious Carl is a freshman from a small town in California. He hasn't figured out what he wants to study. He lives in Keeney, so he doesn't usually eat at Andrews or the VDUB. However, an upperclassman from his high school invited him to lunch at Andrews.

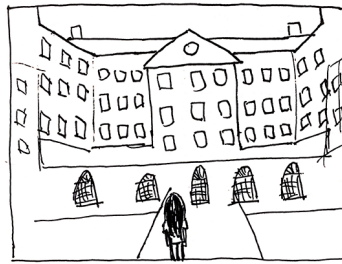
USER TYPE 2

The user in Figure 3 is meant to be a personality that encompasses those who have not used the interface before and are unsure about how to use it. I observed several users who spent some time lingering in front of the interface looking through the different brands and flavors and trying out some of the drinks, but because Andrews is a pretty busy eatery, most would quickly make a selection when someone came behind them, so I made this persona to represent this type of user.

DETERMINED DANIELA



Daniela has class at 10am in Smitty B. She checks her schedule and sees that she is free from 11-12nn to get lunch.



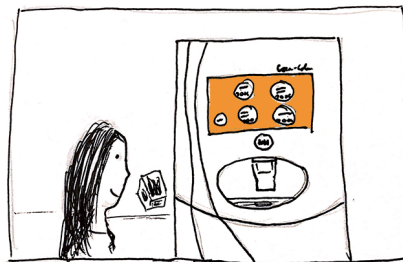
Since she was closeby, she decides to go to Andrews, her favorite dining hall on campus.



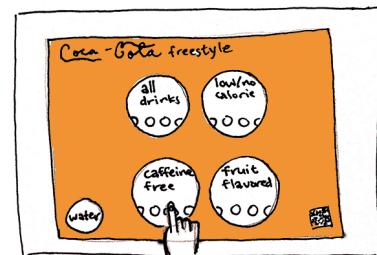
She saw that a line was already forming for pho, the only thing she'll ever eat for lunch at Andrews, so she jumped right into the line upon arriving.



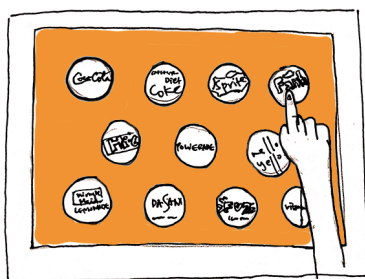
She pays for her pho and a drink and gets a cup from the cashier.



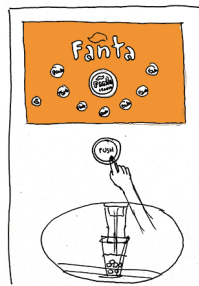
Daniela walks over to the touchscreen soda machine where she always gets her favorite drink.



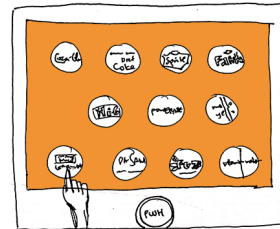
The caffeine free category is the first category she ever tapped on so that is what she continues to choose today.



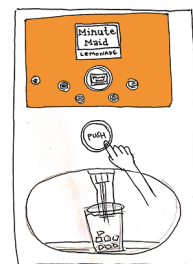
...her first drink choice is Fanta



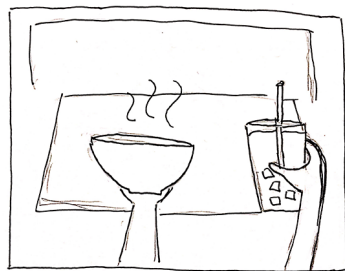
...and she fills her cup about halfway



She goes back to the previous screen and chooses Minute Maid.



...and fills up the rest of her cup



Once she's made her drink, she finds a table.



She sets her pho and her drink on the table and takes out her laptop to do work while having lunch.

Figure 4

STORYBOARD & PERSONA'S GOALS

Daniela is a junior who has gotten more involved in clubs and other projects during her time at Brown. Andrews is her favorite dining hall and when she checks her schedule and sees she has a block of time for lunch and is close by, she goes to Andrews. Daniela values efficiency and is great at multitasking. Her typical lunch is pho and her Fanta + Minute Maid mix drink. She prioritizes beating the lines over finding a table first because she figures she could take her food somewhere else so she has all her stuff on her while getting her pho and making her drink.