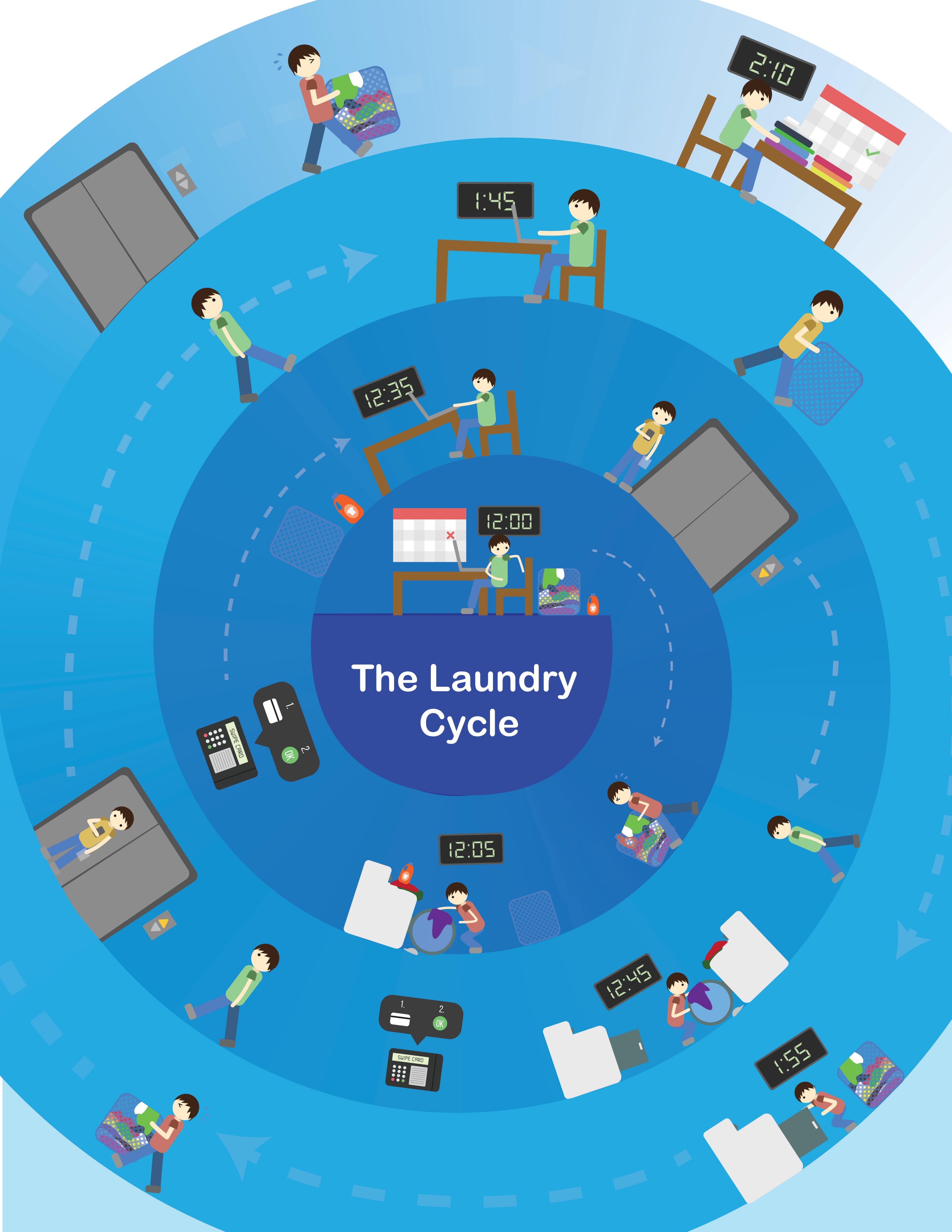
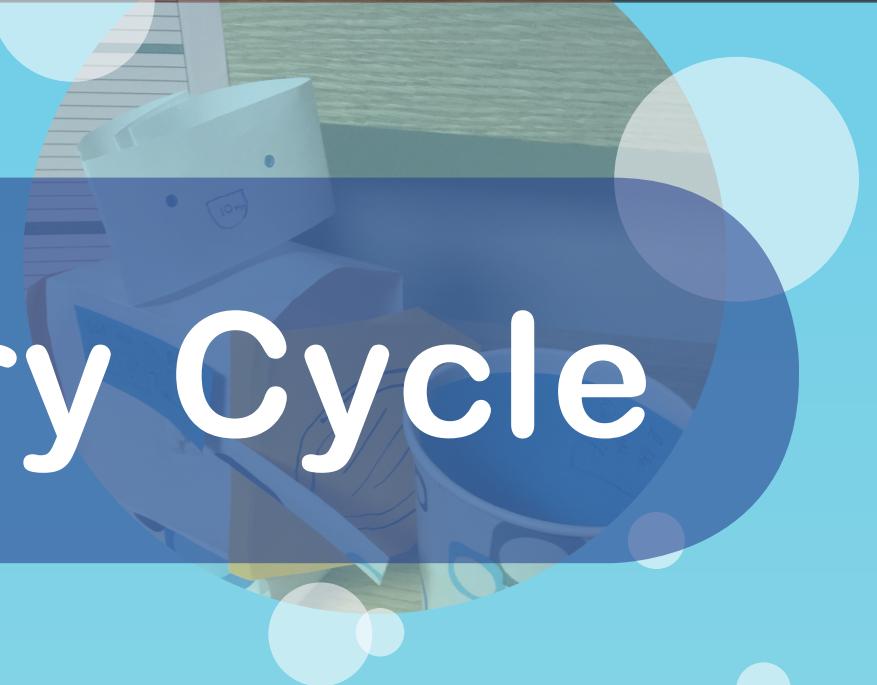


The Laundry Cycle



The Laundry Cycle

Erin Wang



PROCESS | User Goal



Before anything was developed, I had to come up with my main purpose for the assignment. Was it going to be solely on one particular aspect of laundry? Or was it going to be the full process? Who is doing the laundry? I decided that it would be the most fitting if I researched the whole process in the perspective of a busy college student. There are many connections and patterns throughout the process, and the only way to see that clearly is by starting right as the college student drags their clothes to the washing machine, to them folding the clothes neatly.

PROCESS | Research



After figuring out what my main direction was, I proceeded to go out and ask 7 college students. Prior to asking them about how they did their laundry, I asked them some technical details, such as what year they were and which dorm they lived in. This was important to ask since in certain buildings, the locations of the washing machines were much closer than other buildings. Some buildings had their machines on the same floor as their room, but they had limited machines. Other buildings had all their machines in the basement, which was only accessible by taking an elevator or going through multiple flights of stairs.

PROCESS | Research



Other than the technical questions, I asked four questions to each individual about their overall experience with the laundry system. My first question was about their biggest annoyance they had with the system. My second question was about the activities they did while waiting for the laundry to finish. My third question was whether or not they would wait for the laundry to finish and immediately pick it up. Lastly, my fourth question was how often the individual did their laundry.

Interestingly enough, while everyone lived in different locations, everyone had similar responses to all the answers.

Similar Responses in Research

I tend to do homework while
I'm waiting...

I hate loading up the
machine!

Moving back and forth is
the worst.

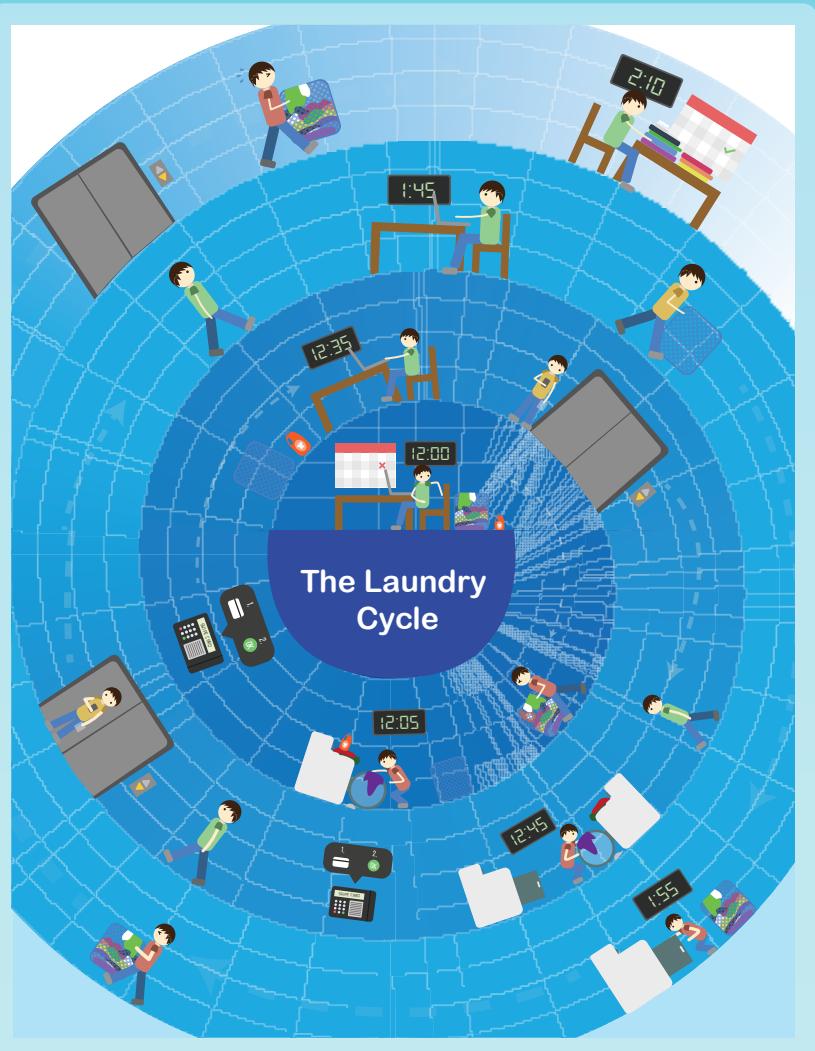
First Draft of the Journey Map



My first draft of my journey map was very verbose. Since I really wanted to show the repetitious cycle of the system, I made the whole process be a spiral. However, this caused the overall map to be really illegible and small. Thankfully, other people were able to guide me as to improving the legibility of the map.

Other than that, most people enjoyed the concept of the cycle, and the map basically hit all the points of the laundry process, both physically and emotionally. I just had to emphasize the main points a bit more.

Final Draft of the Journey Map

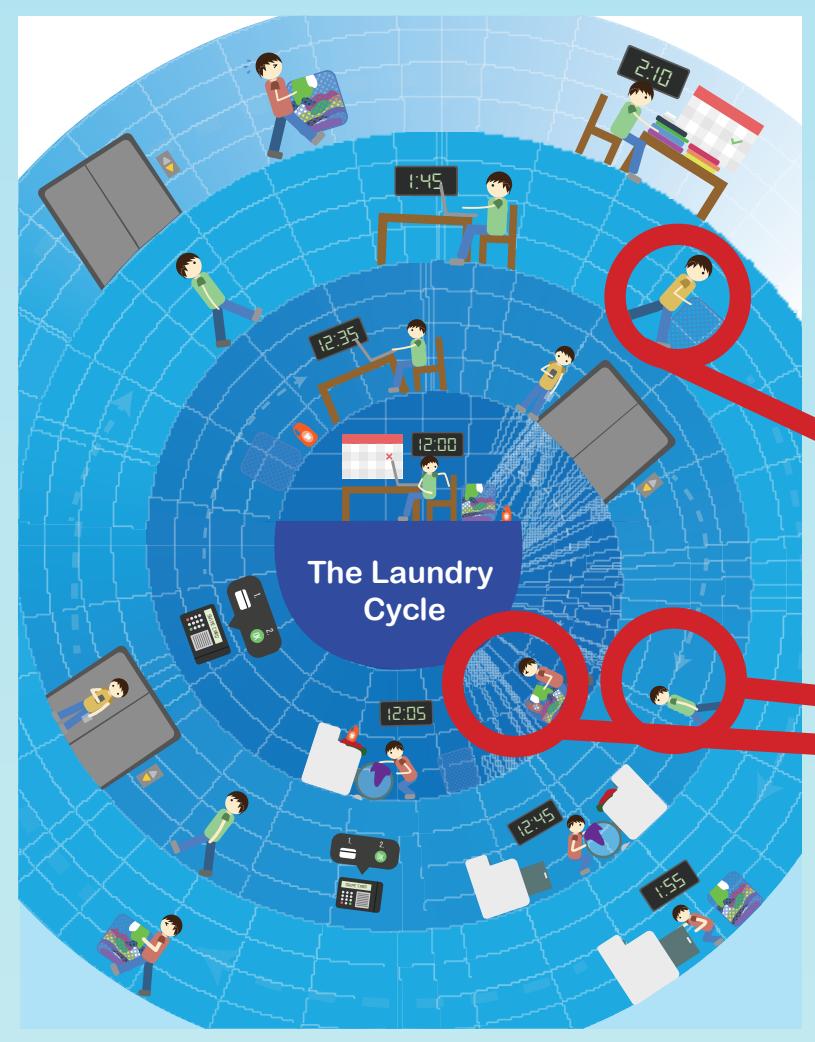


While this map was a bit minimized of each step the user had to go through, this map was significantly more legible. The audience's eyes goes directly toward the center and then slowly moves out, following the expanding spiral.

Since this was also in the same spiral format however, the audience can easily note repetitious actions.

These patterns would later become super handy, especially when I needed to find a pain point.

Discovering the Pain Points

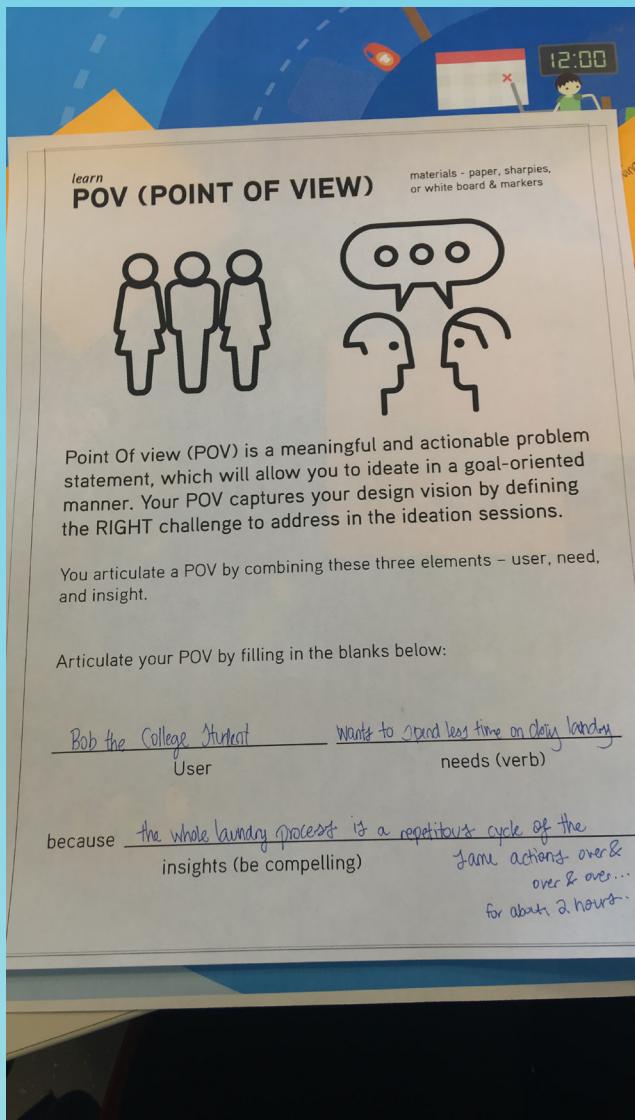


While I found multiple pain points in the laundry process, the most prominent one was the amount of times the user had to do the same thing over and over.

I decided the problem I wanted to fix was to attempt to reduce this cycle.



POV Statement

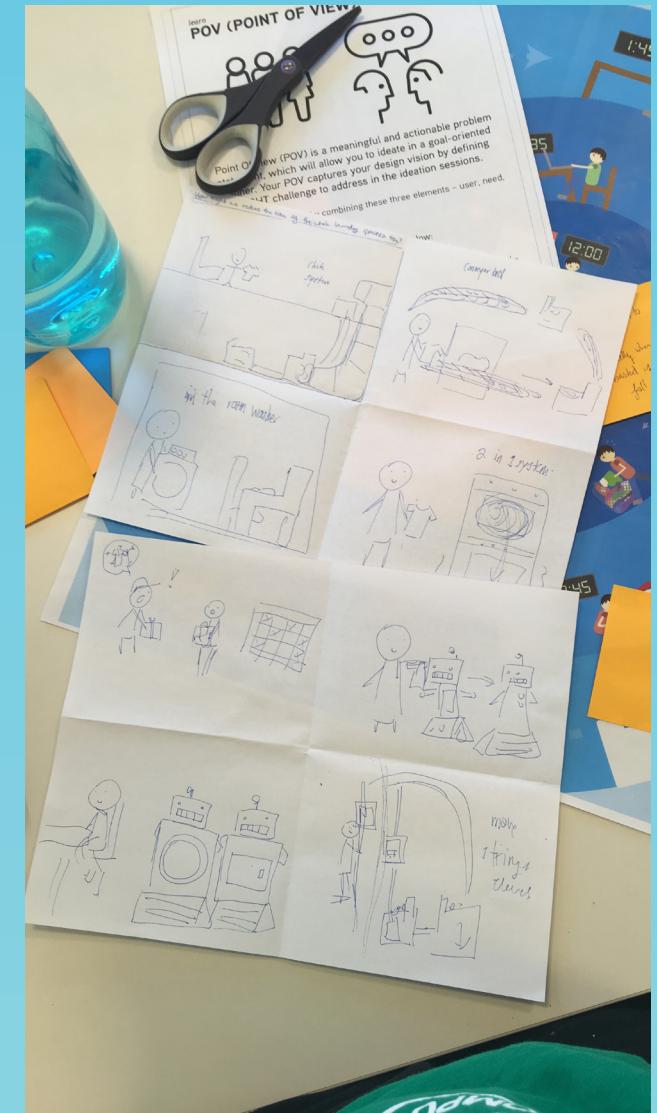


College students want to spend less time on doing laundry because the whole process is a repetitious cycle of the same three actions over and over, causing the student to lose two hours of valuable time due to moving and waiting.

PROCESS | Generate

Once learning about the pain points and the experiences that the users had, it was time to generate ideas. I did the classic Crazy 8's strategy. I had some difficulty coming up with new methods by the end however, especially when I tried to limit myself to no apps.

Out of the 8 ideas I had, I decided to build a robot as my prototype.

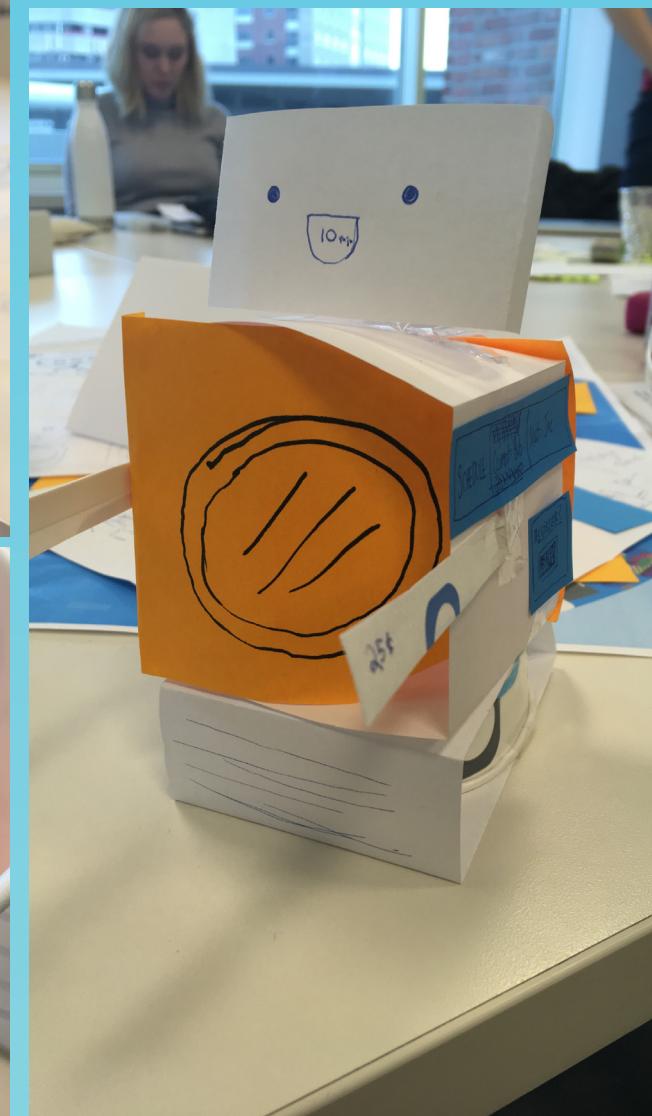
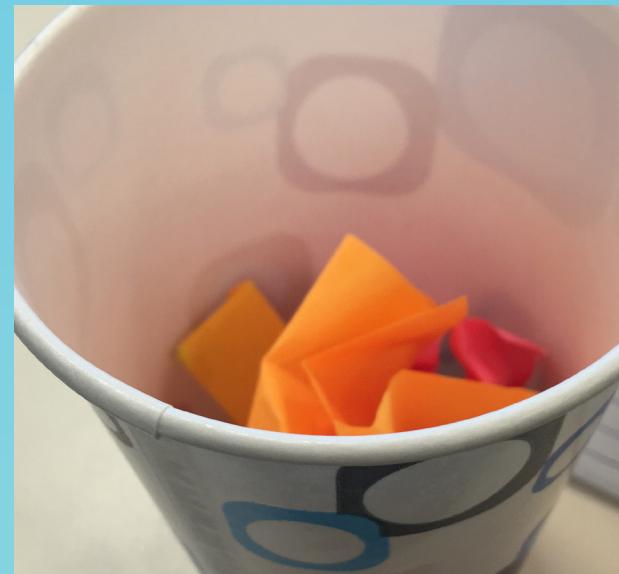
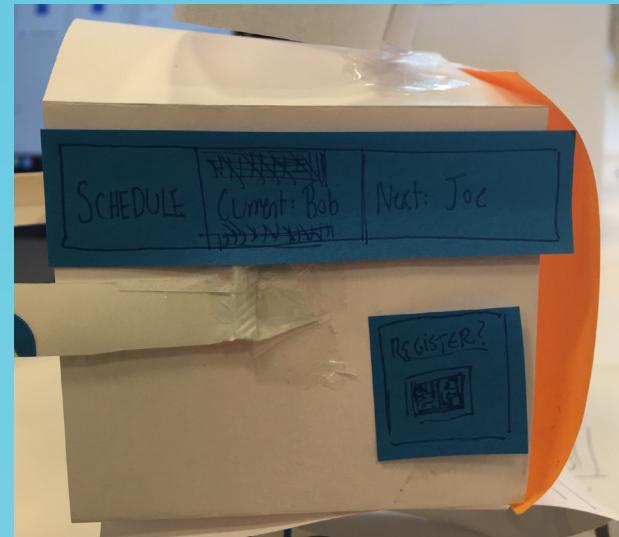


PROCESS | Generate



My main goal was to have the user save up their time, so rather than have the user go to a washing machine, why not bring the machine to the user?

Conceptually, the robot would act similar to an automated garbage truck. On your scheduled day at a certain time, you can leave your hamper outside of your dorm, and the robot will pick up your laundry and wash it. Once it was done, it would return back your laundry back to the basket all clean.



PROCESS | Experiment



I tested my prototype with 6 students. They all loved the concept of the laundry-bot!

They also gave ideas as to what the robot could also do. Some examples include having the robot fold your clothes once it was finished washing and drying your clothes. Another idea was to keep track of the robot's progress and alter changes such as the number of cycles or the type of clothes that were put in. Lastly, some people suggested having the robot automatically have detergent ready.



SURPRISING FINDINGS

!?

I was most surprised by the similar responses I got from my interviewees, especially when I asked what was the most tedious part of laundry. Everyone that I talked to said their least favorite part was definitely bringing the hamper back and forth. I thought this was interesting because no matter how close or how far the person was to the laundry room, everyone hated how they had to bring their pile of clothes somewhere. People who used elevators to get to the laundry room complained. People who lived on the same floor complained. People who lived a few doors down complained. There was no relation towards distance at all.

STUCK MOMENT

...

My biggest stuck moment was definitely generating the ideas. When I started the Crazy 8's activity, I already had about three ideas in mind. However, after those three ideas, I couldn't think of anything else. I tried my best to get unstuck by extending my thoughts to ideas that were a bit more unreasonable, and that helped me produce the next 4 ideas. I once again got terribly stuck on the last idea, but I proceeded to unstuck myself again by rethinking a previous idea with a big variation.

OUTCOME

After taking in all the good ideas from everyone, I decided to include extra functionalities for the robot. I first included a way to keep track of where the Laundrobot is by connecting it to an app. The app would also allow the user to alter their preferred cycles and temperatures of the water.

I felt like the overall solution was successful. It definitely reduces the time it takes to do laundry, especially when a student has no time to wait for the chore to finish.

