



Reimagining the laundry experience

Berkeley Innovation | Sarah Tang





Project objective

Create a more fluid laundry experience.

Assumptions:

Users want to wash clothes/sheets so that they come out clean and undamaged.

Constraints:

Solution must be viable and time efficient.

User Research

In order to understand laundry from the user's perspective, I interviewed 6 people ranging from users with in-house laundry, people that lived in the residence halls to people that used common laundry areas such as laundromats or common areas..

I asked questions about how often they did their laundry, what aspects were most aggravating, and when they learned how to do laundry.

I also examined laundry behavior and watched people do laundry because you gain insights from seeing that people don't necessarily tell you.

no consumption of laundry,
how much detergent, hot/cold water
↓
STICKERS?

EXPERIENCE OF DOING LAUNDRY

only do laundry once a month, wait until out of underwear } until end
* amount of underwear ⇒ LIMITING FACTOR
↳ overflowing hamper.

Expense in unit 3 residence halls. ⇒ cost money \$1.75 + 2.00 = \$3.75
↳ dryer never dries all the way, eat socks (baggies) ↳ QUARTERS ONLY
↳ UNIT 1 = slot out a few hours, lots of time → less often paying
* remember items ex: STUART LITTLE, automatic? ↓↓

How OFTEN? → what clothes to wear when learn? go home to do laundry
↳ laundry every 2 weeks ↳ learned in 5th grade?

laundry basket ↳ out of socks [know] ↳ didn't learn until college... pay dry cleaners
↳ when hamper looks full ↳ learn in dorm ↳ never learn

saving water, ↳ sustainable ↳ once a week (about) ⇒ Forced to wear other clothing items need easy
↳ cleaner to wash towels in hot water barrier to do entry
↳ bed sheets (supposed to wash them frequently) • tide pods not necessary

money issue, energy fabric (cotton, silk) ANNOYING ⇒ folding laundry (SEPARATE) GRATEFUL ⇒ LAUNDRY IN-HOUSE
carrying laundry down to laundry room convenient, free
↳ self conscious = avoid people no embarrassment factor
* get laundry stolen ↳ have opportunity
* dry cleaning broken, frontloading, can't open ⇒ forget, somebody doesn't take out clothes
empty pockets = forced clothes * forgetting what laundry is done
periodicals ↳ what needs to be handwashed = forced clothes

STINKS
periodicals ↳ dry right away
↳ lose socks!
damp, smells weird
waste H₂O

swatters laundromat
travel distance, useful

* DON'T EAT TIDE PODS

Lillian Avedian ▶ Overheard at UC Berkeley
October 1, 2017 at 11:44am · 📷
Girl at frat party: "Shit, my laundry!!"
👍 🗿 🗿 Eric Kong, Jasper Deng and 836 others
74 Comments

Observations

1. Users do laundry depending on **when they run out of clothing**, specifically exercise clothes, underwear and socks.
2. Doing laundry in the dorms and laundromats is **expensive**: \$2.00 + \$1.75 per each load.
3. Many users learn how to do laundry in college, when they are forced to do their own laundry. To avoid learning, some users go home to do laundry or even pay for dry cleaning.
4. Many **nuances** to doing laundry with various fabrics, stains, colors, etc. that are hard to remember. Can be detrimental as specific washes ruin certain clothes.
5. Advantages to in-house laundry include convenience and limited embarrassment factor.
6. **Prolonged time** between washing and drying clothes leaves a damp smell and wrinkles clothing.



Problems

Based on my discussions with people and observations, I identified three major types of laundry users at the college level:

- ★ Users that share multiple machines among strangers, whether it be in apartments or sororities
- ★ People that do not know how to effectively wash towels, nice shirts and delicates ⇒ clump all items together
- ★ Busy users that don't have time to do laundry and end up procrastinating until they are out of clothes

Amongst these groups of people, I found four recurring pain points that kept getting brought up. They were:

1

Time! The most common issue, laundry is a process that requires setting aside and managing time between washing, drying and folding.

2

Lack of knowledge regarding special articles of clothing. There are many tricks to getting out stains, what settings to use for cotton versus delicates, and turning certain items inside out before washing.

3

Sharing machines. People leave their clothes in machines and don't take their clothes out leading to a bottle effect.

4

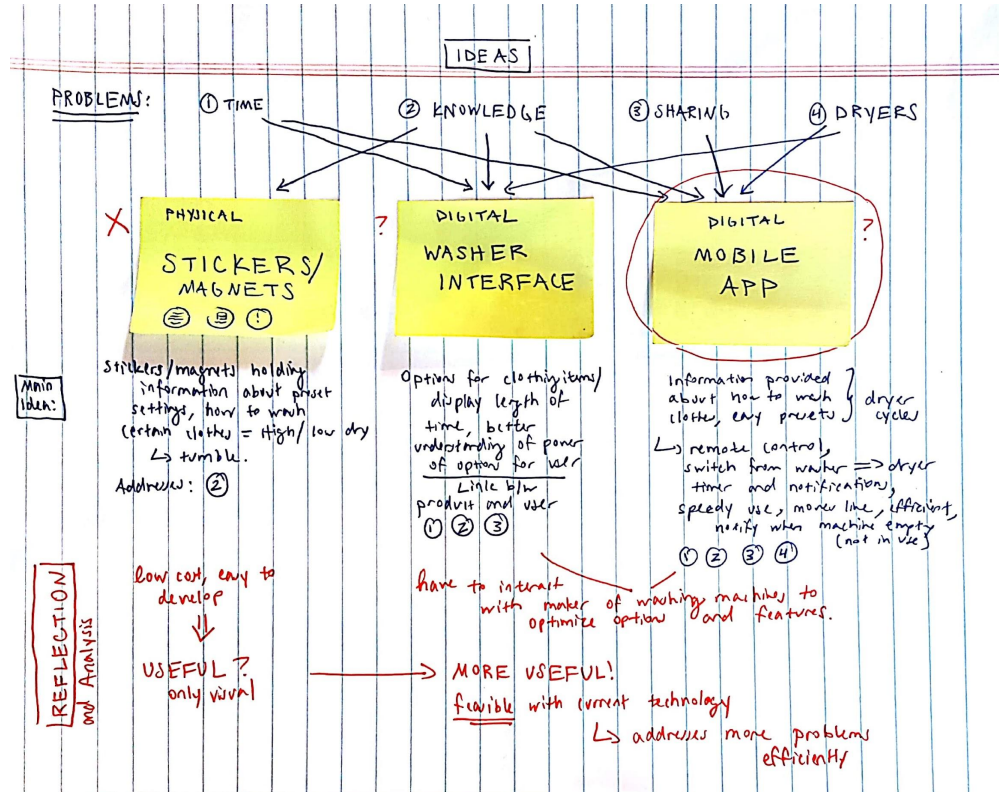
Dryers are weak and unpredictable. They often don't dry clothes all the way making laundry inefficient and expensive.

Ideation

I brainstormed multiple ideas that I think would, to some extent, address the problems that I came across and be useful and efficient for the user.

The three main ideas were physical magnets/stickers that contained useful information for doing laundry as well as altering the washing machine interface or creating a mobile app that would increase knowledge and control.

Based on the feasibility and the number of points that the idea addressed, I decided to develop the mobile app idea as it has the potential to send alerts when done for efficiency, have presets for different materials/types of clothes, and remote control over starting loads.





Proposed solution

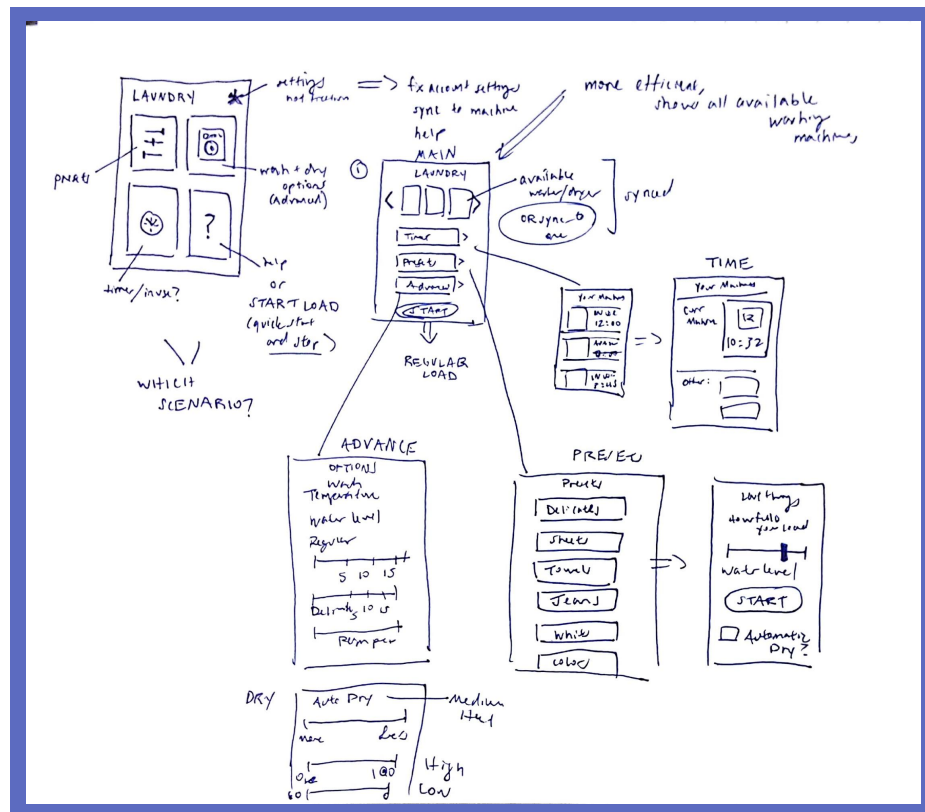
Collaborate with makers of washing and drying machines to **create a mobile app** that syncs with machines, allowing for **preset washing options** for clothing to maximize cleanliness and dryness, **timers and alerts** for efficiency in sharing when machines are not in use, and **remote access** to save time and easily start drying cycles.

Design

My first step was outlining what specific features I wanted to include and figuring out how these features would be integrated into the app.

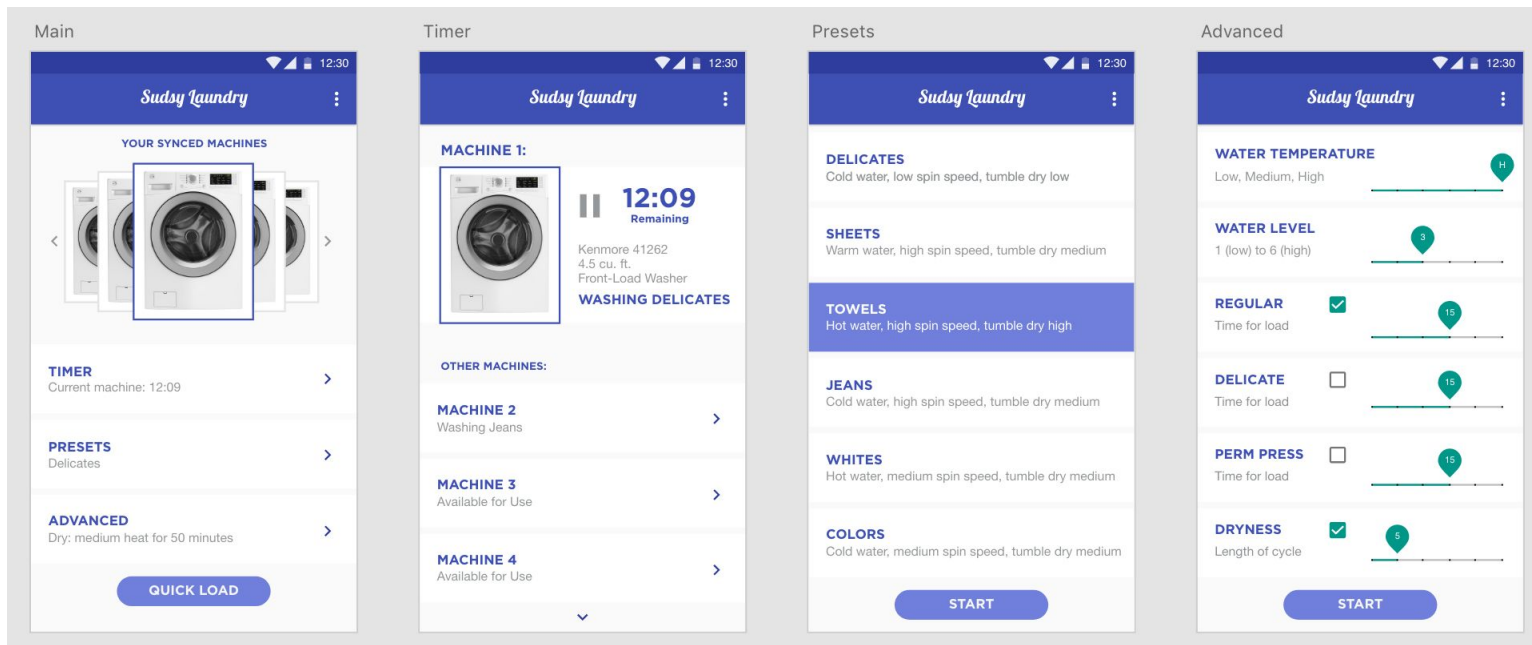
- 01 | Timer
- 02 | Presets
- 03 | Advanced settings
- 04 | Available machines (synced machines)
- 05 | Quick start

The challenge was to consider what aspects were the most important and to reflect that in the flow of the app while maintaining a minimalist aesthetic. I aimed to incorporate visibility of status of washing machines, user control and efficiency, and keep in mind user recognition over recall.



HiFi Designs

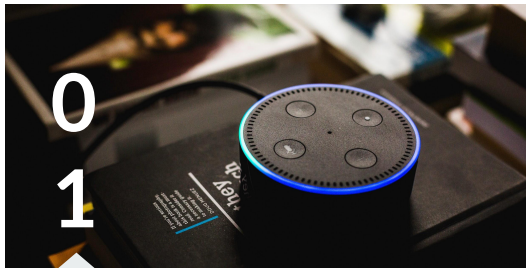
I flushed out my low fi designs to further illustrate the interface of the mobile app. I decided on a neutral bubble-like color and a fun laundry name!



Reflections

While some of my takeaways and reflections are outlined below, my next steps would be to assess the success of my designs by obtaining user feedback and user satisfaction. How often do users use the app? Does it make doing laundry faster?

01



Internet of Things

There is a compromise between functionality and feasibility considering how advanced technology is in terms of connecting with physical machines.

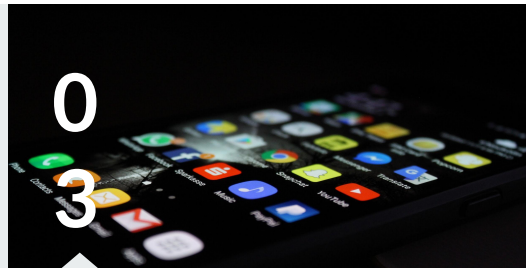
Larger Demographic

In the future, I will talk to more people about their laundry experiences as this population was a relatively restricted demographic in terms of age.

02



03



Importance of Abstraction

I learned how important abstraction is to simplify the interface for the user such as regarding laundry cycles, drying length, temperature water, etc.