



#### **Get Live Updates**

Check on your dorm's laundry room status and switch between tabs to select a washer or dryer layout.



#### Track Your Laundry

After selecting a washer or dryer, start your in-app timer.



#### Report an Issue

See a problem? Report the issue so others can see it too.

**Get Started** 

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Team: Hailey Shi, Jade Chen

Role: UI/UX Designer

Timeline: 2 week design sprint

Deliverables: Hi-Fi prototype

### A Quick Overview

**Challenge:** Doing laundry is time-consuming and irritating for busy college students because it's hard to know when machines are available, but easy to forget about finished laundry.

**Solution:** LionWash tracks real-time machine progress and helps remind students to pick up their laundry with an in-app timer.

**Process:** We conducted 10 interviews with students living on campus and researched a website with similar functions to better understand how to improve the laundry experience.

**Outcome:** Within 2 weeks, we designed a high-fidelity app prototype with 3 key features to meet the needs of our intended users. After more iterations and user testing in the future, LionWash can be accessible to every Columbia student.

## The Challenge

As Columbia students living on campus, we noticed that the current laundry system isn't well designed to adequately address problems that may arise from a student's perspective.

When finished laundry is neglected, other students will either:

- 1. continue waiting for another available machine, or
- 2. replace the clean load with their unwashed load without waiting for the previous user to retrieve it

This cycle wastes time and becomes an incovenience for others, so how might we **improve** and **expedite** the laundry process to ensure an **efficient** and **unburdensome** experience for busy college students?

# The Solution

Laundry should be a simple, hassle-free process. In order to provide such an experience for all residents, we've created LionWash, a mobile app that allows students to easily check for available machines and track their laundry progress.

#### Features include:

- 1. Real-time tracking of available washers and dryers
- 2. In-app timer to monitor the progress of laundry cycle
- 3. Flag button to report broken machines

### Creating Personas

In order to better understand our Columbia peers, we interviewed 10 students living on campus. The personas below reflect their shared needs and frustrations that LionWash aims to improve.



Austin, Freshman

Laundry System Rating: ★★☆☆☆

"I was incredibly busy one night and forgot to set my timer. By the time I finished work and remembered to check on my laundry, I found all my wet clothes piled up on a table."

#### Needs:

- Consistent reminders to help with busy schedules and multi-tasking
- Simple solution to save time and avoid unpleasant laundry scenarios



Sharon, Junior

Laundry System Rating: ★★☆☆☆

"While juggling school with soccer practice and a research position, I become that much more frustrated when I haul my laundry from the 12th floor to the basement only to find that every machine is taken. It's already hard for me to find time to do my laundry as it is."

#### Needs:

 Accurate tracking system to know when laundry machines are available

## Competitive Analysis

Columbia Housing uses LaundryView to monitor the machines, but this site isn't well known throughout the residence halls and 90% of interviewees have never used it.

We noticed some LaundryView issues that LionWash can address:

- 1. Machine availability online doesn't match real-time activity
- 2. Incomplete building list: 5 residence halls aren't included
- 3. Confusing floor plan doesn't indicate specific machines
- 4. Graph showing peak times of machine usage doesn't have data

\*\*\*The app version only shows machine availability and excludes all of the website features. This analysis will only focus on the website.\*\*\*

## Competitive Analysis

Features/Functions	LaundryView	LionWash
Timer	No	Yes
Available for all dorm buildings	No	Yes
Flag to report an issue	Yes	Yes
Real-time machine progress tracking	Yes	Yes
Graph of peak times for machine usage	Yes	No

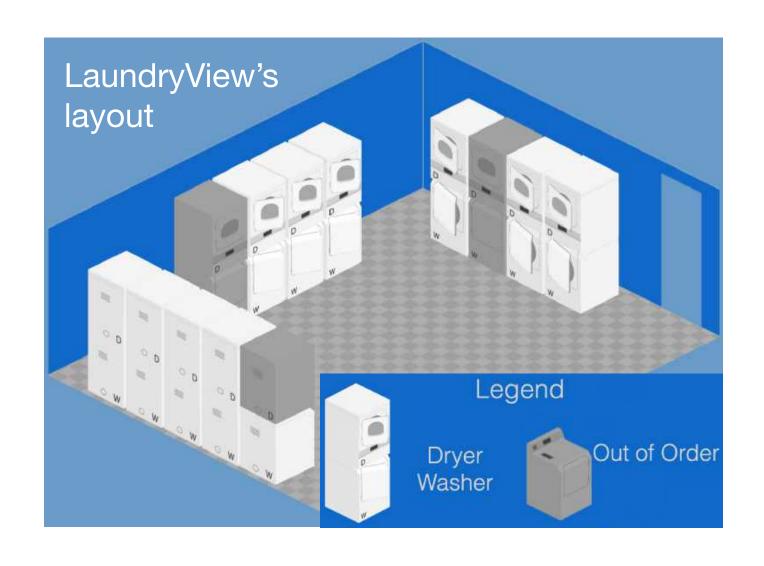
LionWash does not show peak times of machine usage because:

- 1. Schedules may vary, but classes and dining halls have set times and club meetings are held at night. Students free during periods of activity know that laundry rooms will be relatively empty.
- 2. The interviews confirmed that most students are busy and unlikely to schedule their days around the best time to do laundry because it's not their top priority.

#### Real-time tracking

To make this as easy to use as possible, we:

- 1. Simplified and color-coded layout to indicate machine activity
- 2. Divided "Washers" and "Dryers"
- 3. Numbered tiles to match machine labels

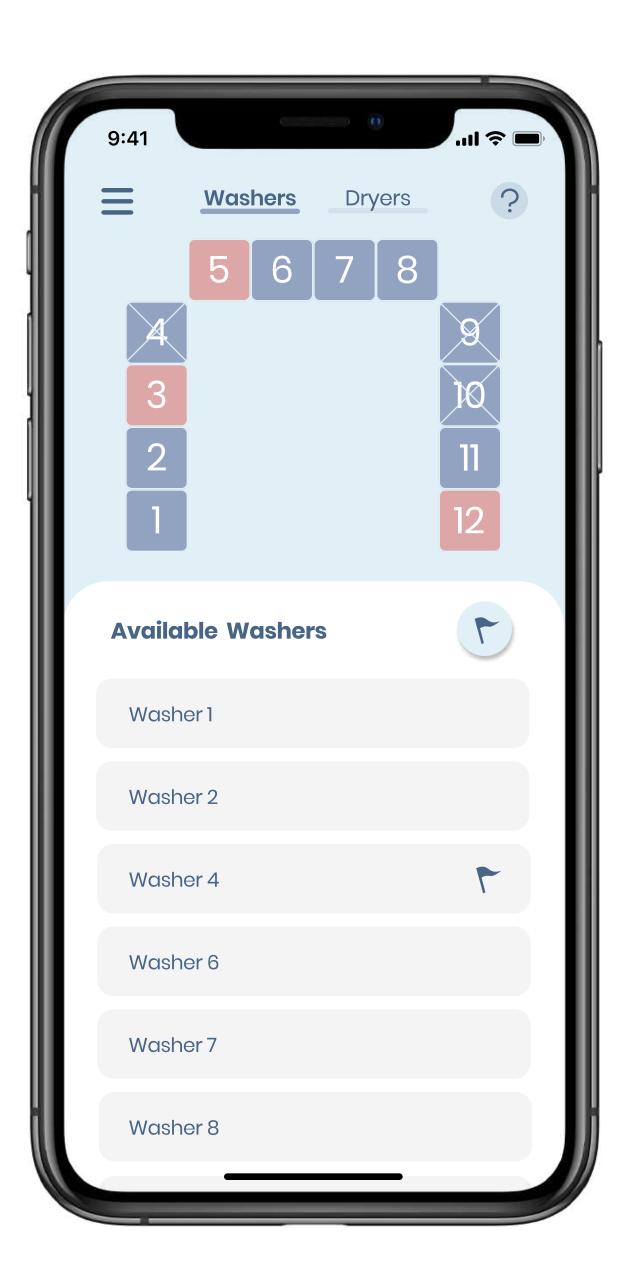












#### **Built-in timer**

After selecting a machine, the student will be directed to the timer. It is already set at the standard lengths of time for both washing and drying cycles, but can be adjusted by dragging the circle.

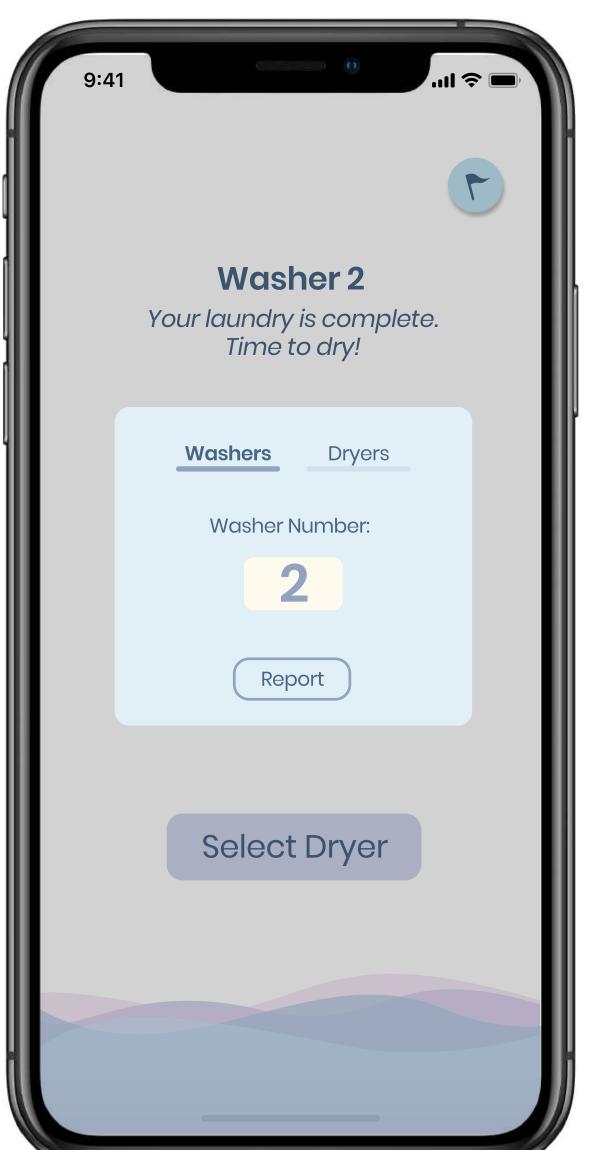




#### Flag Button

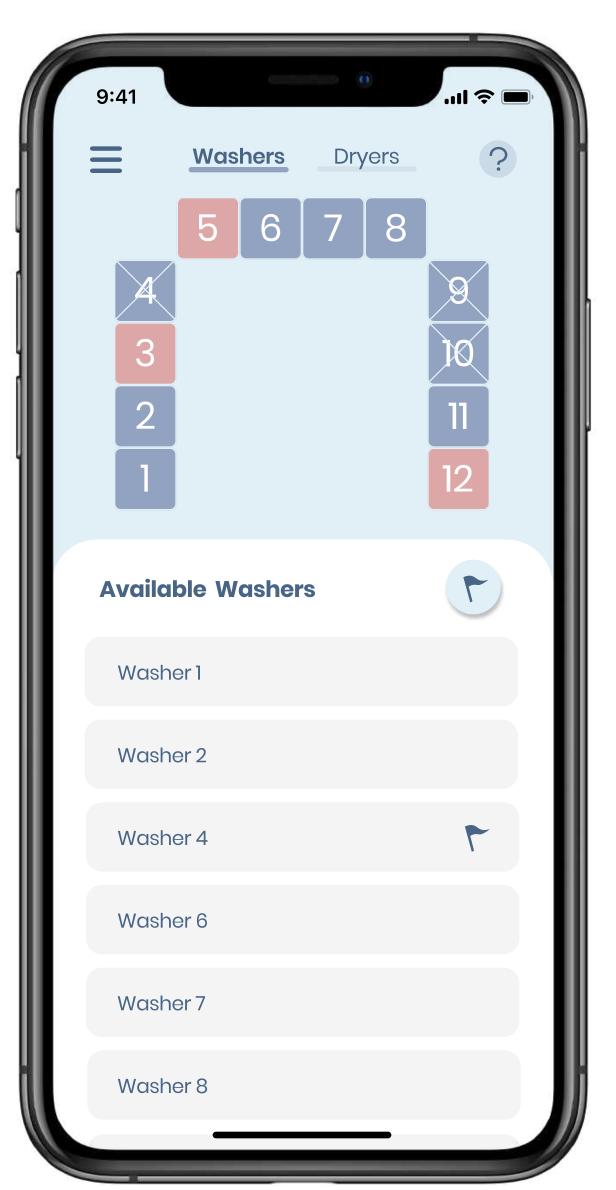
If students experience issues with a machine, they can press on the flag button to report the problem, which will notify other users to avoid the machine.

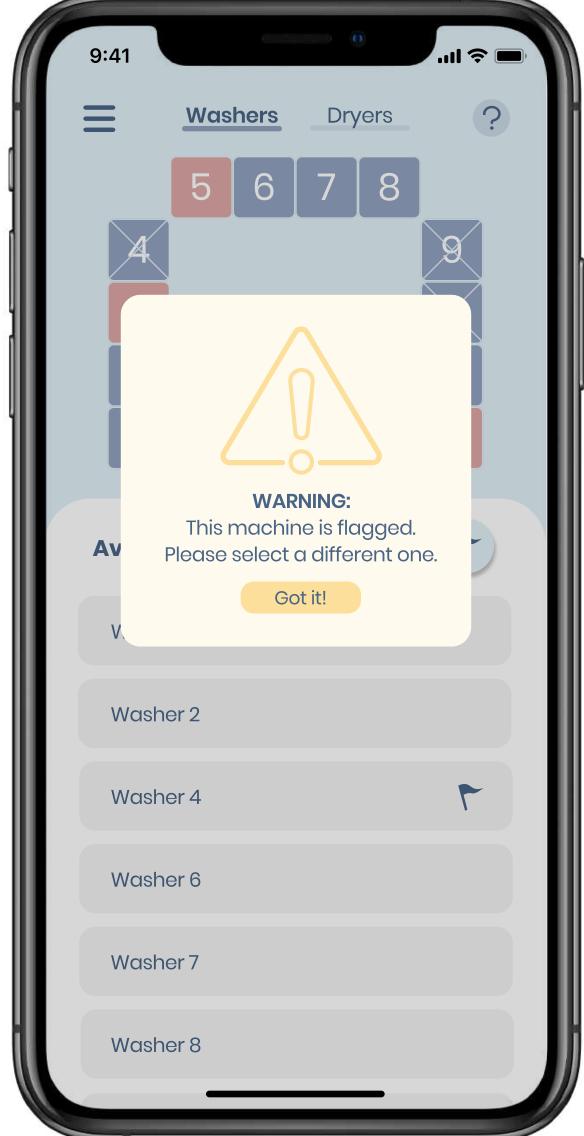




#### Flag Icon

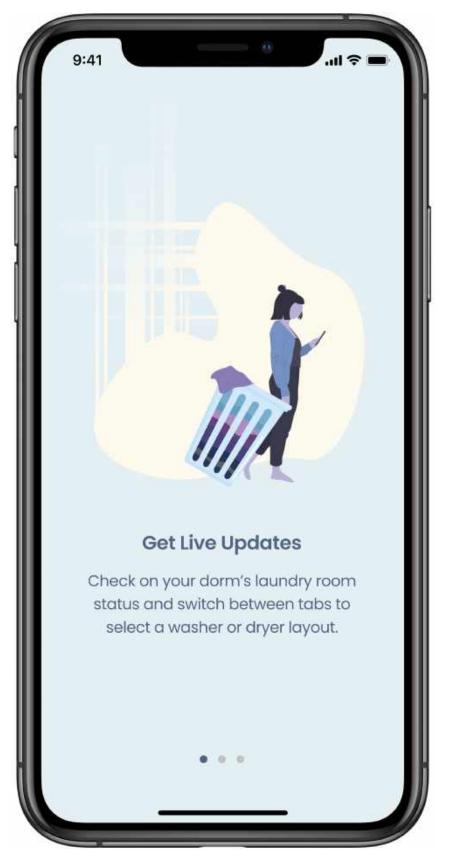
After tapping on a machine with the flag icon, a warning will pop up to indicate that the machine has been flagged. It is still classified on the list as available because the internal laundry system that connects to this app can only track machine activity.

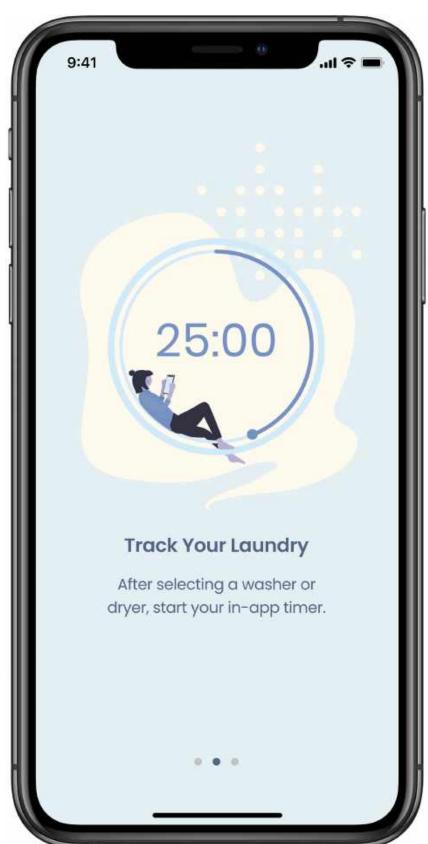


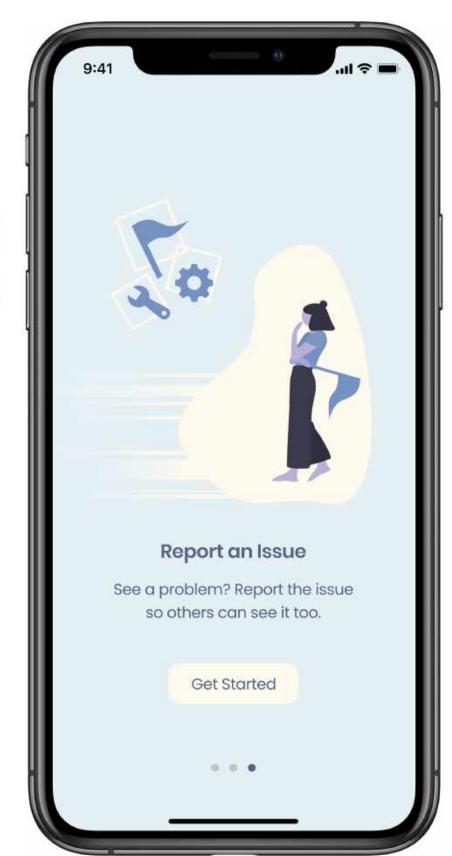


#### Onboarding

After downloading the app, students are directed to the onboarding process, which shows a quick overview of the app's capabilities.

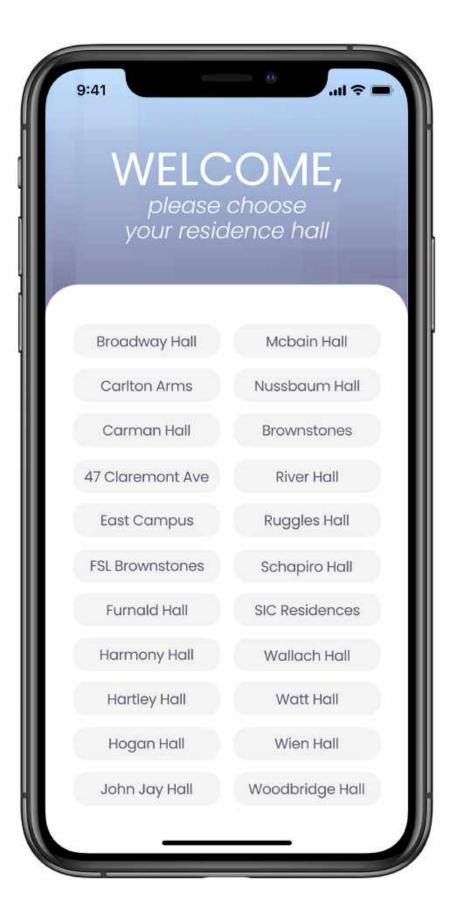






#### **Building Selection**

After onboarding, students will choose their dorm buildings, which then takes them to the washer layout. The menu icon allows them to change buildings and look through the onboarding screens again.







## Washer Selection and Timer

After selecting an available washer, students will be directed to set the timer.

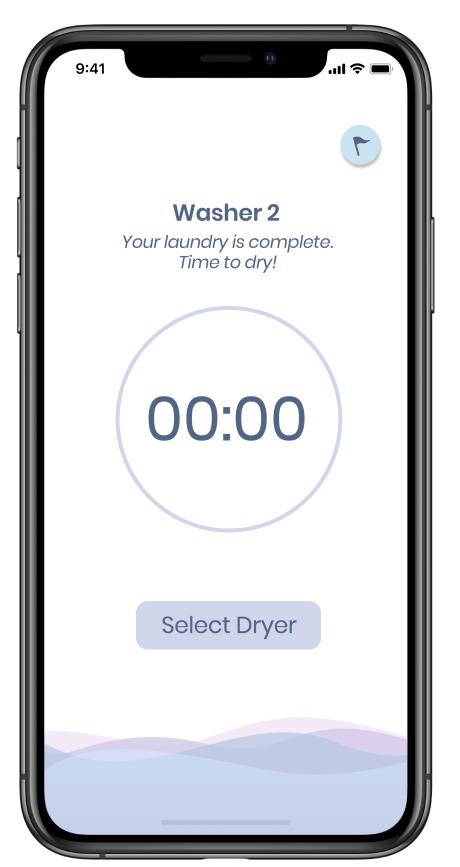






## **Dryer Selection and Timer**

After the water level has fallen completely and laundry is finished, the timer will direct students to the dryer layout to begin the same process.

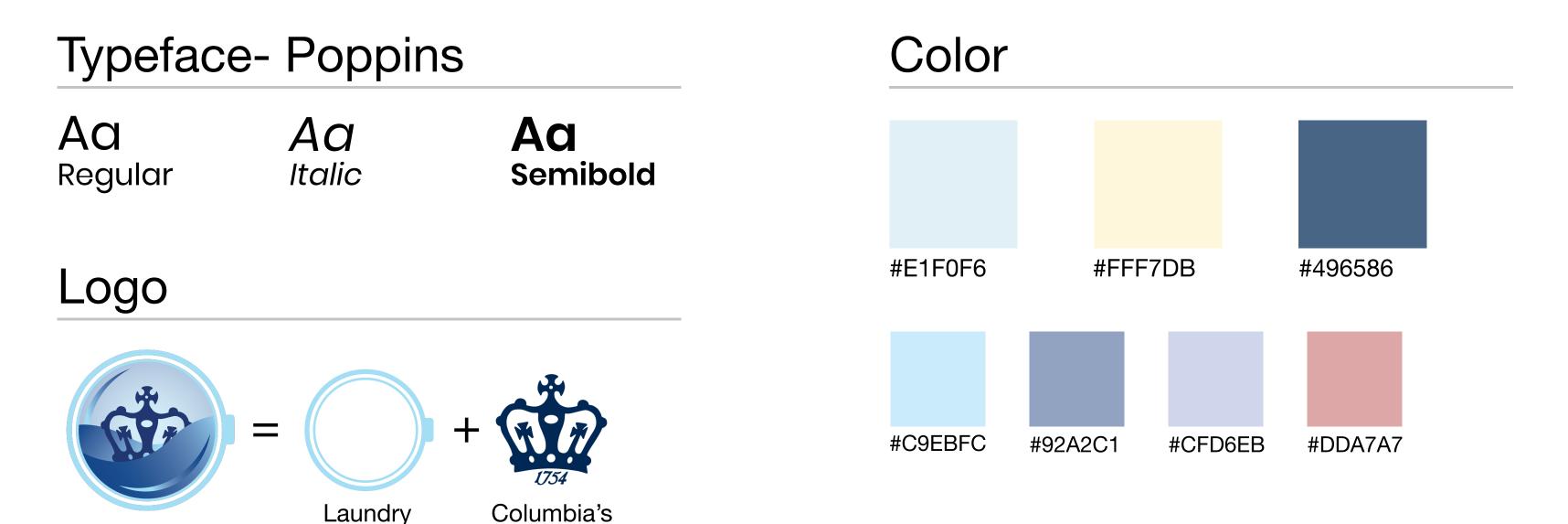






## Style Guide

Because LionWash is unique to Columbia, the overall color scheme was created with university branding in mind. Thus, the majority of the app is made up of different shades of blue, which is also associated with water and conveniently matches the laundry concept.



machine door

crown logo

### Design Decisions

#### Washer/Dryer Layout

The different background colors were chosen to show distinction between which tab the user selected. The washer background is blue, a cool color representing water. In contrast, the dryer background is yellow because it's a warm color, giving off the idea of heat.

#### **Color Choices and Functions**

Many of the interviewees spoke about how the laundry process was more irritating for them when they were stressed and busy. In response, we chose pastel colors to keep the overall look light and created 3 main functions to keep it simple. Students will appreciate an app that is not only aesthetically pleasing but also easy to use.

## Next Steps

#### Additional Features to Include

Looking back at this 2 week sprint, we thought of some features that could be added in future iterations if given more time:

- 1. Messaging: Students who come across finished laundry can contact the current user of the specific machine, resulting in less confusion and fewer piles of finished laundry left outside.
- 2. <u>Timer Settings</u>: Students can set the frequency of reminders based on time intervals. These notifications can be especially helpful for those who tend to forget about their laundry. The time remaining for machines in use should also be visible to everyone.

In order to improve the user experience, we would like to conduct user testing and design the interactive experience based on feedback.

## Important Takeaways

**Research:** Understanding both the user and competition is crucial for a product design project because they influence the building blocks that make up the product. Creating a specific component after conducting research helps narrow down design options to effectively pinpoint the most optimal way it can be presented to the user.

**Simple ≠ Easy:** This app is meant to be simple, but what might seem easy can actually be logistically challenging. In fact, apps that are the easiest to use must go through countless rounds of information restructuring in order to create the best user experience possible.

**Balance:** Especially with more ideas for new features in future iterations, the complexity and variety of functions must be offset by a clean design. Creating an app that can meet the needs of its users without unnecessary complications is a problem solver's balancing act.