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Design document

Designing Based on Interviews

Before starting this process, I want to note that my interviews during last lab were not full 20 minutes. I asked 13 questions in total, but I realize i could have done better by asking more questions to deepen the inquiry. This reflection helped me approach the design phase with more attention to detail and more willingness to test ideas.

Using last week's Data

From the contextual inquiry, I learned several key problems with the laundry system:

- Machines fill quickly during peak times.
- Broken machines are nor clearly marked, wasting students time
- No reminder system exists for when laundry finishes.
- Clothes are often left unattended, causing frustration.
- Students value convenience, predictability, and fairness.

These insights shaped my design ideas. Instead of physical signs or wall displays, I chose to create a phone app, since students are always carrying their phones and already rely on them for timers and reminders.

Sketches.

I began by rapidly exploring different designs ideas. After testing a few ideas, I settled on three core pages for the app.

Machine status page

- Quickly shows which machines are free
- Based on observed need: students often wasted time checking machines one by one.
- Some machines are broken you need a page to show which ones are not working.

Notification page

- Provide reminders when the cycle finishes.
- Based on observed need: students currently rely on phones timers, which don't always help when clothes are left inside.
- Some machines are open, and they don't start the cycle.

Reminder/Timer Page

- It gives students control a reminder on the status of their laundry cycles.
- Students wanted a way to keep track of time without waiting around the laundry room.
- Helps stop students leaving their clothes unattended for hours.

Peer feedback

Strengths

- You clearly label washers and dryers with different status, which directly addresses the main point students reported.
- The notification page idea is simple, and effective students won't have to guess their load is done.
- Adding a reminder feature shows that you thought about students' needs to forget their laundry in the machines.
- The overall layout is straight forward user can quickly scan for available machines without confusion.

Areas for improvement

- The broken machines you could use different colors or crossed out instead of just labeled, to make it visually clear immediately
- The sketch is a bit cluttered with some arrows; icons are competing for space/ attention. You could simplify by grouping machines in a cleaner way
- Add a clear navigation element because now it's not obvious how a user would move between notification page, reminder settings, and machines availability screen.
- Also think about accessibility: larger text, constant, or icons could help students quickly understand machines' tatus without having to read every word.

Evaluation plan

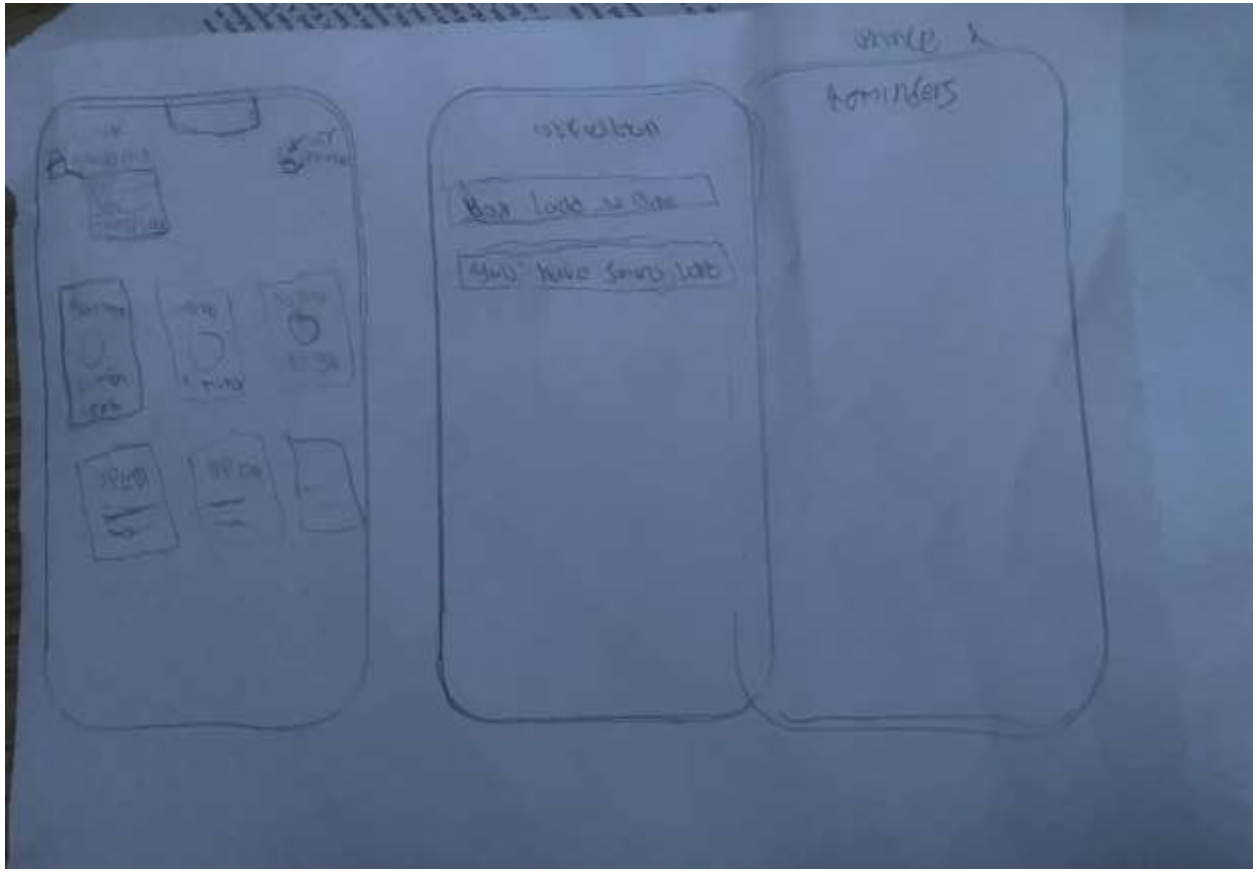
If I had unlimited time and resources, my evaluation plan would start with a pilot testing, where a prototype version of the app with notifications, reminder, and machine availability tracking would be installed and tested in one laundry room. This would allow me to observe the system’s effectiveness in a controlled setting. Following this I would run user trials by asking a group of students to use the app for several weeks. During this time, I would monitor machine usage, wait times, and conflicts to better understand how the system fits into student's routines. To gain insights into the user experience, I would also conduct surveys and interviews to gather feedback about convenience, satisfaction, and stress levels. Alongside this I would perform behavioral observations to see how long students wait, how quickly they remove clothes, and whether conflicts over machines are reduced. I would also incorporate data analytics to track usage trends, including peak hours, and overall efficiency. Finally, based on these findings, I would carry out

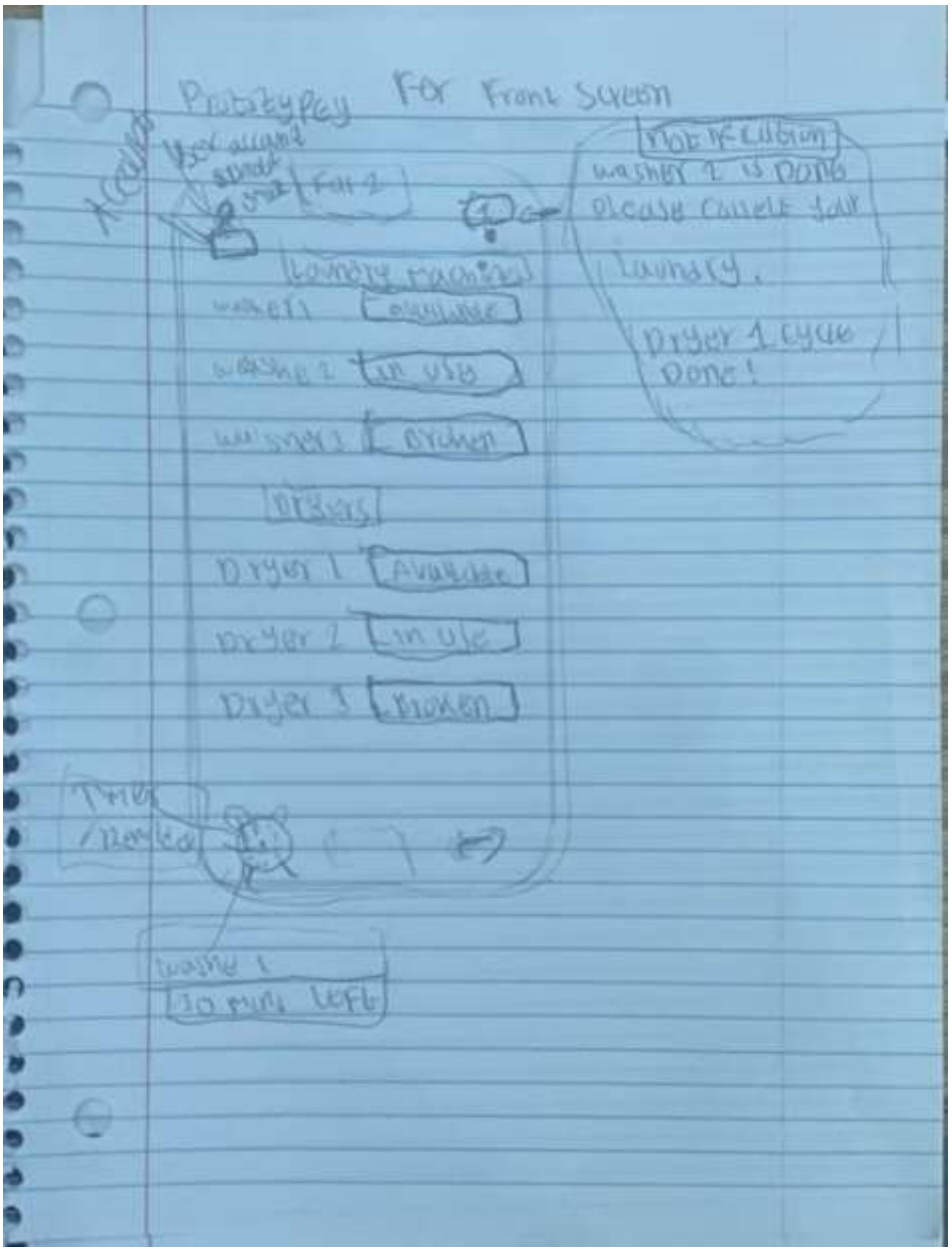
iterative redesigns, and improve features like alerts, reminders and the machine status display page continually meet user's needs.

The sketches and prototypes were developed in direct response to the problem identified during last week’s interviews and also the contextual inquiry. For example, the lack of available Machines inspired the inclusion of a display that shows which machines are free or in use. The frustration around having no notifications was directly addressed through mobile alerts and reminders. The issues of clothes being left in machines was tied to reminders and strong signifiers withing the app, encouraging timely action. Additionally, the confusion caused by broken machines with no clear signifiers.

Conclusion

This design process shows how contextual inquiry data can be transformed into concrete designs solutions. By focusing on the actual points student's face, the laundry app directly addresses problems of availability reminders, and fairness. If developed and tested, this system could reduce time, lower conflict, and make Laundry a less stressful part of student life.




Prototype for Front Screen
Laundry machines
Washer 1 Available
Washer 2 In use
Washer 3 Broken
Dryers
Dryer 1 Available
Dryer 2 In use
Dryer 3 Broken
Time remaining
Wash 1
10 min left
Notification
Washer 1 is done
please collect your
laundry.
Dryer 1 cycle
done!