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# Laundr

— Hang Bui, Atharva Naik, Sam  
Wolfson, Emily Zhang —

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# Overall Problem

- Linda lives in an apartment complex.....
  - Laundry schedule depends on other people
  - Constant checking
  - Timing
  - Forgetfulness

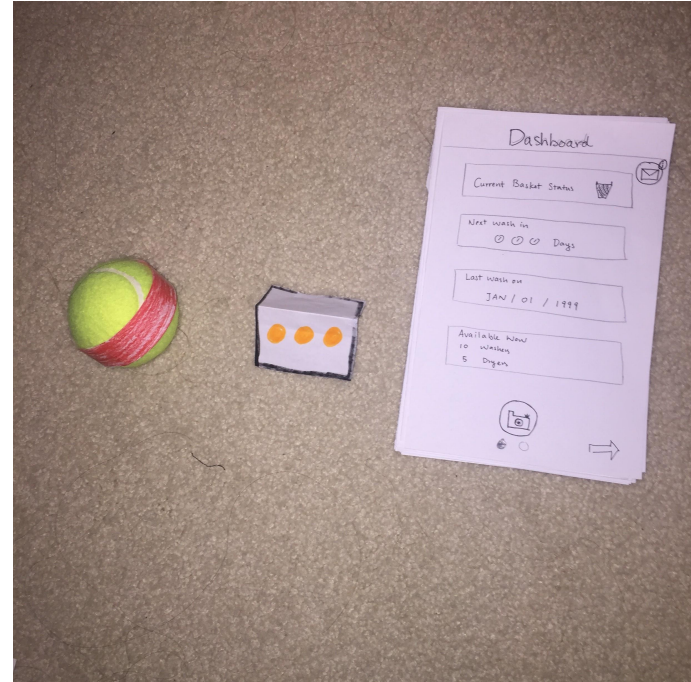


# Solution

- Laundr!
  - Smart laundry system
- Task 1: Knowing when to do your laundry
- Task 2: Knowing when your laundry is done

# Initial Paper Prototype

- Smart laundry ball
  - Notification and tracking device
- Basket sensor
- Mobile app



# Task 1: Knowing when to do laundry

1) Basket sensor senses volume of dirty laundry



2) When limit exceeds, sensor sends a signal to the ball



3) Ball lights up to notify user

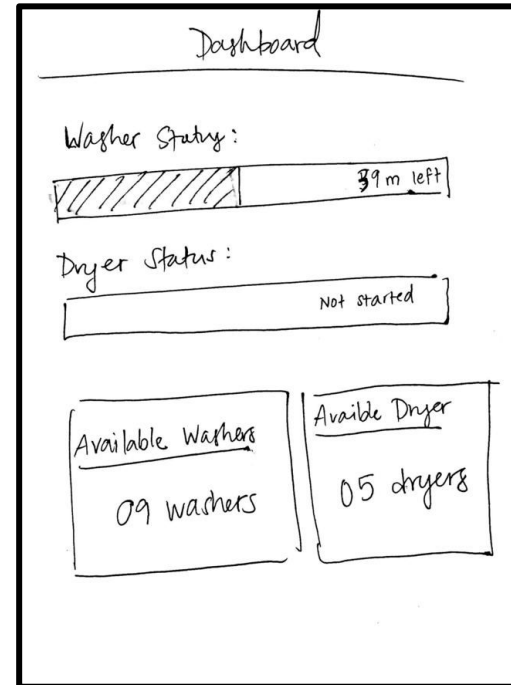


# Task 2: Knowing when your laundry is done

- 1) User throws laundry ball into the washer or



- 2) User receives status update via the app

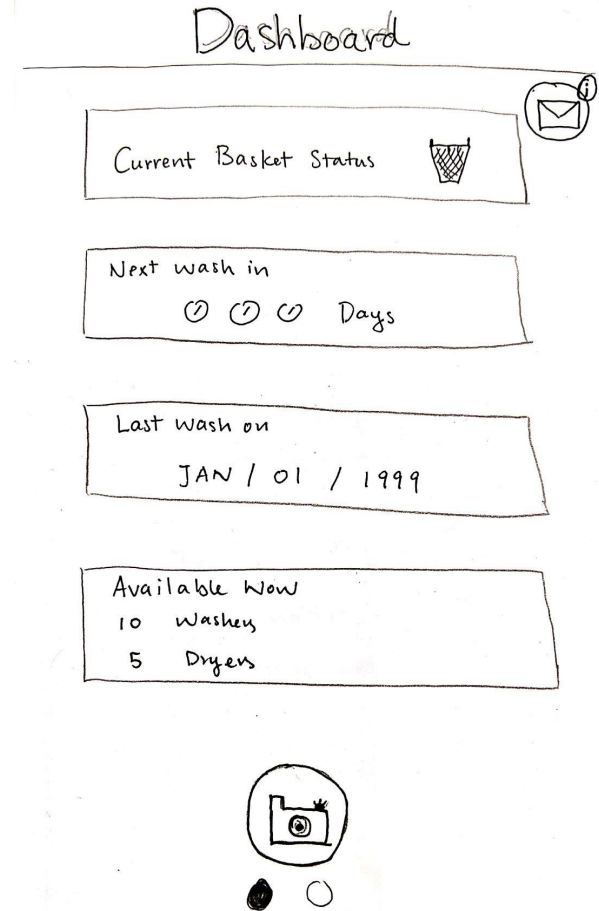


# Testing Process

- 3 participants living in dorms and apartment complexes
- Pretend they are doing laundry
- Asked to complete tasks with minimal instructions
  - Check laundry status
  - Check machine availability
  - Create a schedule

# Testing Results

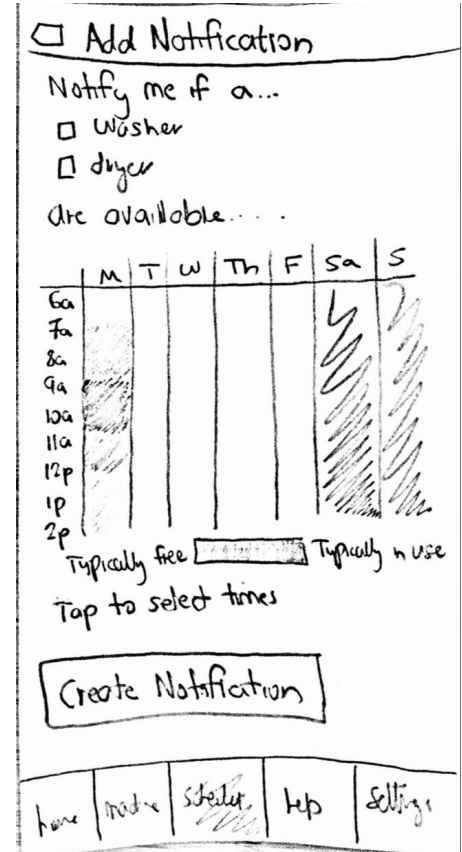
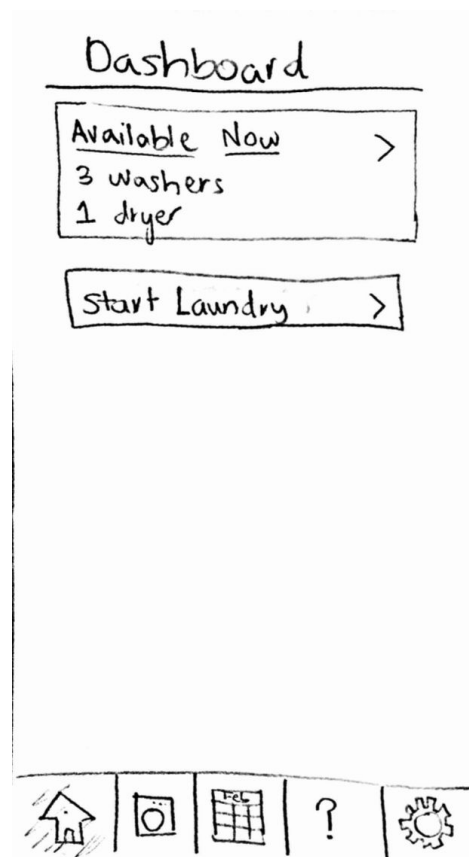
- Navigation inconsistency
- Unnecessary extra features (e.g. camera button)
- Basket sensor not as important





# Refinements: App UI

- Navigation bar
- Remove extra features and only focused on our primary task
- Notification scheduler



# Refinements: Sensor

- Basket sensor → machine sensor
- Tracks machine availability to determine when you should do your laundry



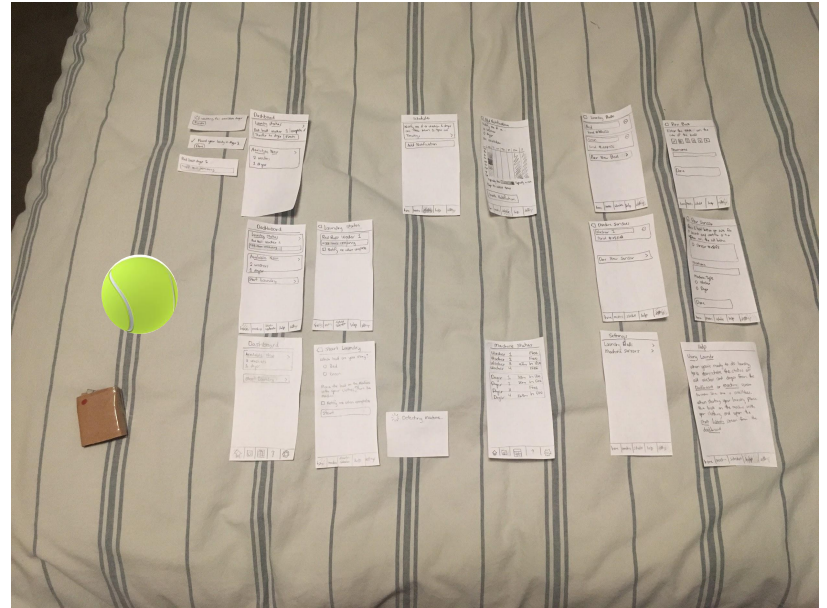
Before



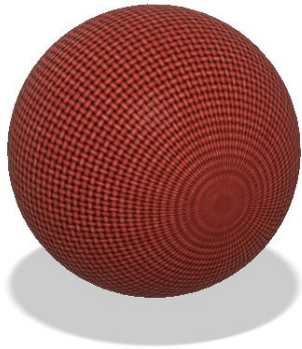
After

# Final Paper Prototype

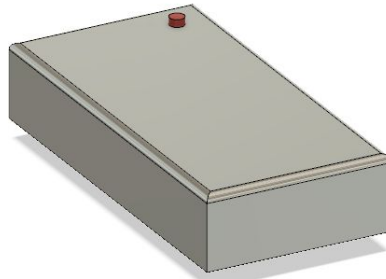
- Task 1: Knowing when to do laundry
  - Machine availability
  - Scheduler
- Task 2: Knowing when your laundry is done
  - App notifications



# Digital Mockup



Ball



Machine sensor



App (notifies and display statuses)

# Task 1: Knowing when to do laundry

## Option 1: Right now!

Machine Status

- Washer 1 ●
- Washer 2 ●
- Washer 3 ●
- Washer 4 ●
- Dryer 1 ●
- Dryer 2 ● 20 mins to complete
- Dryer 3 ● 15 mins to complete
- Dryer 4 ● 10 mins to complete

Home Schedule Machines Help

## Option 2: Schedule a notification

Add Notification

Notify me if a...  
 Washer  Dryer  
are available.

	M	T	W	Th	F	S	S
6 am							
7 am							
8 am							
9 am							
10 am							
11 am							
12 am							
1 pm							

Usage:   
Typically free Typically in use

Create Notification

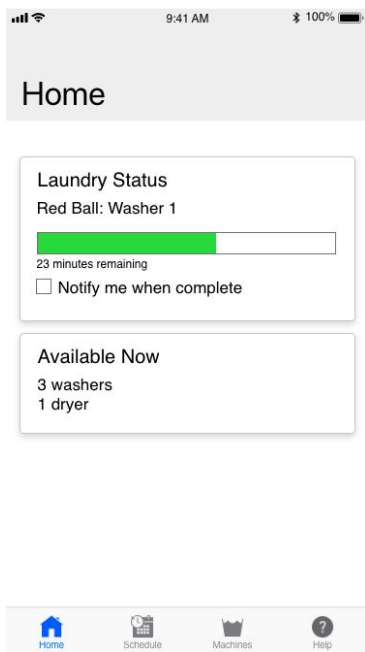
Home Schedule Machines Help

6:27

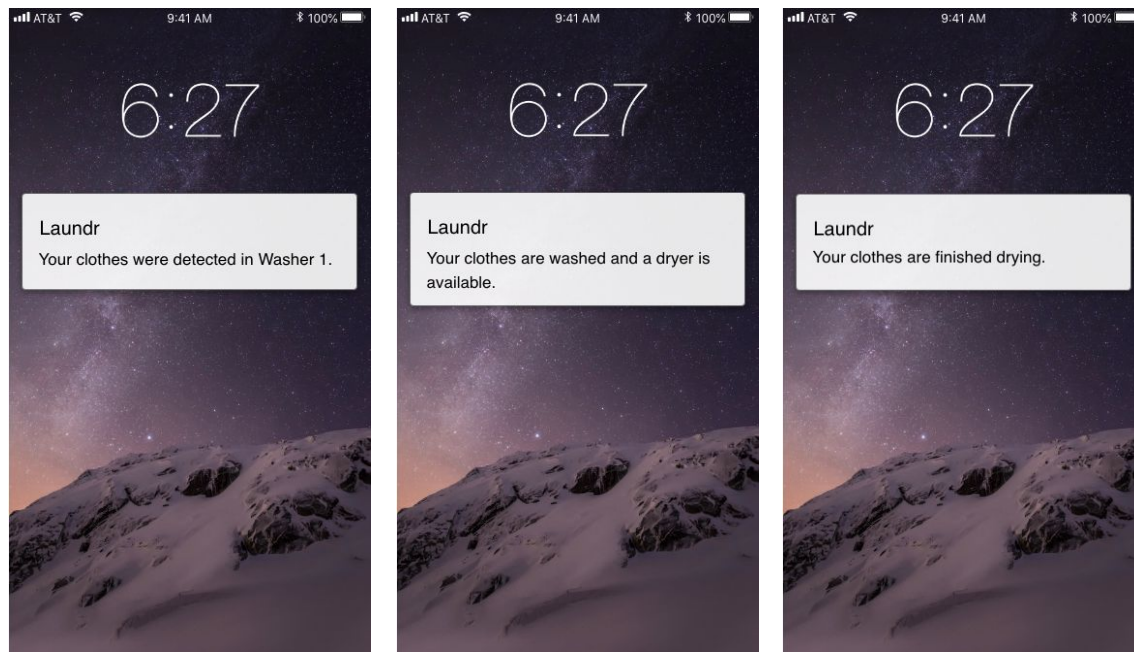
Laundr  
A Washer is available now!

# Task 2: Knowing when your laundry is done

Option 1: Check status in the app



Option 2: Notifications with real-time updates



# Lessons Learned

- Importance of an Iterative Design Process.
- User Research, selecting the right participants and right approach.
- Revising the scope of the project.
- How Usability Tests help us design user-centered products.