# armoir
# Field Usability Study

Alex Weitzman || Ellen Roper || Janna Huang || Starr Jiang

# The Team



Alex Weitzman

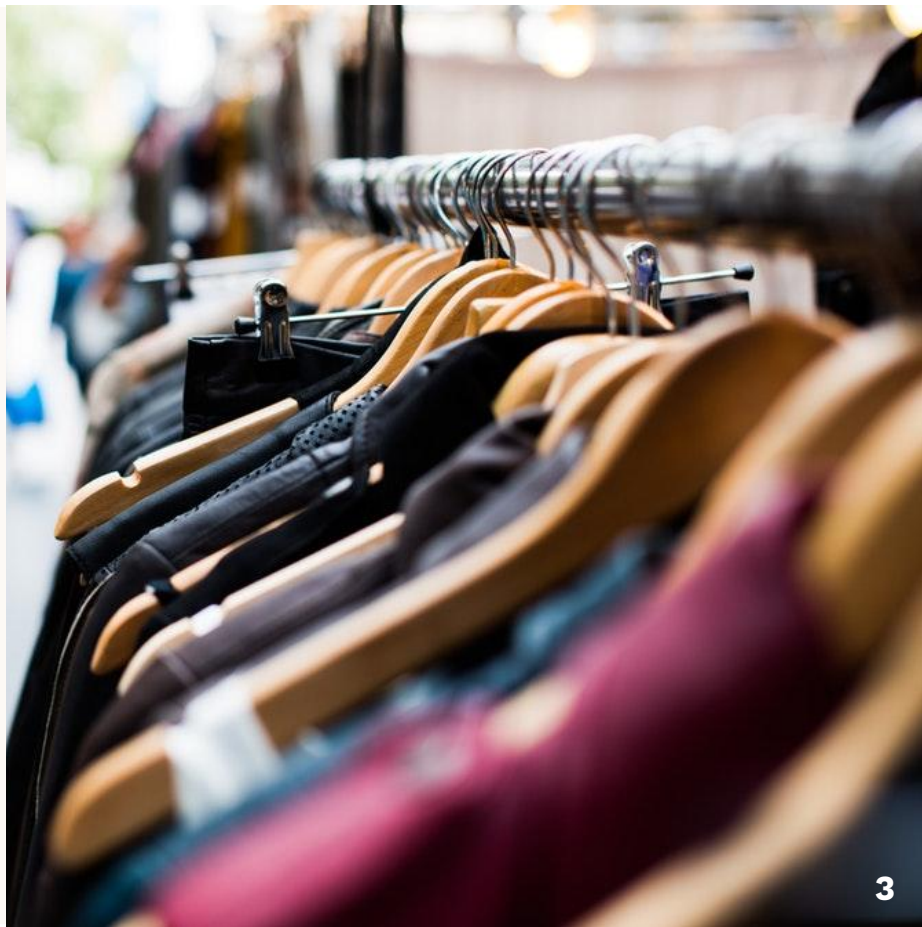

Ellen Roper



Janna Huang
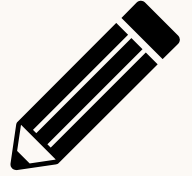


Starr Jiang

# armoir

find that missing piece

# Overview

1. Prototype Changes
2. Methods & Tasks
3. Results
4. Discussion

# Prototype Changes

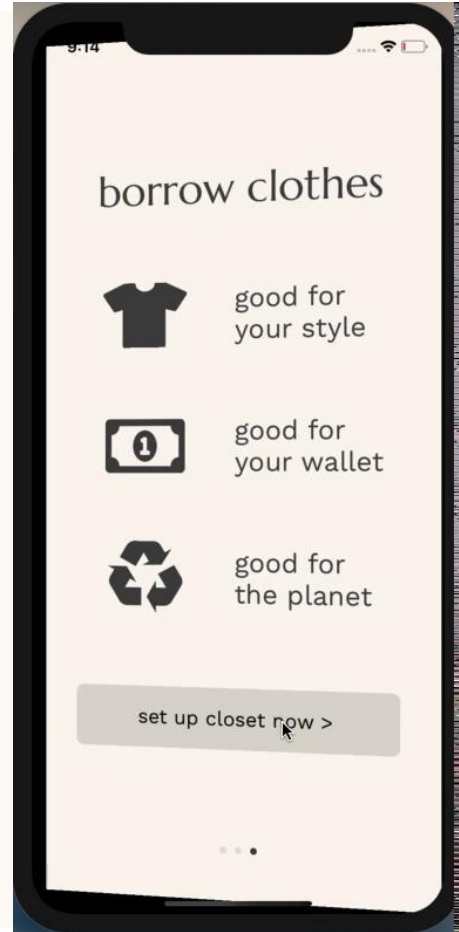# Prototype Changes

- Changed typeface and colors

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*old*

*new*

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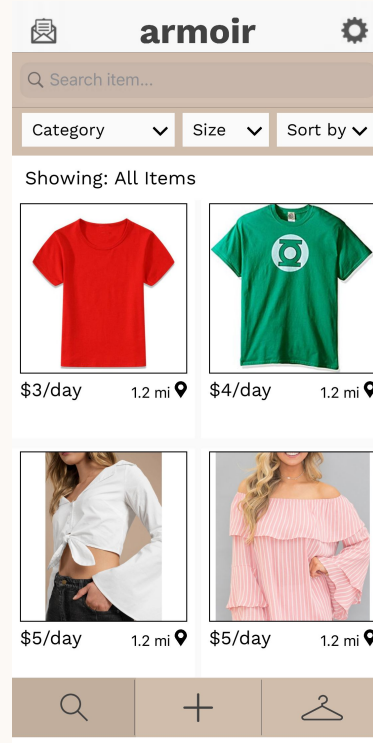- Redesigned inbox to support messaging and marking exchanges
- Updated photos of clothing to fit platform
- Added additional tab for clothing uploads ("My closet") in closet tab



10
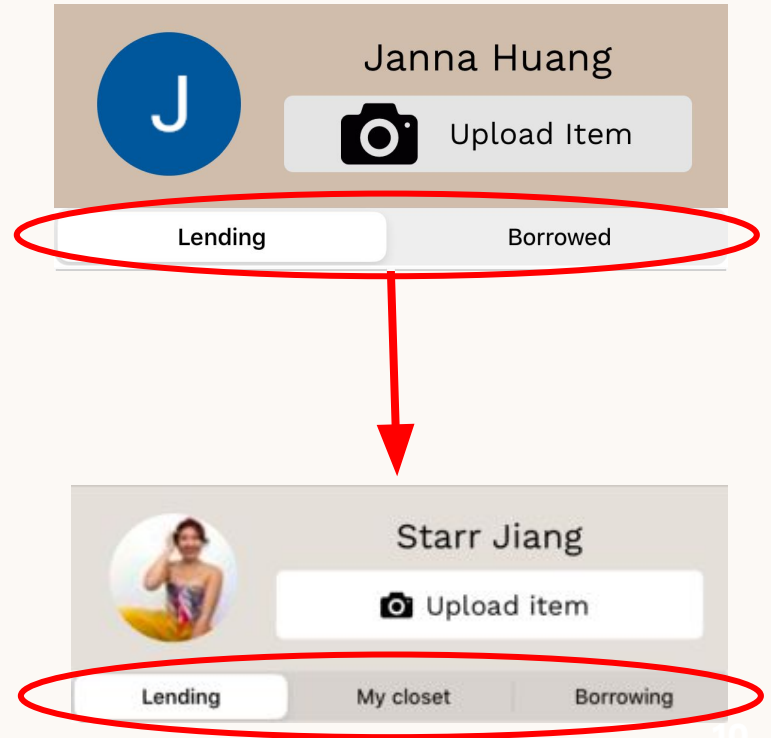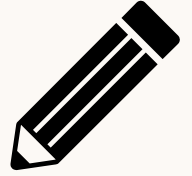
# Methods & Tasks

# Participants



**Angela**
Senior
Shops on
Abercrombie
website



**Wynna**
High Schooler
Shops on Urban
Outfitters
website



**Colin**
Senior
Buys socks off
of Amazon



**Vamsi**
Senior
Likes Amazon
Prime Wardrobe



**Tara**
Senior
Doesn't online
shop



**Michelle**
SJSU Student
Buys working
leggings online

# Apparatus

- Filmed with iPhone cameras
- Firebase for registering clicks
- Ran tests in participants' rooms/closets
- Ran app on iPhone 10
- Participants compensated with $10 Amazon gift card and many thank you's
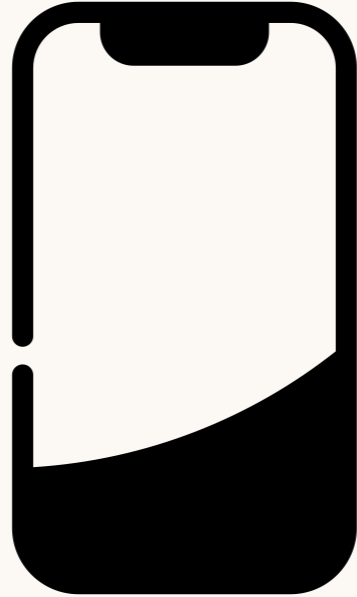
# Procedure

- Pre-written script for short demo of system
- Collected demographic data
- Signed consent form for data collected
- Handed out 5 tasks on separate index cards for participants to complete
- Debriefing interview
  - Follow-up questions on completing tasks
  - Thoughts & feelings while using app
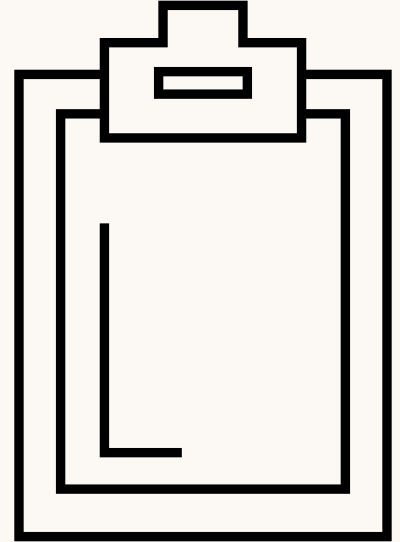
# Test Measures

- Completion of each task
- Time to complete each task
- Buttons tapped to complete a task
- Errors made while completing task
- Critical Incidents (+/-)
- Thoughts/feelings while completing tasks

# Tasks

*Focus on tasks in lender/borrower interaction*

1. Explore and request to borrow clothing
2. Upload clothing to your account
3. Approve borrow request and mark clothing as exchanged
4. Send a reminder to get clothing back
5. Check when borrowed clothing is due

# Tasks
*Borrower*

1. Explore and request to borrow clothing

*What we looked for:*

- *How did users search - Keywords? Size? Type?*

# Tasks
*Lender*

## 2. Upload clothing to your account

*What we looked for:*
- *How did participants photograph their items?*
- *How did participants choose the price they set?*

# Tasks
*Lender*

3. Approve a borrow request and mark clothing as exchanged

*What we looked for:*

- *Could users find the inbox feature?*
- *How did they interact with the chat view?*

# Tasks

*Lender*

4. Send a reminder to get clothing back

*What we looked for:*

- *Do the users go to the inbox or the closet to complete this task?*

# Tasks
*Borrower*

5. Check when borrowed clothing is due

*What we looked for:*
- *Where did users go to find this information?*
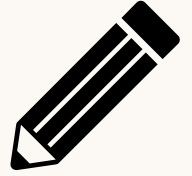
# Results

# Results: At A Glance

| Task | Average Completion Time | Fastest Time | Total Errors | Completed |
|------|------------------------|--------------|--------------|-----------|
| 1 | 20.23 s | 10.05 s | 1 | 6/6 |
| 2 | 40.25 s | 31.23 s | 1 | 6/6 |
| 3 | 53.19 s | 15.23 s | 12 | 6/6 |
| 4 | 29.33 s | 8.9 s | 5 | 6/6 |
| 5 | 8.1 s | 2.4 s | 0 | 6/6 |

# Results

1. Explore and request to borrow clothing

Average Completion Time: 20.23 s

Fastest Time: 10.05 s

Errors: 1

## Completed: 6/6

# Results

1. Explore and request to borrow clothing

Critical Incidents:
- 2 users thought the onboarding screen with photos was the closet
- 2 users stated that scrolling through the clothing was fun, interesting, and intuitive

# Results

2. Upload an item of clothing from your closet.

Average Completion Time: 40.25 s
Fastest Time: 31.23 s
Errors: 1

Completed: 6/6

# Results

## 2. Upload an item of clothing from your closet

Critical Incidents:

- Users wanted to hang the items of clothing from hangers in the photos
- 2 users did not take the task very seriously and put random values for the descriptions/price of the uploaded items

# Results

3. Approve borrow request and mark clothing as exchanged

Average Completion Time: 53.19 s
Fastest Time:  15.23 s
Errors: 12

Completed: 6/6

# Results

## 3. Approve borrow request and mark clothing as exchanged

Critical Incidents:
- 4 users went into the closet first
- 2 users did not know what to do and asked for hints

# Results

4. Send a reminder to get clothing back

Average Completion Time: 29.33 s
Fastest Time: 8.9 s
Errors: 5

Completed: 6/6

# Results

Task 4: Send a reminder to get clothing back

Critical Incidents:
- Half of the users looked for this in the closet, the other half looked in the inbox (both are correct)
- Users who looked for the reminder in the closet didn't know which tab to go into

# Results

5. Check when borrowed clothing is due

Average Completion Time: 8.1 s
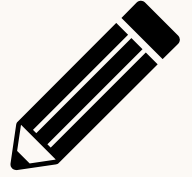Fastest Time: 2.4 s
Errors: 0

Completed: 6/6

# Results

## 5. Check when borrowed clothing is due

Critical Incidents:
- Even split between going to closet vs. going to the inbox
- Testers were quick to complete this task in every trial

# Discussion

" There should be a **guided walkthrough** when you first use the app to show you where the inbox is. I like that you can message people through it, but **it's hard to find and understand its purpose** when I first enter the app.

" I'm interested in **lending out my clothing for free** as long as the other person is **trustworthy** and doesn't mess my clothes up. I'd like to see the **rating of each user** so I know how much I can trust them.

" I would use this app to get **outfits for events or "rally wear"** since these are clothes that I don't always need but is nice to have when the occasion arises

# Discussion

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- People enjoyed using the app and generally remarked that they would use it
- Task 3 (approve a borrow request) was the most challenging, as users did not find it intuitive to look inside the inbox
- Users were split between washing their own clothing and having the borrower wash it
  - All remarked that having a deposit system would make them feel better about lending their clothes out
- Multiple users remarked that they weren't interested in making money off the app

# Future Testing

- Fully implement chat feature for "real time" borrower/lender interaction
  - In future tests, have two users test at a time to coordinate item pick-up and return
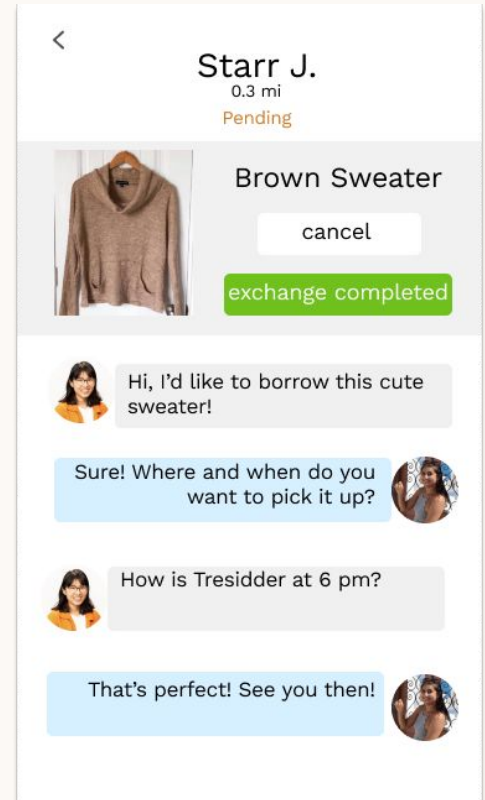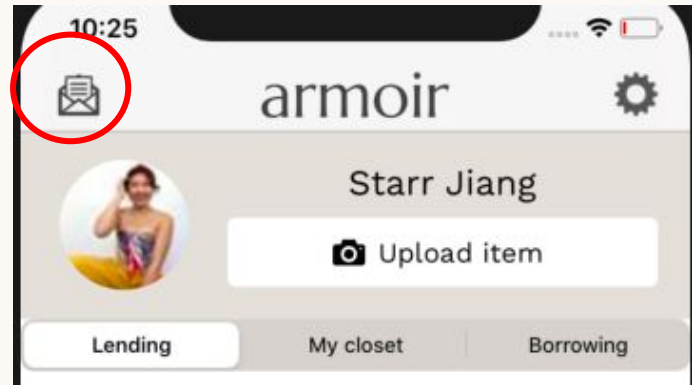
# Future Testing

- Implement functionality for users to set the dates they want to borrow item
- Have pop-ups confirm a user's action whenever they send a borrow request and reminder

# Potential Changes

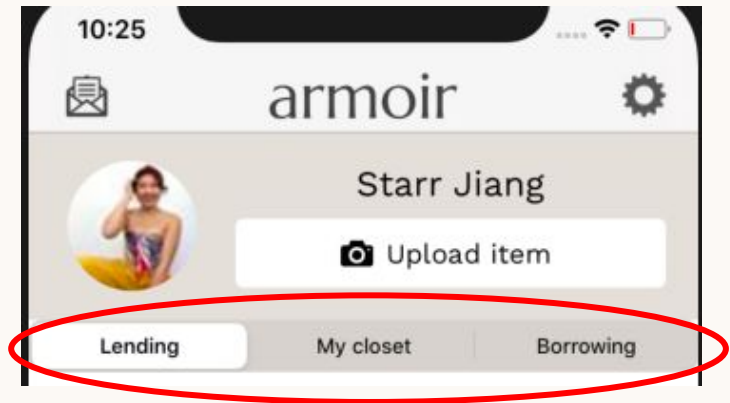Clarify the purpose of the inbox
- Have a pop-up or screen in the onboarding that tells users the purpose of the inbox
- Add notifications

# Potential Changes

Clarify the difference between the three tabs

- Consider renaming the tabs or have part of onboarding dedicated to explaining the difference

# Summary

- Usability tests with 6 subjects, 4 from a Stanford row house, 1 high schooler, and 1 SJSU student
- All tasks were completed, certain tabs and buttons were not clear
- Need to fully implement the chat feature to continue testing direct borrower/lender interaction

# Questions?