

# #OOTD

## Lo-fi Prototyping & Usability Testing

Hannah Cha, Evan Chen,  
Hana Dao and Caroline Wang

# Value Proposition

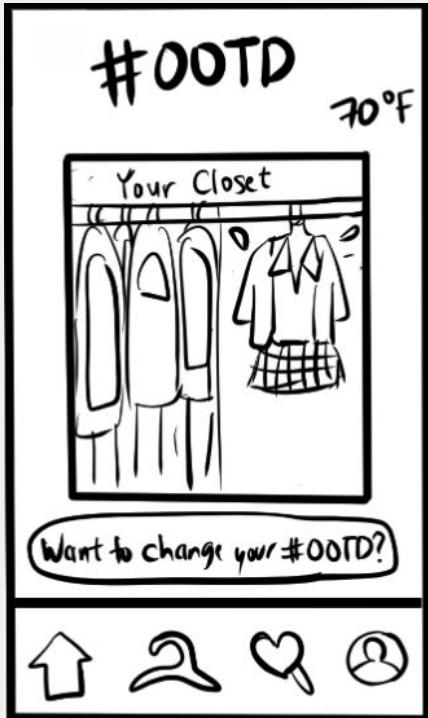
Impressing you to dress



# The Problem

Ask any person about their morning routine and they're sure to mention the act of creating an outfit. Making an outfit every morning requires time and effort which can be especially stressful.





## Our Solution

#OOTD is an app that helps you to digitize your closet with minimal activation energy required. It can be used to create an outfit for you or streamline the task for you utilizing information from the weather, previous outfit history, input from friends, and your daily schedule.

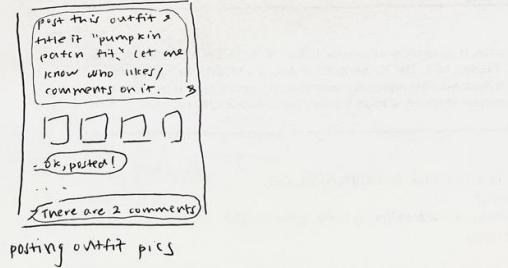
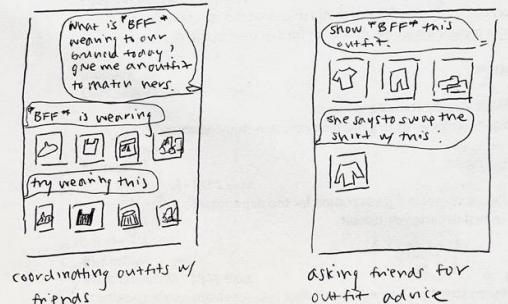
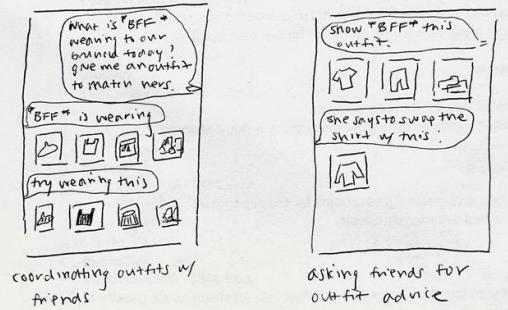
# What We'll Discuss Today

- ❖ Exploration through Concept Sketching
- ❖ Selected Interface & Rationale
- ❖ Low - Fidelity Prototype
- ❖ Usability Testing
- ❖ Results
- ❖ Further Discussion



# Concept Sketches

Chat-based concept:



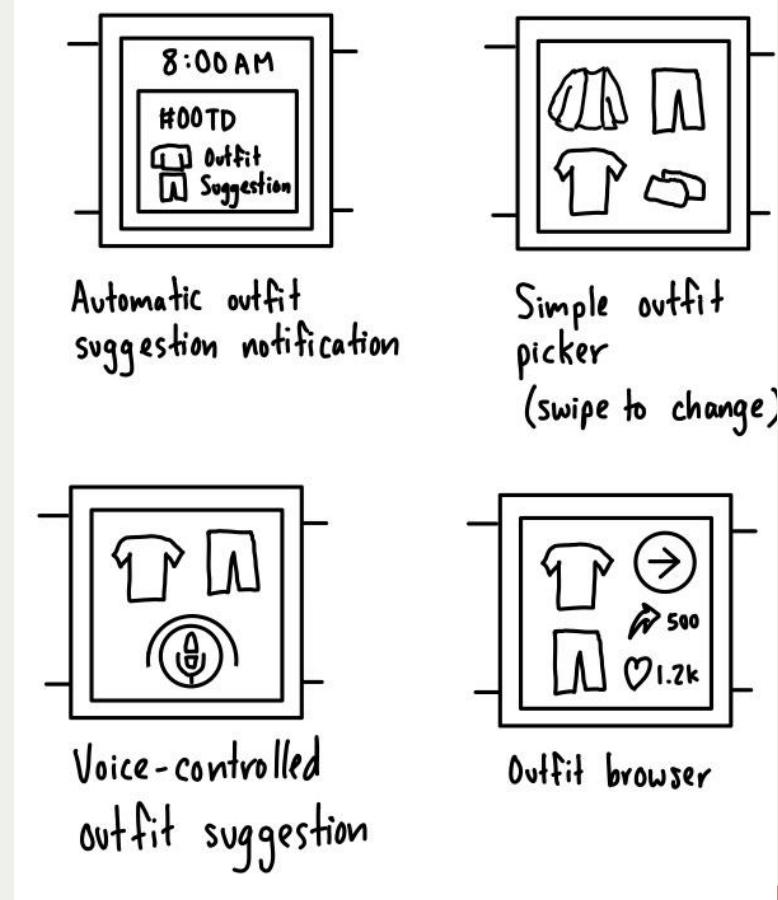
# Concept Sketches

Mobile-based  
concept:



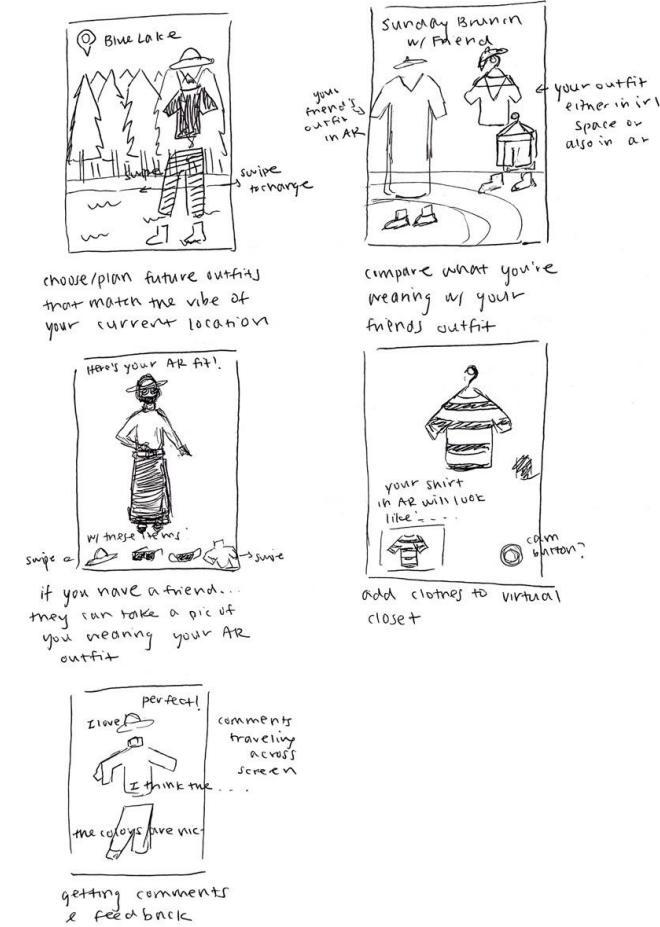
# Concept Sketches

Wearable-based  
concept:

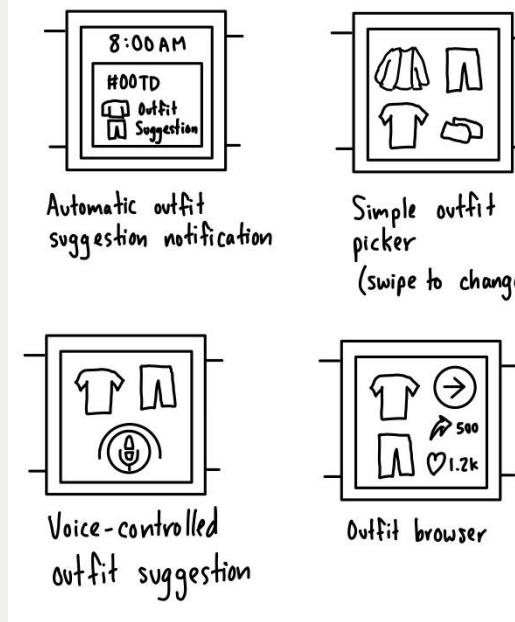


# Concept Sketches

## AR-based concept:



# Chosen Realizations



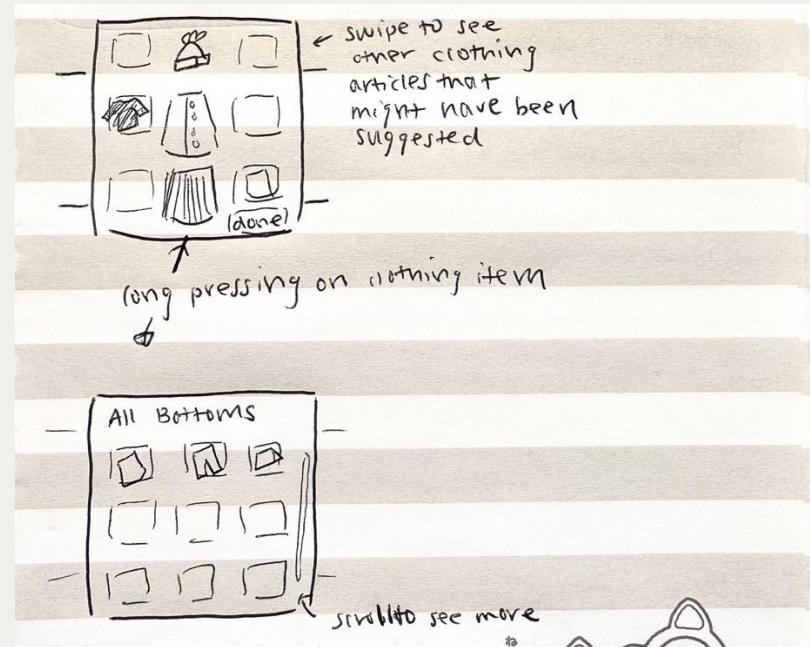
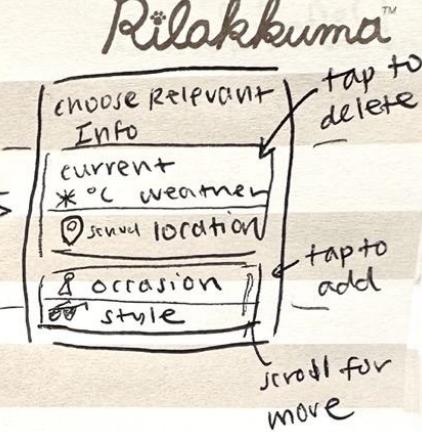
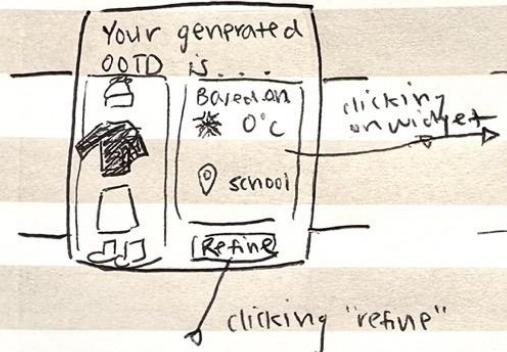
Wearable-based concept



Mobile-based concept

# Concept 1: Wearable Apple Watch

Wearable concept  
Refinement



# Chosen Realizations: Wearable Based

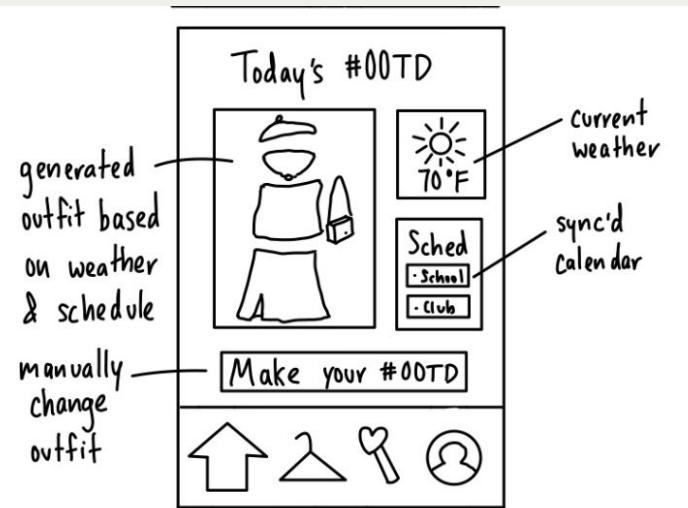
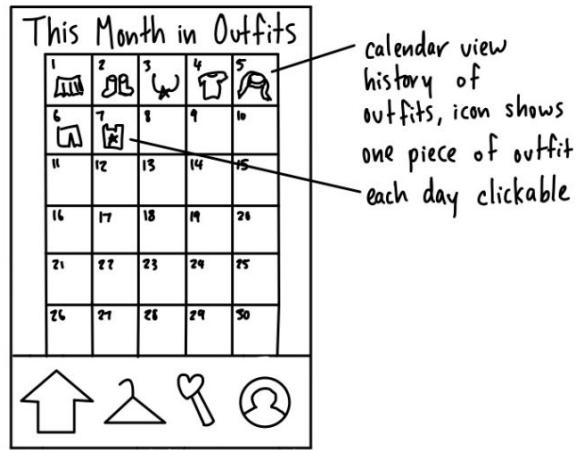
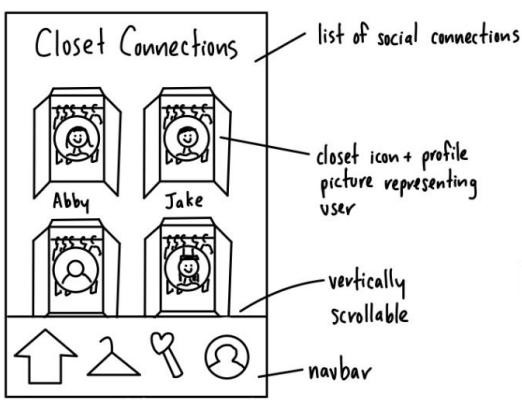
## Pros:

- Very portable and lightweight -> people have access to their closet from anywhere

## Cons:

- People probably don't put on their watch first thing in the morning
- People have big closets but the wearable interface is quite small
- Hard to create intuitive design that allows user to easily access the contents of their closet

# Chosen Realizations: Mobile Application



# Chosen Realizations: Mobile Application

## Pros:

- Touch screen and certain motions (ie swiping) can resemble looking through the hangers in a closet
- Has a built in camera to take pictures, and can connect to Internet to look up clothes

## Cons:

- Cannot capture all aspects of putting together an outfit ie the feel of the fabric, how it fits

# Rationale for mobile app over watch

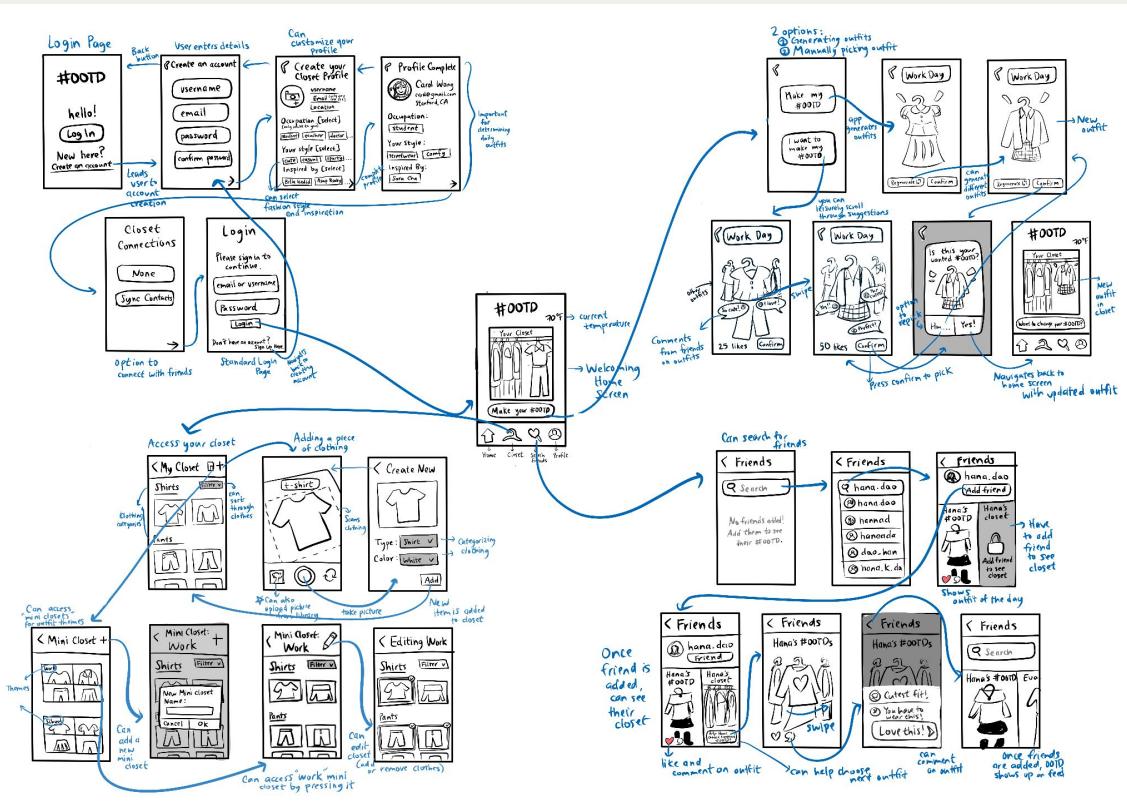
- More people own phones than phone + wearable
- Phone is what people look at first in morning, people don't put watch on immediately
- Phone has bigger interface which can accommodate big wardrobes and intricate clothes
- Since #ootd also has a social aspect, it doesn't need to be a discreet app, so the discreteness of a wearable app is not necessary
- Phones have cameras, watches do not

# Lo-Fi Prototype

No, not  
that type  
of lo-fi

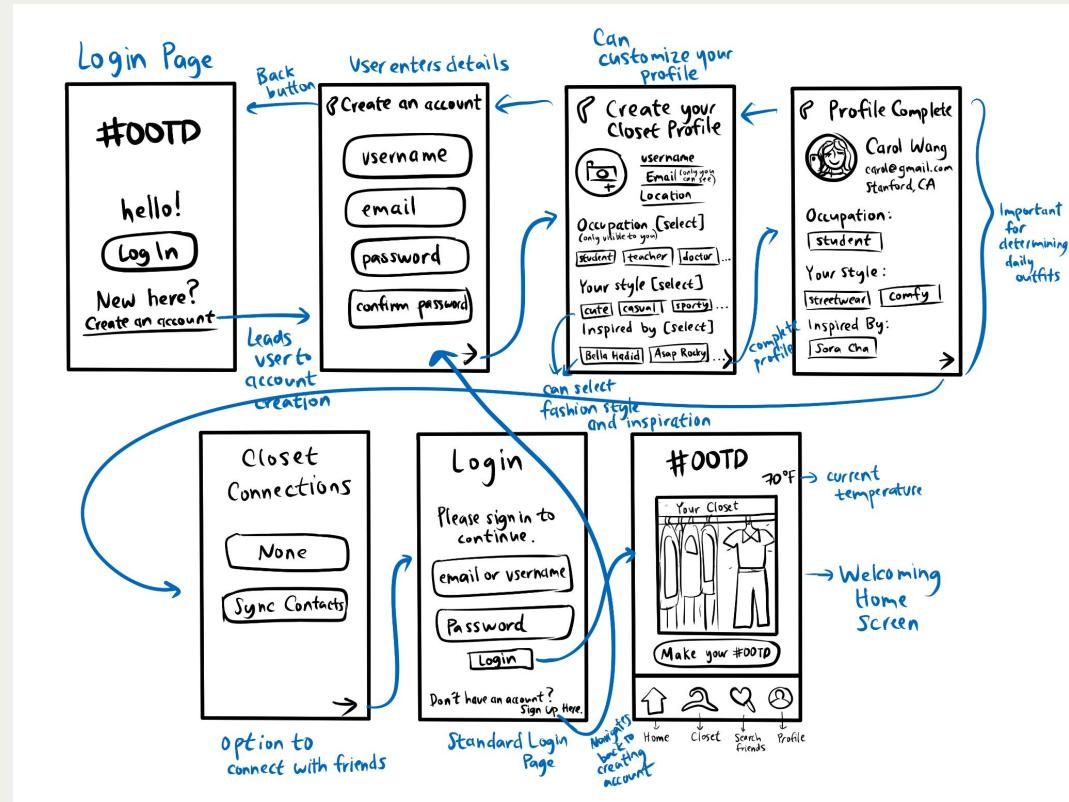


# System Overview



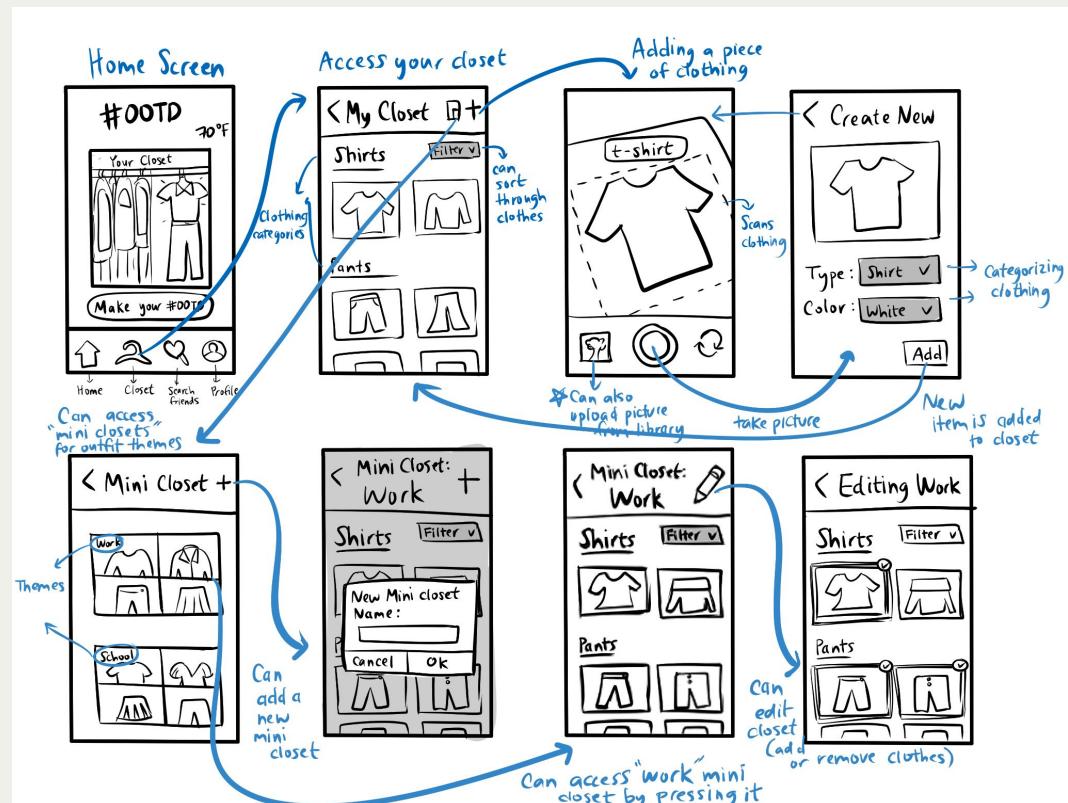
# Section 1: Creating an Account

- Easily create an account and customize details such as occupation, clothing style, and favorite fashion icons.



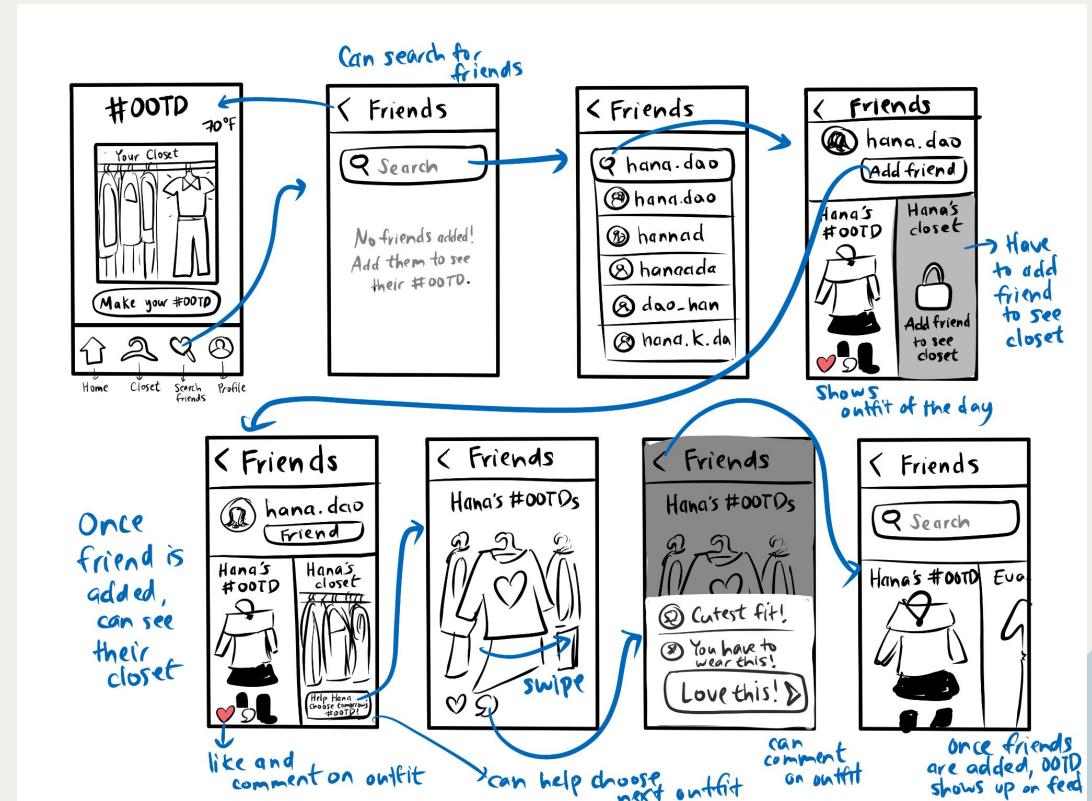
# Section 2: Digitizing Clothes

- Start by adding clothes to your closet by taking a picture or scanning a photo in your library.
- Sort your clothes based on themes (work clothes, going out clothes) in mini closets!



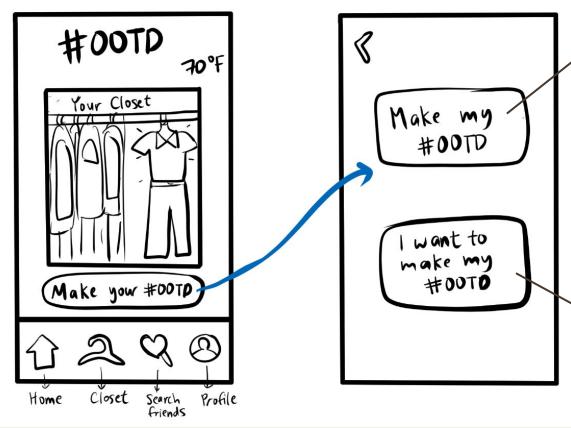
# Section 3: Adding Friends

- Easily find friends by username
- Like and comment on their #OOTD!
- Help them plan and pick their next #OOTD

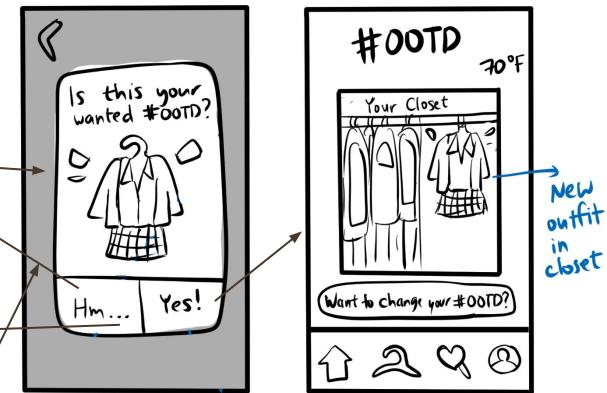
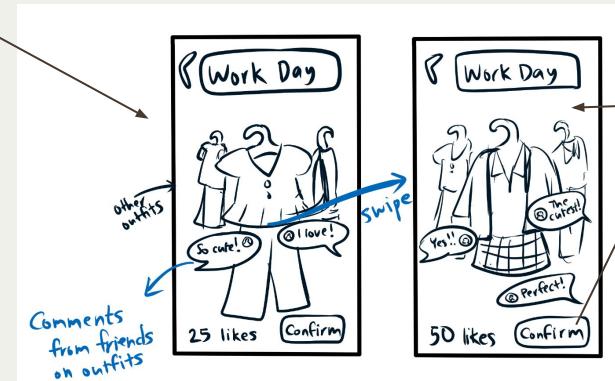


# Section 4: Choosing an Outfit

Path 1: Automatically Generated Outfit



Path 2: Manually choosing outfit

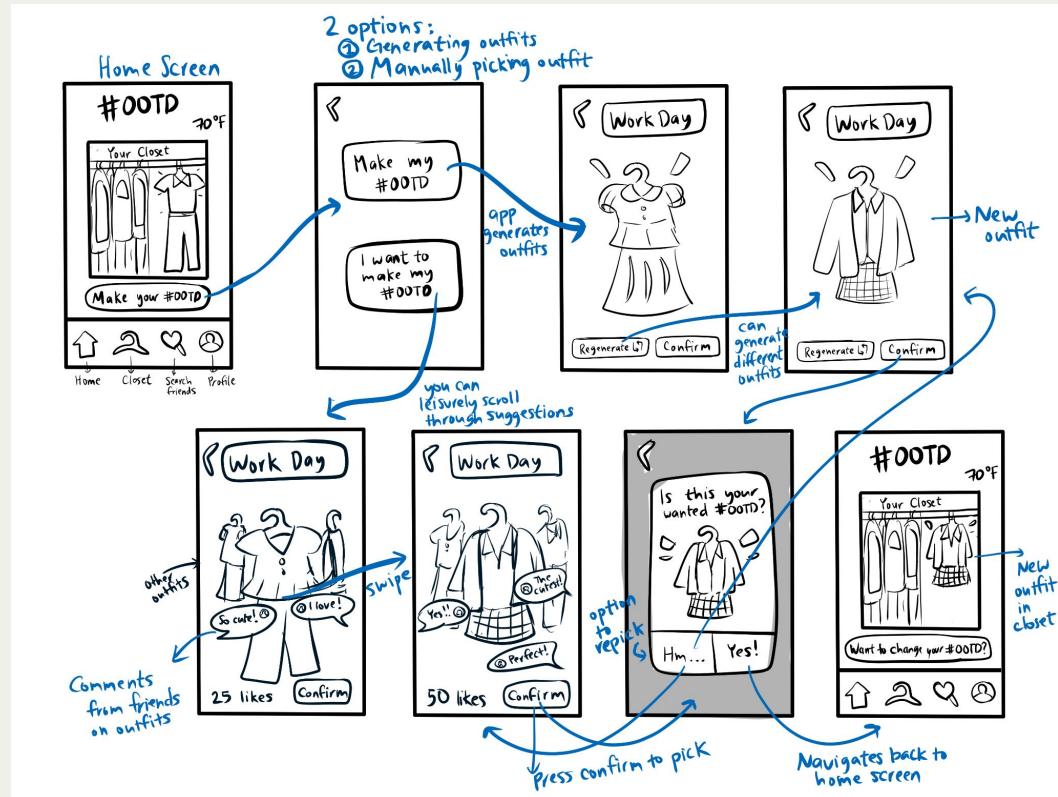


# Task Flows



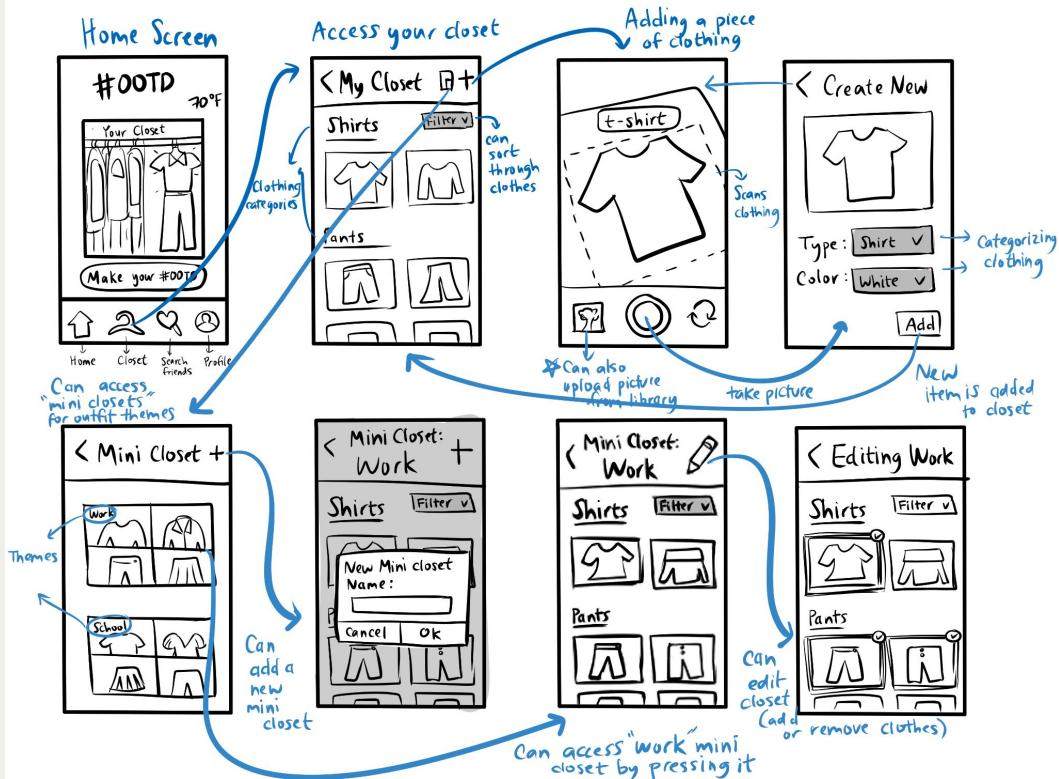
# Simple Task Flow

- Users will be engaging in outfit-choosing daily



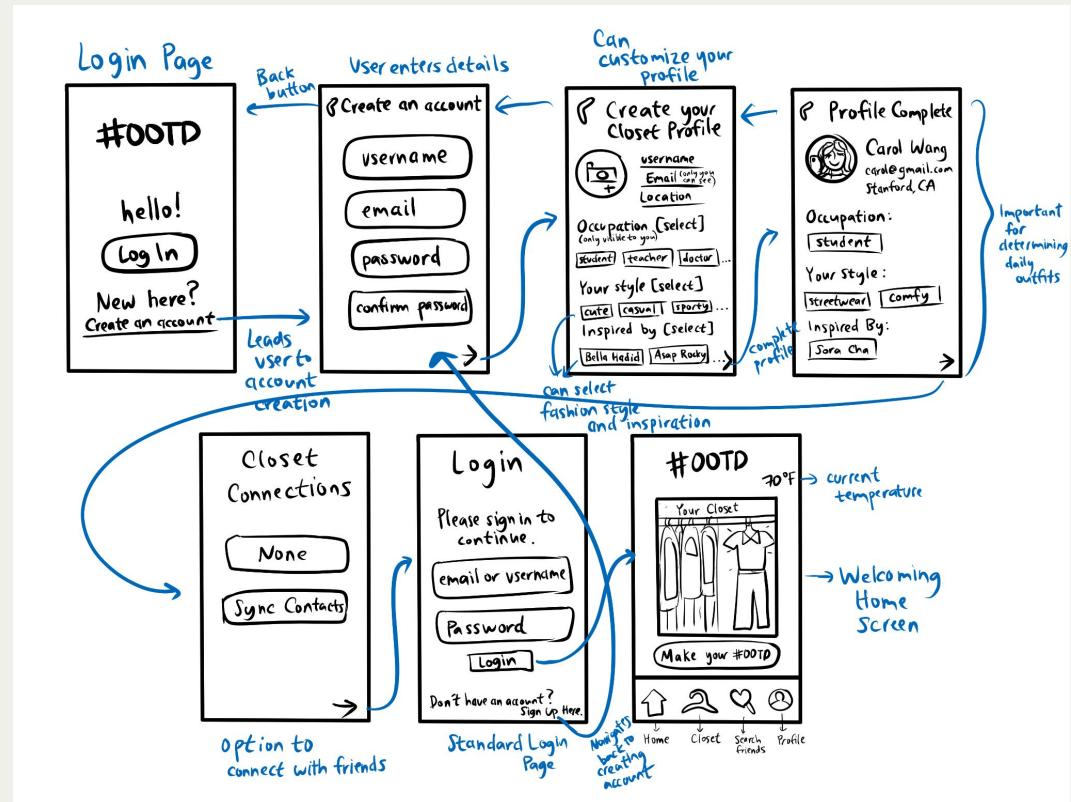
# Medium Task Flow

- Users will only have to upload clothing items once, but can manage their closet and add new clothes as needed



# Complex Task Flow

- Users will only have to create a profile once for their account



# Usability Testing



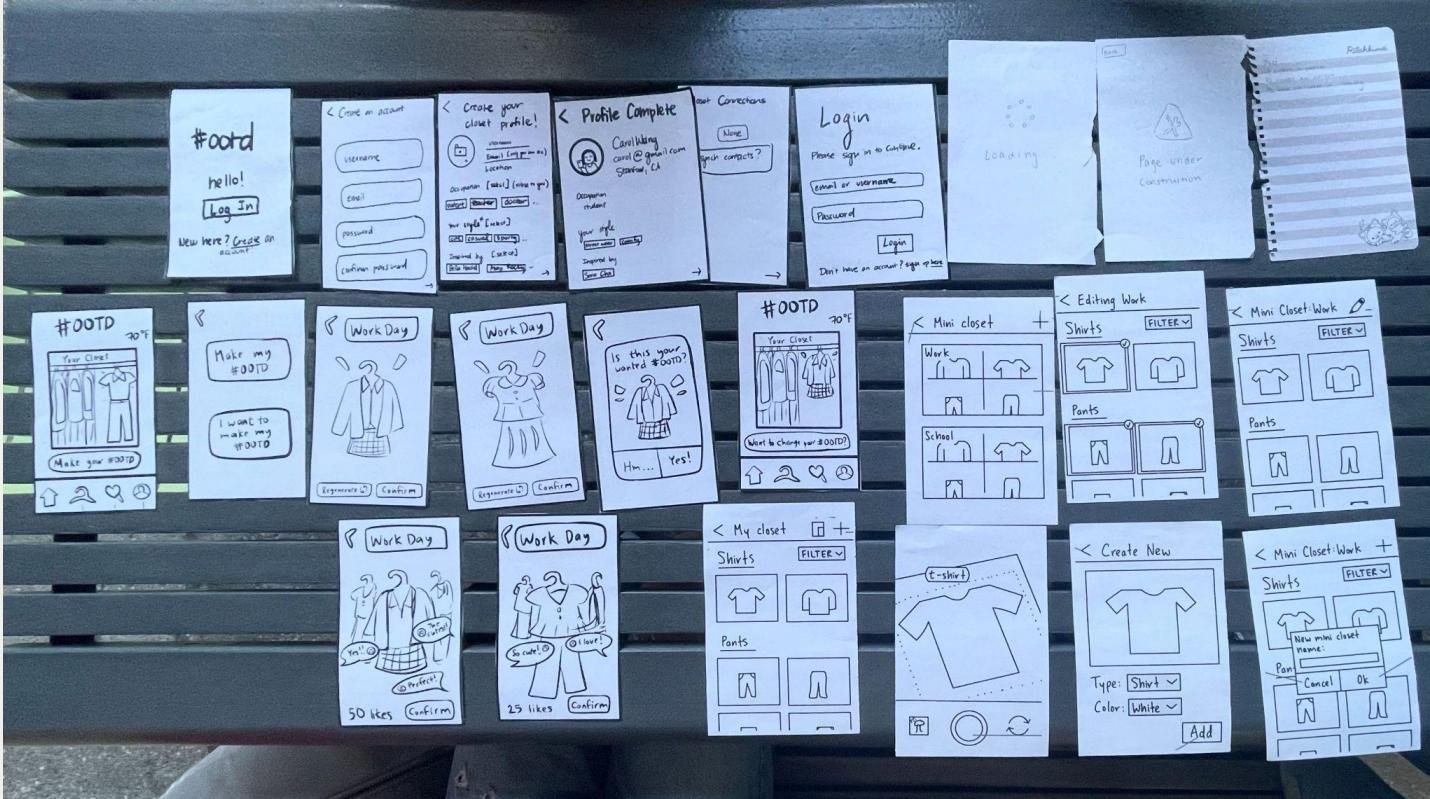
# Testing Methodology

Apparatus: We created a paper prototype, laying them out on a table in front of the user and manually responded to the user's actions, moving around the paper.

Environment: We interviewed 3 people at cafes/boba shops near University Avenue and a 4th person at COHO

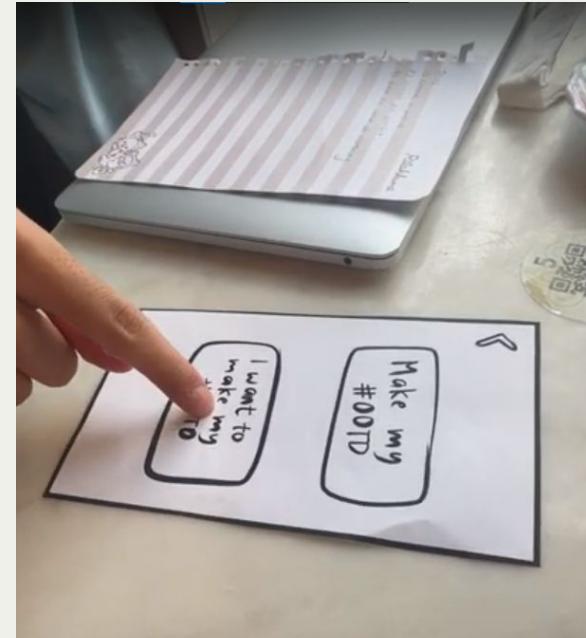


# Set-up



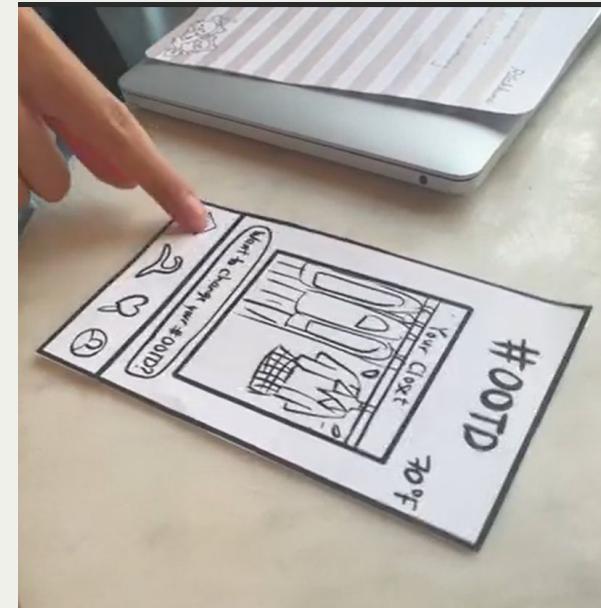
# Procedure

- Introduce #OOTD to interviewees
- Present a hypothetical scenario i.e.  
3 tasks to do on the app which were:
  - Creating an account
  - Uploading an article of clothing
  - Choosing an outfit
- Participants were asked to narrate out loud as they used the prototype



# Post-Procedure

- After, we asked each participant to share:
  - What felt simplest to us during the process
  - What seemed most confusing to them
- They were asked to rate the intuitiveness of the app and to share any final thoughts or questions



# Usability Goal

**Intuitiveness:** Ask how easy/intuitive the features of the app felt on a scale of 1-10.

**Effectiveness:** How long it took participant to complete the task.

# Roles

Hannah



Evan



Hana



Caroline



Facilitator

Computer

Greeter/Observer

Notetaker

# Recruitment

## Ashley

A free lance graphic designer in her 20s



## Kangrui

A 2nd year CS PhD at Stanford



## Tyler

Student Engagement Coordinator at Stanford Arts



## Ethan

An 18-year old, fashion-forward senior in high school

We specialize in quality. since 1999.  
**Mr. Sun**

# Results



# Process Data

- Participants rated the intuitiveness of our interface fairly highly
- Tasks took 3-4 minutes to complete
- Additional feedback indicates points of improvement in terms of interface ambiguity



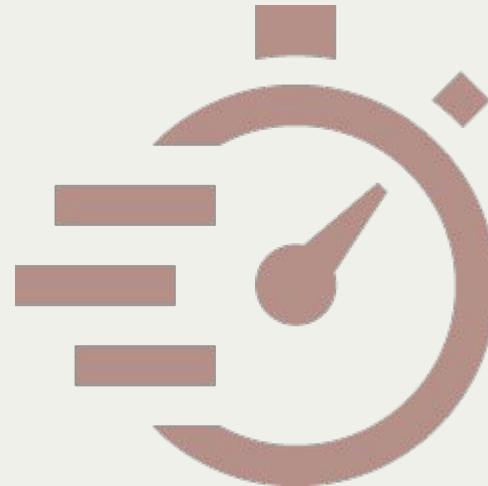
# Bottom-line Data: Intuitiveness

- Intuitiveness scores:
  - Ashley 8
  - Ethan 8-9
  - Kangrui 8
  - Tyler 9-10
- Participants rated our interface as very intuitive, but pointed out that the paper medium and lack of color made it more difficult to use



# Bottom-line Data: Effectiveness

- Time to complete all 3 tasks:
  - Ashley 4:02
  - Ethan 3:43
  - Kangrui 3:48
  - Tyler 3:22
- Time to completion was somewhat consistent
- Profile creation was the slowest task, often taking over a minute



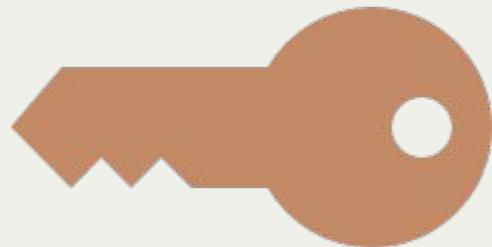


## Key Results

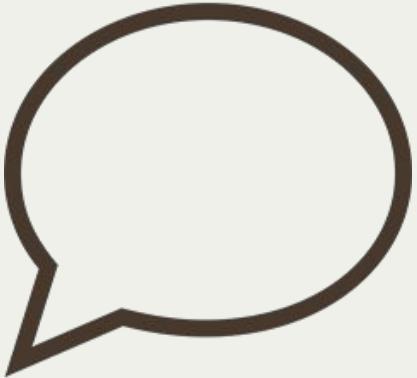
- Some participants were confused over the wording between “Create my outfit” and “I want to create my outfit”
- There was some confusion and lack of clarity for the home page buttons
- Some participants looked overwhelmed by the volume of the “Create your profile page”

# Other key observations

- Some users chose to sync contacts, and guessed that it would allow you to share outfits with friends
- A lot of participants could not find the “add” button on the closet page, and they didn’t know which parts they could interact with



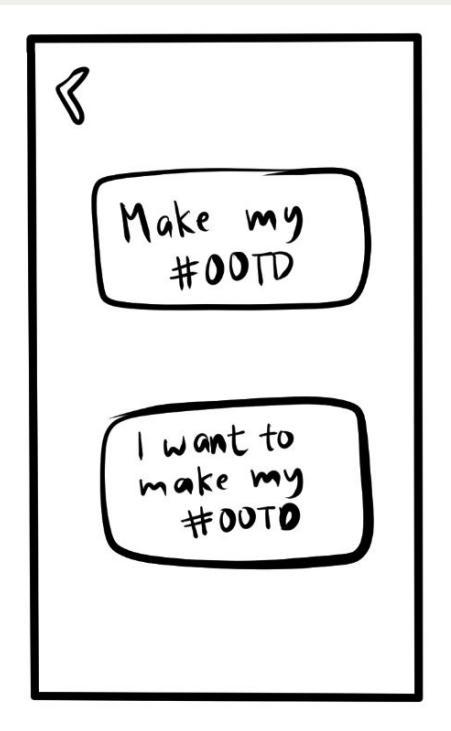
# Discussion



# Implications

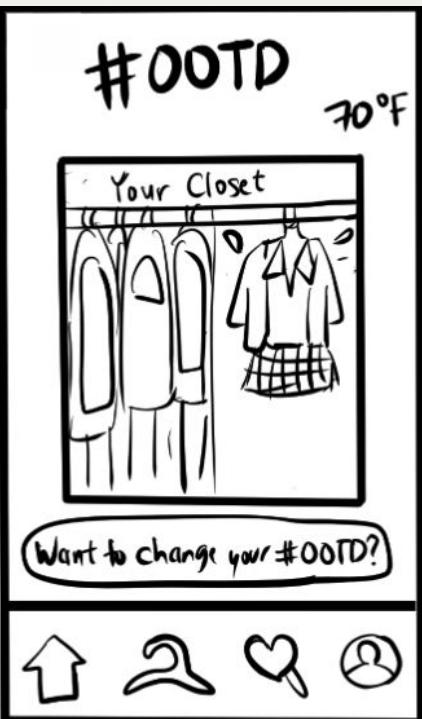
- Our data indicates that our interface was fairly intuitive and effective, with high intuitiveness ratings and consistent task completion
- The occasional confusion at our UI's icons and buttons suggests that some elements convey an ambiguous meaning
- Participant unfamiliarity with the prototype medium may indicate that the final interface may be more intuitive

# Changes



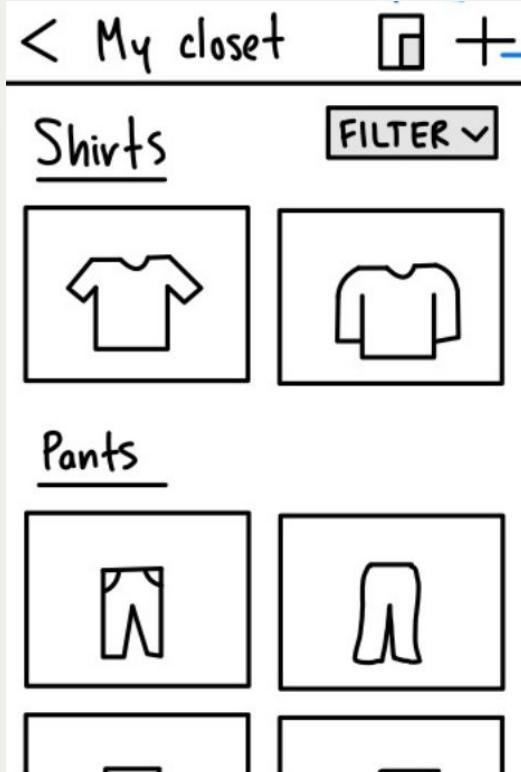
- We will change the wording under the outfit creation page to differentiate the 2 options
  - We will change the first option to say “Generate my #OOTD” to specify that it is a quicker and algorithmic process.

# Changes



- We will improve the clarity of the navigation bar icons
  - The home icon will feature another line to make it appear more like a home
  - We will revise the design of the heart-search icon to better convey its meaning

# Changes



- We will improve the clarity of the add button on the closet page
  - Making the button larger
  - Adding text as a label to the icon

# Testing couldn't reveal...

- How users would feel about using the app under a time limit/in a rush
- Actual testing time distorted due to live feedback
- What does live social interaction such as commenting and liking on #OOTD look like?

# Questions?



# Appendix

## **Wearable based**

### Pros:

- Very portable and lightweight -> people have access to their closet from anywhere
- Can be used hands free, with voice control
- Still has a screen such that people can visually look at their clothes

### Cons:

- People probably don't put on their watch first thing in the morning
- People have big closets but the wearable interface is quite small - hard to create intuitive design that allows user to easily access the contents of their closet (scrolling will take a long time, but the interface might be too small to comfortably fit a search or filter button)
- Wearable can't take pictures of clothing on its own
- A lot of people own phones but not many people own wearables

## **Mobile Based Application**

### Pros:

- Almost everyone owns a phone
- Large enough interface for people to navigate through their closet and visually see their clothes
- Touch screen and certain motions (ie swiping) can resemble looking through the hangers in a closet
- Has a built in camera to take pictures, and can connect to internet to look up clothes
- Many people check their phones first thing in the morning

### Cons:

- A large market of mobile apps already
- Cannot capture all aspects of putting together an outfit ie the feel of the fabric, how it fits

# Script

Hi! Do you have 5 minutes to spare? We are a group of Stanford students working on a clothing app for the class, and are looking for people to test our prototype.

Ask to sign consent form

We currently have a paper prototype, but treat it as though its a phone screen, so feel free to press buttons or swipe. It would also be really helpful if you could narrate your thoughts out loud! We have three tasks here for you to complete.

\*Show tasks, start prototype.\*

That is all! Do you have any questions or feedback for us? From a scale of 1 to 10, how intuitive would you say the process was? Were there any moments that were particularly confusing? Thank you again!

# Critical Incidents

- Some users chose to sync contacts, and guessed that it would allow you to share outfits with friends (severity: 1)
  - Maybe we should explicitly state the reason why you would want to sync contacts on that page (ie “sync contacts to share your outfits with friends!”)
- It was confusing what the home page was (severity: 2)
  - Participants clicked the home button which led them to stay on the same page
  - We should indicate what page they are currently on (maybe by changing the color of the icons?)
- One user (kangrui) stated that after creating an account, it should just take you directly to your home page, rather than take you back to the login page (severity: 2)
- Kangrui did not know how to change the clothing in the “I want to create my own outfit” page (severity: 4)
  - Didn’t know whether to swipe or press, so just pressed confirm
  - Have better visual cues/flow so that it’s intuitive how to change outfits
  - Maybe don’t even provide a base outfit? (and if we do, where does the base outfit come from? Is it autogenerated? Based on our last outfit?)
- A lot of participants could not find the “add” button on the closet page, and they didn’t know which parts they could interact with (severity: 3)
  - Ie a lot of them pressed on images of an uploaded tshirt, thinking it would do something
  - Maybe we should therefore lead them somewhere?
- On the page that confirms if the generated outfit is ok, there are 2 back buttons (“hmmm....” and “>”) that I’m assuming takes you back to the generated outfit (severity: 2)
  - Maybe we should consolidate that to one button
  - Also we should include a back button on the generated outfit screen, in case someone wants a previously generated outfit

# Results

Notes!:

- All participants were confused over the wording between “Create my outfit” and “I want to create my outfit”
- All participants looked kind of overwhelmed by the “create your profile page”
  - Maybe there is too much visual information? Maybe we can turn “creating your profile” into a multi page process?  
Present it in smaller chunks?
- Some users chose to sync contacts, and guessed that it would allow you to share outfits with friends
  - Maybe we should explicitly state the reason why you would want to sync contacts on that page (ie “sync contacts to share your outfits with friends!”)
- All participants were confused by the home page buttons
  - Maybe add captions in addition to the icons
  - ALSO tyler was confused when pressing on the closet picture and pressing on the hanger icon both led him to the closet page -> maybe only have one way to lead to the closet, so that people are not running in circles
- It was confusing what the home page was
  - Participants clicked the home button which led them to stay on the same page
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