

# A5: Prototype

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# FitCast Team



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Coterm  
Computer Science  
Sydney, Australia

# Value Proposition

Interpreting weather forecasts to  
relieve clothing decision fatigue



Today	THU	FRI	SAT	SUN	MON	TUE
 Sunny	 Sunny	 More sun than clouds	 Passing clouds	 More sun than clouds	 Scattered clouds	 Scattered clouds
66° 43°	69° 39°	72° 44°	78° 47°	78° 53°	77° 52°	75° 55°

# Problem/Solution

## PROBLEM

Wasting time and energy deciding what to wear/pack based on the ever changing weather

## SOLUTION

Feedback log that helps make clothing/apparel suggestions based on the current weather, weather changes, and your schedule





**Sketches**

**01**

**Selected Interface**

**02**

**Prototyping**

**03**

**Testing Methodology**

**04**

**Result & Discussion**

**05**





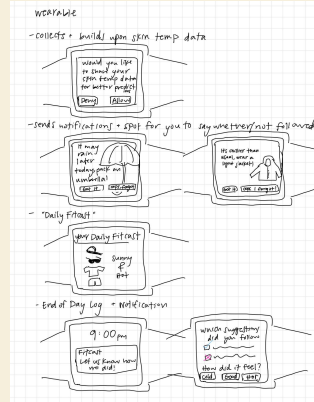
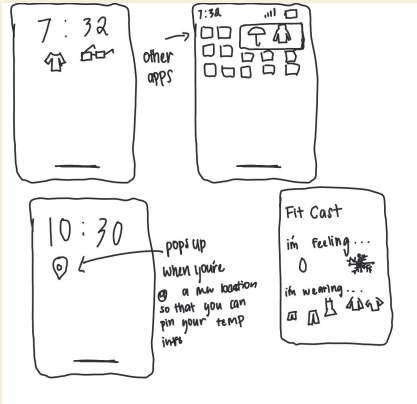
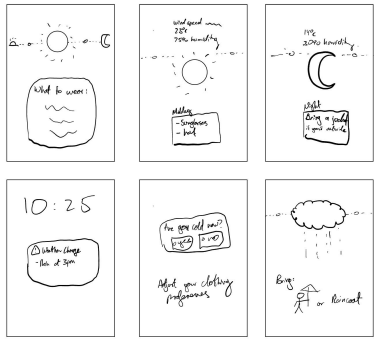
**Sketches**

**01**

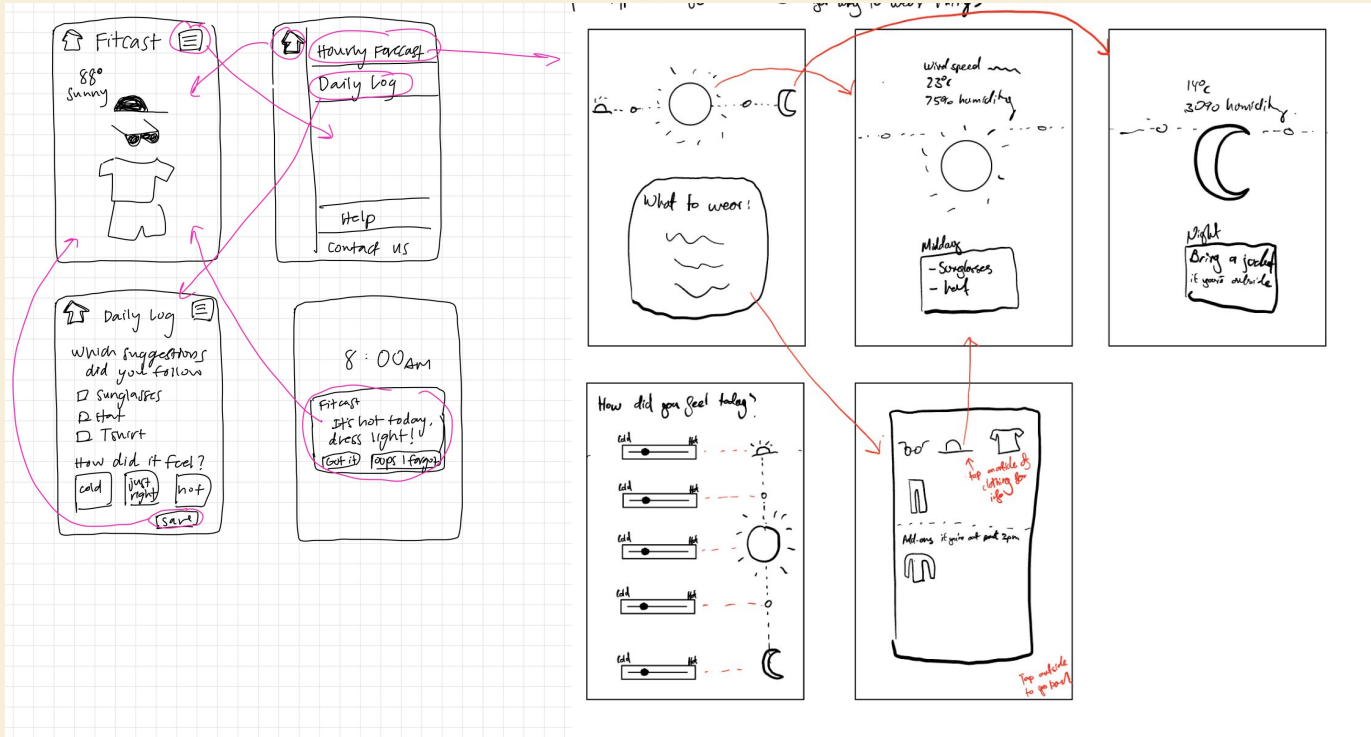


# Concept Sketches (21)

#1 App that suggests clothing & weather conditions for why to wear things



# #1 [Mobile App]



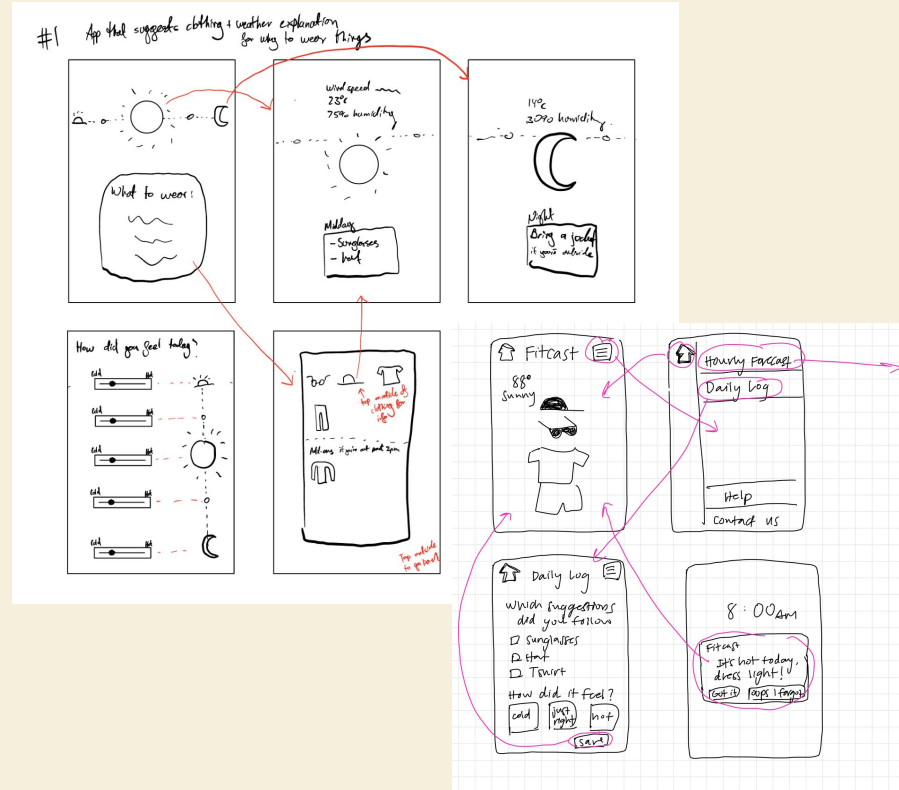
# Pros and Cons [Mobile App]

## Pros

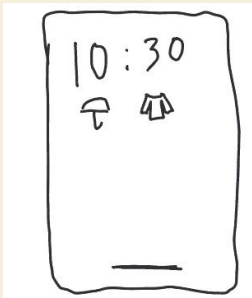
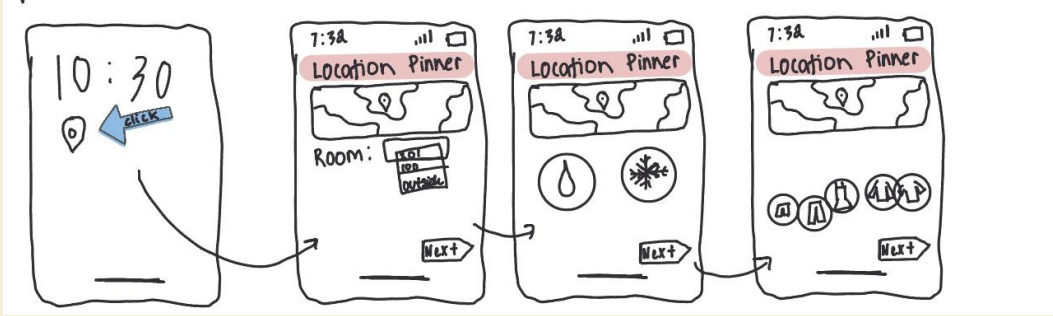
1. Explains why it is suggesting certain articles of clothing
2. Can visualise weather changes
3. Very simplistic
4. Users are given more autonomy

## Cons

1. May be viewed as a pure weather app and clothing suggestions are an afterthought
2. Could have too much autonomy → getting dressed is just as hard as before



# #2 [Widget-Based App]



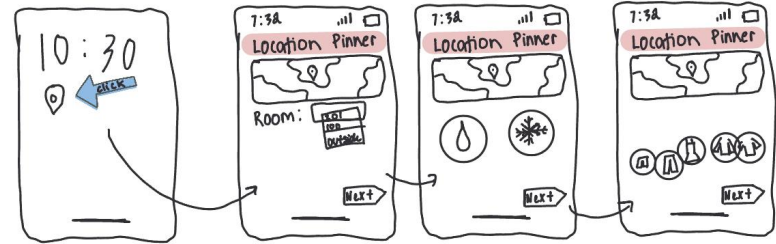
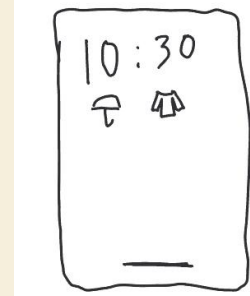
# Pros and Cons [Widget-Based App]



## Pros

- Simple UI
- Less (bothersome) notifications
- Icons are easy to recognize
- Clothing suggestions aren't hyper-specific

## Cons

- Easy to ignore
- Over-simplified
- May have too much going on





**Selected  
Interface**

**02**



# Key Features We Liked

## End of day log

Push notification to prompt users to reflect on how they felt about the suggestions

## Push notifications

Give suggestions (typically in the morning). Under those suggestions, allow for immediate feedback, ie. "Got it!" and "Oops, I forgot"

## "Pinning"

When a user's location changes, have a widget pop up on their home screen which allows them to immediately state their feelings about the temperature

## Explanation of Clothing suggestions

Provide user with some autonomy given the information about the weather + explains why you should pack a hoodie or sunglasses etc.

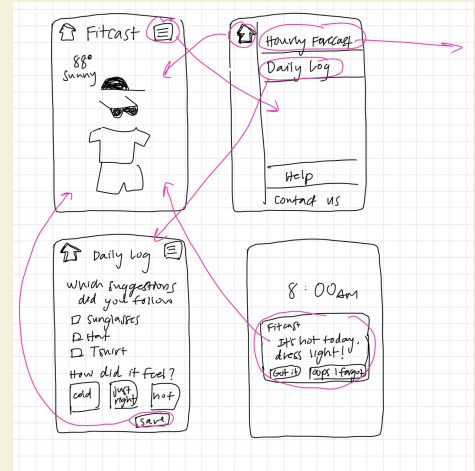
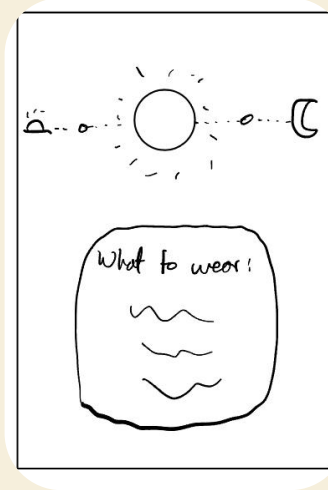
# Chosen Design - Weather Timeline W/ Icons

**Simplistic design** that suggests clothing but also explains **reasoning** behind suggestions

Can **easily see weather changes** throughout the day, the user can still make their own decisions

**Integrated icon design** that has simplified interface (suggest clothing + warns of any weather changes)

**Adjust suggestions** based on **survey results** and aggregated data from other users





**Prototyping**

**03**



# Target Tasks

## Simple

User is deciding what to wear based on the weather now



## Moderate

User wants to know if/how they should prepare for indoor temperatures



## Complex

User is trying to adapt their clothing wearing habits more closely to their personal temperature preferences



# Simple Task Flow

Key:

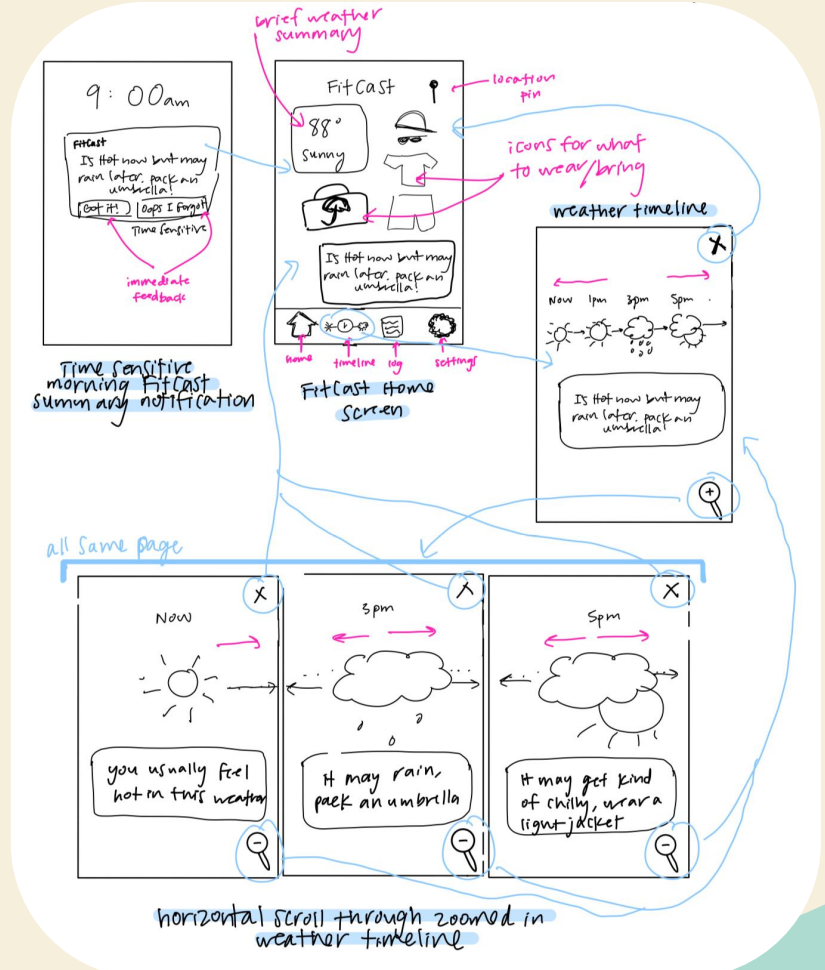
Pink = notes

Blue highlight = screen caption

Blue arrows → = transitions

## Simple

User is deciding what to wear based on the weather now



# Moderate Task Flow

## Key:

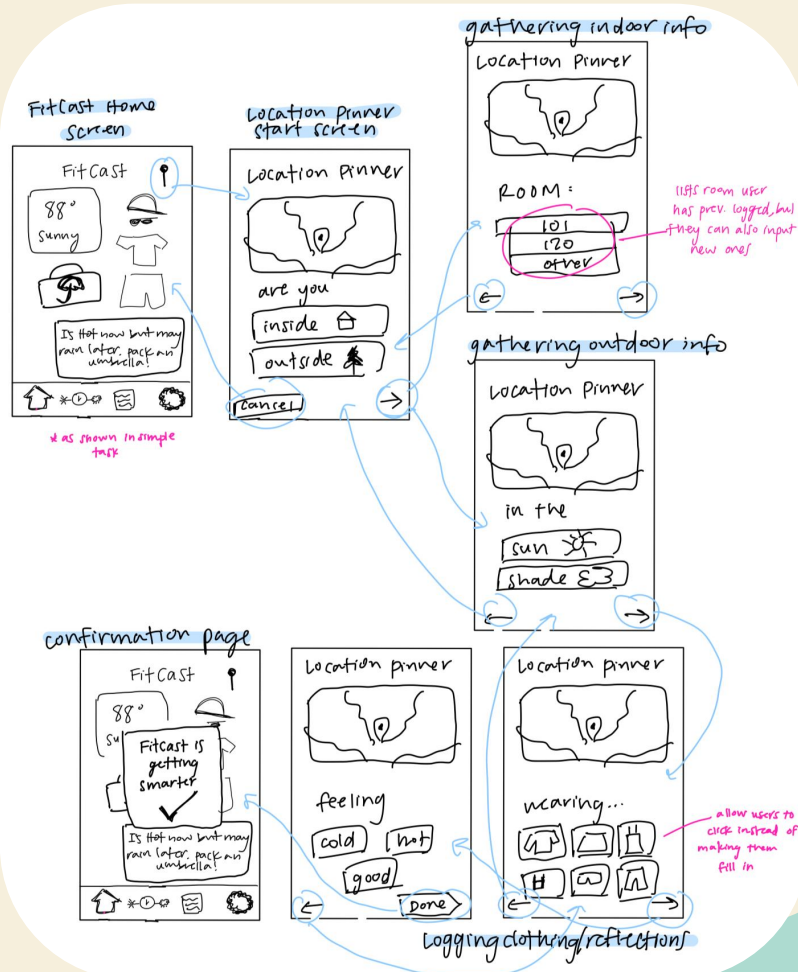
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## Moderate

User wants to know if they should prepare for indoor temperatures



# Complex Task Flow

## Key:

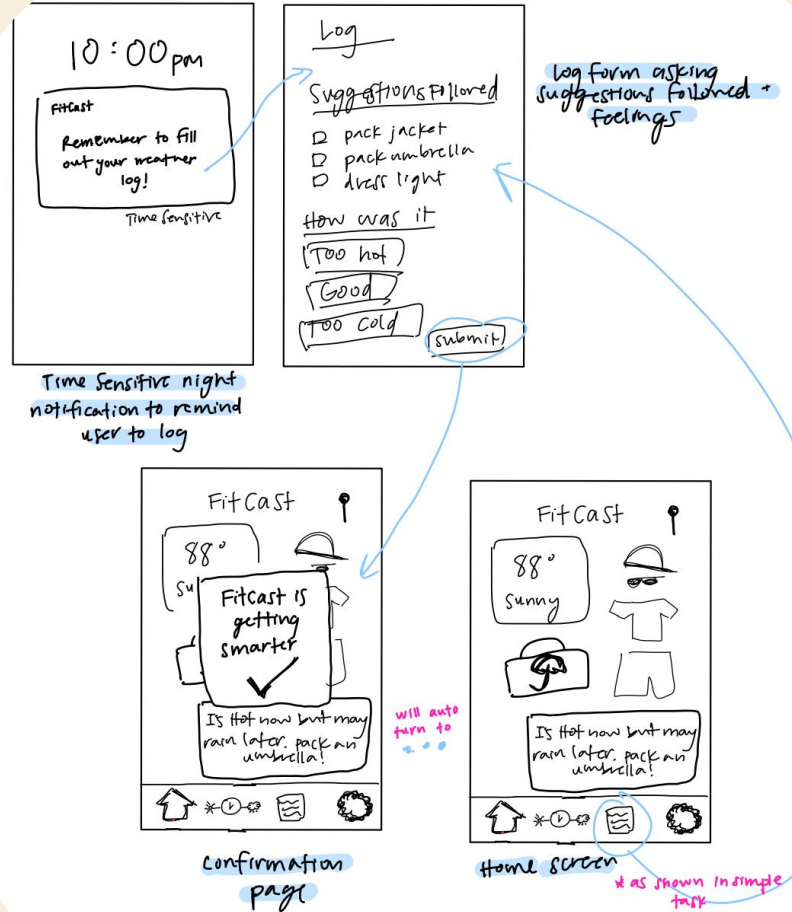
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Blue highlight = screen caption

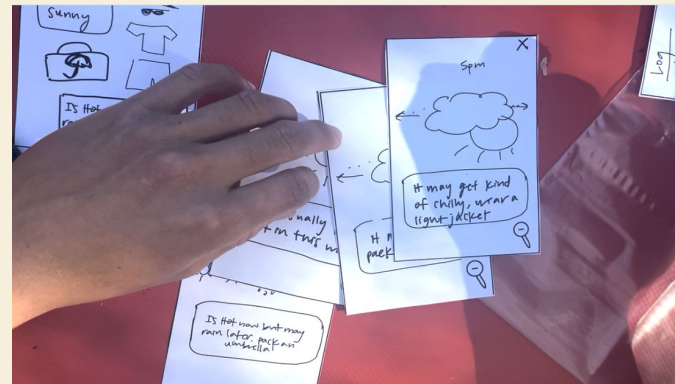
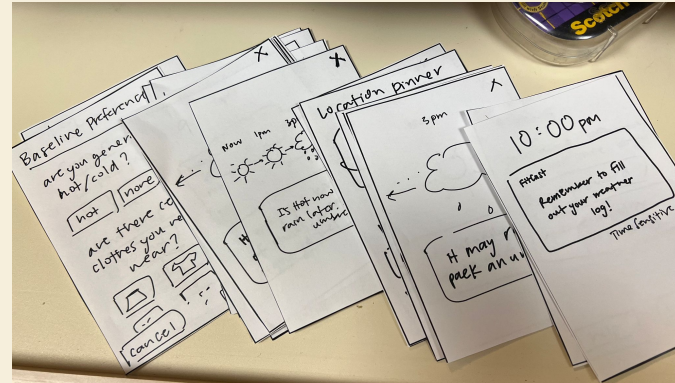
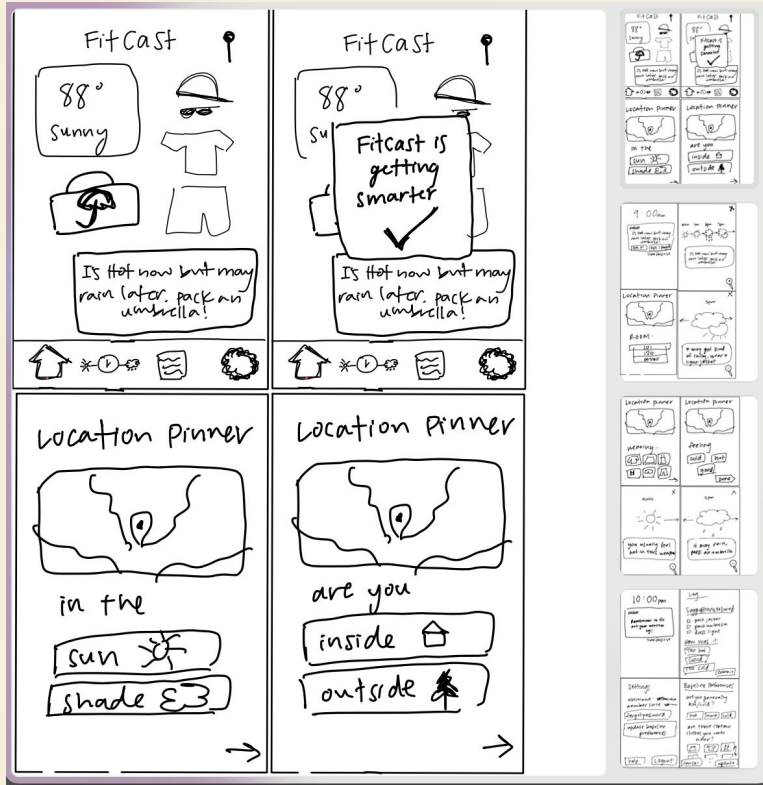
Blue arrows → = transitions

## Complex

User is trying to adapt their clothing wearing habits more closely to their personal temperature preferences



# Low-Fi Prototype Construction





**Usability Testing  
Methodology**

**04**



# Participants

01

Madi

Electrical  
engineering  
student at  
Stanford

02

Morgan

Med-School  
student from  
Tampa, Florida

03

Debbie

Retiree

04

Yesh

Retiree

05

Adreana

High school  
junior from St  
Louis, Missouri

# Environment, Apparatus & Roles

## Location

Conducted at Tressider Union and EVGR (mostly just approached people)

## Apparatus

Paper with screens, actionable buttons

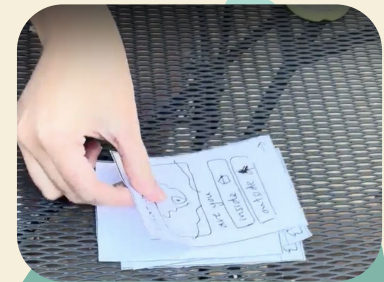
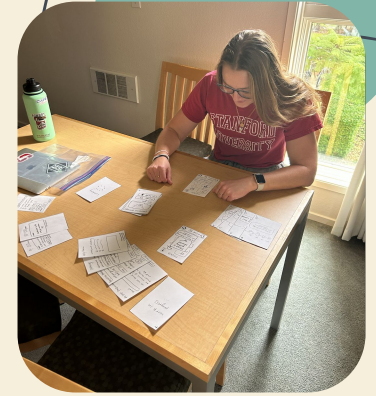
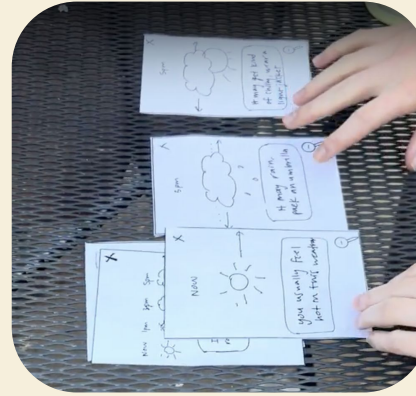
## Roles

Greeter: Eliza

Facilitator: Ashley

Computer: Daphne

Observer: Leon



## Usability goals

Minimize number of mistakes

Maximize repeat users

Make the app a pleasing experience



## Measurements



Count number of mistakes

Ask how likely users are to use the app

Ask the users their favorite aspect of the app


# Testing Procedure

- 1. Explain the context of our app**
- 2. Process description**
  - a. Ask them to narrate and explain their thought process as they go, and to press buttons, swipe
- 3. Ask them to complete three tasks**
  - a. Specific wording, but ensure not too specific to make the task flows too obvious
- 4. Ask them follow up questions**
  - a. What they liked/didn't like
  - b. What they thought was confusing
  - c. If people would use the app



**Results &  
Discussion**

**05**



# Usability Measurements

## Usability goals

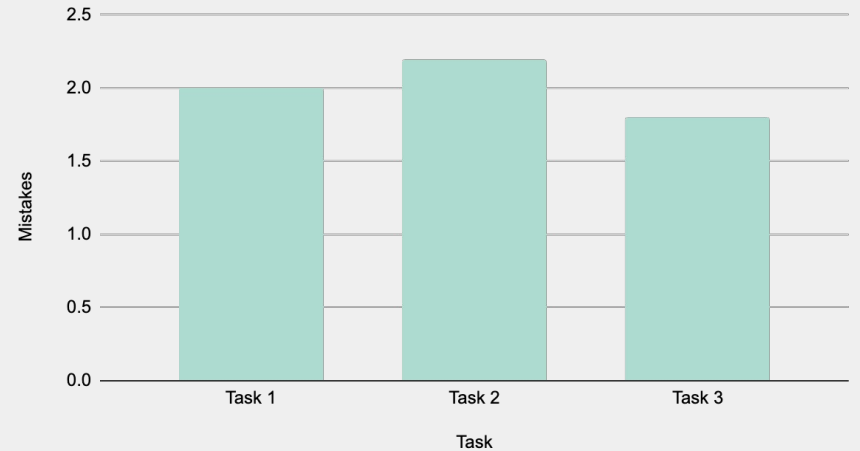
Minimize number of mistakes

Maximize repeat users

Make the app a pleasing experience



Mistakes per Task



# Usability Measurements

## Usability goals

Minimize number of mistakes

Maximize repeat users

Make the app a pleasing experience



4.25/10

# Usability Measurements

## Usability goals

Minimize number of mistakes

Maximize repeat users

Make the app a pleasing experience



## Favorite Aspects of the App:

- Home screen
- Zooming in on the “Weather Timeline” for more information
- Lack of required logging

# Incidents

3

Participants didn't understand why/how to pin their location

2

People thought the log was a packing list

0

One participant hated the word "pinner"

1

People kept clicking buttons that didn't go anywhere

3

Participants confused end-of-day log with location log

3

Participants said they would never personally want to do the tasks we asked

# Key Takeaways

Home screen  
is good

Target  
audience →  
Students + Young  
People

Once they got to  
the correct page,  
all the steps after  
were clear

Most users will be  
simple users (as  
expected)

Button locations  
were confusing

# UI Changes

Home screen more simplified in terms of options, and label icons at the bottom

Simplify clothing suggestions - encourage user autonomy in making clothing decisions

Ensure that the information on weather much more comprehensive

Logging should be made easier, or can be automated using apple watch or other wearable devices



**Thank you!**



**Appendix**

**06**



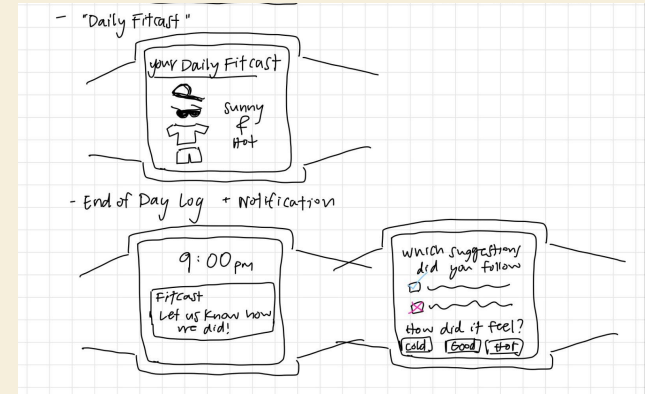
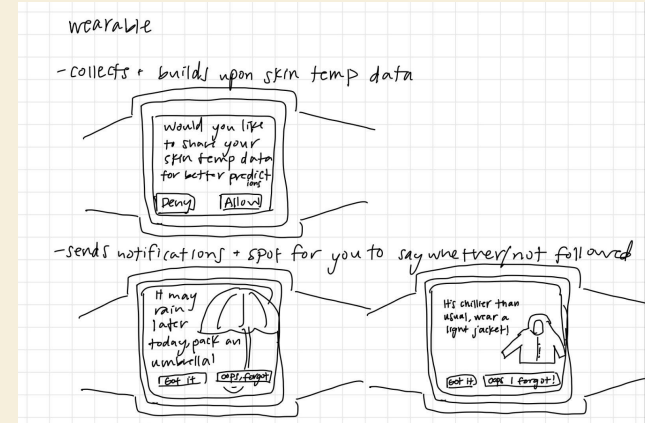
# Pros and Cons - Wearable

## Pros

1. Can take advantage of Apple Watch vitals data
2. Notifications on wearables are easy to check/more often checked

## Cons

1. Will be constrained to wearable devices
2. Smaller screen so less information



# Pros and Cons- Smart Mirror

## Pros

1. Completely visual- immediate information and feedback
2. User sees how they themselves might look

## Cons

1. User only sees this information when they are home
2. Collects a lot more user data
3. Focuses on the fashion aspect of the outfit





# Script Link



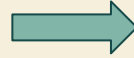
# Usability Progress

## Usability goals

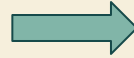
Minimize number of mistakes

Maximize repeat users

Make the app a pleasing experience



# of mistakes decreased as we consolidated/redirected buttons on the home screen



Automate logging, otherwise many users will lose interest or find that app burdensome



Users seem to want more simplicity in terms of suggestions and more information on what weather throughout the day