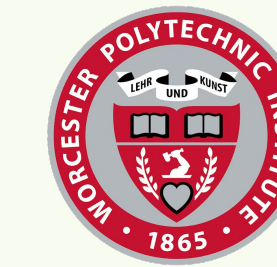




# Weather Wear

Shivani Gupta, Claire Newcom, Nicholas Eck  
Advisor: Angela Taricco



# WPI



## Executive Summary

Weather Wear is an app designed with the Seven Hills Foundation to **promote independence among people with disabilities**. The app gives the user basic information on the weather for the day and **provides outfit recommendations**. This app aims to help those facing significant challenges or disabilities that may hinder their ability to read weather apps.

## Motivation

We wanted to create an app that could be implemented, and assisted people near us. We were inspired by Seven Hills' goal, of promoting independence and wanted to add to that.

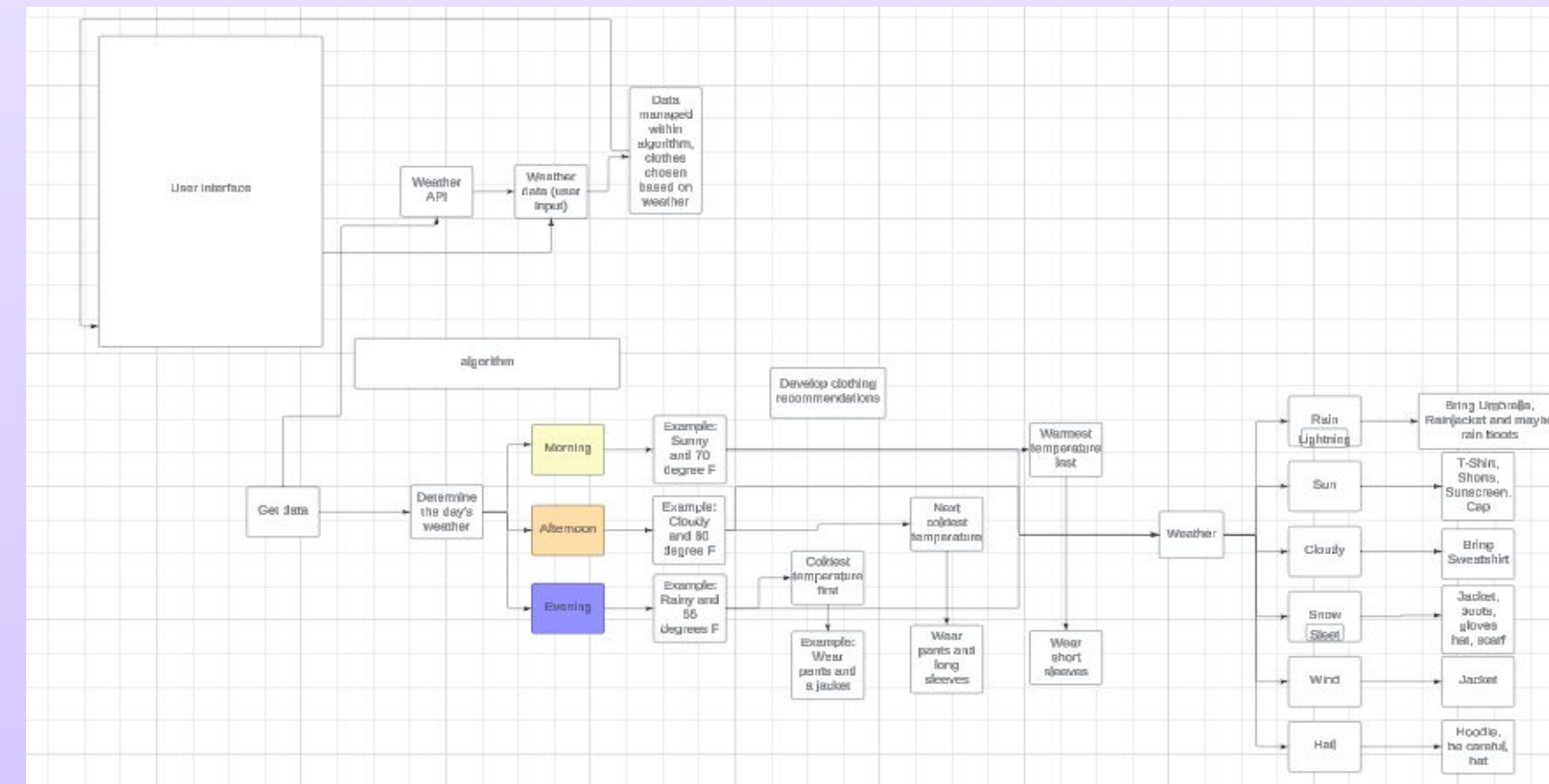
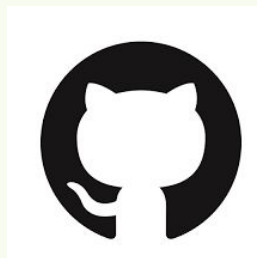
## Audience

Our audience includes those who face significant intellectual challenges that could inhibit their ability to make thoughtful decisions about their outfit based on daily weather conditions. Additionally, the app focuses on those involved in the Seven Hills program, designed to support adults and families who may face challenges, including disabilities or poverty.

## Competitors

- Weather Fit:
  - Recommendations change throughout the day as the weather changes
  - Provides extra information, including the phase of the moon, the visibility, humidity, and hourly air pressure
- Weather Proof:
  - Recommending clothing based on the activities
  - Uses pictures to tell you what clothing items to wear
  - Does not label items

## Applications



Structural Diagram of our App

## Our App

- Our app intends to improve upon current solutions by providing recommendations on what to wear for the day as well as some context as to why the clothing item was chosen
- Our app aims to be easily understandable for everyone. It will identify every article of clothing and accessories that the user should wear or bring for the day using a visual and written representation.
- We will only show the user temperature and weather information to not overwhelm the user.



## Technical and Data Feasibility

- The app required **weather data**, particularly temperature, humidity, wind speed, and weather type.
- This data retrieved from the *Weather API's* API is called each time the user opens the app to retrieve updated data.
- The app also requires the user's location to pull accurate data from the weather API.
- We programmed the application in Dart using Flutter and Android Studios

## Future Works

- Check future days, so they plan their outfits ahead of time. This is left out because viewing outfits for multiple days at once may be confusing to the user.
- Include a text-to-speech feature
- A feature that asks for the user's plans for the day and accommodates the outfit according to those plans
- Add quiz feature allowing them to learn what to wear in the future, increasing independence
- Allow the user to input their location so the app is applicable outside of Worcester

## References

“Disabilities Census Data.” Boston Center for Independent Living, <https://bostoncil.org/about-bcil/disabilities-census-data/>. Accessed 25 March 2024.

“Disability - Census Bureau Tables.” Census Data, <https://data.census.gov/table?q=disability>. Accessed 25 March 2024.

Nguyen, Jenn, and Lauren Gilbert. "Health Literacy among Individuals with Disabilities: A Health Information National Trends Survey Analysis." *The Permanente Journal*, vol. 23, 2019, <https://doi.org/10.7812/TPP/19.034>. Accessed 25 March. 2024.