### JAM Tech

COSC 4950 - Senior Design I Jenna Goodrich Alicia Thoney Marc Wodahl

# StyleSense

## **Initial Plan**

#### **CHALLENGES**

- 1. Overall build a mobile application allowing users to digitize their closet + providing outfit selections based on weather, color scheme, and occasion.
  - a. Frontend
    - i. Design the user interface for the mobile application using UI/UX software
    - ii. Define use cases
    - iii. Develop each page of the application using React Native
    - iv. Test frontend display on different mobile phones / mobile operating systems
    - v. Utilize state management (Redux?) to create
    - vi. Allow users to either take a photo of their clothing item or upload an existing image

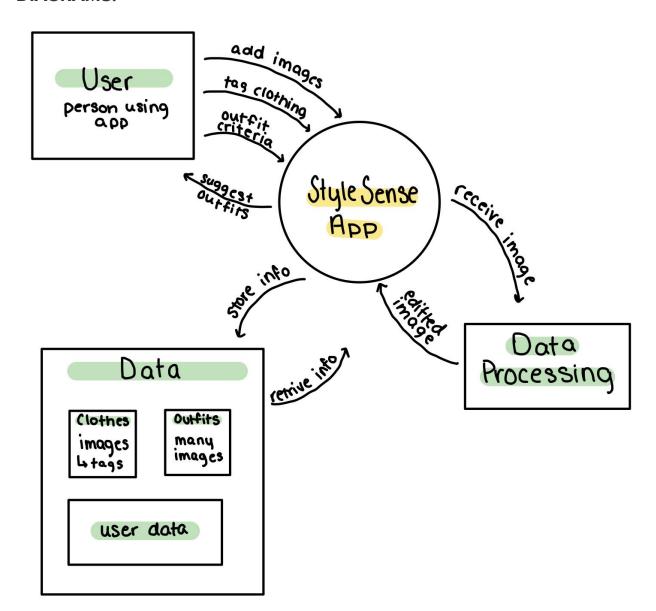
#### b. Backend

- i. Gather color scheme data
- ii. Gather appropriate outfit data given weather
- iii. Gather appropriate outfit data given occasion
- iv. Store the above data in a set of relational database tables
- v. Create queries to pull back appropriate data given user input
- c. Middleware facilitate data transfer + user input between front + backend
  - i. Create a RESTful API (language / library TBD) to facilitate communication between the frontend display and data stored on the backend

#### **SPECIFICATIONS**

The infrastructure

# **DIAGRAMS:**



# Script:

Time is money. And frankly, there are not enough hours in the day to attend class, do homework, and plan my outfit. Even when I do find time, it is a futile feat because I forget to check the weather and arrive to class drenched in rain or covered in goosebumps courtesy of the Laramie wind. But, what if I told you there was a way you could save time and arrive at any occasion perfectly dressed. Enter: StyleSense

StyleSense is a mobile app for android and ios that lets users create a digital copy of their wardrobe by taking photos of their clothing or manually inputting items. Our base features will include outfit creation, outfit recommendation, and a tagging and sorting system that will aid both outfit features. Tags will include weather condition, color, occasion/formality, and more! Additional features we may explore include a friends system that would allow users to show off outfits, recommend outfits to friends, and create shared closets.

How do we know this app will succeed? Well, StitchFix is incredibly successful. They showed us that people want help styling day to day outfits. However, we understand everyone doesn't have money to throw at an entirely new wardrobe. And honestly, I don't need an entirely new wardrobe. I just want refreshing and practical looks.

How can we, JamTech, bring StyleSense to you? All of us have experience in full stack and mobile development with excellent problem solving abilities. Together we can bring a truly unique and beneficial app to the market, Style Sense.

I am Jenna Goodrich, I am Alicia Thoney, and I am Marc Wodahl, and we are Jam Tech.

- 1. Minimum Viable Product
  - a. Allow User to upload photos in 'their closet'
    - i. Allow User to select existing clothing item
      - 1. Edit tags
      - 2. Delete tags
    - ii. Allow User to upload new clothing item
      - 1. Take photo
      - 2. Upload existing photo
      - 3. Fill out tags + relevant information
  - b. Allow User to create an outfit given a tag
    - i. Select a tag
    - ii. Select an item from each required outfit category
    - iii. Select additional item(s) from clothing categories that aren't required (accessories, jackets, etc.)
    - iv. Save if desired
- 2. Data Needed:
  - a. Clothing Storage

i. id: UUID (PK)

ii. userID: varchar(30)

iii. photo: bytea

iv. primary\_color : varchar(8)

v. secondary\_color: varchar(8)

vi. tag\_list : text[]

# clothing\_storage id: UUID user\_id: varchar(30) photo: bytea primary\_color: varchar(8) secondary\_color: varchar(8) tag\_list: text[]

- 3. Tasks
  - a. Front-End

 Page creation - home page, my closet page, outfit creation page

# b. Back-End

- i. API Methods:
  - c. GET (params=tag)
    - i. Queries DB for all clothing items whose tag\_list includes tag
    - ii. Returns clothing items separated by type (JSON object)
  - b. POST(body=file, tag(s), color)
    - i. Adds photo with tag(s) and color to DB clothing\_storage table
    - ii. Return status message & error text (if applicable)
  - c. PUT(body=fileID, file?, tag(s), primaryColor, secondaryColor)
    - i. Updates the given fileID with a new file (if provided), new tags (if provided), and new primary\_color / secondary\_color (if provided)
    - ii. Returns status message & error text (if applicable)
  - d. DELETE(params=fileID)
    - Deletes the existing file given fileID from the clothing\_storage table
    - ii. Returns status message & error text (if applicable)

# Team Contract

# 1. Commitments

- a. All team members will complete an intro React Native tutorial of their choosing, completed by November 30th.
- b. Decision on mobile/web made by end of November.

# 2. Meetings

a. Minimum 20 minute weekly meeting (excluding Fall 2022 semester) to discuss progress/blocks in the project

# 3. Communication

- a. Respond in 24 hrs even if it isn't a solution to the question.
- b. Weekly check-in in Spring 2023