

SuitUp: Donating Work Attire to Low Income, Aspiring Professionals

GitHub Repo: SuitUp, <https://github.com/sriniva5/SuitUp>

Introduction

Background:

For a job interview or corporate job, workers are often expected to wear business attire.

However, the price of business wear can cut into the living expenses of low income workers.

Low income workers are faced with a dilemma of buying work attire for their career prospects or buying essential goods for their families. Thus, it is imperative that the affordability of work attire should not limit a person's chances of getting a job. Professional attire is also beneficial as it can help instill confidence and "dominance" in candidates, according to a study conducted by the Yale School of Management¹. As a result of business clothing, low income workers can gain a presence within the industry.

Project Description:

SuitUp is an Android application designed for low income workers to receive gently used work attire (dress shirts, suits, skirts, blazers, etc.) from donors.

Importance of this App:

While there are organizations like [Dress for Success](#) and [Gear Up](#) that do similar work, the locations of these organizations are few and far between. This app will expedite the donation process by allowing low income people in rural areas and urban areas get clothing shipped to their home address or find a donor nearby so they do not have to travel far for clothing. SuitUp accepts mens and womens clothing, so there are many clothing options to choose from.

Clothing may seem like a minor way to mitigate the issue of class discrimination, but a business suit can instill confidence in a person to achieve their goals within the workplace, feel like an

¹ <https://www.wsj.com/articles/why-dressing-for-success-leads-to-success-1456110340>

actual professional, and subsequently overcome discouragement from employers who believe otherwise.

Technical Details

Option 2:

SuitUp will be an original project, and will not be derived from an existing open source project.

Languages and Platforms Learning Plan:

SuitUp will be implemented as an Android app using Java. The databases for listing clothing and retaining user data will be managed using SQLite. Android Studio will be the primary IDE for this project.

I intend on learning Android development through the Android Developers documentation. I have also found an open Android course conducted by Udacity, which will teach SQLite with respect to Android development². My goal is to go through the course in four weeks and focus more on the modules involving the usage of SQLite databases in Java code.

Algorithms and Data Structures:

For finding clothing that matches the size of the user and sizes near the user's size, I intend on using the quicksort algorithm. I think the computational time of the algorithm is ideal for an app due to its speed ($O(n \log n)$). I also thought about using ranking algorithms to filter listings based on the keywords of clothing the user wants, the user's size, and the location of the donor (if the user wants the donor to drop off the clothing).

I believe arrays will be essential for my project, as I have seen SQLite database operations using arrays of strings. For instance, to update a database, an array of Strings can be used to gather the row needed to be updated. The array was then used a parameter for a database update method³.

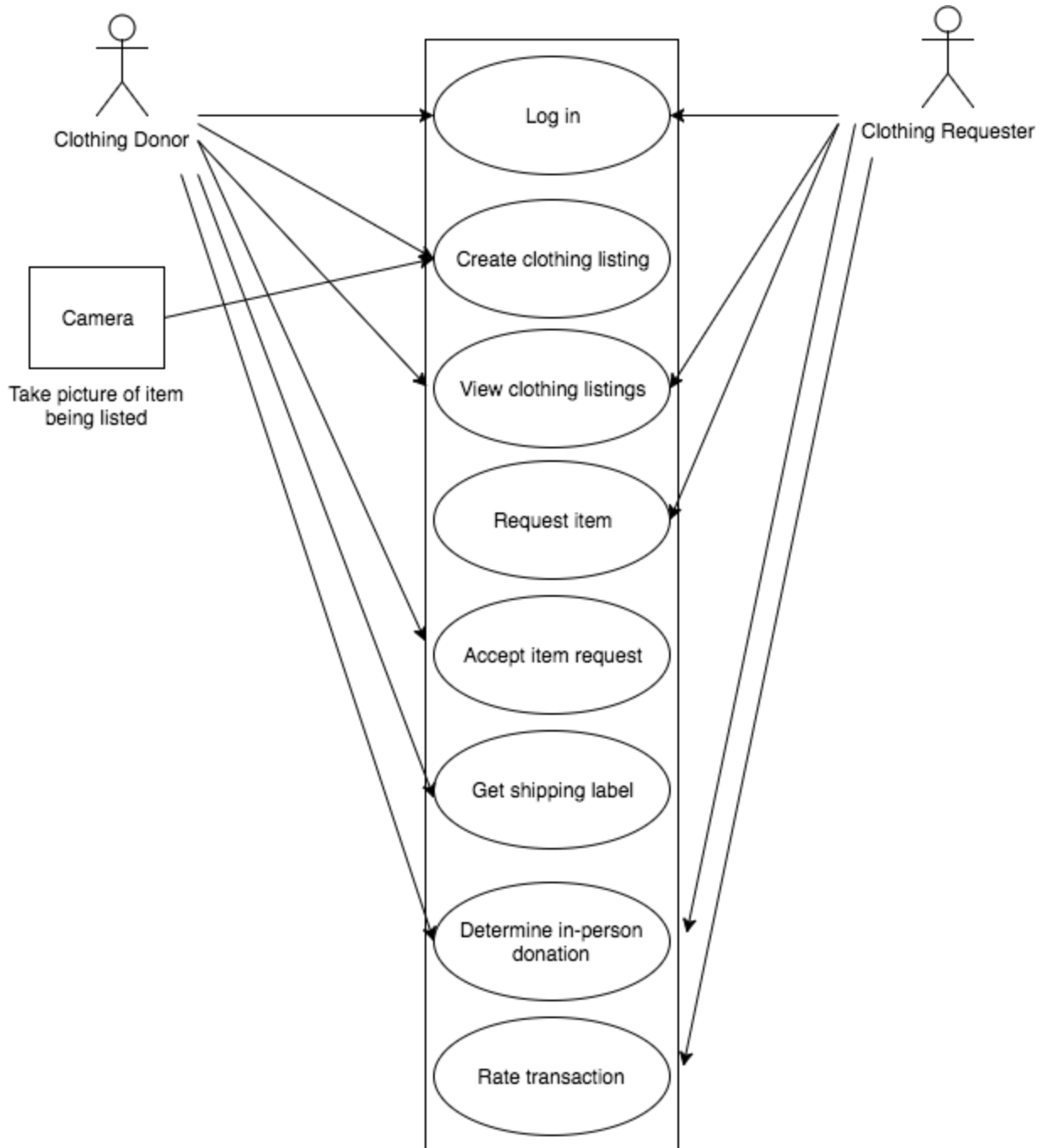
² <https://www.udacity.com/course/android-developer-nanodegree-by-google--nd801>

³ <https://developer.android.com/training/basics/data-storage/databases.html>

Software Engineering Concepts Reinforced:

I will reinforce the idea of prototyping, in which I will create models of my program, test the model program, and note any issues I encounter with the prototype. Additionally, I know I will be using various testing strategies like unit testing and integration testing to see if my features work. Unit testing will test each feature standalone, to ensure they operate correctly. Integration testing will help test groups of features to ensure these features perform in the way they are intended and produce accurate results.

Use Case Diagram:



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Version 3, 29 June 2007

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```

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```
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```

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