

1. Names of all team members: Feel free to give your team/system a clever name if that's your thing!

- Tsz Kwan (Bill) Lam (tszklam@seas.upenn.edu)
- Raymond Yang (rayyang@seas.upenn.edu)
- Lesedi Kereteletswe (lesedik@seas.upenn.edu)
- Cynthia Yee (cynthyyee@sas.upenn.edu)
- Sarah Payne (paynesa@sas.upenn.edu)

2. Problem statement

What is your system trying to solve?

We want to increase the lifecycle of clothing items in order to reduce clothing waste.

Why is it important to solve this problem?

It is estimated that the average American throws away about 37kg/81 pounds of clothes every year. This waste and the resulting impact on the climate can be reduced by allowing people to trade items, thus extending the lifespan of the items. We will also include a donation system for thrift stores, homeless shelters, etc. in order to help reduce the amount of clothing that is thrown away and make it easier for people to donate their clothes.

Who will benefit from solving it?

Whoever is willing to get rid of their unused clothes and get some useful ones. As users will not have to pay for clothing items, the cost of exchange is limited to shipping, transportation, and/or other means of exchange, that are up to the user. This allows more people to get access to new clothing in a sustainable manner. Additionally, if users have clothing that they aren't able to find a trade for, or if they want to donate their clothing instead, our app will make it easier for them to do so by providing information about nearby donation locations.

3. Description: This application will provide a "Tinder-like" interface for clothing re-use with the goal of reducing clothing waste. People can select clothes they like, and if the person offering those clothes also likes something the first person is offering, then they will match and be able to exchange the clothing items. The app's goal is to support trading of used clothes rather than buying/selling used clothes (in comparison to apps like DePop etc.). We will also allow donation centers to set up profiles so that users can find places in their area to donate used clothes if they do not match for a trade, once again in pursuit of our goal of reducing clothing waste. Users will be able to message other users to set up a trade, unmatched if the trade is unsuccessful, and filter their feed based on what they're looking for (items, size, location/distance from them, etc.). The primary data being stored will be data about the clothes (size, images), as well as the user's location and preferences, and their message history and matches. We may also include features such as the ability to review users (e.g. if they reliably show up to trade items) and show the general location of the user (like Airbnb's interface so you can tell the general area that they're in but not specifically where they live).

4. Bios:

- **Tsz Kwan (Bill) Lam:** Senior CIS & Math major student. Familiar with Java/Python/SQL/C, currently taking CIS545/STAT431/MKTG212 which may bring him insights in data processing/visualization.
- **Sarah Payne:** Senior CIS & Linguistics major familiar with Java, JS, Python, SQL, C, C++ and R. Experience with data science, especially wrangling and analysis, and backend implementation.
- **Cynthia Yee:** Junior CIS and Criminology major familiar with Java, Python, C, R, and Julia. Experience with data analysis.
- **Raymond Yang:** Senior CMPE major familiar with Java, JS, C. Experience in backend web dev.
- **Lesedi Kereteletswe:** Sophomore CMPE major, familiar with Java, C. Has experience in mobile App Design.

5. Goals:

- **Tsz Kwan (Bill) Lam:** Improve communication skills in team working and implement agile programming in reality.
- **Sarah Payne:** strengthen front-end skills and learn full stack development.
- **Raymond Yang:** gain more experience with client side focused app development.
- **Cynthia Yee:** gain experience in app design and development
- **Lesedi Kereteletswe:** gain experience in front-end development and learn new teamwork strategies.