Team 20 Project Charter

Project Name: Virtual Closet App

**Team Members:** Divay Gupta, Kartik Uppalapati, Maeve Tra, Meghna Rajagopalan, Oleg Aprelikov

**Problem Statement:** People have a lot on their minds these days. Sometimes they lose track of what clothes they have and which ones need to be washed. Sometimes they can’t decide what to wear tomorrow, or they forget to check the weather and get their shoes wet in the rain.

There are some virtual closet apps, but none of them have all the features ours will have: keeping track of laundry, recommending clothes based on the weather, syncing with your Google calendar to recommend clothes for specific events, and reminding you to wash or iron the clothes you need for future events.

**Project Objectives:**

1. Offer a virtual representation of a user’s closet that allows them to browse the entire closet from their phone.
2. Allow users to enter clothing items into the database along with descriptions of each item, including short or long sleeves; color; material; thick or thin; breathable or keeps you warm; collar or no collar; casual or dressy or formal; fashionable or not; wrinkles easily or not.
3. Recommend clothes based on weather (through the weather forecast) and upcoming events (through the user’s calendar), such as exercise, interviews, and parties.
4. Allow users to keep track of laundry, add/remove clothes from the “laundry basket”, and suggest what needs to be washed based on future recommendations.
5. Recognize aspects of the clothing item (color, sleeve length, etc) from a picture using artificial intelligence

**Stakeholders:**

Users: People who are looking for a better way to organize and keep track of their closets with options for customization.

Developers: Divay Gupta, Kartik Uppalapati, Maeve Tra, Meghna Rajagopalan, Oleg Aprelikov

Project Manager: Jiannan Wang

Project Owners: Divay Gupta, Kartik Uppalapati, Maeve Tra, Meghna Rajagopalan, Oleg Aprelikov

**Deliverables:**

* Front-end:
  + Interface on app for user to see their virtual closet
  + Interface for user to see their virtual laundry basket
  + User gets recommendations on what to wear
  + App can model clothes on a virtual model (photo of user)
  + User can check their notifications
  + App opens camera for user to take a picture of a clothing item OR user can upload a picture
  + Technology we plan to use: Flutter
* Back-end:
  + Code to check the upcoming weather and recommend clothes based on that
  + Code to sync with user’s Google calendar and recommend clothes based on upcoming events
  + Code to send the user notifications reminding them to do laundry if certain clothes will be needed soon and need to be washed or ironed
  + Artificial Intelligence that can recognize aspects of the clothing item from a picture (color, sleeve length, etc)
  + Technology we plan to use: Flutter
* Database:
  + We plan to use Firebase
  + Database will store all the information about the user’s clothes, including but not limited to color, material, sleeve length (short, long, none), in laundry basket or not, occasion (casual, formal or dressy)