What went well

Overall, sprint two went well for our group. We continued to work well together through the use of our sprint meetings and communication outside of our meetings. We were able to accomplish all of our initial goals and even more. We were able to add functionality to each of the screens and integrate even more APIs than were present before. We were also able to add a key functionality of our application, adding clothing to the database and pulling them from the database. We were also able to add the functionality of a photo analyzer so that the user didn't have to input the correct labels for each picture uploaded. We also worked well in a timely method and didn't leave anything until right before it was due.

What didn't go well

Although we were able to complete all of our goals, we did run into some issues along the way. One issue was uploading pictures onto firebase. As we saw in sprint one, the documentation for firebase is out of date in many places. This caused this goal to take longer than anticipated. Another issue was using location services. We ran into the issue that the Android Emulator's current location services is off on the longitude aspect. Although we had implemented the API correctly, the emulator thinks we are in Mountain View, CA. Unfortunately because this is an emulator issue we cannot fix it. Another issue we ran into was figuring out which software was the best for image recognition software. We went back and forth between a few different options throughout the process. One issue we weren't expected was the fingerprint of everyone's application is different. We each needed to add our fingerprint so the functionality would work properly on everyone's device. The last issue we ran into during sprint two was on a few occasions the images were not being displayed properly. After lots of researching, we discovered this was due to different drawables being in different folders. Although many issues arose during this sprint, due to working together and communication, we were able to solve all of them.

One issue that we talked to Dr.Gray and Dr.Carver about was with our J-unit testing. Due to the amount of APIs that we used, it was hard to make 15 individual tests. One issue is due to the location issue on the emulator mentioned above testing for location services was somewhat difficult to test. Also, since we used Firestore for our database and not a real time database, there was no added write on triggers that we could test when adding to the database. We did extensively test the things we were able to test.

What could be improved

One thing that we could improve on is commenting our code as we go along. This would allow for more readability if we were to look at it later in time.

Challenges

- 1. Uploading Pictures onto Firebase
- 2. Location Services
- 3. Firebase Documentation not up to date
- 4. Image recognition software
- 5. Fingerprint of application

6. Drawable folders