EE/CprE/SE 492 Status REPORT 6
Start Date – End Date: April 4 - April 17

Group number: 25

Project title: dripdrop

Client &/Advisor: Simanta Mitra

Team Members/Role:
Team Liaison/Communication Leads: Zachary Foote
Research Lead: Logan Roe
Project Manager: Kaden Wingert
Technical Lead/Architect: Elyse Kriegel
Testing/Quality Assurance: Gavin Rich
Documentation/Meeting Lead: Kolby Kucera

- **Weekly Summary**

A large change these past two weeks was the implementation of security. We now require strong passwords, have two-factor authentication with email at sign in, and require user id tokens for all api calls. The feed was improved overall, with bugs being fixed and the comment modal being improved visually. Markers were also added to the feed so that a user can view clothing item details for any clothing item that has details available on any given post. On the backend, changes were made to almost every lambda and API endpoint to handle the new security changes. We also started working on bookmark table and endpoints. To utilize our AI model, we created an algorithm for offering users AI recommendations. This currently exists as an endpoint, and frontend is actively working on implementing it in the app.

- **Past week's accomplishments**

Kaden Wingert:
- Added the ability on the frontend to create item markers, and create item details
- Added the feature to allow the user to view all of the image markers and click into them to verify/modify the items' details
- Fixed the bug that occurred with dark mode
- Spent time looking into issues with the user's id not being properly set after the security changes
- Updated the team website to improve the styling and include new documents
- Fixed the frontend create post endpoints and calls that were disrupted with the

new security features
- Created a script in Bruno to automatically populate the authorization when making API requests
- Created 3 unit test files for the mobile app frontend
- Connected the frontend to display and update the markers created by the AI
- Looked into an expo bug that caused camera roll images to not be displayed on the create post screen for Android.

Kolby Kucera:
- Created a new lambda for giving AI suggestions. This uses the tags that are populated by our AI model
- Made small backend fixes to account for the new security features
- Created backend table and lambda functions for bookmarks.
- API Gateway Endpoints for bookmarks: /getBookmarks, /createBookmark, /removeBookmark.

Logan Roe:
- Fixed numerous bugs with the feed to improve robustness.
- Added the ability to navigate to a user's profile page via the feed's poster information (i.e., directly from the username listed above & below the post) & from a user's comment in the comment modal.
- Improved the appearance and functionality of the comment modal.
- Added the ability to toggle on/off markers for each post that has valid markers present.
- Added the ability to click on each marker for each clothing item on a post in order to view the item details for that clothing item.
  - The currently selected marker may be seen as highlighted in the background of the pop-up.
  - The pop-up may be drug around to anywhere on the screen.
  - The user may scroll through the various clothing items on the pop-up screen as desired.

Zachary Foote:
- Frontend Security:
  - Added validators for email and also checkers to ensure passwords are strong enough
  - Implemented the frontend for user inputting a confirmation code to validate their email address
  - Store the tokens returned from signing in, and use them to populate session data and also bearer tokens in api calls
  - Implemented the refresh token call to refresh the id_token when needed
- Made the search feed a page instead of a modal
- Implemented Logan's component for comment and liking functionality, and formatted the search feed to look like the main feed.

Elyse Kriegel:
- Backend Security:
    - Added backend security using cognito
    - Fixed all lambda's to use new security
    - Created new lambdas and updated lambda for the new user creation and signin process
- Backend fix:
    - Fix lots of backend problems caused by changing of security
    - Tweaked/improved lambdas during this process
    - Also improve lambda used in AI process
- Frontend:
    - Revamped the user profile page
    - Created a feed page for posts in user profile

Gavin Rich:
- Helped identify and resolve bugs in the database and endpoints post-security changes
- Fixed follow button in profile page
- Updated routes for post retrieval to use route parameters
- Made a follower/following modal in profile to show all users following the profile and users followed by the profile
- Helped make a post preview modal for profile pages
- Created ability to update profile picture

Pending issues
-

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Kaden Wingert	Updated the create post to allow the user to resize their image through pinching and zooming in/out. I also improved some css for the create post screens and connected the frontend to the backend when creating items and markers. Spent time looking into issues with the user's id not being properly set after the security changes. I also updated the team website. I fixed the the create post frontend code to handle the new security	31	106

	changes. Created a script in Bruno to automate the authentication steps when developing. Was able to get the create post fully working with the AI. Looked into an Expo issue that caused the camera roll images to not display on the create post screen for Android platforms.		
Kolby Kucera	Created a new lambda for giving AI suggestions. This uses the tags that are populated by our AI model. Made small backend fixes to account for the new security features. Created backend table and lambda functions for bookmarks. API Gateway Endpoints for bookmarks: /getBookmarks, /createBookmark, /removeBookmark.	12	56
Logan Roe	I fixed numerous bugs with the feed page and the comment modal. I also improved the appearance of the comment modal to be more visually appealing. The user can also now navigate to another user's profile page by clicking on their username, whether that be on the feed itself or in the comment modal. The user may toggle on/off the markers for each post that has markers available. With markers on, the user may click on any given marker, and a pop-up will appear showing the clothing item details. This pop-up may be drug around to anywhere on the screen, and the currently selected marker will be highlighted in the background. Further, the user can navigate through all clothing items on a given post within the pop-up using the left/right arrows.	21	72
Gavin Rich	Helped to identify and resolve bugs in the database and endpoints post-security changes from Elyse. Also fixed the follow	25	66

	button in profile page to work properly and consistently. Updated routes for post retrieval to use route parameters to get specific types of posts individually rather than in bulk. Made a follower/following modal in the profile page to show and link all users following the profile and users followed by the profile. Helped make a post preview modal for profile pages that expand the profile's posts into a feed-like display. Created ability for users to update their profile picture.		
Zachary Foote	I implemented some fronted security to tie in with Elyse's backend changes. This includes getting a confirmation code on the frontend with an email code, and adding validators to ensure that passwords are strong and emails are valid addresses. I also store the tokens through async storage, and decode the id_token to get user info. I added a bearer token to the frontend and also set up the refresh token so that the user can get a new token when needed. Additionally, I Logan's component to set up liking and commenting for the search feed, and I made the search feed a page instead of a modal.	20	65
Elyse Kriegel	I worked on backend security by integrating Cognito and updating all the Lambda functions to use the new security setup. I also created new Lambdas and updated existing ones to support the new user creation and sign-in process. In addition to that, I fixed a lot of backend issues that arose from the security changes and took the opportunity to tweak and improve the Lambdas overall, including the one used in the AI process. On the frontend, I revamped	40	127

	the user profile page and created a feed page to display posts within the user profile.		

- **Comments and extended discussion**

- **Plans for the upcoming week**

Kaden - Create more unit tests on the frontend. Address any bugs that come up. Look further into a solution for uploading images from Android

Kolby - Test the AI features, fix bugs that come up in testing, work on backend integration testing, and work on final deliverables.

Logan - I need to further test the marker system to ensure robustness. I need to implement the "See AI Suggested Products" button on the clothing item pop-ups and implement the page where the user can actually see these AI-suggested products.

Zach - Made the confirmation code look better on the frontend. Assist Logan in setting up the "view similar posts".

Elyse - Improve the accuracy of the AI lambdas

Gavin - Build a saved/bookmarked posts page and feature to allow users to save posts for further reference.

- **Summary of weekly advisor meeting**

Our advisor is still out of the country, so we will be meeting with him next week.