GitHub Username: kasiam87

Makeup App

Description

Find the best makeup products available on the market!

Intended User

Anyone interested in makeup.

Features

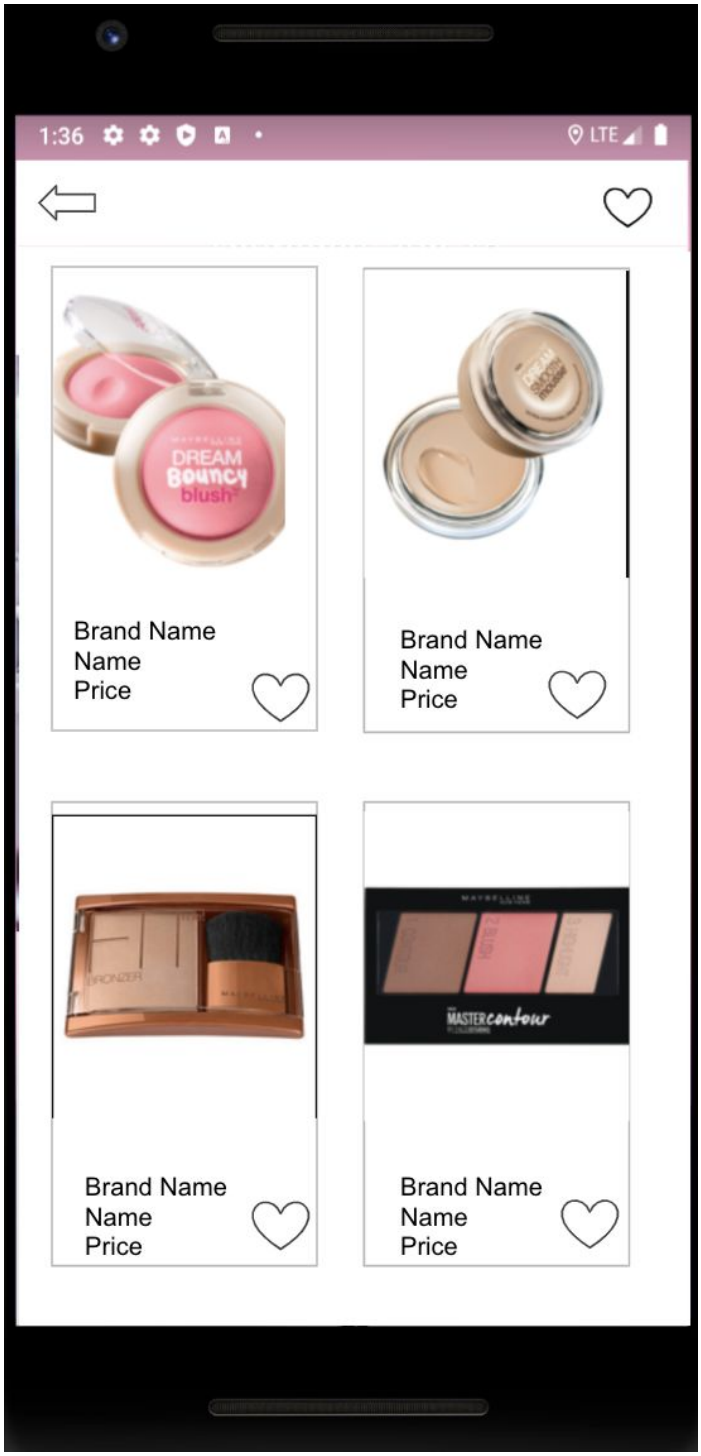
- Search for makeup products by brand, product type or tag
- Save favorites
- Show favorites
- Share products
- Show product details
- Open product web site

User Interface Mocks

Main Screen

Main activity containing a search field and a button to show favorites products.

Search Results Screen



Screen containing search result. For each result we display an image and some basic info like product brand and price. Each product can be added to favorites.

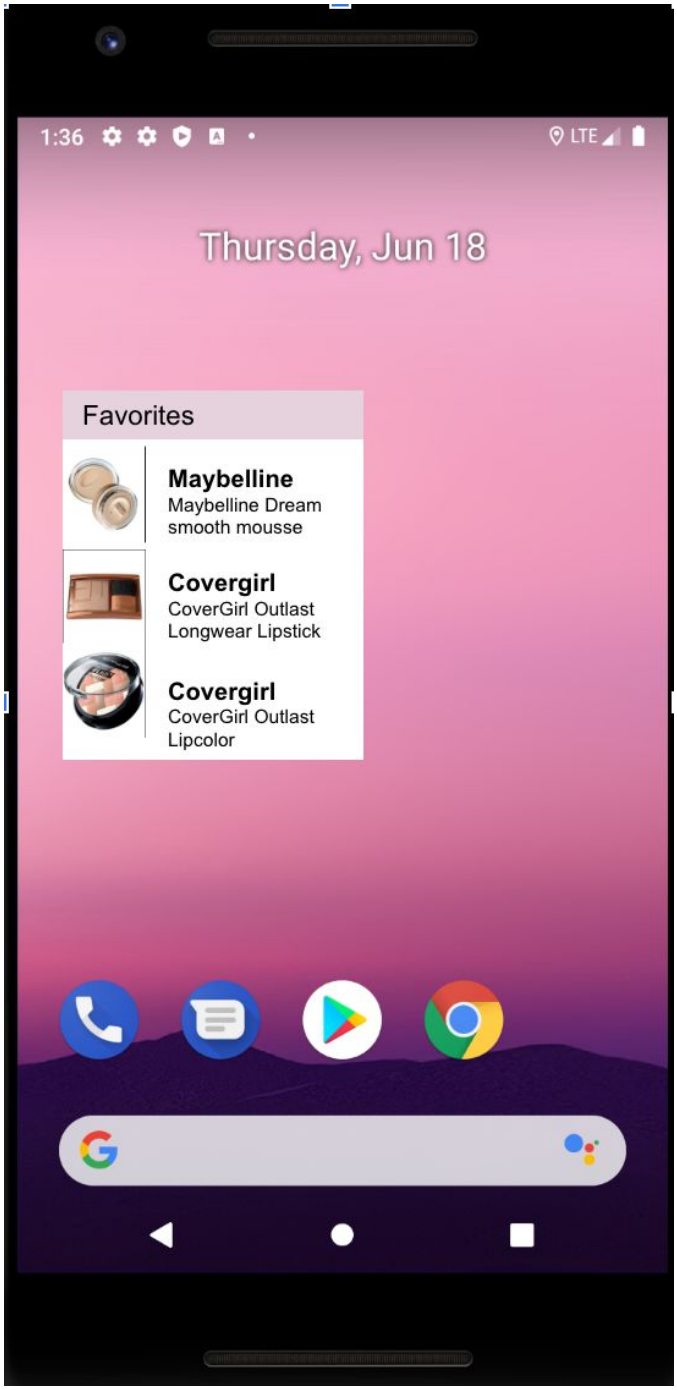
Details Screen

Product details screen.
Product can be shared or added to favorites.
Screen shows info like brand, product name, price, available colors, rating and link to product website.

Favorites Screen

Displays list of favorite items.

Widget



Widget displays list of favorite items.

Key Considerations

How will your app handle data persistence?

App stores favorite products using Room. Favorites list is updated whenever user adds or removes an item.

Describe any edge or corner cases in the UX.

- Details screen contains a FAB that serves to add product to favorites.
- Details screen can be scrolled to see more details. When scrolling, the detail image disappears and toolbar, back button and FAB are adjusted to improve the UI.
- If user has no favorite, then Favorite Screen will display appropriate message

Describe any libraries you'll be using and share your reasoning for including them.

Picasso to load images (or placeholders, if image is not available).
Retrofit as http client to easily perform network requests and json parsing.
Timber for logging, configured so that logs will appear only in debug app.

Describe how you will implement Google Play Services or other external services.

- App uses Google Play Services AdMob. Ads will be displayed on home screen only in the free variant.
- App uses Google Analytics to log a "share product" event

Next Steps: Required Tasks

Task 1: Project Setup

- Create new Android Studio project
- Add lib dependencies to build.gradle
- Define minSdkVersion

Task 2: Create POJO classes

Define classes that will contain pojos relevant for the app.
Api used is http://makeup-api.herokuapp.com/

Task 3: Create Http Client class

- Use retrofit to create an http client class
- Define http methods that will be used by the app
- Define baseUri and paths based on api http://makeup-api.herokuapp.com/

Task 4: Add Database classes

- Define Room Database class
- Define Room Dao interface that will contain DB operations
- Define class that extends AndroidViewModel and defines a LiveData object containing favorite products

Task 5: Implement UI

- Create UI for MainActivity
- Create UI for search results screen, add adapter for results recycler view
- Create Detail Screen activity and implement navigation from search results to details screen
- Create UI for Favorites screen, add adapter for favorites recycler view and implement navigation from home screen and search results screen

Task 6: Implement Search

- If user searches for a term that is a brand, a product type or a tag, then perform the appropriate query and show results
- If user searches for a term that is not available, show an error message
- Add enums containing list of available brands, product types and tags
- To check if search term is a valid brand, type or tag, compare it with these enum values

Task 7: Save/Restore state

Save/restore state on each screen, so that screen is not reloaded e.g. when rotating the device

Task 8: Handle Errors

Handle errors such as:

- No internet connection
- Product image not available
- Other product info not available
- No item available

Task 9: Implement Sharing feature

Create intent for sharing product website link from Details Screen

Task 10: Implement Google Play Services

- Add gradle dependency to play-services-ads for the free version
- Add ad to home screen
- Add gradle dependency for firebase analytics
- Register app with firebase and add config file
- Create FirebaseAnalytics instance
- Log an event when user shares a product

Task 11: Create Build Variants

- Create free and paid flavors
- Paid flavor doesn't contain ads
- Remove from paid flavor any unnecessary dependencies

Task 12: Add widget

Implement widget that will display updated list of favorite items in a recycler view

Task 13: Improve App UI

- Add elevations where needed

- Make app look good on tablets
- On details screen, make image disappear while scrolling

Task 14: Add Signing configuration

- Create keystore (in the root of the project) and key
- Create signing configuration in build.gradle file
- Assign signing configuration to build type release
- Make the store file path a relative path

Task 15: Add Support for Accessibility

- Add content-description where needed
- Use margin start/end/left/right attributes

Submission Instructions

- After you've completed all the sections, download this document as a PDF [File → Download as PDF]
    - Make sure the PDF is named "**Capstone_Stage1.pdf**"
- Submit the PDF as a zip or in a GitHub project repo using the project submission portal

If using GitHub:

- Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
- Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"