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CocktailApp

Description

Convenient App to view cocktails, recipes, search by ingredients.

Intended User

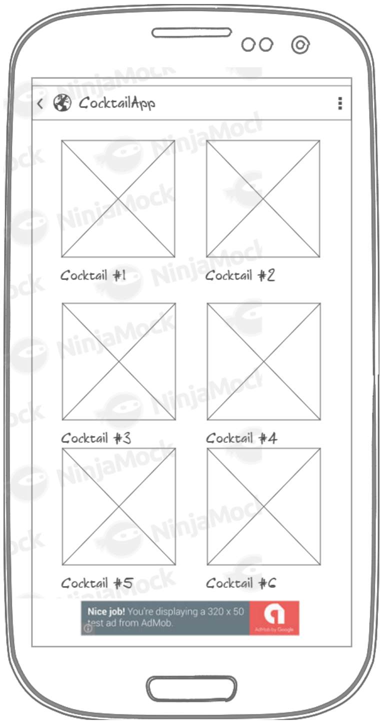
People who likes to experiment with the cocktails or having guests at their parties.

Features

- Search by ingredient
- Share recipe
- Add cocktail to favorites

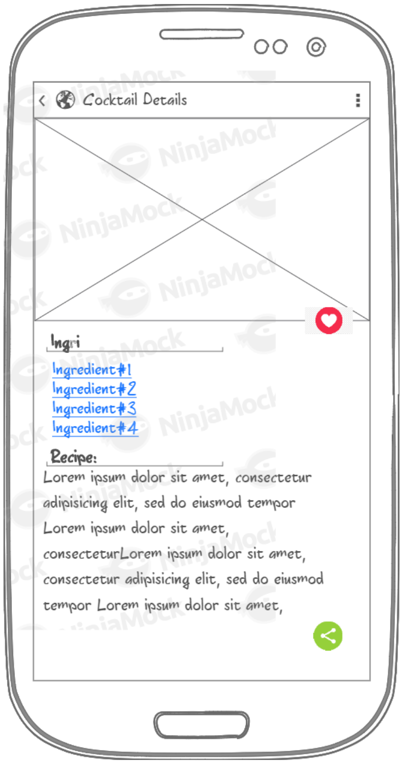
User Interface Mocks

Main screen. Shows alcoholic cocktails by default



Nice job! You're displaying a 320 x 50 test ad from AdMob.

Cocktail Details Screen



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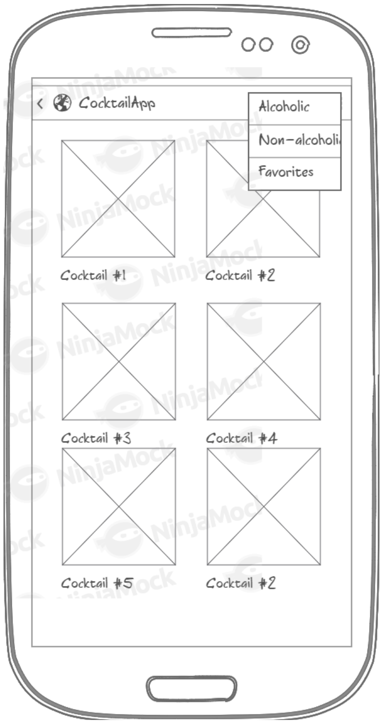
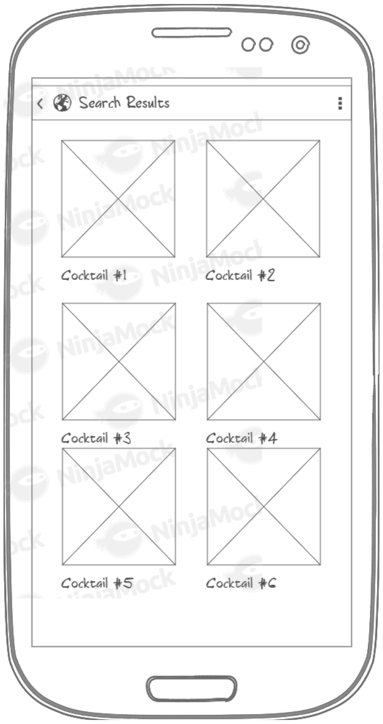
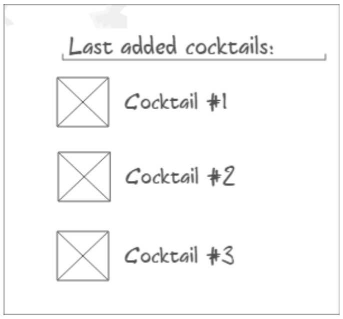
Main screen with menu to select filter criteria



Screen showing cocktails searched by ingredient clicked on details screen



Widget screen (will show last three added favorite cocktails)



Key Considerations

Programming language

Application will be written in Java language.

SDKs, IDE and build tools used

Android Studio v.3.0.1

Gradle v.3.0.1

Target SDK v.27

Data persistence to be implemented

Content provider will be built to store data for favorite cocktails.

Corner cases for the UI.

- Screen rotation is handled correctly;
- If no internet access, corresponding error is shown to user with ability to retry. Application will not crash;
- Navigation between screens is handled correctly and application doesn't accidentally crash if moved between screens;
- List of favorite cocktails is accessible even if there is no internet connection;

Libraries which will be used with the App.

- Picasso v.2.5.2 library for images.
- Volley v.1.1.0 library for data loading from API DB
- GSON v.2.8.0 for json processing
- Butterknife v.8.8.1 library for convenient view binding and adding handlers
- Lombok v.1.16.20 library for better POJO implementation
- Apache commons v.4.4.1 library for convenient work with collections;
- Apache commons lang v.3.3.6 library for convenient work with Strings;
- EventBus v.3.1.1 library to send convenient notifications between activities;
- Android material design related packages v.26.1.0
- Google Play Services v.4.1.0 SDK to enable support;
- Google Analytics v.10.2.4 SDK to support gathering analytical data;
- Google Mobile Ads v.15.0.0 SDK to support showing of ads;

Usage of Google Play Services or any external API.

Cocktail DB API will be used https://www.thecocktaildb.com/api.php
Volley library will be used to send requests to cocktail DB and process responses
Google Play Services: Google Mobile Ads and Google analytics will be used.

Next Steps: Required Tasks

Task 1: Project Setup

- Configure libraries
- Setup correct project structure
- Configure build tools

Task 2: Implement UI for Each Activity and Fragment

- Build UI for CocktailsListActivity
    - Implement RecyclerView to show list of cocktails in gridview manner (GridLayoutManager);
    - Implement CocktailItemView to show Image of cocktail and its name;

    - Implement AdView to show Google Mobile Ads;
- Build UI for CocktailDetailsActivity
    - Add ImageView to display cocktail image;
    - Add necessary views to display cocktail ingredients in the list manner;
    - Add necessary view to display cocktail recipe;
    - Add floating action button to share cocktail details;
    - Add floating action button to add cocktail to favorites;
- Build UI for SearchResultsActivity
    - Correctly re-use views available on CocktailListActivity UI as this screen will show cocktails in the same manner;

Task 3: Implement communication to Cocktails API DB

- Implement POJOs for request/response processing;
    - Implement HTTPRequest POJO to hold request related data;
    - Implement HTTPResponse POJO to hold response data;
    - Implement Cocktail POJO to hold cocktail related information loaded from the API DB or from content provider;
- Implement supporting functionality for communication purpose using volley on the backend;

Task 4: Implement content provider to store favorite cocktails

- Implement DB contract;
- Implement CocktailsDataProvider
- Implement supporting functionality to store data into DB and read from DB;

Task 5: Implement Google Mobile Ads support

- Add dependency for Google Mobile Library;
- Update AndroidManifest.xml file to add application id;
- Add AdView to MainActivity layout;
- Implement functionality to init AdView in MainActivity class;

Task 6: Implement Google Analytics support

- Add dependency for Google Play Services and Google Analytics Library;

- Update AndroidManifest.xml file to add required INTERNET and ACCESS_NETWORK_STATE permissions;
- Add global_tracker.xml resource with APP identifier;
- Init Google Analytics client (only one instance per application);
- Implement logic inside SearchResul activity and CocktailDetails actvity to send events about which cocktail was viewed and which ingredient was searched;