Description Intended User

Features

**User Interface Mocks** 

Screen 1

Screen 2

### **Key Considerations**

How will your app handle data persistence?

Describe any corner cases in the UX.

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

Describe how you will implement Google Play Services.

Next Steps: Required Tasks

Task 1: Project Setup

Task 2: Implement UI for Each Activity and Fragment

Task 3: Your Next Task

Task 4: Your Next Task

Task 5: Your Next Task

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# Reddease

# Description

Write a brief summary of what your app does. What problem does your app solve? (I don't have an idea in my mind yet, so I decided to implement the sample Reddit project)

The user subscribes to a large number of subreddits, finds it hard to keep up with them, and has long stretches where some are neglected. He/she wants a way to get news/posts/threads from all of them equally. To resolve this problem, my app will retrieve the top one/two posts from each subscribed subreddits. In addition, my app allows users to subscribe to and save their favorite subreddits. For some unimplemented functionalities, the app redirects users to the system browsers to experience them.

## Intended User

The intended users are "redditors" who have a large number of subscriptions and have trouble of keeping track of them due to unbalanced incoming posts from each subreddits.

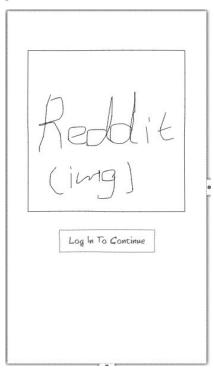
## **Features**

- 1. Retrieve posts (1 or 2) evenly from each subreddits an user subscribes to.
- 2. Allow users to subscribe or unsubscribe subreddits.
- 3. Allow users to save their favorite contents.
- 4. Allow users to search posts/subreddits.

## **User Interface Mocks**

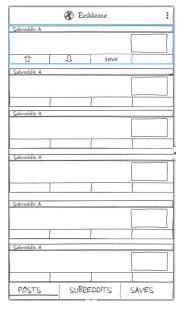
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, <a href="www.ninjamock.com">www.ninjamock.com</a>, Paper by 53, Photoshop or Balsamiq.

#### Screen 1



1. This is the login page where the authentication(Oauth2) takes place.

## Screen 2



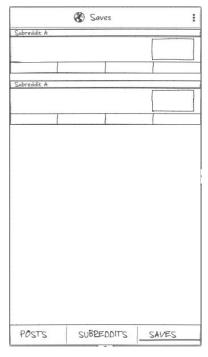
- 1. ViewPager is at the bottom.
- 2. This is the page where users can read post briefly and perform actions( favor or unfavor a post and save post)
- 3. For each subreddit, it will have the same number of posts

### Screen 3



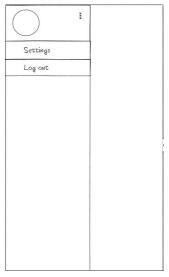
1. This is page where users can (search and) subscribe or unsubscribe subreddits.

## Screen 4



1. This page allows users to see what posts they have saved.

# Screen 5



- 1. This is the drawer.
- 2. Users can choose to navigate to setting page or login page (by logging out)

## Screen 6



1. From screen 2, when users tap on each post, user will be redirect to a webview of(reddit official page) to perform further actions.

## Screen 7



1. This page allows users to change both app settings and reddit setting.

# **Key Considerations**

How will your app handle data persistence?

- 1. Sharedpreference
  - a. Stores oauth aceess\_token and refresh\_token
  - b. Stores app's local configurations (such as font, font\_size)
  - c. Store current location
- 2. Database
  - a. Stores the most recents posts used for offline

Describe any edge or corner cases in the UX.

I can't think of any by far.

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

Glide: handling loading and caching of images.

Butterknife: handling view bindings. Retrofit: handling http requests

Gson: will use with retrofit to turn json object to java object

(maybe) Rxjava: handling async logic

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

#### Google Play Services:

Location: will be used to retrieve relevant subreddits

Analystics: add Analytics to measure user activity to named screens

# Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

### Task 1: Project Setup

Added dependencies for third-party libraries

- 1. Glide
  - a. implementation 'com.github.bumptech.glide:glide:4.5.0'
  - b. annotationProcessor 'com.github.bumptech.glide:compiler:4.5.0'
- ButterKnife
  - a. compile 'com.jakewharton:butterknife:8.8.1'
  - b. annotationProcessor 'com.jakewharton:butterknife-compiler:8.8.1'
- 3. Retrofit
  - a. compile 'com.squareup.retrofit2:retrofit:2.3.0'
- 4. Gson
  - a. compile 'com.google.code.gson:gson:2.8.2'
- 5. Rxjava
  - a. compile 'io.reactivex.rxjava2:rxandroid:2.0.1'
  - b. compile 'io.reactivex.rxjava2:rxjava:2.1.7'

### Task 2: Implement UI for Each Activity and Fragment

- 1. Build UI for login activity
- 2. Build UI for <a href="https://example.com/home">home</a>(main) activity
  - a. includes a ViewPager
    - i. (fragment) UI for posts list
    - ii. (fragment) UI for subreddits list
    - iii. (fragment) UI for saved-posts list
  - b. Includes a slider
- 3. Build UI for detail post
  - a. Includes a webview
- 4. Build UI for <u>setting</u> fragments

## Task 3: Authentication (Oauth2)

- 1. Retrieve access\_token and refresh\_token.
- 2. Save tokens to SharedPreference

## Task 4: Logout

- 1. Add a logout button to slider
- 2. By clicking the logout button, clear all relevant infos and redirect users to login page.

### Task 5: Retrieve post list

- 1. Use relevant reddit apis to retrieve 4 posts from each subreddits the user is subscribing to.
- 2. For each subreddit, display only 1 post at a time.
  - a. Implementing finger gestures
    - i. Swipe left (for next post)
    - ii. Swipe right (for preview post)
  - b. Implementing voting functionality (using api for voting)
  - c. Implementing save functionality (using api for saving)
- 3. Implement onClick listener:
  - a. Navigate to <u>detail activity</u> (contains a webview)

#### Task 5: Subreddits list

- 1. Create layout
  - a. There is a button associate to each subreddit
- 2. Make an api call to retrieve a list of subreddits.
- 3. Implement onClick listener for buttons,
  - a. Make an api call to subscribe the corresponding subreddits

## Task 5: saved-post list

- 1. Create layout (similar to post list)
- 2. Make an api call to retrieve a list of saved-post list

### Task 6: Setting page

- 1. Create layout
- 2. Store user configurations to SharedPreference and make sure main activity listens to changes.