

How to Use this Template

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Reddit Quick Viewer

While the official Reddit app is great, full-featured, it does come with a lot of bells and whistles that you may not want when you just want to view new posts for the subreddits you are subscribed to.

This app will present a simplified view of your subscribed subreddits and their new posts.

Intended User

This app is intended for those who want to quickly check for new posts on Reddit, without having to wade through levels of UI that the official Reddit app presents.

Features

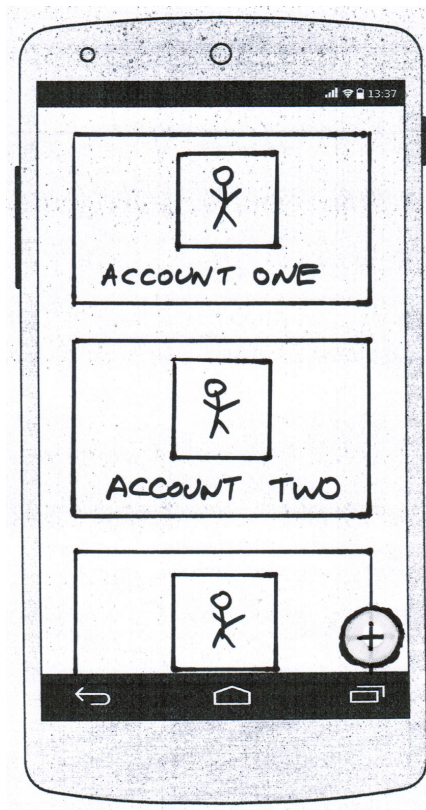
This app has the following features:

- Presents a concise list of new posts for each subreddit you are subscribed to
- Supports multiple accounts
- Stores posts for offline app usage
- Has a desktop widget that will show number of new posts available to read

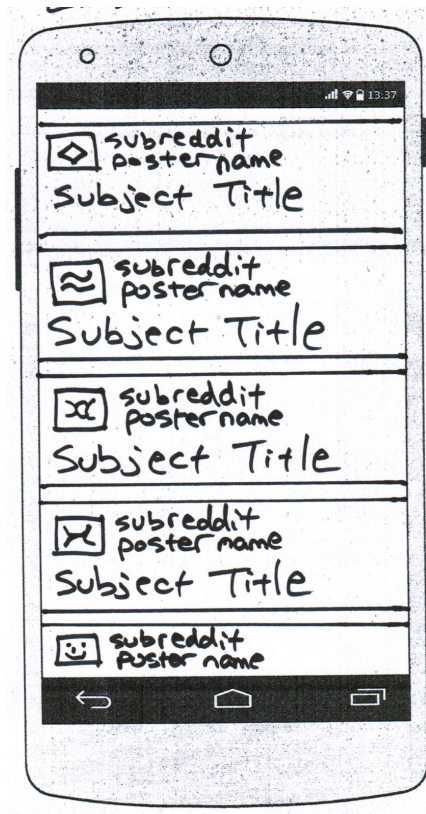
User Interface Mocks

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, www.ninjamock.com, Paper by 53, Photoshop or Balsamiq.

Screen 1: Reddit Accounts

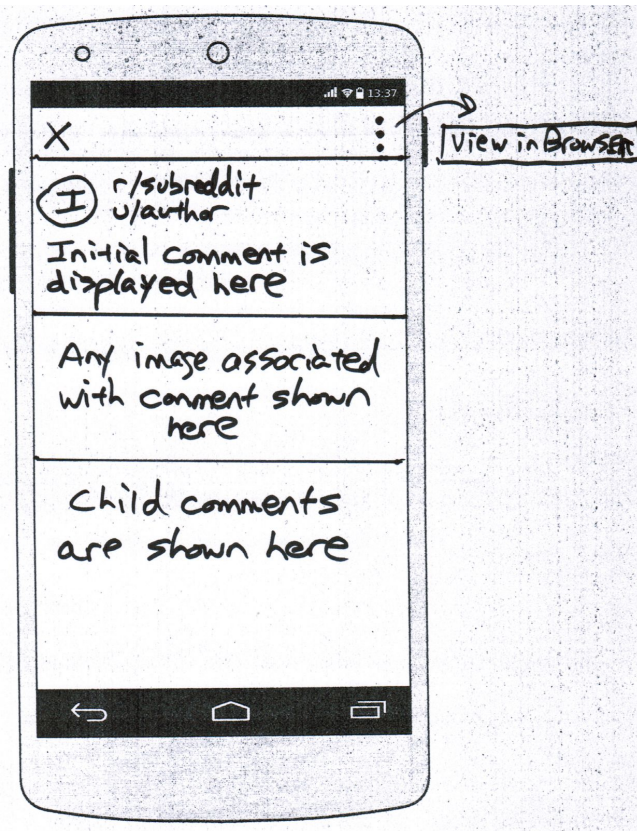


This mock shows the view of reddit accounts available to get the list of subreddits to look through for new posts. There is a FAB that allows the user to add a Reddit account to the list.

Screen 2: List of new posts

This mock shows the view of all new posts, for all subreddits. Selecting a post in the list will launch the view that displays the comment and any child comment.

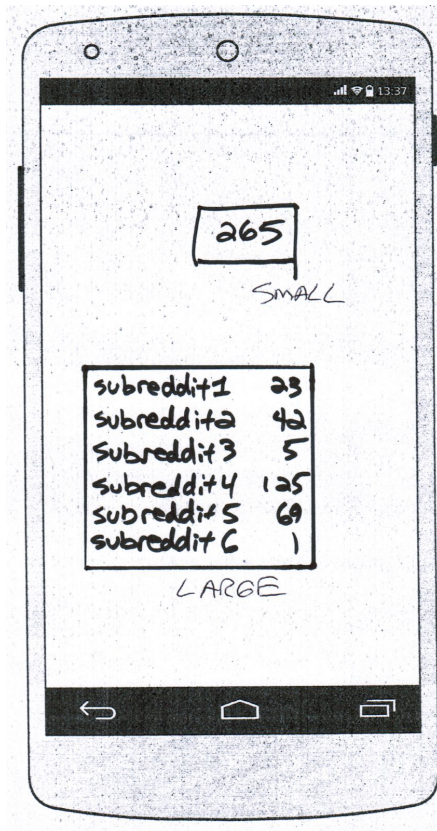
Screen 3: Detail view of a single new post



This mock shows the view of a single post/comment, with any child comments that are associated with the post/parent comment.

The menu option will allow the user to view the post at the Reddit web site via a browser.

Screen 4: View of widget showing number of new posts available to view



This mock shows the app widget, both when it is a small size, and when it has been enlarged by the user.

The small size will just show a counter of how many new posts are available to view.

The large size will show a simple list of subreddits, and how many new posts each subreddit has.

Key Considerations

How will your app handle data persistence?

Will use an `IntentService` to fetch the new posts, and save them to a local database via Room. Will use `ViewModel/LiveData` api to update UI with updated data persistence. As discussed here: <https://developer.android.com/jetpack/docs/guide#persist-data>.

Describe any edge or corner cases in the UX.

The plan is to use implicit intents, leveraging other existing apps for viewing images/videos from any new posts.

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

- Retrofit2/GSON, for pulling json data from Reddit servers
- Glide for handling the loading and caching of images that may be displayed as part of a post.
- Google Android binding with ViewModel, for separation of concerns between the data and the UI.
- Google Room. For local data persistence.
- Google Android Material Design library. For teh swxy looks.

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

Firebase Crashlytics, and Google Analytics. For Google Analytics, will create custom events for things like which subreddits are subscribed to, and how many new posts are read.

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

- Create the project in Android Studio
- Add needed libraries entries to the build.gradle file for the app
- Configure the app manifest for the need permissions
- Configure build variants; types and product flavors
- Integrate Google Play/Firebase functionality libraries
- Reddit OAuth (<https://github.com/reddit-archive/reddit/wiki/OAuth2>)

Task 2: Implement UI for each Activity and Fragment

- Build UI for Reddit account login
- Build UI for list of new subreddit posts
- Build UI for viewing in detail a single subreddit post
- Build combined list/detail UI for viewing with a tablet
- Build UI for desktop widget that will show number of new posts

Task 3: Implement Reddit data fetching

Task 4: Implement data repository

Task 5: Implement repository and ViewModel interaction

Task 6: Implement data caching/persisting

Task 7: Implement testing for each code area

Task 8: Implement Firebase Crashlytics functionality

Integrate the Firebase Crashlytics library into the application.

- Include specific test-like code that crashes the app, to confirm it works properly

Task 9: Implement Google Analytics functionality

Integrate the Google Analytics library into the application:

- Include custom event to track number of subreddits user is subscribed to
- Include custom event to track number of new posts read by the user per session

Add as many tasks as you need to complete your app.

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:

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