How to Use this Template

- Create a new document, and copy and paste the text from this template into your new document [Select All → Copy → Paste into new document]
- 2. Name your document file: "Capstone_Stage1"
- 3. Replace the text in green

Description

Intended User

Features

<u>User Interface Mocks</u>

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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Another Reddit App(ARA)

Description

Reddit.com is a social networking website where registered users can post content such as direct links or text posts. These posts can be made in user made sections called subreddits which users can actually follow based on their interest. It is a massive collection of forums, where People can share news and content or comment on other people's post. Registered users can upvote or downvote posts which is visible to other users. This is an app which allows the user to read the list of subreddits, favourite them and see them in widgets.

Intended User

This app is for the users who loves to use reddit, by reading custom sets of subreddits but don't want to upvotes/downvotes or comments in any post.

Common Requirements

- App is written solely in the Java Programming Language
- App utilizes stable release versions of all libraries, Gradle, and Android Studio.

Android Studio Version 3.2

Gradle Version 3.2.0

Glide Version 4.8.0 / Picasso Version 2.7

Okhttp Version 3.12 / Volley Version 1.1.1

Features

List the main features of your app. For example:

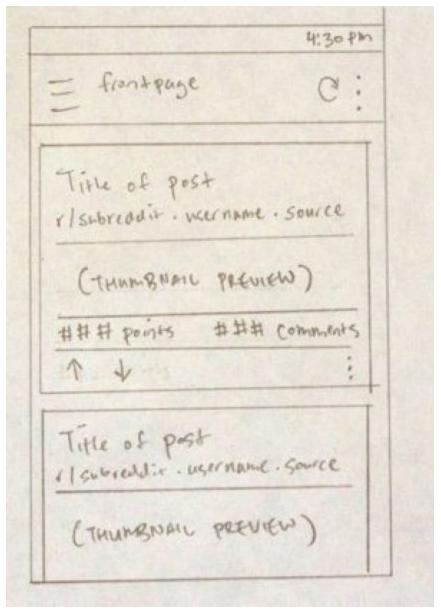
- Load content for Subreddits in Listview.
- Allow user to search and sort in subreddits
- Show users the detailed views for reading
- Allow user to favourite the contents on detailed view
- Allow user to share the link on detailed view
- Allow user to open content using intents
- Banner ads will be shown in the detail view screen

User Interface Mocks

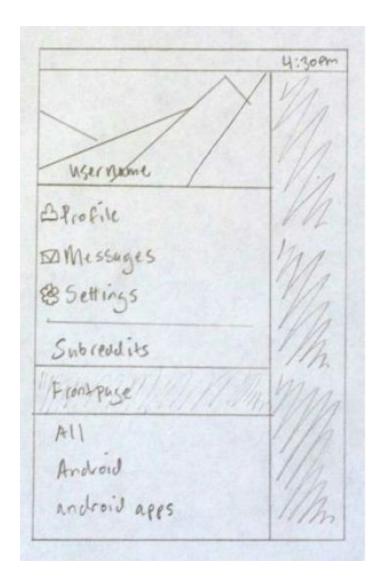
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, www.ninjamock.com, Paper by 53, Photoshop or Balsamiq.

Screen 1

Note: This is just a proposed UI not the actual UI

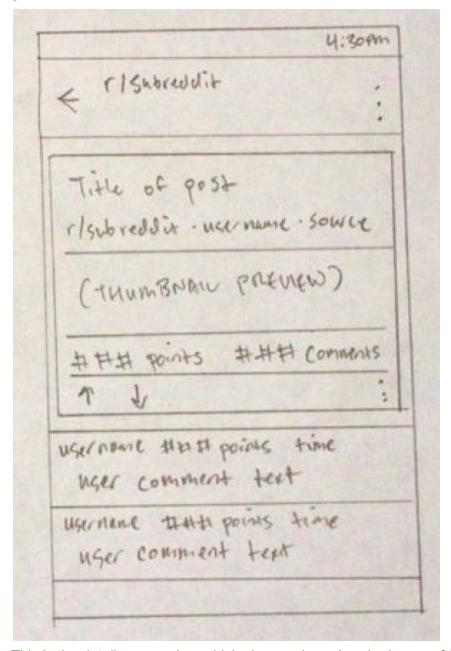


This is the main activity and it contains a list view that displays the content from the chosen subreddits. There is a navigation drawer containing subreddits and favourites menu item, like below. The title-bar has the menu item for search and sorting the items based on category being hot, new, top and controversial.

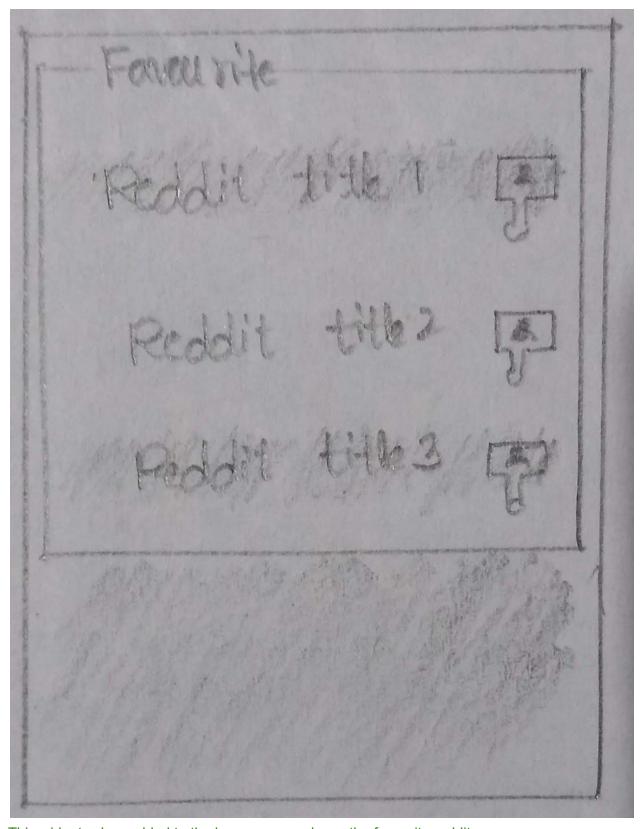


Users can reorder the subreddit ordering. Also, when clicking on the item the detail view of the item opens.

Screen 2



This is the detail screen view which shows a large header image of the content which can be clicked to open the related website. The comments can be viewed in a scrollview below. The ad banner appears at the bottom of the screen.



This widget, when added to the home screen shows the favourite reddits.

Add as many screens as you need to portray your app's UI flow.

Key Considerations

How will your app handle data persistence?

A content provider will be created to manage the favorite's database. SharedPreferences will be used to store the user's custom list of subreddits.

Describe any edge or corner cases in the UX.

When there is no network, toast message will be shown. Also, when we don't fetch any list of reddit items, toast message is shown again. On the home page subreddit, only search is shown in the menu item.

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

I will be using Picasso or Glide to handle the loading and caching of images. Also, I will use okhttp or volley for http requests. Also, I may use retrofit for rest calls.

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

I will try to use google location api and google+ services to share the information to the friends.

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

I have to set up the projects, including the libraries.

- Volley For caching images and http api calls.
- Butterknife For binding the UI elements

- Firebase For showing ads
- Google Play Services (GMS) For google play analytics.

Task 2: Implement UI for Each Activity and Fragment

Here are my UI activities:

- Build UI for List Activity
- Build UI for Detail Activity
- Build UI for Detail Fragment
- Build UI for managing the subreddits

Task 3: Implement the Reddit API

Implement Reddit.com API using retrofit. Documentation for the API can be found here: https://www.reddit.com/dev/api . Here are some URLs to be tried:

- https://www.reddit.com/.json
- https://www.reddit.com/r/aww/.json
- https://www.reddit.com/r/aww/new/.json
- https://www.reddit.com/search.json?q=kittens&sort=new
- https://www.reddit.com/r/pics/search.json?q=kittens&sort=new

Task 4: Set Up the UI Activity

- Setup listview to adapt to the reddit item list, and allow the view to change when navigation item is clicked.
- Sorting the list view by menu item
- Search with guery in sub reddits.
- Implement the detail activity and the detail fragment.

Task 5: Set up the Google Firebase ad

 Get google-services.json file from Firebase console. Add ad unit ID to app, and admob banner to detail activity.

Task 6: Implement Google Analytics

• Get the configuration file from developers.google.com and implement the screen tracking into the app.

Task 7: Build Android Widget

- Build Content Provider with URI
- Implement loader callback to get data

Task 8: Implement SharedPreferences

• Manage the list of subreddits via shared preferences.

Task 9: Implement ContentProvider

Create a Content Provider to use for saving favorites.

Task 10: Implement Sync Adapter or JobDispatcher

• App updates data at regular interval of time.

Task 11: Make the app production ready

- Improve the app visuals using some Material Design techniques (shared element transitions, parallax scrolling, animations etc.)
- Provide RTL-layout support
- Provide accessibility support
- Provide content descriptions for meaningful UI elements
- Plan for localization (move all strings into strings.xml)

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:

- 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"