How to Use this Template

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Submission Instructions

- After you've completed all the sections, download this document as a PDF [File → Download as PDF]
- Create a new GitHub repo for the capstone. Name it "Capstone Project"
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Description

Intended User

Features

User Interface Mocks

Screen 1 (Login)

Screen 2 (Main activity, Smartphone)

Screen 3 (Comment, Smartphone)

Screen 4 (Main activity and Comment, Tablet)

Screen 5 (Settings for Subreddits Subscription)

Screen 6 (Widget)

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: Create Content Provider

Task 4: Implement Sync Services and Adapters

Task 5: Implement Login Activity

Task 6: Implement Settings Activity

Task 7: Implement Interactions with Posts

Task 8: Implement Widget

Task 9: Google Play Services

GitHub Username: chhsalex

Reddit App

Description

An Android viewing app of Reddit. Users can decide which subreddits to pull and display. They may normally view the selected posts one by one. Users can also interact with the post, e.g. viewing the images, playing videos, reading / writing comments, upvoting / downvoting, and they can dismiss the post. Also, this app can be visited via a widget.

Intended User

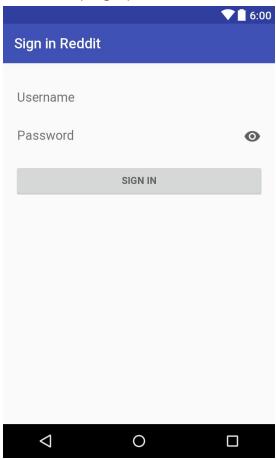
Reddit users with an Android device (e.g. a smartphone or a tablet) will be the intended users.

Features

- Have access to login and connect with Reddit
- Display subscribed posts one by one, either by posting time or randomly
- Subscribe or unsubscribe subreddits for this app to pull and store
- Save settings data and some posts of selected subreddits
- Allow interactions with posts, i.e. view image posts, play video posts, upvote / downvote, comment, share, etc
- Provide a widget at desktop, displaying a random post subscribed by users

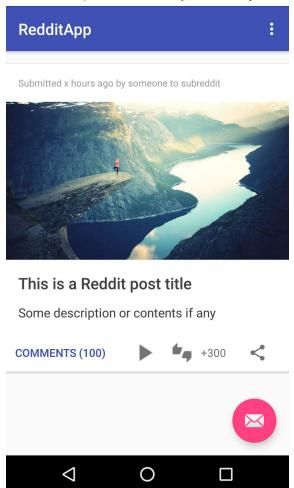
User Interface Mocks

Screen 1 (Login)



If user has not yet logged in, the app will be redirected to login page.

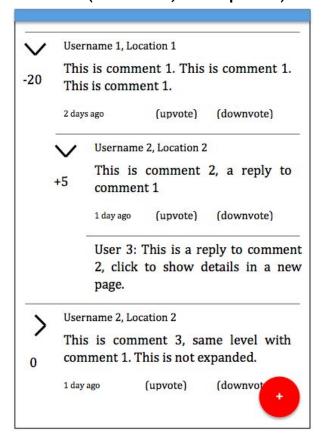
Screen 2 (Main activity, Smartphone)



The main screen will basically be the view of post currently presented. The image view, the play button and the description text are optional, which depend on the type of the post (e.g. plain text, image, video, or a link).

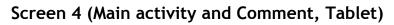
When the app is launched, a post will be presented here. And to dismiss this post and present a new one, just click the FAB.

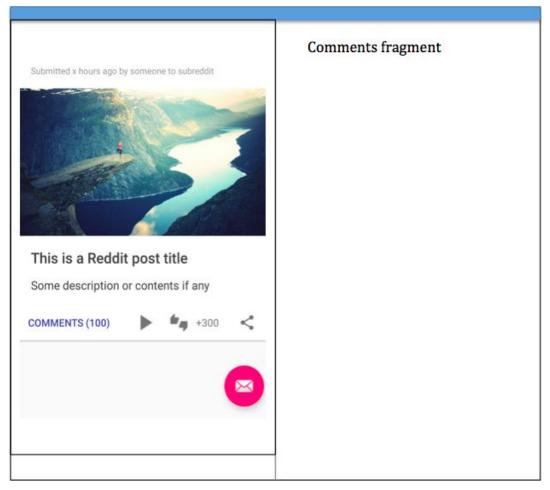
Screen 3 (Comment, Smartphone)



This is the comment fragment layout. As comments have a hierarchy structure, we may want to go to another page to view the low level comments, which is the idea adopted by Quora.

Reply action will be launched by clicking on the comment row. Fab is used to add a comment.



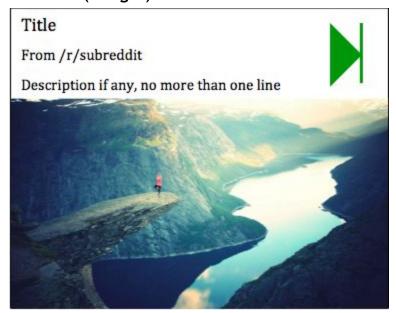


For tablet, comments can be put together with the post. However, for comments with rather low levels, a new comment fragment will be created, and the previous fragment should be folded temporarily.

Screen 5 (Settings for Subreddits Subscription)



Screen 6 (Widget)



The widget may not contain an image or a description text, which depends on the post. By clicking the "Next" button, the widget will display the next randomly selected post.

Key Considerations

How will your app handle data persistence?

The app will have a Content Provider containing recent posts for UI to choose from. Data would be resynchronized periodically.

Settings would be saved in SharedPreference.

Describe any corner cases in the UX.

Hierarchy levels of comments should be carefully concerned. If there are too many levels, there will be quite a lot of comment fragments as well.

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

Retrofit to call APIs;

Picasso to deal with images.

Describe how you will implement Google Play Services.

Google Play Service Admob will be used to provide ads.

Google Play Service Analytics to collect app usage information.

Next Steps: Required Tasks

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

Task 1: Project Setup

- Create new project for phone and tablet
- Select compile SDK version and target SDK version
- Configure libraries

Authenticate App in Reddit via OAuth

Task 2: Implement UI for Each Activity and Fragment

- Build UI for Login Activity
- Build UI for card view of a single post
- Build UI for Main Activity (smartphone & tablet layouts)
- Build UI for Comment Fragment
- Build UI for Settings Activity

Task 3: Create Content Provider

- Create SQLite database
- Implement URIs and interfaces

Task 4: Implement Sync Services and Adapters

- Gather APIs needed for this app
- Implement Authentication Service and Adapter
- Implement Data Service and Adapter

Task 5: Implement Login Activity

Implement login action

Task 6: Implement Settings Activity

- Implement actions for subscription / unsubscription
- Implement other settings, e.g. sequence to present a post (by posting time or randomly)

Task 7: Implement Interactions with Posts

- Implement actions such as play videos, comment, upvote / downvote, share, etc
- Videos may need external player apps
- Websites may need external browser apps

Task 8: Implement Widget

Task 9: Google Play Services

- Implement Admob
- Implement Analytics

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

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