#### How to Use this Template

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Description

Intended User

Features

User Interface Mocks

Screen 1

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Screen 4

#### **Key Considerations**

How will your app handle data persistence?

Describe any edge or 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 or other external services.

Next Steps: Required Tasks

Task 1: Project Setup

Task 2: Implement UI for Each Activity and Fragment

Task 3: Implementation of Reddit API:

Task 4: Set up the Activity

Task 5: Implementation of Content Provider

Task 6: Implementation of Google Ads

Task 7: Implementation of Google Analytics

GitHub Username: RamshaS

# Reddit App

# Description

Reddit is a social networking application which disposes wide range of content such as current affairs, art etc covering every aspect of life. The user can favorite/unfavourite the posts in which they find their interest and these posts are saved under favorite bar. The user can favourite, comment, share and browse the content directly on the webpage. Reddits appear as a list with content categorized under respective discipline i.e. subreddits. The subreddits can be managed by reordering the list with single tap and new subreddits can be added. This is an application which facilitate user by providing wide range of content in a well defined way. The user can easily get their favourite post as widget.

### Intended User

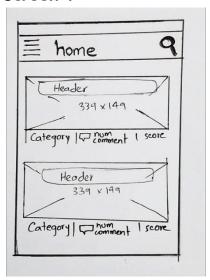
This is an app for those who want to search, store or read variety of information in a feasible way.

### **Features**

- Saves information
- Google Analytics
- Display the content directly through API provided i:e Reddit.
- Display the content of subreddits in list view
- Sorting of subreddits by using filter
- Keyword search of subreddits
- Sharing of reddits to other social media networks, contacts or through Bluetooth on detailed view.
- Favorite the content on detailed view.
- Widget of favorite content on home screen.
- Detail view of a subreddits upon selection.
- Screen rotation.
- On detailed view of reddit banner Ad is displayed.

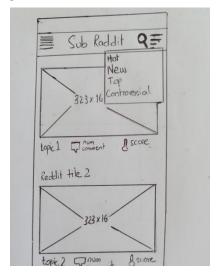
### **User Interface Mocks**

#### Screen 1



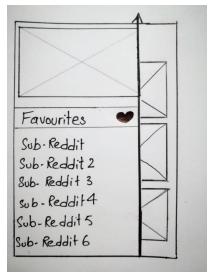
This will be the home screen of application which contains a search option (that appears as search dialog). The content has main header (title) on the image with category name, total number of comments and score below the image in the end.

#### Screen 2



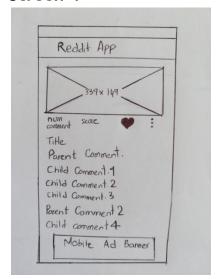
This is the main page which holds main activity of the application. The content is displayed in a list view from selected subreddit. There is a navigation drawer which contains favorites, manage subreddits, a list of subreddits and home option that brings back to home page. The subreddits has a search option (appear as search dialog) on the top of the screen as shown above and sorting option which sort the content as top,new,hot and controversial.

#### Screen 3



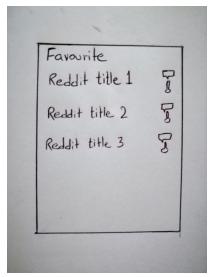
Navigation drawer view.

#### Screen 4



This is the detailed view of a reddit which shows image as main header under which total number of comments and total scores are being displayed. Whereas, the favorite, share and browse buttons are also lined up below the image. Afterwards, the main text/title of the image appears. And the comments are displayed in scroll view.

# Screen 5



This is the image of widget that can be added to the home screen. The favorite reddits are directly displayed through it.

# **Key Considerations**

#### How will your app handle data persistence?

For data persistence, this app will rely on content provider -the app uses a Loader to move its data to its views. It will save all favorites in local SQLite and will be display it on a favorite app widget. When any keyword is searched it performs short duration, on-demand requests (such as search), app uses an AsyncTask.

Describe any edge or corner cases in the UX.

This app will display a loading progress on each image while fetching from server. As well as when image failed to load it will display no image found. And when there is no internet connection the app will toast a message "No internet connection found". Also when no item fetched from Reddit API it will toast a message.

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

I will be using Retrofit for REST API calls as it is the best for getting huge amount of data within seconds. And for image load and processing I will use Glide. As it will be the best for image caching while getting High resolution images.

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

I will use Google Ad service to display ads with in app and will try to implement Google Analytics.

#### **Programming Language**

Java language will be used for development.

#### **Library Version**

I am using the following version of libraries;

- Android Studio 3.1.3
- Gradle 4.4
- Android Support Library 27.1.1
- Google Play Service 11.8.0
- Retrofit 2.4.0
- Glide 4.7.1

#### Core Platform Development

App keeps all strings in a strings.xml file and enables RTL layout switching on all layouts.

App includes support for accessibility. That includes content descriptions- alternate text for an object.

Next Steps: Required Tasks

# Task 1: Project Setup

In Step 1- the app should include the following libraries:

- Data Binding enabled: for accessing all UI elements directly.
- Retrofit: for getting data from Reddit REST API.
- Glide: for getting images and scale them.
- Google Play Services.

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

Here is the list of UI I'm going to build first:

- Build UI for Main Activity
- Build UI for Detail Activity
- Build UI for Detail Fragment
- Build UI for managing the subreddits.

## Task 3: Implementation of Reddit API:

After building all UI elements, Reddit API will be implemented using retrofit. After getting successful will parse the data which is in JSON format and display it in a list. Here is the list of API's that will be used:

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

### Task 4: Set up the Activity

After building all UI elements. Reddit API will be implemented using retrofit. After getting successful;

- Create list view to adjust the item list of Reddit and when navigation drawer is opened the whole view is changed.
- Sorting of list view according to category.
- Searching based on query within subreddits.
- Used the detail activity and detail fragments on click on each item.

#### Task 5: Implementation of Content Provider

Create a content provider which will able to save on tap of each favorite icon in the detail view. SQLite will the save that favorite item and will be displayed in a widget.

### Task 6: Implementation of Google Ads

To implement this app will need the google-service.json file and Ad unit id hardcoded in the app. With that an Ad banner is implemented to display the Ad

### Task 7: Implementation of Google Analytics

Set the entire configuration in the Google developer's panel and screen tracking system will then be implemented.

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