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AndPress

Description

AndPress is an Android client of blog capstone.sudhirkhanger.com. Blogs are great for web but blog doesn't translate to personal experience that mobile apps promise. AndPress brings that personal experience to the blog on mobile.

Intended User

The great thing about AndPress is that it's intended user base is user base of one's blog. It's based on WordPress REST API 2.0. It can be remodeled to various blogs very easily. I am going to use a sample WordPress instance hosted at capstone.sudhirkhanger.com and the app's intended users will be the blogs readers.

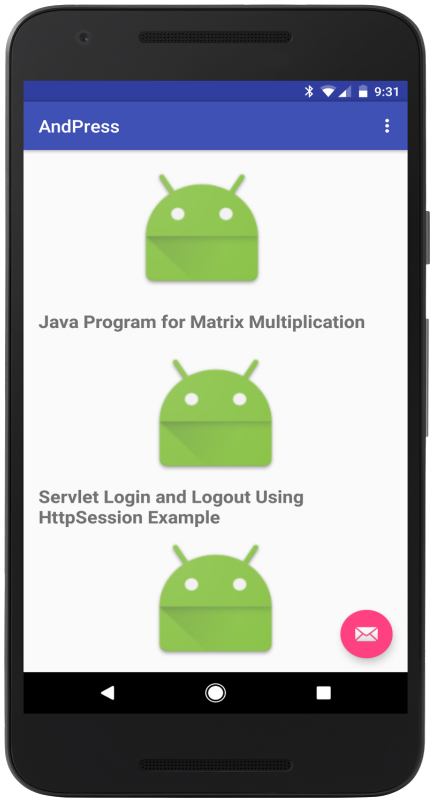
Features

List the main features of your app. For example:

- Shows posts from the blog.
- Main screen contains a list of posts.
- Detail screen shows the content of the post.

User Interface Mocks

Screen 1

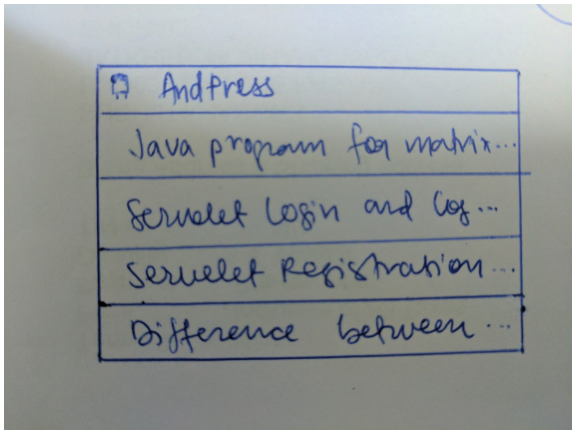


The main screen will list all the blog posts.

Screen 2

When a user clicks on a post it will open a detail activity which will show the post content in a WebView.

Screen 3



This is a collection widget which shows the title of the posts.

Key Considerations

How will your app handle data persistence?

After downloading content from the API title and content which are Strings will be stored in a SQLite which will be handled via a ContentProvider. Images will be cached by Picasso.

Describe any corner cases in the UX.

In the first version of app there are going to be only two screen one showing a list and another showing detail. The navigation will also be as a result simpler. Clicking on post will take you to post.

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

I will use Picasso for image loading and caching. I will also use Firebase for Analytics and Admob. Picasso can help in reducing a lot of boilerplate and improve performance by loading images in background. Firebase is these days the de facto library for analytics and admob.

Describe how you will implement Google Play Services.

I am going to use Firebase Analytics and Admob. Analytics to collect information about the app usage and Admob to show banner ads. I am going to use the default tracking provided by Firebase Analytics which includes metric like how often the app is opened. Simply initializing Firebase instance and setting default logging on will help me get the basic metric for analysis. I will use AdView from Admob to show the banner ad.

Next Steps: Required Tasks

Task 1: Project Setup

- Add RecyclerView library
- Add CardView library
- Add Schematic library for ContentProvider

Task 2: Implement UI for Each Activity and Fragment

- Use Basic Activity template to create main layout
- Main layout primarily contains a RecyclerView
- Detail Activity will also be a Coordinator layout

- Detail layout will contain an imageview in collapsing toolbar and the middle region will contain a big WebView.

Task 3: Implement SQLite and ContentProvider

SQLite will contain three columns title, image and content

- I will use Schematic library to create a basic database.

Task 4: Networking

I will need an AsyncTask to fetch data from the WordPress instance.

- I will use a separate class for AsyncTask
- Use an interface to deliver data from AsyncTask to the Activity

Task 5: JSON Parsing

WordPress JSON will be parsed in this section

- JSON parsing will occur in the AsyncTask class

Task 5: RecyclerView

- Setup RecyclerView

Task 6: Send Intent to open detail Activity when an item is clicked.

Use setOnClickListner from Adapter class or setup RecyclerView listener class to enable click.
Use Intent to send a URI which locates the item in the database

Task 7: Use Loader to load data from the database

Use LoaderCallback methods to load data from the database and show it in the WebView.

Task 8: Use WebView to show the data

Use WebView to show the data. Content comes from WordPress so necessary formatting is required.

Task 9: Implement Widget

- Implement a Collection Widget which shows item titles.

Task 10: Implement Firebase analytics

- Import library
- Initialize instance
- Enable basic logging

Task 11: Implement Admob

- Import library
- Show AdView in the MainActivity and DetailActivity.

Other

- Although the app is designed to pull data from blog which serves WordPress REST 2.0 API but for our purposes the app may also use JSON hosted at myjson.com.