Android Fundamentals Project Self-Evaluation

Instructions: Once you've completed your Final Project, please respond to the questions below. This is a chance for you to briefly explain to the grader your thought-process during development. Once you are done, include this with the source code and accompanying files you are submitting. Then, give yourself a pat on the back for making a great app!

Questions about Required Components

Permissions
Please elaborate on why you chose the permissions in your app.

I used the most minimum permissions in my app zero; however, after the Android Study Jam I may add a web service for json data and the change will require permission for INTERNET. Then I may also allow sync and would need READ_SYNC_SETTINGS, WRITE_SYNC_SETTING and AUTHENTICATE_ACCOUNTS permissions.

Content Provider
What is the name of your Content Provider, and how is it backed? (For example, Sunshine's Content Provider is named `WeatherProvider` backed by an SQLite database, with two tables: `weather` and `location`.)

The name of the ContentProvider is CrossPlatformContentProvider and it is backed by SQLite database, with two tables grouptable and itemtable. Itemtable has a foreign key group_id that references grouptable._id.

What backend does it talk to? (For example, Sunshine talks to the OpenWeatherMap API.)

I used AssetManager and an asset folder to stage my SampleData.json file.

If your app uses a SyncAdapter, what is it called? What mechanism is used to actually talk over the network? (For example, Sunshine uses `HttpURLConnection` to talk to the network, but your app may use a third-party library to do the talking.)

I used an AsyncTask called SampleDataAsync. The process queries the database and if the data has not been added then I use AssetManager, read json file, parse json, and load two tables using the CrossPlatformContentProvider and ContentValues. Group data is written one row at a time and the group row id is used with the bulk insert of item rows, as we will need the relationship later when you select a group row to find the item records. After the Android Study Jam I may add a web service for json data and change the AsyncTask to a SyncAdapter.

What loaders/adapters are used?

The GroupFragment uses CursorLoaders and is backed with a CursorAdapter called GroupAdapter.
Once a group is selected two pieces of data a passed to the ItemFragment, title and groupid.
The ItemFragment uses CursorLoader with groupid and is backed with a CursorAdapter called ItemAdapter.
The title is only used for the DetailActivity title.

User/App State

Please elaborate on how/where your app correctly preserves and restores user or app state. (See rubric for examples on this question)

When a mobile device rotates the currently selected list position is saved to give users an excellent experience. This is preserved and restored with savedInstanceState bundle, name value pair, the key called "selected_position" and value mposition an int.
Saves are done between onPause and onStop override called onSaveInstanceState and restored with override call onCreateView. The last override called is onLoadFinished and if there is a valid position then we tell the view to smoothScrollToPosition(mposition)

Questions about Optional Components

Answer the questions that are applicable to your final project

Notifications

Please elaborate on how/where you implemented Notifications in your app:

In the SampleDataAsync that loaded the database. Upon load complete I send the user a notification stating the "3 platforms & N concepts were loaded", the N is the number of group rows added. Building a notification, icon, title, and content. The next step is creating Intent and adding a PendingIntent with TaskStackBuilder. Then binding the notification with the pending intent. The last step is using NotificationManager with the notification service sent the notification with the final built notification.

ShareActionProvider

Please elaborate on how/where you implemented ShareActionProvider:

I thought it might be cool to share the json file with the group and item data.
So I added an item to menu_mail that uses a compatable actionProviderClass.

Broadcast Events

Please elaborate on how/where you implemented Broadcast Events:

Custom Views

Please elaborate on how/where you implemented Custom Views: