Ser423/Cse494

Mobile Computing

Lab 3 Android App to Manage Movie Descriptions

Due by midnight Tuesday February 9, 2016. No late submissions will be accepted.

Changes since distribution:

• No changes.

Description

You are to construct a multiple view Android app for managing **MovieDescriptions**. The app should be based on the first single view Android app that you developed, which used a **Json** description of a movie description, and displayed the information in your **MovieDescription** class. This app is similar to that one, but uses more complex controls and multiple views to display and manage a collection of **MovieDescription** objects. Add a **MovieLibrary** class which retains movie description objects. This app does not need to use the network to contact a movie database, although a future revision of the app will use the <u>Open Movie Database API</u>. Your app should provide a list of all movie titles contained in the collection. It should allow the user to select one title and see all of the information about that title, and it should provide the ability to add or remove movie description entries. New descriptions should be added to the collection by the user manually entering the appropriate information needed to create a **MovieDescription** object. Include at least the following fields: Title, Year, Rated, Released, Runtime, Genre, Actors, and Plot.

Constraints

In the Android app adhere to the following constraints:

- 1. Use an **Action Bar** that includes at least one button whose action relates to the requirements of this assignment.
- 2. Use either a **ListView** or **RecyclerView** control with a properly formed **adapter**.
- 3. Use at least the following basic controls: **Button**, **EditText/TextView**, and a **Picker** or **Spinner**.
- 4. Provides separate classes for **MovieDescription** and **Movie Library**

The same packaging, documentation and solution formatting constraints as with the prior assignments apply to this assignment as well:

- 1. Place all of your application source code into the package named: edu.asu.bsse.asuriteid.appname where bsse designates your academic program: bscse, msse, bsse, bscs, which stand for BS Computer Systems Engineering, MS Software Engineering, BS Software Engineering, or BS Computer Science respectively.
 - asuriteid is your asurite id.
- 2. As part of all class header comments, that you create and turn-in this semester, include a copyright notice, such as: **Copyright 2016 Your Name**.
- 3. As part of the class header comments, include a **right to use** statement. The examples presented in

- class use the Apache License Version 2, but you should put whatever rights you prefer. At the very least, you must provide the instuctor and the University with the right to build and evaluate the software package for the purpose of determining your grade and program assessment.
- 4. As part of the class header comments, include a reference to the software's author, such as:

 @author FirstName LastName mailto:FirstName.LastName@asu.edu.
- 5. As part of the class header comments, include an indication of the software version, such as: **@version March 2, 2016**

These comments are required on all code that you generate this semester. If you hand in an assignment that does not include them, it will not be graded.

What To Hand-In

Structure your project as a single sub-directory of the folder named **Assign3MyASURITEID**. The sub-directory should contain the **Android** app. You will submit this project, by first cleaning it (to remove all generated files. Then create a **jar** or **zip** archive of the project (Assign3*) directory. You can create a **Java Archive** (**jar**) by executing the following command from a terminal in the directory which is parent to the project directory:

jar -cvf Assign3MyASURITEID.jar Assign3MyASURITEID/

That archive will then be submitted via **Blackboard**. See the Content section.

Grading Criteria

- **5 points**. Your solution builds using Android Studio. And, your UI appears properly in the Android emulator with a **Nexus5-API23**.
- **5 points**. Your Android app should define and properly use an **all** of the controls discussed above in the section on **Constraints**.
- 5 points. Your solution includes comments described above as headers for each class used in the apps.
- **5 points**. Your app provides the ability to list all movie titles, to display the details of a single move, and to manually add or remove a movie description.

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