Ser423/Cse494 Mobile Computing

Lab 9 Android and iOS Movie Library and Player

Due by midnight Thursday April 28, 2016. No late submissions will be accepted.

Changes since distribution:

- No changes.

Description

Recast both your iOS and Android Movie Library apps: **iOS Core Data** and **Android Sqlite3** to work with the instructor provided **jsonRPC server** and **media streamer**. The new versions of your apps should use their internal database and add to that database any movies that are available through the JsonRPC server. Movies that are available throught the RPC server will have an additional Json **attribute/key** which indicates the **filename** of the media file. Doing an http request to the instructor supplied streamer with the **filename** will cause the file to be streamed to the Media Player of the mobile device. Your app should use the platform suppled media player to play in a new **scene/view** the media file. Thus your apps will be able to search the **OMDB API**, add new movie descriptions, and obtain/save JsonRPC movie descriptions, display movie information, and where available, play movies for which the **streamer** has a media file. Your solution to this problem should be an **Xcode** project, and an **Android Studio** project that works with the instuctor supplied **jsonRPC server** and **media streamer**.

Use the example instructor provided **jsonRPC server** and **media streamer**: mediaPlayer.jar for developing your apps.

What To Hand-In

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 assigment that does not include them, it will not be graded.

Structure your project as a sub-directory of the folder named **Assign9MyASURITEID**. The sub-directories of this folder should separately contain each of the following:

- **The iOS app,** and
- **The Android app**.

You will submit this project, by first cleaning its iOS and Android apps to remove all generated files. Then create a **jar** or **zip** archive of the project (Assign9*) directory. Include separate folders within the **Assign9*** folder for each of the iOS and Android apps. 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 Assign9MyASURITEID.jar Assign9MyASURITEID/

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

Grading Criteria

- **10 points**. Your iOS and Android apps properly get and save information from the JsonRPC server for movie descriptions. This includes modifying your existing MovieDescription classes (**Swift** and **Java**) to work with the instructor provided solution as well as with the **OMDB API**.
- **10 points**. Your **iOS** app should include a new scene to play movies that are available through the streamer. All movies available through the JsonRPC server and streamer should be playable. The view should only be accessible for movies for which streaming is available, and the player should use platform supplied controls for playback.
- **10 points**. Your **Android** app should include a new view to play movies that are available through the streamer. All movies available through the JsonRPC server and streamer should be playable. The view should only be accessible for movies for which streaming is available, and the player should use platform supplied controls for playback.

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