

Ser423/Cse494

Mobile Computing

Lab 6 JsonRPC iOS App for JsonRPC Movie Collection Server

Due by midnight Thursday March 17, 2016. No late submissions will be accepted.

Changes since distribution:

- No changes.

Description

You are to use the **JsonRPC** movie server that you created to solve the last assignment, and construct an iOS app that utilizes the server. The server manages a collection of movie descriptions.

The **iOS** app you create to complete this problem should be compatible with the Android App from the last assignment. That is, your iOS app running on the simulator and your Android app running on the emulator should be able to access and jointly utilize your movie server. Both of your apps should use the server as its only data source for obtaining movie information. You should not retain a local mirror of the movie collection within the app, and instead use the **JsonRPC** methods defined by your collection to obtain model information. You may use the **iOS AsyncTask** ([asyncTaskIOS.playground.jar](#)) discussed in class, or the approach used in the **StudentCollectioniOSJsonRPC** sample app as the basis for connecting to your server. 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 instructor 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 sub-directories of the folder named **Assign6MyASURITEID**. Use the same folder structure as used in the [studentCollectionJsonRPC.jar](#) example. The sub-directories should contain the **Android app**, **iOS app**, and **server** 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 (Assign6*) 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 Assign6MyASURITEID.jar Assign6MyASURITEID/
```

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

Grading Criteria

- **5 points.** Your server solution builds using Ant. And, your methods are available via **Curl**.
- **5 points.** Your app should define and properly use network requests off of the UI/Main Thread by using either the AsyncTask or **dispatch_async** on the **main_queue**.
- **5 points.** Your iOS app solution includes comments described above as headers for each class used in the apps.
- **5 points.** Your iOS app provides the ability to list all movie titles, to display the details of a single movie, and to manually add and remove movie descriptions. Your app uses only the **JsonRPC** server as its underlying model.

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