In this assignment, re-implement the Media Library applications in C++ and Java, adding serialization by importing the Library from a Json file to initialize the library, and exporting to a Jsonfile to save the library.

Use the file [media.json](http://pooh.poly.asu.edu/Ser321/Assigns/Assign3/media.json)(http://pastebin.com/0XAiLPsf) to initialize the Media Library, and export a modified Json file to save the library upon completion of the program.

One approach to completing this assignment is to **add constructors** to both your MediaLibrary and MediaDescription classes that initialize from Json. For example, your Java MediaDescriptionclass may have a constructor        **~~public MediaDescription(JSONObject jsonObj)~~**   and your MediaLibrary class may have a constructor that initializes the library from a file containing Json. In Java this may be

**~~public  MediaLibrary(String  jsonFileName)~~**

  Each of these classes may contain methods to export to Json. In MediaDescription this may be

**~~public  JSONObject  toJson( )~~**

And in MediaLibrary this may be

**~~public  void  toJsonFile(String  jsonFileName)~~**

The Java **main program** would use the MediaLibrary constructor to **initialize the library from a file**, and **call the toJsonFile method** to save the library. Similar methods and constructors would exist in the C++ program.

Structure of your Solution Directory

Submit your solution as a Java archive file (jar) of the project directory: Assign3. Grading your project will be done by extracting the jar and executing the project using Ant from the command-line. The project directory should include only the following files, subdirectories and classes:

* The Ant directive file build.xml. The build should contain targets for targets, clean, prepare, build.cpp, execute.cpp, and build.java. The execute.java.
* media.json
* Subdirectory: src for source files. The src directory contains subdirectories for the Java and C++ source files in java and cpp respectively.

Subdirectory classes used to store the compiled Java class files.