

# Programming Project #4

CIS 2151 – Oakland Community College

Prof. John P. Baugh

Points: \_\_\_\_\_/200

## Objectives

- To create an application that uses database technology
- To become more familiar with JDBC and SQLite

## Instructions

Use the provided **music\_artists.sqlite** database file for this application. Peruse the data in the database.

- Create classes named **Artist** and **Album**
  - You will use these to create objects that store data for the artists and albums
  - The Artist object should store a list of all Album objects related to the artist
- Create a class named **MusicDB** with methods to get a connection to the database
  - It will provide a method to return a list of Artist objects that contain the data for all artist and their albums
- Sort the artists and album names in ascending sequence (A to Z)
- Create a class named **Proj4**, containing the **main method** that uses the Artist, Album, and MusicDB classes to display a list of the artists, a list of the albums, and a list of the albums by artist
- If the application encounters any exceptions, it should display them on the console

Example of the program running:

## Artist and Album Listing

### Artists

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Elvis Presley

John Prine

The Beatles

### Albums

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Elvis 30 #1 Hits

Elvis at Sun

John Prine

Revolver

Rubber Soul

Sgt. Pepper's Lonely Hearts Club Band

Sweet Revenge

The White Album

### Albums by Artist

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Elvis Presley

Elvis 30 #1 Hits

Elvis at Sun

John Prine

John Prine

Sweet Revenge

The Beatles

Revolver

Rubber Soul

Sgt. Pepper's Lonely Hearts Club Band

The White Album

## Deliverables / Submission Instructions

- Take **screenshots** of your program running and turn them in
  - Place them in the top folder containing your Java files
- You need to turn in your source code (just the .java files) **zipped up**.
  - The zip file should be submitted to D2L under the appropriate assignment directory.  
**Just name the zip folder/file Proj4.zip** – D2L automatically attaches your name to it.