CSE3OAD/CSE4OAD – Lab 5

JDBC: Introduction and Application Development

In this lab, you will be working with a database that maintains data about the music albums (which have been introduced in previous labs).

Files Provided:

1. CreateMusicDB-Latcs7.sql (to be used for server on latcs7)

2. CreateMusicDB-OwnServer (to be used for your own server)

3. HasKey.java (complete)

4. MusicAlbum.java (complete)

5. MusicAlbumDSC.java (to interact with database, to complete in lab)

6. Main.java (program to test MusicAlbumDSC, to complete in lab)

7. mysql-connector-java-bin.jar (jar file containing Driver class)

Task 1 – Working with scripts

Run the SQL script to prepare the database.

But first, modify the script to make it appropriate for your server, database, username and password.

Task 2 – Working with CLI

Login to MySQL, and from the MySQL prompt, execute a number of statements:

- Some MySQL-specific methods, e.g. show databases
- Some SQL methods: select, insert, update, and delete

Task 3 – Working with JDBC

Implement the following methods of the MusicAlbumDSC and complete the methods to test them.

Method 1: get(String id) - which retrieves an album from the database

Method 2: getAll() - which retrieves all the albums

Method 3: count() - which counts number of albums in the database

Method 4: add(MusicAlbum album) - which adds an album to database

Method 5: update(MusicAlbum album) - which updates an album in the database

Method 6: remove(String id) - which removes an album from the database

Method 7: getByGenre(String filter) - which retrieves albums that whose genre match, i.e. contain, the given filter string

Take care of one method at the time.

■