**CS3431-A18: Project Description**

**Phase 3: Simple Database Application**

Due Date: Friday, Oct. 5 at 11:59pm.

Late Policy: 10% off until Saturday, Oct. 6 at 5pm

Teams: The project is done in the same teams of two as in the previous project phases.

Submission: One teammate will upload the p3.java (x should be replaced with your project team number) file to Canvas. Although you may develop the code using either Eclipse or IntelliJ, **the TA will compile your file on a CCC machine so make sure your file compiles and runs on the CCC machines**! Any comments or assumptions that you have, you can include them in a separate Word or PDF file. **Also make sure to use the same interface, filename, and class name or we will not be able to grade your project and your grade will be 0**!

Description:

For the first two phases of this term project, you were a database developer in charge of creating the database component that application developers would use. For this final phase of the project, you will get experience from the other side - you are now a Java application developer who will access and update an external database.

Download and use the provided p3start.sql file to do the final phase of the project.

You are required to write a java program that accesses and modifies the database, and prints results on the screen. Your program will be the interface to perform some simple functionality over the database. **Pay careful attention to the naming of your file and class so we can run them and give you credit for the project phase!**

Create a program named “p3.java”. The program will always take two parameters, e.g., username and password to connect to the DB. (Pass them as parameters such that the TAs can easily set them as needed without recompilation).

1. When your program is executed without any additional arguments, e.g.,  
   > java p3 <username> <password>

Then the program should output a message with the following options, and then terminate:

1 – Report Wine Information

2 – Report Company Rep Information

3 – Report Wine Label Form Information

4 – Update Phone Number

5 – Exit Program

If your program is executed without enough parameters, the program should output a message indicating that the user name and password should be included as parameters.

1. When the program is executed with an argument 1 as follows:  
   > java p3 <username> <password> 1

The program now enters the “Report Wine Information” mode. The program should print out the following line:

Enter Wine ID: <and wait for user’s input>

When the user enters the wine ID, the program should execute a query of the Wines table and print on the screen the following location information and then terminate.

Wines Information

Wine ID: …

Brand Name: …

Class/Type: …

Alcohol: …%

Appellation: …

Net Content: …

Bottler: …

1. When the program is executed with an argument 2 as follows:  
   > java p3 <username> <password> 2

The program now enters the “Report Company Rep Information” mode. The program should print out the following line:

Enter Company Rep login name: <and wait for user’s input>

When the user enters the login name, the program should execute a query and print on the screen the following location information and then terminate.

Company Representative Information

Login Name: …

RepID: …

Full Name: …

Phone: …

Email Address: …

Company Name: …

1. When the program is executed with an argument 3 as follows:  
   > java p3 <username> <password> 3

The program enters the “Report Wine Label Form Information” mode. The program should print out the following line:

Enter Wine Label Form ID: <and wait for user’s input>

When the user enters the formID, the program should execute a query of the Wine Label Form and related tables and print on the screen the following information:

Wine Label Form Information

Form ID: …

Status: …

Wine Brand: …

Vintage: …

Company Rep Full Name: ...

Agent Full Names: … (Note: there may be more than one)

Then the program terminates.

1. When the program is executed with an argument 4 as follows:  
   > java p3 <username> <password> 4

The program now enters the “Update Phone Number” mode. The program should print out the following line:

Enter Company Rep Login Name: <and wait for user’s input>

Enter the Updated Phone Number: <and wait for user’s input>

Then your program should update the phone number in the Accounts database and then the program terminates. Now if you execute option 3 again with the same company rep login name, you should get the updated phone number.

NOTE: **the user entering an input should NOT have to enter single quotes as part of the input**. For example, if a company login name is being input by the user, they should be able to type JWilliam instead of 'JWilliam' in order for the program to work!