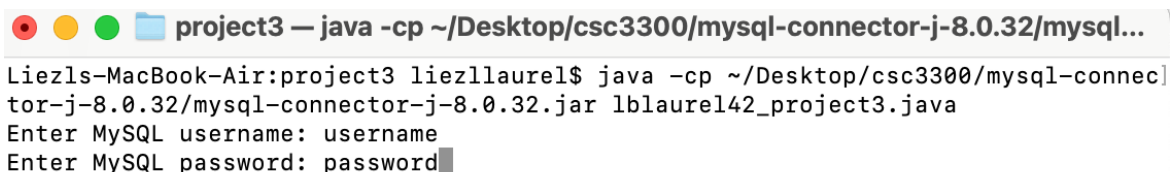**Liezl Laurel**

CSC-3300-001

4/18/2023

Project 3 Documentation

a) User Manual

- Start a session in MySQL. If this step is skipped, the app cannot connect to the database.

- Run the following command in the terminal to start the app. Make sure you're in the correct directory (the folder in which "lblaurel42_project3.java" is)

> java -cp ~/*your_path*/mysql-connector-j-8.0.32/mysql-connector-j-8.0.32.jar lblaurel42_project3.java

- When prompted, enter your MySQL username and password to verify a connection to the server. An invalid username and/or password will not connect and the user can choose to try again or exit the program.

```
● ● ●  📁 project3 — java -cp ~/Desktop/csc3300/mysql-connector-j-8.0.32/mysql...
Liezls-MacBook-Air:project3 liezllaurel$ java -cp ~/Desktop/csc3300/mysql-connec
tor-j-8.0.32/mysql-connector-j-8.0.32.jar lblaurel42_project3.java
Enter MySQL username: username
Enter MySQL password: password
```

- Once connected, a menu of certain operations will display.

```
Connected to the University database!

What would you like to do?
1. Retrieve all departments
2. Add a course
3. Retrieve all courses
4. Delete a course
5. Update a course
6. Exit
Enter your choice:
```

1) Retrieve all departments

   o This will display info about departments (dept_name, building), excluding their budgets

2) Add a course

   o The user will be prompted to enter the course ID, title, department name, and number of credits. After this operation, retrieving all courses (option 3) will display the newly added course.

```
What would you like to do?
1. Retrieve all departments
2. Add a course
3. Retrieve all courses
4. Delete a course
5. Update a course
6. Exit
Enter your choice: 2
Enter course ID: CSC-3300
Enter course title: Databases
Enter department name: Comp. Sci.
Enter number of credits: 3
Course added successfully.
```

3) Retrieve all courses

   o This will display all info about courses (course id, title, dept name and credits)

4) Delete a course

   o The user will be prompted to enter the course ID of the course they'd like to delete. After this operation, retrieving all courses (option 3) will no longer display the deleted course.

```
What would you like to do?
1. Retrieve all departments
2. Add a course
3. Retrieve all courses
4. Delete a course
5. Update a course
6. Exit
Enter your choice: 4
Enter course ID to delete: CSC-3300
1 row(s) deleted
```

5) Update a course

o The user will be prompted to enter the course ID of the course they'd like

to update, and if they'd like to update title and/or number of credits,

followed by the new title/number of credits. After this operation,

retrieving all courses (option 3) will display the updates.

```
What would you like to do?
1. Retrieve all departments
2. Add a course
3. Retrieve all courses
4. Delete a course
5. Update a course
6. Exit
Enter your choice: 5
Enter course ID to update: PHY-101
Update course title? (Y/N) y
Enter new course title: Physics1
Update number of credits? (Y/N) y
Enter new number of credits: 4
```

6) Exit

b) **Implemented and not implemented functionality**

- This app verifies a connection to the MySQL server given a user's username and

password.

- The operations offered in the display menu is based on the requirements in the readme.pdf:

  "The user of your program should be able to:

  (a) Retrieve all info about departments, without info about their budgets.

  (b) Add a course. Retrieve all info about courses (course id, title, dept name and credits). Delete a course. Update course's title and/or number of credits it is worth."

- The app handles any exceptions that may occur due to unexpected user input.

c) **Assumptions**

- The user must have a session already started in MySQL. If this step is skipped, the app cannot connect to the database, even if a valid username and password are provided.

- The user should not update a course that doesn't exist. If a user tries to update such a course, the app will continue as if that course exists, but retrieving all courses (option 3) will show that there is no such course.

d) **How to Build and Run the Project**

- Run the following command in the terminal to start the app. Make sure you're in the correct directory (the folder in which "lblaurel42_project3.java" is)

> java -cp ~/*your_path*/mysql-connector-j-8.0.32/mysql-connector-j-8.0.32.jar lblaurel42_project3.java