How to Build and Run the Library Management System Application:

Build the Database:

1. Open milestone3dump.sql file in MySQL Workbench
2. Run the SQL script
3. Refresh the database list
4. '**mm_cpsc502101team04'** should now appear in the list of databases
5. The database is now ready to run queries on!
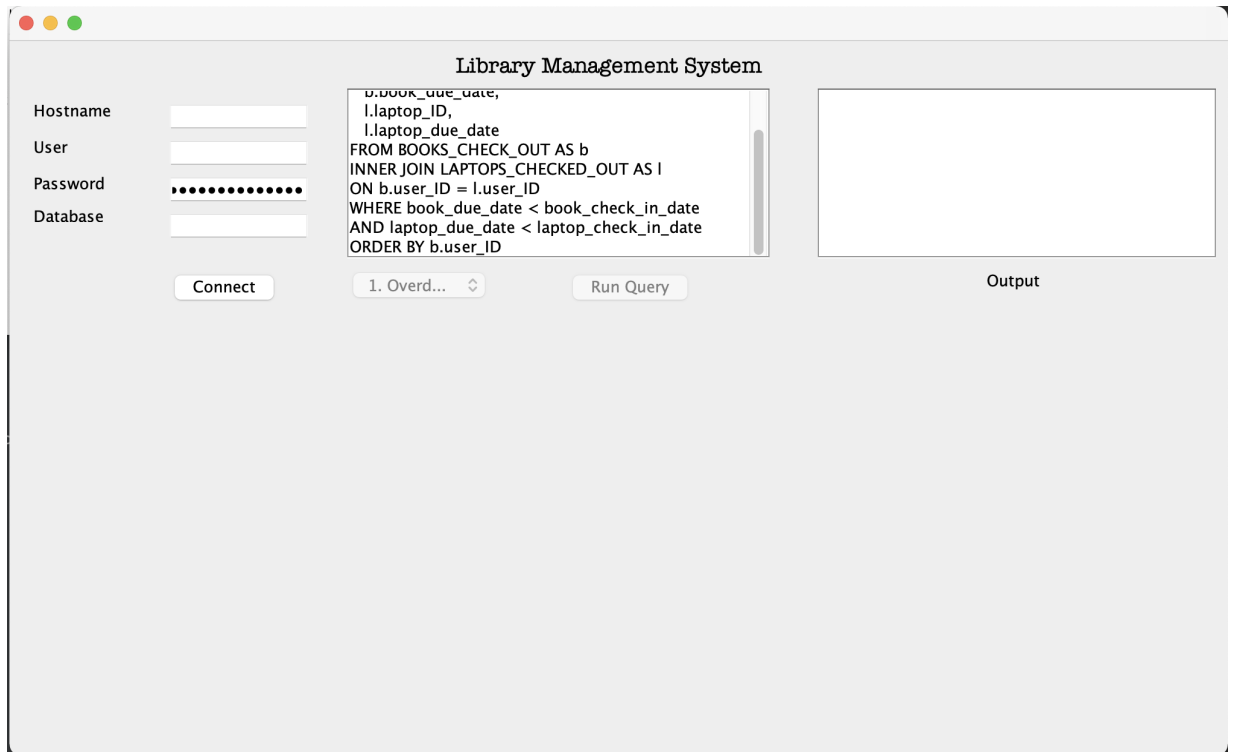
GUI Application:

The GUI application is already built and can be run without rebuilding it.

The GUI application can be run either by launching the LibraryManagementSystem.jar file from the console with the command **java -jar LibraryManagementSystem.jar**
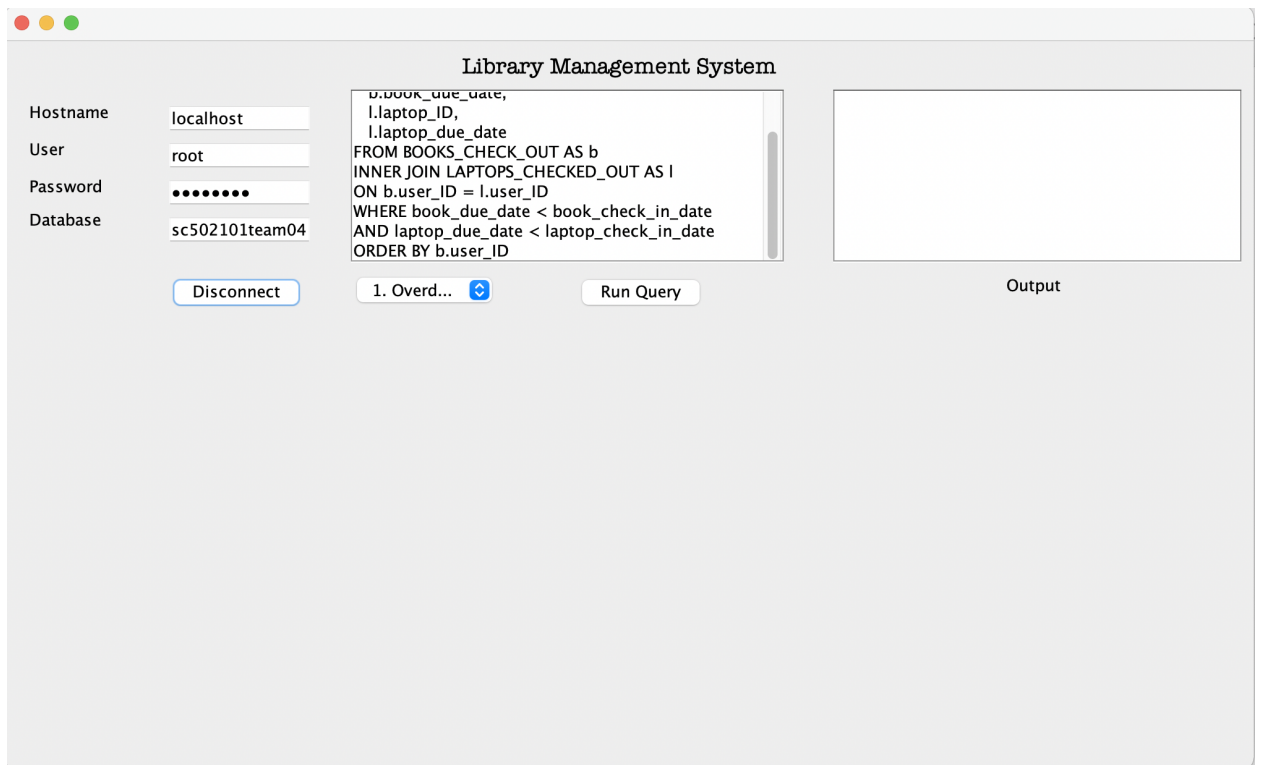
```
[mariacuevas@Marias-MacBook-Pro ~ % cd desktop
[mariacuevas@Marias-MacBook-Pro desktop % cd QueryRunner
[mariacuevas@Marias-MacBook-Pro QueryRunner % cd out
[mariacuevas@Marias-MacBook-Pro out % cd artifacts
[mariacuevas@Marias-MacBook-Pro artifacts % ls
 LibraryManagementSystem_jar
[mariacuevas@Marias-MacBook-Pro artifacts % cd LibraryManagementSystem_jar
[mariacuevas@Marias-MacBook-Pro LibraryManagementSystem_jar % ls
 LibraryManagementSystem.jar
[mariacuevas@Marias-MacBook-Pro LibraryManagementSystem_jar % java -jar LibraryMa]
 nagementSystem.jar
 choice is 1. Overdue Book and Laptop
 mariacuevas@Marias-MacBook-Pro LibraryManagementSystem_jar % █
```

The GUI application can also be launched directly from the LibraryManagementSystem.jar file (on a Mac system this is done by double clicking the file). The LibraryManagementSystem.jar can be found in at this file path:

Group4LibraryManagement/out/artifacts/LibraryManagementSystem_jar/LibraryManagementSystem.jar

Library Management System

Hostname

User

Password ••••••••••••••

Database

Connect   1. Overd... ⇕   Run Query

Output

Once the application is launched fill in the spaces for the host, user, and password. For the database name enter: **mm_cpsc502101team04**
Press connect and the application is ready to run queries!

Library Management System

Hostname localhost

User root

Password ••••••••

Database sc502101team04

Disconnect   1. Overd... ↕   Run Query

Output

Console Application:

The console application is run by launching the LibraryManagementSystem.jar file from the console with the command
java -jar LibraryManagementSystem.jar -console
Enter the host, user, password, and database (**mm_cpsc502101team04**) when prompted

```
[mariacuevas@Marias-MacBook-Pro ~ % cd desktop                                    ]
[mariacuevas@Marias-MacBook-Pro desktop % cd QueryRunner                          ]
[mariacuevas@Marias-MacBook-Pro QueryRunner % cd out                             ]
[mariacuevas@Marias-MacBook-Pro out % cd artifacts                               ]
[mariacuevas@Marias-MacBook-Pro artifacts % ls                                   ]
 LibraryManagementSystem_jar
[mariacuevas@Marias-MacBook-Pro artifacts % cd LibraryManagementSystem_jar        ]
[mariacuevas@Marias-MacBook-Pro LibraryManagementSystem_jar % java -jar LibraryMana]
 gementSystem.jar -console

Welcome to the Library Management System!
Please enter the following pieces of information
about your database:

Enter the host: localhost
Enter the user: root
Enter the password: CPSC5021
Enter the database: mm_cpsc502101team04█
```

Follow the instructions provided by the program to run queries!

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     .                           .

Connected

*-*-*-*-*-*-*-*-*-*-*
* 1. Instruction Menu   *
* 2. Run Query          *
* 3. Quit               *
*-*-*-*-*-*-*-*-*-*-*

Enter menu option: 2

*-*-*-*-*-*-*-*-*--*-*-*-*-*-*-*-*-*
* 1. Overdue Book and Laptop        *
* 2. Due Soon                       *
* 3. Popularity of Laptops          *
* 4. Popularity of Subjects by User Type *
* 5. Average Rental                 *
* 6. Users with Holds               *
* 7. Book in Language               *
* 8. Books check Out by User        *
* 9. Books with Specified Number    *
* 10. Users with Fines              *
* 11. Holds Ready                   *
* 12. Book borrow history by User ID *
* 13. Laptops model borrowing status *
* 14. Return to Menu                *
*-*-*-*-*-*-*-*-*-*-*--*-*-*-*-*-*-*-*

Enter menu option: █
```