Introduction:

The goal of this project is to create a library database system using Java, JDBC and SQL*Plus. It allows different types of user (clerk, borrower or librarian) to perform transactions with a graphical user interface. The system automatically updates all the information that is added or modified to the database.

How to Run:

This project requires some setup before running on a personal computer.

- 1. Using the sql file "cs304.sql" in our project to create the library database. (By putting this file to the SQL*Plus server, and typing "START cs304.sql" in the SQL command line)
- 2. Open our project in Eclipse, and load the JDBC and Oracle libraries (classes12.zip) provided by the instructor for this project.
- 3. Compile and run our project as "Java application" on Eclipse to start the library database system. (The database access is granted to your Oracle account: "ora_yourUnix id", and password: a "StudentNumber")
- 4. Finally, you are able to perform any transactions on our designed library database system.

For clerk:

- Add a new borrower to the library
- Check-out items borrowed by a borrower
- Process a return
- Check overdue items

For borrower:

- Search for books
- Check his/her account.
- Place a hold request for a book that is out.

- Pay a fine

For librarian:

- Add a new book or new copy of an existing book to the library
- Generate a report with all the books that have been checked out
- Generate a report with the most popular items in a given year

If you are having difficulties viewing our library database system, please contact wngkai. 91@g mail.com