MPP Final Project – Group02

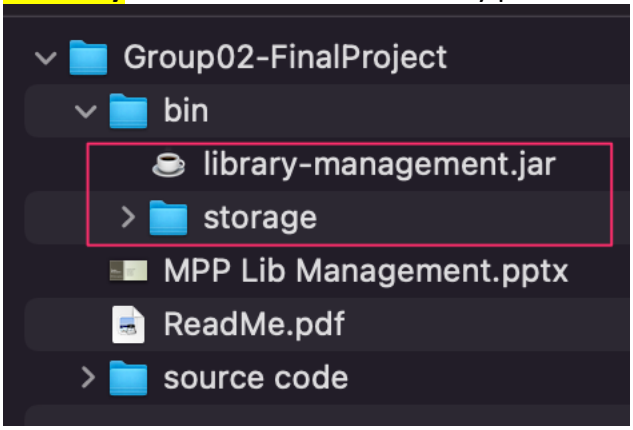
I. Background

The library management application is a desktop application for users (Librarian, Admin or Both) to deal with below use cases

1. Login
2. Add a new library member to the system
3. Checkout a book (if available) for a library member
4. Add a copy of an existing book to the library collection
5. Add a book to the library collection
6. Given a library member id, print (to console) the checkout record of that library member
7. Determine whether a given copy of a publication is overdue, and which library member has it in his/her possession

II. Run the application

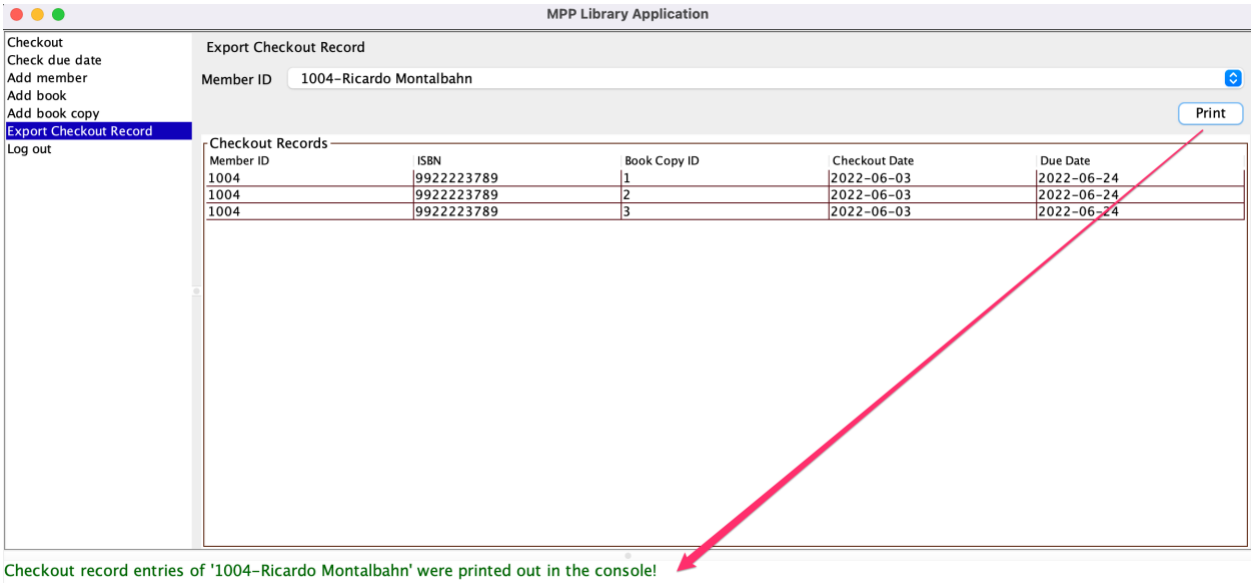
1. Run by double-clicking on **library-management.jar**, it requires **storage directory** is located at same directory parent of **library-management.jar**



2. Customize storage home directory path by passing **STORAGE_HOME** system property in the command line e.g.

```
$ java -DSTORAGE_HOME=/Users/phatnguyen/Desktop -jar library-management.jar
```

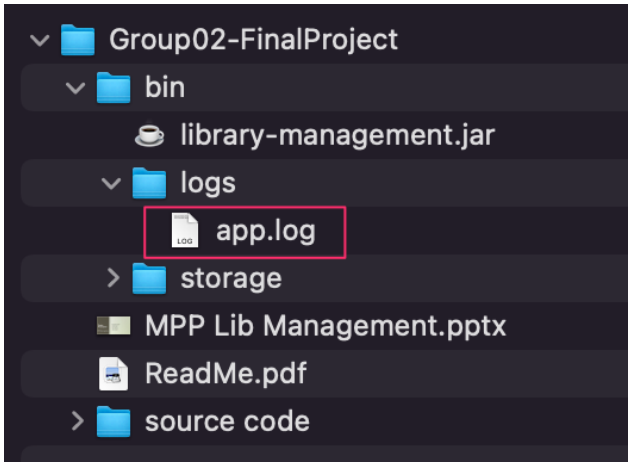
III. Monitor log in console or log file

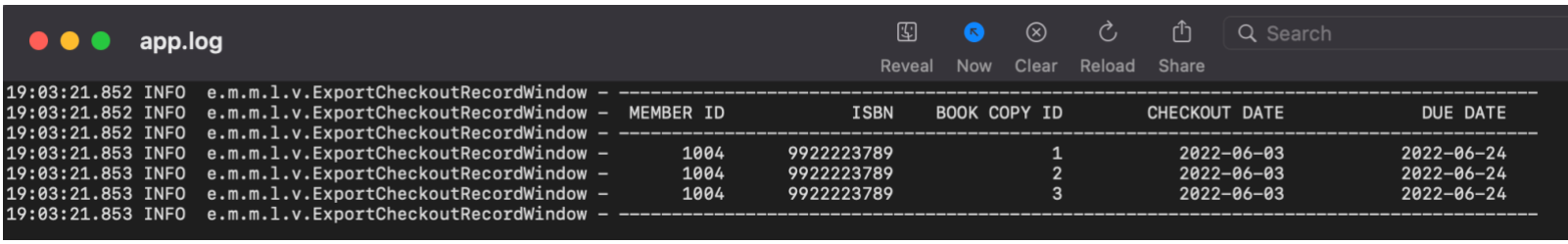


1. In the console

```
19:03:21.852 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow - ------------------------------------------------------------------------------------------
19:03:21.852 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow -  MEMBER ID          ISBN    BOOK COPY ID       CHECKOUT DATE          DUE DATE
19:03:21.852 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow - ------------------------------------------------------------------------------------------
19:03:21.853 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow -       1004      9922223789             1         2022-06-03          2022-06-24
19:03:21.853 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow -       1004      9922223789             2         2022-06-03          2022-06-24
19:03:21.853 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow -       1004      9922223789             3         2022-06-03          2022-06-24
19:03:21.853 [AWT-EventQueue-0] INFO  e.m.m.l.v.ExportCheckoutRecordWindow - ------------------------------------------------------------------------------------------
```

2. In log file at logs/app.log





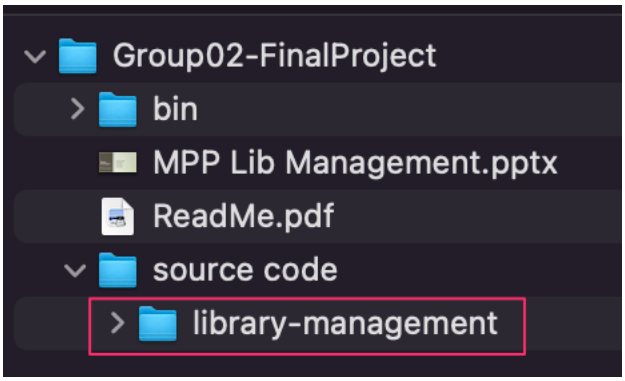
IV. Sample data

Users

User {username='101', password=xyz, role=LIBRARIAN}
User {username='102', password=abc, role=ADMIN}
User {username='103', password=111, role=BOTH}

Books

[2311451123, The Big Fish, Joe Thomas; Sandra Thomas, 21, 3]
[9922223789, Thinking Java, Andrew Cleveland, 21, 5]
[2812331456, Antartica, Nirmal Pugh, 7, 2]
[2311451125, Beginning MPP, Joe Thomas; Sandra Thomas, 21, 1]
[4856882567, Jimmy's First Day of School, Sarah Connor, 7, 2]

V. Development section

1. Use IntelliJ IDE to design GUI and code
2. Maven version is 3.6 or above
3. Oracle Java version is 17 or above
4. Source code is sent along with as attachment or could be cloneable at https://github.com/phatn/library-management.git