

CST 338 Project 2 Part 3

Due December 9, 2016 at 11:55pm

In this project, you will develop an Android app for the *Otter Library System*, a book reservation system for a library. You can see the detailed use case model in the Project 2 (Part 2) assignment description on iLearn. For the project, you must develop an Android app using Android Studio. You should use **SQLite** for your database. **For the purpose of grading, we will use the following 15 test cases.**

For the project, **you are required to submit two files:**

1. **A ZIP file of your app.** We will not accept other formats such as tar or rar. If you do not submit the ZIP file, you will automatically get a zero for the source code portion.
2. **A PDF** to indicate which test cases are passed and which test cases are failed. As evidence of a passed test case, you have to include screenshot(s) of the test case to show that your app worked well on your emulator/device for the test case.

Note: If you do not use SQLite, the highest score you can receive is 90/100.

Test Cases for Project 2 (Part 3)

1. When your app starts, it should provide the main menu GUI with four options of “Create Account”, “Place Hold”, “Cancel Hold”, and “Manage System”.
2. Create a correct account
 - Select “Create Account”
 - Username: !!byun7
 - Password: !!byun7
 - The System informs the Customer that the new account has been created successfully. A user clicks the “OK” button to confirm the message. After that, the System should display the main menu.
3. Manage the system - Verify the newly created account
 - Select “Manage System”
 - Username: !admin2
 - Password: !admin2
 - The system should display
 1. Transaction type: New account
 2. Customer’s username: !!byun7

3. Transaction date: Depends on the test.
 4. Transaction time (= hour and minute): Depends on the test.
 - In this test case, we will not add new book.
 - The System should display the main menu.
4. Create an incorrect account
 - Select “Create Account”
 - Username: byun7
 - Password: !byun7
 - The System should display an error message of incorrect format.
 - Username: byun7!
 - Password: 7byun
 - The System should display an error message of incorrect format. Then, it displays the main menu.
 5. Create an incorrect account - Duplicated username
 - Select “Create Account”
 - Username: \$brian7
 - Password: 123abc##
 - System should display that the username already exists.
 - Username: !!byun7
 - Password: 123abc##
 - The system should display that the username already exists. Then it displays the main menu.
 6. Place hold
 - Select “Place Hold”
 - Pickup: 10/20/2016 10:00(AM)
 - Return: 10/22/2016 10:00(AM)
 - Book to hold: Hot Java
 - Username: !!byun7
 - Password: !!byun7
 - System should display
 1. Customer username: !!byun7
 2. Pickup date/time: 10/20/2016 10:00(AM)
 3. Return date/time: 10/22/2016 10:00(AM)
 4. Book Title: Hot Java
 5. Reservation number: Depends on the test.
 6. Total amount: \$2.40
 - Once everything goes well, the System should display the main menu.

7. Place a hold - One more trial

- Select “Place Hold”
- Pickup: 10/19/2016 10:00(AM)
- Return: 10/26/2016 10:00(AM)
- Book to hold: Fun Java
- Username: !!byun7
- Password: !!byun7

→ System should display

1. Customer username: !!byun7
2. Pickup date/time: 10/19/2016 10:00(AM)
3. Return date/time: 10/26/2016 10:00(AM)
4. Book Title: Fun Java
5. Reservation number: Depends on the test.
6. Total amount: \$168.00

→ Once everything goes well, the System should display the main menu.

8. Place a hold - Handle More than 7-Day Rental

- Select “Place Hold”
- Pickup: 10/21/2016 10:00(AM)
- Return: 10/31/2016 6:00(PM)

→ System should display

1. The System informs the Customer that the books can’t be reserved.
2. The Customer confirms the error message.

- Pickup: 10/21/2016 10:00(AM)
- Return: 10/21/2016 6:00(PM)
- Book to hold: Algorithm for Java
- Username: !!byun7
- Password: !!byun7

→ System should display

1. Customer username: !!byun7
2. Pickup date/time: 10/21/2016 10:00(AM)
3. Return date/time: 10/21/2016 6:00(PM)
4. Book Title: Algorithm for Java
5. Reservation number: Depends on the test.
6. Total amount: \$2.00

- Once everything goes well, the System should display the main menu.
9. Place a hold - Handle No Book Available
- Select “Place Hold”
 - Pickup: 10/19/2016 9:00(AM)
 - Return: 10/25/2016 8:00(PM)
- The System informs the Customer that there is no book available for the dates/hours. The System prompts the Customer to exit the program. The Customer clicks the “Exit” and the System displays the main menu.
10. Cancel hold - Handle No Reservation
- Select “Cancel Hold”
 - Username: a@lice5
 - Password: @csit100
- System should display
1. The System informs the Customer that there is no reservation with the username.
 2. The Customer clicks the OK button to continue.
 3. The System displays the main menu.
11. Cancel hold
- Select “Cancel Hold”
 - Username: !!byun7
 - Password: !!byun7
- System should display
1. All three reservations of !!byun7
- Select “Hot Java” to cancel and confirm it.
- System should display the main menu.
12. Manage the system - Verify the newly cancelled hold
- Select “Manage System”
 - Username: !admin2
 - Password: !admin2
- The system should display
1. Transaction type: Cancel hold
 2. Customer’s username: !!byun7
 3. Book title: Hot Java
 4. Pickup date/time: 10/20/2016 10:00(AM)
 5. Return date/time: 10/22/2016 10:00(AM)
 6. Reservation number: Depends on the test.
 7. Transaction date: Depends on the test.

8. Transaction time (= hour and minute): Depends on the test.
- In this test case, we will not add new book.
 - The System should display the main menu.
13. Manage the system - Add a new book
- Select “Manage System”
 - Username: !admin2
 - Password: !admin2
 - The system will display logs. But it’s not important for this test case.
 - Librarian selects the YES option to add a new book.
 1. Book title: Android Programming
 2. Author: Bob Smith
 3. ISBN: ABCDEF
 4. Hourly Fee: \$0.50
 - After the Librarian confirmed the information, the system should display the main menu.
14. Manage the system - Handle Invalid Book Information
- Select “Manage System”
 - Username: !admin2
 - Password: !admin2
 - The system will display logs. But it’s not important at this test case.
 - Librarian selects the YES option to add a new book.
 1. Book title: Android Programming
 2. Author: Bob Smith
 3. ISBN: ABCDEF
 4. Hourly Fee: \$0.50
 - The System informs the Librarian that the information entered is not valid. Then, it should display the main menu.
15. Place a hold - One more trial
- Select “Place Hold”
 - Pickup: 12/31/2016 10:00(AM)
 - Return: 12/31/2016 11:00(AM)
 - Book to hold: Android Programming
 - Username: !chris12!
 - Password: CHRIS12!!
 - System should display
 1. Customer username: !chris12!

2. Pickup date/time: 12/31/2016 10:00(AM)
 3. Return date/time: 12/31/2016 11:00(AM)
 4. Book Title: Android Programming
 5. Reservation number: Depends on the test.
 6. Total amount: \$0.50
- Once everything goes well, the System should display the main menu.