

1. **Test Case ID:** TC1.

- a. **Description:** Verify user can be added with phone number, email, or both, and verify that records in DB are updated.
- b. **Test Steps:**
  - i. Log in as btills.
  - ii. Add a user with desired name, email, and library card that do not exist.
  - iii. Check database to ensure user was added to user table.
  - iv. Try User LookUp with new user and ensure their information appears and is accurate.
- c. **Expected Results:** Success message. User can be found in the 'user' table in the database with correct card number. User can checkout items or be looked up in the app.
- d. **Actual Results:** Passed

2. **Test Case ID:** TC2

- a. **Description:** Verify that a staff member can log in and log out, check input security and that session details are purged after logging out.
- b. **Test Steps:**
  - i. Log in as btills.
  - ii. View myInfo to ensure proper log in and details.
  - iii. Log out by exiting.
  - iv. Ensure that log in is required before accessing anything else again.
- c. **Expected Results:** Menu page loads, and when viewing "myInfo" the information is that of the specified employee.
- d. **Actual Results:** Passed

3. **Test Case ID:** TC3

- a. **Description:** Within the app, verify that items can be searched by each parameter with accurate results in all three type categories. Verify that multiple search parameters can be used at once successfully.
- b. **Test Steps:**
  - i. Ensure that input fields change when selecting different radio buttons.
  - ii. Try searching for book "1000 Years of Solitude" by author Garcia. Ensure correct results.
  - iii. Try searching for books in the children's genre by author Rowling. Ensure correct results.
  - iv. Try searching for dvds with director Spielberg. Ensure correct results.

- v. Try searching for dvds by Disney with “pirates” in the title. Ensure correct results.
    - vi. Search for A Night at the Opera cd by Queen. Ensure correct results.
    - vii. Search for rock cds. Ensure correct results.
  - c. **Expected Results:** New window opens with search results that are accurate and complete for all kinds of search query. Information displayed is up to date.
  - d. **Actual Results:** Passed
4. **Test Case ID:** TC4
- a. **Description:** Verify that a user can check out an item by library card number and inventoryID. Verify that records are updated in the database, and that checkouts only occur on available items.
  - b. **Test Steps:**
    - i. Check the database to find any item marked as available.
    - ii. Attempt to check out that item under any fake user’s library card.
    - iii. Ensure the success message displays. Check the checkOutHistory record in the database to ensure accuracy and that the due date is correctly set to 14 days out, and check the inventory table to ensure it is marked as unavailable.
    - iv. If successful, proceed to next step to test returns.
  - c. **Expected Results:** Success message. New record in checkOutHistory can be found in the database for the transaction. The status of the item in the inventory table has been updated to be unavailable.
  - d. **Actual Results:** Passed
5. **Test Case ID:** TC5
- a. **Description:** Verify that a checked out item can be returned to inventory and that the waitlist or availability status is update in the database. Ensure that only checked out items can be returned.
  - b. **Test Steps:**
    - i. Return an item checked out by a fake library card number (potentially from previous step).
    - ii. Ensure that the record in checkOutHistory has a correct return date and that the item is now marked as available.
  - c. **Expected Results:** Success message. Record for the tansaction in checkOutHistory has a return date, and the status is listed as available in the inventory table or the waitlist has been updated accordingly.
  - d. **Actual Results:** Passed
6. **Test Case ID:** TC6

- a. **Description:** Verify that the availability of an item can be accurately checked using its inventoryID.
- b. **Test Steps:**
  - i. Check database for an item that is available. Also find an item that is unavailable.
  - ii. Perform availability check using inventoryIDs for both of these items. Ensure that the appropriate results are displayed.
- c. **Expected Results:** Message displayed. Check for accuracy in the database.
- d. **Actual Results:** Passed

7. **Test Case ID:** TC7

- a. **Description:** Verify that user information can be looked up by entering the library card number. Verify that current and historical checkout data can be viewed and its accuracy.
- b. **Test Steps:**
  - i. Perform LookUp User on a fake library card number, ideally one that has already checked out or placed holds on some items.
  - ii. Check database to ensure accurate results.
  - iii. Check the user's current holds and check outs. Ensure accuracy with database.
  - iv. Check the user's history. Ensure accuracy with database.
- c. **Expected Results:** User information displays and is accurate. Clicking on historical data button displays another window with accurate data, as does clicking on the current data button.
- d. **Actual Results:** Passed

8. **Test Case ID:** TC8

- a. **Description:** Verify that users with a library card number can make an online account with an email and/or phone number, and verify that the user can then log in and out.
- b. **Test Steps:**
  - i. Find or create a fake user with a fake card number but without assigning a password.
  - ii. Use the web application to attempt to sign up the user with any password.
  - iii. Success message should be displayed. Try logging in to ensure it works.
  - iv. Check database to see that the password has been added to the user table.

- c. **Expected Results:** Success message. User can log in with the chosen password right away. User record has been updated in the user table to show password.
- d. **Actual Results:** Works for records with both a phone and an email in the system, but sometimes has issues with records with just a phone or just an email. In Progress.

9. **Test Case ID:** TC9

- a. **Description:** Verify that web application inventory search is successful for all types of items and with all combinations of search parameters.
- b. **Test Steps:**
  - i. Ensure that input fields change when selecting different radio buttons.
  - ii. Try searching for book “1000 Years of Solitude” by author Garcia. Ensure correct results.
  - iii. Try searching for books in the children’s genre by author Rowling. Ensure correct results.
  - iv. Try searching for dvds with director Spielberg. Ensure correct results.
  - v. Try searching for dvds by Disney with “pirates” in the title. Ensure correct results.
  - vi. Search for A Night at the Opera cd by Queen. Ensure correct results.
  - vii. Search for rock cds. Ensure correct results.
- c. **Expected Results:** New page opens with search results that are accurate and complete for all kinds of search query. The information displayed is up to date.
- d. **Actual Results:** Passed

10. **Test Case ID:** TC10

- a. **Description:** Verify that logged in users can view their account information, and that they can access details about current and historical checkouts and holds.
- b. **Test Steps:**
  - i. Log in as a fake user and proceed to “My Information”
  - ii. Ensure that information displayed is accurate with the database.
  - iii. View user’s history. Ensure it is accurate with database.
  - iv. View user’s current check outs and holds. Ensure it is accurate with the database.
- c. **Expected Results:** User information displays and is accurate. Clicking on historical data button displays another window with accurate data, as does clicking on the current data button.

d. **Actual Results:** Passed

11. **Test Case ID:** TC11

a. **Description:** Verify that user information can be updated by logged in users and that password changes can occur, with these changes being updated instantaneously in the database.

b. **Test Steps:**

- i. Log In as any fake user and navigate to user's information.
- ii. Attempt to change the phone number, email, and name.
- iii. Ensure that the records are updated in the database.
- iv. Attempt to change the password.
- v. Ensure that password change is reflected in the user table and try logging out and back in again to ensure password functions.

c. **Expected Results:** Success message. Information is updated on the page, and is seen updated in the user table in the database.

d. **Actual Results:** Passed