**Normal Flow**

**Test Case 001 - Begin System:**

Description: The user is able to begin the system by click on the “Borrow Book” Button located on the Main Menu

Pre-conditions: GUI interface is displayed

Post-conditions: “Swipe Card” Button displayed and readers enable

Data required: None.

**Test Case 002 - Swipe Card:**

Description: Member able to scan the barcode of a book located on the public shelves

Pre-conditions: Test Case ID 001 successfully completed

Post-conditions: The card reader is enable and the member details appear on the “Scanning” menu

Data required: Member ID = 1

**Test Case 003 - Scan Book:**

Description: The member is able to scan the barcode of a book that is allocated on the public shelves of the library.

Pre-conditions: Test Case ID 002 successfully completed

Post-conditions: The book is added to the loan pending list and shown in the “Current Book” description box. Scan reader enable

Data required: Book Barcode = 11

**Test Case 004 - Completed Scan:**

Description: The user completing the loan book transaction

Pre-conditions: Test Case ID 001-003 successfully completed

Post-conditions: The “Current Loan List” is displayed showing the book and borrower’s details. Scanner disable

Data required: None.

**Test Case 005 - Confirmed Loans:**

Description: The user to complete its loans and to check it is confirmed

Pre-conditions: Test Case ID 001-004 successfully completed

Post-conditions: The “Printer” screen will displayed showing what book has been recorded against the borrower

Data required: None.

**Alternate Flow - Borrowing Restricted**

**Test Case 006 - Unable to borrow book(s):**

Description: The user cannot proceed to scanning out a book because of overdue loans

Pre-conditions: Test Case ID 001-002 successfully completed

Post-conditions: The system display “Member 2 cannot borrow at this time” error and display “Borrower Restrictions” error message. User then forced to be back on the Main Menu screen.

Data required: Member ID = 2

**Alternate Flow – Scanning More Books**

**Test Case 007 - Scanning more book(s):**

Description: The user scanning out more books to the member ID 1

Pre-conditions: Test Case ID 001-005 successfully completed. User sitting on the Main Menu display

Post-conditions: The books are added to the “Loans Pending List” and book details are displayed in the “Current Loan Display”

Data required: Member ID: 1 | Book ID : 10 | Book ID: 12 | Book ID: 13 | Book ID: 14

**Test Case 008 - Loan Limit Reached:**

Description: The user loan has reached its max of 5 books

Pre-conditions: Test case 001-005 successfully completed | Test case 007 successfully completed

Post-conditions: “Scanning” menu will be displayed showing borrower’s details | Scanner is disable | Forced to land on the Main menu screen

Data required: Member ID = 1

**Alternate Flow - Loan Rejected**

**Test Case 009 - Amount Owning:**

Description: The user will not be able to scan out any loans because of a fine that is owed

Pre-conditions: User sitting on the Main menu screen

Post-conditions: Error message displayed on the Scanning menu not letting the user to do anything till payment is completed

Data required: Member ID = 3