| **Test Name** | **Member can borrow books after rejecting pending loans** |
| --- | --- |
| **Use Case Tested:** | Borrow Book |
| **Test Description:** | A member has no outstanding fines or loans.   1. Enter member ID number 1 (Swipe card) 2. Scan five books, reaching the loan limit. 3. Click reject to abandon the pending loans. 4. Scan two more books. 5. Click ‘Completed’. 6. Click ‘Confirm’ to accept the pending loans.   The expected result is that the initial five books scanned are not stored as loans by the system. These books remain available to borrow, and the member remains unrestricted. The committed loans, which are sent to the printer, will only include the confirmed loans, and not the rejected ones. |
| **Pre-conditions** | - MemberDAO must include a member who has no outstanding fines or loans.  - BookDAO must include a minimum of five books, which must be available for loan. |
| **Post-conditions** | - The member must remain able to borrow more books if required.  - The two books on loan must not be available for other members to borrow.  - The system should return to the main screen to allow other members to borrow books.  - Outstanding loans must remain stored in the system until it is closed. |
| **Notes:** | **This test requires library.Main, with setupTestData() on line #72 uncommented as it makes use of objects created in that code.** |
| **Result (Pass/Fail/Warning/Incomplete)** | **PASS** |

|  | **TEST STEP** | **EXPECTED TEST RESULTS** | P | F |
| --- | --- | --- | --- | --- |
|  | Enter member ID number 1 | Card reader is disabled and book scanner is enabled. | P |  |
|  | Scan five books, reaching the loan limit. Use barcode numbers 11, 12, 13, 14 and 15. | After each book is scanned, its details are displayed, and it is added to the pending loan list. After the fifth book is scanned, book scanner is disabled, and the current loan list is displayed, with buttons allowing the user to ‘Confirm’, ‘Reject’ or ‘Cancel’. | P |  |
|  | Click reject to abandon the pending loans. | The display returns to the scanning panel, with no pending loans displayed. The book scanner is enabled | P |  |
|  | Scan two books with barcodes 11 and 12 | The book scanner remains enabled, because loan limit has not been reached | P |  |
|  | Click ‘Completed’ | The current loan list is displayed | P |  |
|  | Click ‘Confirm’ | The main menu is displayed. | P |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Data Table** | | | | | |
|  | **1** | **2** | **3** | **4** | **5** |
| Card Reader | 1 |  |  |  |  |
| Book Scanner (First Use) | 11 | 12 | 13 | 14 | 15 |
| Book Scanner (Second Use) | 11 | 12 |  |  |  |

| **Test Name** | **Member cannot borrow books if the fine limit is reached** |
| --- | --- |
| **Use Case Tested:** | Borrow Book |
| **Test Description:** | A member has no outstanding loans, but has reached the fine limit.   1. Enter member ID number 1 (Swipe card) 2. Click ‘Cancel’.   After swiping his/her card, the member will be notified that he/she has reached the fine limit, and will be unable to borrow any books. |
| **Pre-conditions** | - MemberDAO must include a member who has no outstanding loans, but has reached the fine limit.  - BookDAO may contain books, but these are not required for this test. |
| **Post-conditions** | - The member must remain restricted (unable to borrow books)  - The member must be informed of his/her restricted status and the amount owing.  - The two books on loan must not be available for other members to borrow.  - The system should return to the main screen to allow other members to borrow books |
| **Notes:** | **This test requires library.Main, with setupTestData() on line #72 uncommented as it makes use of objects created in that code.** |
| **Result (Pass/Fail/Warning/Incomplete)** | **PASS** |

|  | **TEST STEP** | **EXPECTED TEST RESULTS** | P | F |
| --- | --- | --- | --- | --- |
| 1. | Enter member ID number 3 | Card reader and book scanner are disabled. Borrowing restrictions are displayed: “Borrower has exceeded fine limit. Amount owing: $10.00”. “Borrowing Restricted” is also displayed in red. Only the ‘Cancel’ button is enabled. | P |  |
| 2. | Click ‘Cancel’ | The main menu is displayed. | P |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Data Table** | | | | | |
|  | **1** | **2** | **3** | **4** | **5** |
| Card Reader | 3 |  |  |  |  |