| **Test Name** | | | Scan Book | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Use Case Tested:** | | | Add book to list of pending loans | | | |
| **Test Description:** | | | Add book to list of pending loans | | | |
| **Pre-conditions** | | | BorrowBookCTL class exists  Scanner exists  BorrowBookCTL added as listener to scanner  BorrowBookCTL state == SCANNING\_BOOKS | | | |
| **Post-conditions** | | | **(book not found)**  BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled  cardReader is disabled  scanner is enabled  book not found error message displayed  BorrowBookCTL state == **SCANNING\_BOOKS**  **(book not available)**  BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled  cardReader is disabled  scanner is enabled  book not available error message displayed  BorrowBookCTL state == **SCANNING\_BOOKS**  **(book already scanned)**  BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled  cardReader is disabled  scanner is enabled  book already scanned error message  displayed  BorrowBookCTL state == **SCANNING\_BOOKS** | | | |
|  | | | **(scan count < loan limit)**  BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled  cardReader is disabled  scanner is enabled  scanCount incremented by 1  scanned books details displayed  new (pending) loan created  (pending) loan added to pending loan list  Current pending loan list displayed  BorrowBookCTL state == **SCANNING\_BOOKS**  **(scan count == loan limit)**  BorrowBookUI is displayed  ConfirmingLoans panel of BorrowBookUI  displayed  final pending loan list displayed  Cancel button enabled  Reject button enabled  cardReader is disabled  scanner is disabled  scanCount incremented by 1  BorrowBookCTL state == **CONFIRMING\_LOANS** | | | |
| **Notes:** | |  | | | | |
| **Result (Pass/Fail/Warning/Incomplete)** | | **Pass** | | | | |
|  | **TEST STEP** | | | **EXPECTED TEST RESULTS** | P | F |
|  | **Test 1 – book not found** | | | |  |  |
|  | Press (borrow books) on main page | | | Card reader enabled | \* |  |
|  | Enter 1 into member id field and press swipe card | | | 1. Book scanner enabled 2. cardReader is disabled | \* |  |
|  | Enter 16 into book scanner text field | | | 1. Scanning panel of BorrowBookUI displayed 2. Complete + Cancel button enabled 3. book not found error message displayed 4. BorrowBookCTL state == SCANNING\_BOOKS | \* |  |
|  | **Test 2 -** **book not available** | | | |  |  |
|  | Press (borrow books) on main page | | | Card reader enabled | \* |  |
|  | Enter 1 into member id field and press swipe card | | | 1. Book scanner enabled 2. cardReader is disabled | \* |  |
|  | Enter 6 into book scanner text field | | | 1. Scanning panel of BorrowBookUI displayed 2. Cancel button enabled 3. book not available error message displayed 4. BorrowBookCTL state == SCANNING\_BOOKS | \* |  |
|  | **Test 3 -** **book already scanned** | | | |  |  |
|  | Press (borrow books) on main page | | | Card reader enabled | \* |  |
|  | Enter 1 into member id field and press swipe card | | | 1. Book scanner enabled 2. cardReader is disabled | \* |  |
|  | Enter 15 into book scanner text field | | | 1. Scanning panel of BorrowBookUI displayed 2. Cancel button enabled 3. BorrowBookCTL state == SCANNING\_BOOKS | \* |  |
|  | Enter 15 into book scanner text field | | | 1. book already scanned error message   displayed | \* |  |
|  | **Test 4 -** **scan count < loan limit** | | | |  |  |
|  | Press (borrow books) on main page | | | Card reader enabled | \* |  |
|  | Enter 1 into member id field and press swipe card | | | 1. Book scanner enabled 2. cardReader is disabled | \* |  |
|  | Enter 11 into book scanner text field  Enter 12 into book scanner text field  Enter 13 into book scanner text field | | | 1. Scanning panel of BorrowBookUI displayed 2. scanned books details displayed 3. new (pending) loan created 4. (pending) loan added to pending loan list 5. Current pending loan list displayed 6. BorrowBookCTL state == SCANNING\_BOOKS | \* |  |
|  | **Test 5 - scan count == loan limit** | | | |  |  |
|  | Press (borrow books) on main page | | | Card reader enabled | \* |  |
|  | Enter 1 into member id field and press swipe card | | | 1. Book scanner enabled 2. cardReader is disabled | \* |  |
|  | Enter 11 into book scanner text field  Enter 12 into book scanner text field  Enter 13 into book scanner text field  Enter 14 into book scanner text field | | | 1. ConfirmingLoans panel of BorrowBookUI   displayed   1. final pending loan list displayed 2. Reject button enabled 3. scanner is disabled 4. BorrowBookCTL state == CONFIRMING\_LOANS | \* |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Data Table** | | | | | |
|  | **1** | **2** | **3** | **4** | **5** |
| [Data field 1] | [data set 1 input value for field 1] |  |  |  |  |
| [Data field 2] | [data set 1 input value for field 2] |  |  |  |  |
| [Data field 3] | [data set 1 input value for field 3] |  |  |  |  |