| **Test Name** | | | Test Swipe Card | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Use Case Tested:** | | | Borrow Book | | | |
| **Test Description:** | | | Testing the system operations involved with scanning a book, and seeing how the system will behave and respond when given a variety of different test data.  Test case involves user swiping card and being unrestricted. Alternative flows include post-conditions such as User restricted and user not found.  The post-conditions will determine what type of test data to use, each test will test a different post-condition. | | | |
| **Pre-conditions** | | | * cardReader visible and enabled * BorrowBookCTL added as listener to * cardReader * memberDAO exists * BorrowBookCTL state == INITIALIZED | | | |
| **Post-conditions** | | | * (member exists and not restricted)   + Scanning panel of BorrowBookUI displayed   + Complete, Cancel buttons enabled   + cardReader is disabled   + scanner is enabled   + borrower details displayed   + existing loans displayed   + scan count initialized as number of   + existing loans   + existing fine message displayed if relevant   + BorrowBookCTL state == SCANNING\_BOOKS * (member exists and is restricted)   + Restricted panel of BorrowBookUI displayed   + Cancel button enabled   + cardReader is disabled   + scanner is disabled   + borrower details displayed   + existing loans displayed   + existing fine message displayed if relevant   + overdue message displayed if relevant   + atLoanLimit message displayed if relevant   + borrowing restricted error message displayed   + BorrowBookCTL state == BORROWING\_RESTRICTED * (member does not exist)   + member not found error message displayed | | | |
| **Notes:** | | **All tests meted the expected user acceptable outcome. All system processes behaved and resulted as expected.** | | | | |
| **Result (Pass/Fail/Warning/Incomplete)** | | **Pass** | | | | |
|  | **TEST STEP** | | | **EXPECTED TEST RESULTS** | P | F |
| Test 1 – Member exists, not restricted | | | | | | |
| Click Borrow Books | | | | BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled | | |
| Enter Member Id 1 | | | |  | | |
| Click Swipe Card | | | | cardReader is disabled  scanner is enabled | | |
| Test 2 – Member exists, restricted | | | | | | |
| Click Borrow Books | | | | BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled | | |
| Enter Member Id 2 | | | |  | | |
| Click Swipe Card | | | | Restricted panel of BorrowBookUI displayed  Cancel button enabled  cardReader is disabled  scanner is disabled  borrower details displayed  existing loans displayed  overdue message displayed  borrowing restricted error message displayed | | |
| Test 3 – Member does not exist | | | | | | |
| Click Borrow Books | | | | BorrowBookUI is displayed  Scanning panel of BorrowBookUI displayed  Cancel button enabled | | |
| Enter Member Id 999 | | | |  | | |
| Click Swipe Card | | | | member not found error message displayed | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Data Table** | | | | | |
|  | **1** | **2** | **3** | **4** | **5** |
| Member ID | 1 | 2 | 999 |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |