# Normal Flow – Library System – ITC205

Test Case 01: Begin System  
Description: System Loads up after compiling the program. The user may start their process by clicking on “Borrow Books.”  
Pre-Conditions: All GUI elements and java windows are open.  
Post Conditions: The “Card Reader” window is open and accessible.   
Data Required: None

Test Case 02: Swipe Card  
Description: The user swipe’s their library card. The program identifies their memberId. ID = 1  
Pre-Conditions: Test Case 1 was completed without errors.   
Post Conditions: The “Scanner” window is open and accessible.   
Data Required: memberId

Test Case 03: Scan Book  
Description: The user is able to scan the barcode of a pre-existing library book. The program identifies the bookId number. Ideal bookId: 10. The user is able to complete this Test Case multiple times at this point.   
Pre-Conditions: Test Case 1 and 2 were completed without errors.   
Post Conditions: Book added to loanList and Book details are presented within the Display Window  
Data Required: bookId

Test Case 04: Scan Completion  
Description: The user may verify if the status of their Book Scanning and whether or not they’re finished Scanning. They may press “Complete” to finish their scan.   
Pre-Conditions: Test Case 1, 2 and 3 were completed without errors.  
Post Conditions: The Loan List is displayed within the Display Window, inherently waiting for the user to confirm their loans.  
Data Required: None

Test Case 05: Confirm Loan(s)  
Description: After pressing the “Complete” Button, the User can confirm their Loans by Clicking on the “Confirm” Button  
Pre-Conditions: Test Cares 1, 2, 3 and 4 were completed without errors.   
Post Conditions: The new Loan is connected to the respective Borrower and the details are presented within the printer window.  
Data Required: None

# Alternate Flow –Restrictions

Test Case 06: Restricted – Program Cancels  
Description: The user is unable to borrower books due to having overdue loans and/or fines. The user is unable to proceed and their only option is to cancel.   
Pre-Conditions: Test cases 1 and 2 were completed, however were unable to progress into Test Case 3 due to their account standing.  
Post Conditions: The user presses cancel and they’re reverted to the main menu.  
Data Required: None.

# Alternate Flow –Loan Limit

Test Case 07: The User Reaches their Loan Limit  
Description: The Loan Limit for each user is 5. When this limit is breached, the user will be unable to add more books to the loan list.   
Pre-Conditions: The user has added 5 books to their pending loan list.  
Post Conditions: The pending loan list is displayed within the “Display” menu.  
Data Required: loanLimit variable.

Alternate Flow – Loan Rejection

Test Case 08: User Rejects Pending Loan  
Description: After Scan Completion, the “Reject” Button appears and the user has the option of clicking the button.   
Pre-Conditions: Test Cases 1, 2 and 3 have been completed successfully.   
Post Conditions: Pending Loan List is discarded and the user is directed back to the Main Menu   
Data Required: None.