

## CS6360.001 Database Design

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### Project 1

#### Library Database Quick Start Guide for Users

The library database starts out on the Main Menu form. The main menu form contains a search box to search books by ISBN, author, or title. The Search button will run the search through the database for any text entered. The clear button clears the text box and reloads the initial view of the book. "Borrower Management" button opens the borrower management form. "Loan Management" opens the loan management form. "Fines Management" opens the fines management form.

To check out a book search for the book using the search box. When the book is found click the row in the data view corresponding to the book to be checked out and then click the "Check Out Book" button. A hidden box will appear and prompt you to enter the card id of the borrower checking out the book. Enter the card id, a message box will appear telling how many books the borrower has that are out and not turned in. If the card id you enter is not a valid card id, it will prompt you to reenter the card id. If the borrower has 3 books out the program will not let you check out a book until a book(s) is turned back in.

The borrower management window has a search box and an area to enter a new borrower. The search box will search by name, SSN, Email, Phone number, or address. The clear button clears the search box and resets the data view. When adding a new borrower, the name, SSN, and address fields must be filled in or the borrower will not be inserted. When entering the SSN, enter it as an integer without the hyphens, i.e. enter "999-99-9999" as "999999999."

The loan management window has a search box and a button "Check In" to check in books that are currently out. The initial loan view shows only loans that are still outstanding. The search box searches for a loan by the ISBN, borrower card id, or borrower name. When the book to be checked in is located, click the "Check In" button. A hidden group box will appear and prompt the user to verify the information is correct before clicking the second "Check In" button which finalizes the check in. The "Show All Loans" button will show all loans returned or not and grouped by borrower. The appearing search box lets one find the history of a borrower's loans by searching for a borrower's name or card id.

The fines management window has a search box to search for fines by a borrower's card id or name. The "Update Fines" button updates the fines in the system to the current date. To pay a fine locate the borrower by searching and click the corresponding row with their name and/or card id and click the "Pay Fine" button. The user will then be prompted to select the corresponding fine by book ISBN. Once the row is selected click execute to pay the fine. Fines will not be paid unless the book has been turned in. The default view only shows open fines. The "Show All Fines" button will show all fines paid and unpaid along with a search box to search for all fines by borrower card id or name.