LIBRARY MANAGEMENT SYSTEM

Following are the high-level functionalities a librarian can perform using the application:

1. **Book Search:**
   - To search for a book, navigate to 'Books' tab. (Default tab)
   - Search for a book by a keyword (part of ISBN or Title or Author name).
   - A table will be populated below the search box showing the results.
   - If it doesn't match any book details, 'No results found' will be shown.

2. **Book availability and check-out:**
   - The search results in 'Books' tab will have a 'Available' column which denotes whether the book is available to check-out or not.
   - If it's a 'No' in Available column, the book is already checked-out.
   - If it's a 'Yes', there will a link proceeding it to 'check out' the book.
   - Clicking a 'Check-out' link, will open a window, showing the selected book's details and an input to enter the 'Card Id' of the borrower to check-out the book.
   - Click 'Check-out' button to check out a book. If it's a success, the corresponding 'Available' value for the book in the search table will be updated. If it fails, relevant message for failure will be shown.

3. **Book check-in:**
   - To check-in book(s), navigate to 'Check-ins' tab.
   - Search for a book to check-in using its ISBN, borrower's id or borrower's name.
   - A table will be populated showing relevant entries as per the search keyword.
   - If it doesn't match any book details, 'No results found' will be shown.
   - The 'Check-in' button will only be enabled when there is at least one book selected.
   - One or more books from the table can be selected at the same time using the check-boxes.
   - Clicking 'Check-in' button will check-in the selected books and the table would be refreshed.

4. **Borrower management:**
   - Details of all the borrowers currently present in the system are shown in the 'Borrowers' tab.
   - 'Add Borrower' link above this table, opens a form to add a new borrower.
   - All the boxes should be filled up to enable the 'Add' button.
   - Once the Add button is enabled and clicked, if the entered data validates, the borrower will be added, else appropriate validation error message would be shown
   - Click on the 'Add Borrower' name or arrow icons to toggle the displays. Opening the 'Add Borrower' form, hides the search table and closing it shows the search table.

5. **Fine management:**
   - A button with refresh "Icon" on the top left corner calculates/refreshes fines for that day. After refreshing the fines, default 'Book' tab would be opened.
   - A borrower has how much fine associated can be seen in the table of the 'Fine Management' tab.
   - If 'Include already paid fines?' is selected as 'Yes'(Default), the table would not filter out previously paid fines and the total fine shown for a borrower would be sum of previously paid and current unpaid fines.
   - If 'Include already paid fines?' is selected as 'No', the table would filter out previously paid fines and the total fine shown for a borrower would be sum of current Unpaid fines only.
   - Clicking on the 'Card_id' of a borrower from the table, would open a window showing his/her fine information.
   - If 'Include already paid fines?' is selected as 'Yes'(Default), the window would display both the paid and unpaid fines otherwise it will display only unpaid fines for that id.
   - 'Make Payment' link after Unpaid option, will allow the librarian to record the fine payment for that book on that day.
   - If it's a success, the status of the fine would change to 'Paid' else relevant error message would be shown
   - A particular borrower's fine information can be viewed by searching for his 'card_id' in the search box provided on top of the page.
   - Unlike other search boxes in the application, this requires exact match.
   - Switching between 'Yes' and 'No' options of 'Include already paid fines?', will populate results based on the search box entry above it.

Note:

   - Every search operation in the application can be triggered either by clicking on the search button or by pressing the 'Enter' key
   - Every search results have pagination below it to navigate and accommodate large set of results. Each result page has maximum 8 entries.
   - Every search would display all results if searched by an '' (Empty keyword)
      a. Book's search with no keyword would display all the books present in the library
      b. Check-in's search with no keyword would display all the books that are available for check-in.
      c. Fine Management's search with no keyword would display total fines of all the fined borrowers.