LiBerry - User Guide

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1. Introduction

LiBerry is a desktop app for librarians to **quickly manage their community libraries!** LiBerry is optimized for librarians who prefer to work with a Command Line Interface (CLI) while still having the benefits of a Graphical User Interface (GUI). You can type quickly and serve your long line of

borrowers in a short amount of time.

LiBerry can manage all your books and borrowers efficiently and meticulously. You can easily add new books to your library records, register new borrowers, loan out books, track outstanding fines and more!

This user guide will introduce to you the different features of LiBerry and how to use them! Jump to Section 3, "Quick Start" to get started now! Enjoy!

2. Legend

TIP	Denotes useful tips.

IMPORTANT	Denotes

3. Quick Start

Dive into LiBerry with our simple set-up guide for a quick tour of our user interface and features!

1. Ensure you have `Java 11` or above installed in your Computer.

2. Download the latest `LiBerry.jar` here.

3. Copy the file to the folder you want to use as the home folder for your LiBerry.

4. Double-click the file to start the app. The GUI should appear in a few seconds.
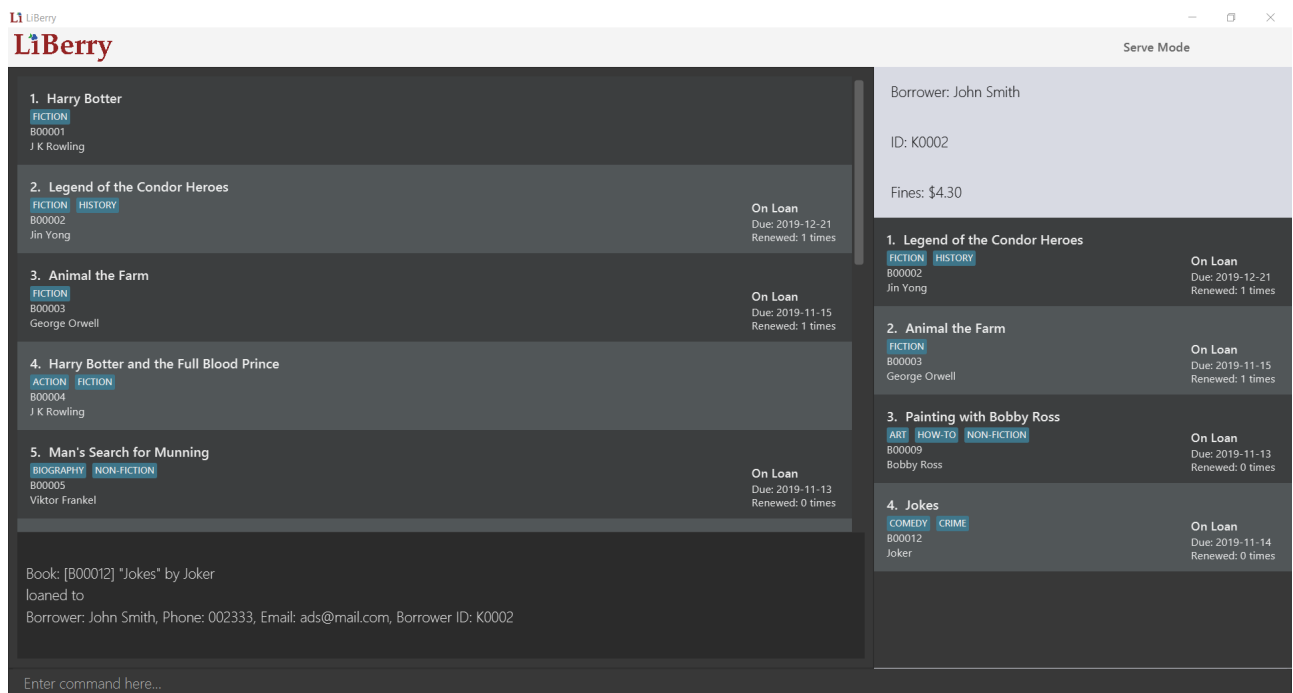

Figure 1. LiBerry's User Interface

5. Type the command in the command box and press `Enter` to execute it.
    e.g. typing `help` and pressing `Enter` will open the help window.

6. Here are some commands you can try out:

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a. **Add a new book** to LiBerry by using `add t/Animal Farm a/George Orwell`

b. **Register a new borrower** to LiBerry by using `register n/John Smith p/97875454 e/jsmith@gmail.com`

7. Refer to Section 4, "Features" for details of each command.

8. A list of books will be displayed at the left column but not a list of borrowers as a list of borrowers will not be very useful. Serving a borrower require the borrower's `borrowerId` instead browsing the app until the borrower's name/id is found.

4. Features

This section contains a detailed guide to every feature LiBerry supports, including how to use and the format of the commands to use the feature. The following table shows the format used to describe each command.

Command Format

- Words in `UPPER_CASE` are the parameters to be supplied by the user e.g. in `find t/TITLE`, `TITLE` is a parameter which can be used as `find t/Harry Potter`.

- Items in square brackets are optional. E.g. `t/TITLE [g/GENRE]` can be used as `t/Harry Potter g/fiction` or as `t/Harry Potter`.

- Curly brackets indicate that at least 1 of the optional parameters have to be given, e.g. `{ [t/TITLE] [a/AUTHOR] }` can be used as `t/Harry Potter`

- Items with ⋯ after them can be used multiple times including zero times, e.g. `[g/GENRE]⋯` can be used as   (i.e. 0 times), `g/fiction`, `g/fiction g/adventure` etc.

- Parameters can be in any order e.g. if the command specifies `t/TITLE a/AUTHOR`, `a/AUTHOR t/TITLE` is also acceptable.

4.1. Using Normal Mode

Normal Mode is for librarians to manage the books in the library. Commands in normal mode are not specific to any borrowers. Normal Mode also provides some utility commands to help the librarian use LiBerry. However, it is important to note that commands specific to Serve Mode cannot be used while in Normal Mode.

4.1.1. Viewing help : `help`

Opens up a help window, which shows a list of possible commands that the user can execute.

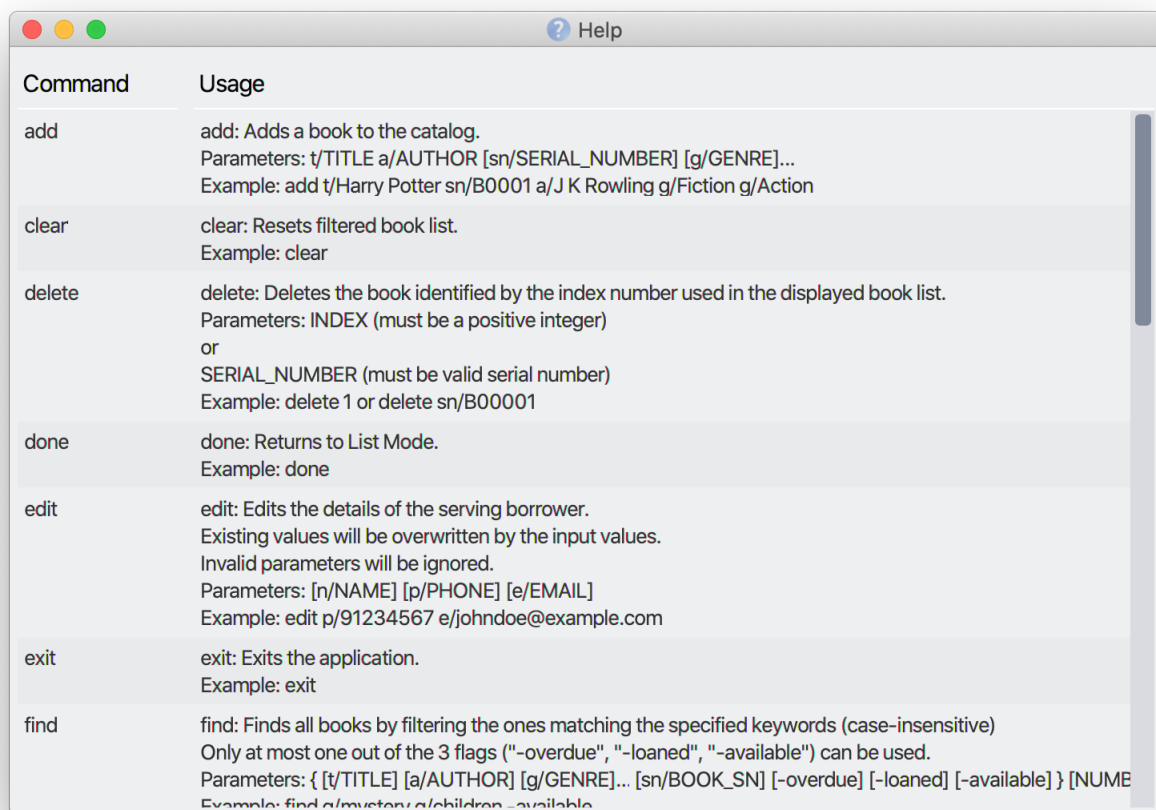| Command	Usage
add	add: Adds a book to the catalog. Parameters: t/TITLE a/AUTHOR [sn/SERIAL_NUMBER] [g/GENRE]... Example: add t/Harry Potter sn/B0001 a/J K Rowling g/Fiction g/Action
clear	clear: Resets filtered book list. Example: clear
delete	delete: Deletes the book identified by the index number used in the displayed book list. Parameters: INDEX (must be a positive integer) or SERIAL_NUMBER (must be valid serial number) Example: delete 1 or delete sn/B00001
done	done: Returns to List Mode. Example: done
edit	edit: Edits the details of the serving borrower. Existing values will be overwritten by the input values. Invalid parameters will be ignored. Parameters: [n/NAME] [p/PHONE] [e/EMAIL] Example: edit p/91234567 e/johndoe@example.com
exit	exit: Exits the application. Example: exit
find	find: Finds all books by filtering the ones matching the specified keywords (case-insensitive) Only at most one out of the 3 flags ("-overdue", "-loaned", "-available") can be used. Parameters: { [t/TITLE] [a/AUTHOR] [g/GENRE]... [sn/BOOK_SN] [-overdue] [-loaned] [-available] } [NUMB Example: find g/mystery g/children -available

Figure 2. Screenshot of Help Window

The figure above shows a screenshot of the help window. The left side of the window shows the command while the right side of the window gives a description of the command and a usage example.

Format: `help`

Example:

- `help`
  Opens the help window.

4.1.2. Locating books by title: `find`

Shows all relevant books found.
Format: `find [NUMBER] { [t/TITLE] [a/AUTHOR] [g/GENRE]··· [sn/BOOK_SN] [-overdue] [-loaned] [-available] }`
Format: `find [NUMBER] { [t/TITLE] [a/AUTHOR] [g/GENRE]··· [sn/BOOK_SN] [-overdue] [-loaned] [-available] [-rated] [-popular] [-new] }` **- Coming in v2.0**

- The search is case insensitive. e.g `harry` will match `Harry`

- When searching by book titles and authors, partial words will also be matched e.g. `Har` will match `Harry`, `J` will match `J K Rowling` and `Jin Yong`

- Books matching at least one keyword will be returned (i.e. `OR` search). e.g. `harry` will return both `Harry Potter` and `Harry Botter`

- `[NUMBER]` will limit the search to `NUMBER` books

- `[t/TITLE]` will be used to search through book titles

- `[a/AUTHOR]` will be used to search through or filter by authors

- `[g/GENRE]` will be used to search through or filter by genre

- `[sn/BOOK_SN]` will be used to search through book serial numbers

- Only 1 of the following 3 flags can be used

  - `[-overdue]` will only show overdue books

  - `[-loaned]` will only show loaned books

  - `[-available]` will only show available books

- Adding one of the following will sort the books such that:

  - `[-rated]` will list the top 10 highly rated books **- Coming in v2.0**

  - `[-popular]` will list the top 10 most borrowed books **- Coming in v2.0**

  - `[-new]` will list the 10 newest books **- Coming in v2.0**

TIP	Inputs for `g/GENRE` is automatically capitalized.

TIP	`t/TITLE` and `a/AUTHOR` are matched by partial spellings. Search `t/phil` if you forgot how to spell 'Philosopher'!

Examples:

- `find t/Animal Farm a/George Orwell`
  Searches for the book titled "Animal Farm" by the author "George Orwell".

- `find 3 g/mystery g/children -available`
  Searches for children mystery books that are not on loan and show the first 3 entries.

4.1.3. Viewing a book: `info`

Views more information about a book in the displayed list.
Format: `info INDEX`

4.1.4. Clearing all entries : `clear`

Clears the most recent search and displays all books.
Format: `clear`

4.1.5. Adding a book: `add`

Adds a new book to library records.
Format: `add t/TITLE a/AUTHOR [sn/BOOK_SN] [g/GENRE]…`

TIP	A book can have up to 5 genres (but can have no genres as well).

TIP	You do not need to specify the serial number if you wish so. LiBerry will then auto-generate a valid serial number for the new book.

Examples:

- `add t/Harry Botter a/Raylei Jolking sn/B02010 g/children`
  Adds a children book titled "Harry Botter" by "Raylei Jolking", with the serial number "B02010", to LiBerry.

- `add t/Inferno a/Tande g/classic g/epic` Adds a book titled "Inferno" by "Tande", with the genres "classic" and "epic" to LiBerry. The serial number for this book will be automatically generated.

4.1.6. Deleting a book : `delete`

Deletes a book from the library records. Used when book is lost or trashed. Format: `delete INDEX` or `delete sn/BOOK_SN`

- Deletes the book at the specified `INDEX`.
- The index refers to the index number shown in the displayed book list.
- The index **must be a positive integer** 1, 2, 3, …
- `INDEX` will delete the book with the book at this index in the results list
- `sn/BOOK_SN` will delete the book with this serial number

Examples:

- `find t/harry`
  `delete 1`
  Deletes the 1st book in the results of the `find` command.

- `delete sn/B00422`
  Deletes the book with serial number `sn/B00422`.

4.1.7. Registering a new borrower: `register`

Registers a new borrower to the library records. A unique ID associated with the borrower will automatically be generated and displayed. Borrowers are expected to know his ID in order for loans to be processed.
Format: `register n/NAME p/PHONE_NUMBER e/EMAIL`

Example:

- `register n/matt p/83938249 e/matt@damon.com`
  Registers a new borrower called "matt", with phone number "83938249" and email "matt@damon.com" to LiBerry.

4.1.8. Unregistering a borrower: `unregister`

Unregisters and removes a borrower with the given borrower ID from the library records.
Format: `unregister id/BORROWER_ID`

Example:

- `unregister id/K0001`
  Deletes the borrower with the borrower ID `id/K0001`

4.1.9. Undoing mistakes: `undo`

Undoes the previous command/action made by you. This command only works for commands that modifies the catalog, loan records and borrower records.

Undoable Commands:

- `add`, `delete`, `edit`, `loan`, `register`, `renew`, `return`, `set`, `toggleui` and `unregister`.

IMPORTANT	After every `serve`, `done` or `pay` command, all previous state would be cleared. This means that you would not be able to undo to the state

Format: `undo`

4.1.10. Redoing: `redo`

Redoes the most recent undo should there be no more commands/actions after the most recent undo.
Format: `redo`

4.1.11. Set User Settings: `set`

Sets the user settings for loan period (in days), renew period (in days), fine increment (in cents) and maximum renews allowed.
Format: `set { [lp/LOAN_PERIOD] [rp/RENEW_PERIOD] [fi/FINE_INCREMENT] [mr/MAX_RENEWS] }`

Examples:

- `set lp/30 rp/10`
  Sets the loan period to 30 days and renew period to 10 days.
- `set rp/10 fi/5 lp/10 mr/2`
  Sets the renew period to 10 days, fine increment to 5 cents per day, loan period to 10 days and maximum renews allowed to 2.

4.1.12. Exiting the program : `exit`

Exits the program.
Format: `exit`

4.1.13. Toggling dark mode : `toggleui`

Toggles between light mode and dark mode for the UI.
Format: `toggleui`

4.1.14. Rate a book : `rate` - Coming in v2.0

Gives a book a numerical rating.
Format: `rate INDEX r/RATING`

4.2. Using Serve Mode

The Serve Mode is for librarians to serve borrowers. All commands in Serve Mode are done on a specific borrower currently served by the librarian. All commands in Normal Mode can be used in Serve Mode too.

4.2.1. Entering Serve Mode: `serve`

Enters Serve Mode. All commands/actions will be done on this specific borrower. A list of the borrower's currently loaned books and their serial numbers will be displayed.
Format: `serve id/BORROWER_ID`

Example:

- `serve id/K0001`
  Enters save mode to serve a borrower with the ID `K0001`

4.2.2. Exiting Serve Mode: `done`

Exits Serve Mode.
Format: `done`

4.2.3. Editing a borrower: `edit`

Edit borrower's particulars.
Format: `edit { [n/NAME] [p/PHONE_NUMBER] [e/email] }`

- Edits the currently serving borrower's particulars.

- At least one of the optional fields must be provided.

- Existing values will be updated to the input values.

Examples:

- `edit p/91234567 e/jane@austen.com`
  Edits the phone number and borrower's email address to be `91234567` and `jane@austen.com` respectively.

- `edit n/Betsy Crower`
  Edits the name of the borrower to be `Betsy Crower`.

4.2.4. Loaning book(s): `loan`

Loan book(s) by their serial number.
Format: `loan sn/BOOK_SN`
Format: `loan sn/BOOK_SN [sn/BOOK_SN]⋯` **- Coming in v2.0** Examples:

- `loan sn/B00041`
  Loans the book with serial number B00041 to the currently served borrower.

- `loan sn/B00201 sn/B02929 sn/B00203` **- Coming in v2.0**
  Loans the books with serial numbers B00201, B02929 and B00203 to the currently served borrower.

After loaning all books, upon the `DONE` command, a printable loan slip in pdf format will be generated. The loan slip will be opened in your computer's pdf viewer and also saved in the `loan_slips` folder.

Figure 3. Printable loan slip generated.

In the figure above, we can see that the loan slip records all the books being borrowed by 'Bill'.

4.2.5. Returning book(s): `return`

Return book(s) that were loaned by the borrower.
Format: `return INDEX` or `return -all`
Including `-all` will return all currently loaned books.

- Returns the book at the specified `INDEX` in the borrower panel or all of the currently served borrower's loaned out books.

- The index refers to the index number shown in the borrower's book list on the right.

- The index **must be a positive integer** 1, 2, 3, …

- `INDEX` indicates the book at this index in the borrower's book list.

- `-all` indicates all the books currently loaned out by the borrower.

4.2.6. Renewing book(s): `renew`

Renew book(s) from the list of currently loaned books, i.e., extend their due dates.
Format: `renew INDEX` or `renew -all`

- Renews the book at the specified `INDEX` in the borrower panel or all of the currently served borrower's loaned out books that can still be renewed.

- The index refers to the index number shown in the borrower's book list on the right.

- The index **must be a positive integer** 1, 2, 3, …

- `INDEX` indicates the book at this index in the borrower's book list.

- `-all` indicates all the books currently loaned out by the borrower that still can be renewed.

4.2.7. Paying fines: `pay`

Reduces the outstanding amount of borrower's fines by AMOUNT (in dollars).
Format: `pay $AMOUNT`

4.2.8. Reserve a book: `reserve` - Coming in v2.0

Reserve a particular book Format: `reserve INDEX` or `reserve sn/BOOK_SN`

- Reserves the book at the specified `INDEX` or the book with the specified serial number `BOOK_SN` for the currently served borrower.

- The index refers to the index number shown in the displayed book list.

- The index **must be a positive integer** 1, 2, 3, …

- `INDEX` indicates the book at this index in the search results list

- `sn/BOOK_SN` indicates the particular book with this serial number

Examples:

- `reserve 2`
  Reserves the 2nd book in the results of the `find` command for the currently served borrower.

- `reserve sn/B02422`
  Reserves the book with serial number `sn/B02422` for the currently served borrower.

4.3. Saving the Data

LiBerry data are saved in the hard disk automatically after any command that changes the data. There is no need to save manually.

5. FAQ

Q: How do I transfer my data to another Computer?
A: Install the app in the other computer and overwrite the empty data file it creates with the file

that contains the data of your previous LiBerry folder.

6. Command Summary

This section contains the summary of LiBerry's commands.

Commands applicable to both **Normal** and **Serve** mode:

- **Help** : `help`
- **Find a book** : `find [NUMBER] { [t/TITLE] [a/AUTHOR] [g/GENRE]⋯ [sn/BOOK_SN]] [-overdue] [-loaned] [-available] }`
  e.g. `find t/Animal Farm a/George Orwell`, `find 3 g/mystery g/children -available`
  `[-rated] [-popular] [-new]` **- Coming in v2.0**
- **View book info** : `info INDEX`
- **Clear results** : `clear`
- **Add a book** : `add t/TITLE a/AUTHOR sn/BOOK_SN [g/GENRE]⋯ `
  e.g. `` `add t/Harry Botter and the Baby␀s Potty a/Reali Jolking sn/B02010 g/children ``
- **Delete a book** : `delete INDEX` or `delete sn/BOOK_SN`
- **Register a borrower** : `register n/NAME p/PHONE_NUMBER e/EMAIL`
  e.g. `register n/matt p/83938249 e/matt@damon.com`
- **Unregister a borrower** : `unregister id/BORROWER_ID`
- **Undo** : `undo`
- **Redo** : `redo`
- **Set user settings**: `set { [lp/LOAN_PERIOD] [rp/RENEW_PERIOD] [fi/FINE_INCREMENT] }`
- **Exit** : `exit`
- **Toggle UI theme**: `toggleui`
- **Rate a book** : `rate INDEX r/RATING` **- Coming in v2.0**

Commands applicable to **Serve** mode only:

- **Serve mode** : `serve id/BORROWER_ID`
  e.g. `serve id/K0001`
- **Exit serve mode** : `done`
- **Edit a borrower's particulars** : `edit { [n/NAME] [p/PHONE_NUMBER] [e/email] }`
  e.g. `edit p/91234567 e/jane@austen.com`
- **Loan book** : `loan sn/BOOK_SN`
  e.g. `loan sn/B00201`
- **Return book(s)** : `return INDEX` or `return -all`
- **Renew book(s)** : `renew INDEX` or `renew -all`
- **Pay fines** : `pay $AMOUNT`
- **Reserve book** : `reserve INDEX` or `reserve sn/BOOK_SN` **- Coming in v2.0**