

Instruction Manual

Bibliothekos is a command line app that allows 2 different types of users to access a library database. These 2 users are the *admins* and the *borrowers*. *Admins* are able to access commands that contain sensitive info and add, delete or update books in addition to exiting Bibliothekos. Upon firing up the programme you can enter the `help` command to access a list of commands. They should appear as follows:

Name	Logged in as Admin?	Description
login admin	No	Login as an admin to access admin-only commands. Remember to logout using <code>logout admin</code> before relinquishing access to a borrower because you can be logged in as an admin and a borrower at the same time.
logout admin	Yes	Logout as an admin.
exit admin	No	Exit Bibliothekos. You need to enter the credentials of an admin to do so, whether or not you are logged in as an admin.
login	No	Login as a normal borrower.
logout	No	Logout as a normal borrower.
new user	No	Create a new borrower user.
edit user	No	Edit your user info. Must be logged in as a borrower.
search user	No	Get a list of all borrowers.
investigate user	Yes	Get more information of a borrower using their ID. After entering <code>investigate user</code> , you will be prompted to enter the ID.
delete self	No	Delete your borrower account. Must be logged in.
about self	No	Get the details of your own borrower account.
check loans	No	Check your own outstanding loans
borrow book	No	Borrow a book using its ID. You can obtain the ID using <code>search books</code> .

return book	No	Return a book using the ID of the loan. The loan ID can be obtained by using <code>check loans</code> .
search books	No	Search for books. See the section named 'Searching Books' for more information.
add book	Yes	Add a book to the database.
delete book	Yes	Remove a book from the database.
edit book	Yes	Edit the details of a book.
who borrowed	Yes	Check who borrowed a book.
help	No	Get a list of commands and a short of description of each of them.

Searching Books

You can enter 'book searching' mode by using the `search books` command. Upon entering this mode, you are given a prompt to edit queries with this line:

```
[update/delete/search/exit] [title/author/isbn]
```

The way the format is displayed is slightly misleading because only `update` and `delete` need to be paired with `[title/author/isbn]`. `search` and `exit` can be executed on their own.

When you type in `update [title/author/isbn]`, you will be prompted to fill in that query field. For example, if you want to find a book with the word 'Trump' in it, do:

```
|> update title
```

```
Please enter search term |> Trump
```

Search queries are not case-sensitive.

You can also sort the search results according to their `title`, `author`, `isbn`, and `number of pages`. To sort book titles in descending order, do:

```
|> sort title -1
```

To get the programme to ignore title when searching, do:

```
|> sort title 0
```

If you want to remove a search query, do `delete [name/authors/isbn]` instead of `delete [title/author/isbn]`.

Schema Design

The schema design can be found in 'schema.pdf'. That document should display the mapping of the updated schema used in the database.