

ZCCT

Library Management System Documentation

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Prepared by: Abd Alsalam Allawlbi

Supervised By: Dr. Khari Armih




Overview

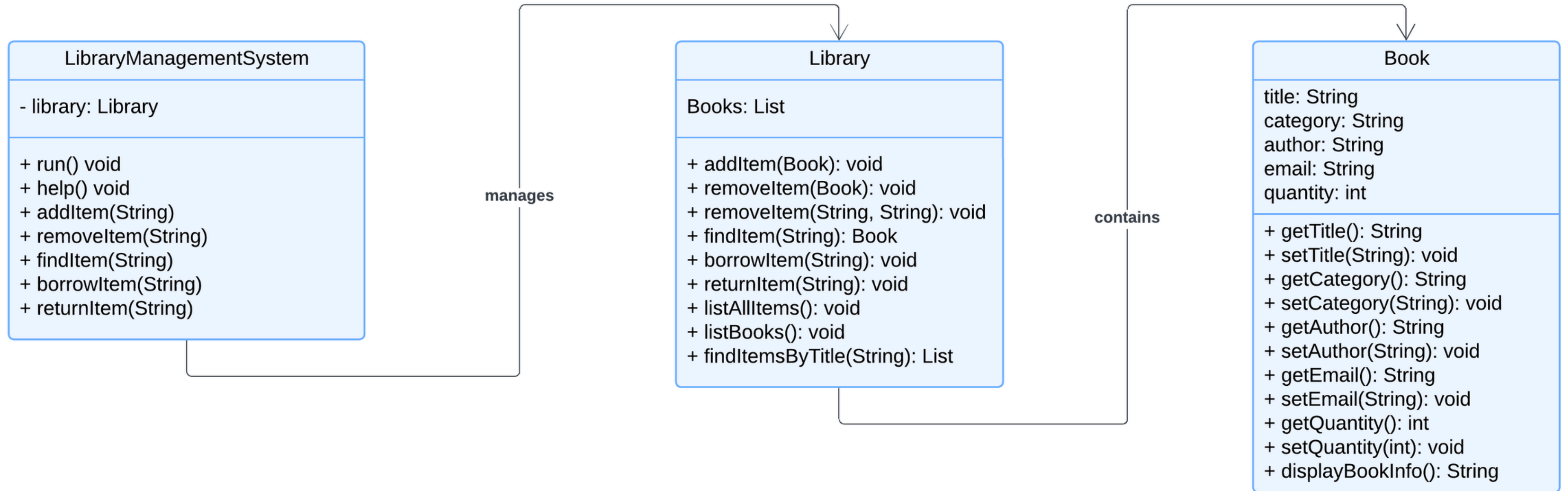
The Library Management System is a Java-based application designed to manage books and their availability in a library. Users can add, remove, find, borrow, and return books using various commands. The system also provides a way to list all available books.



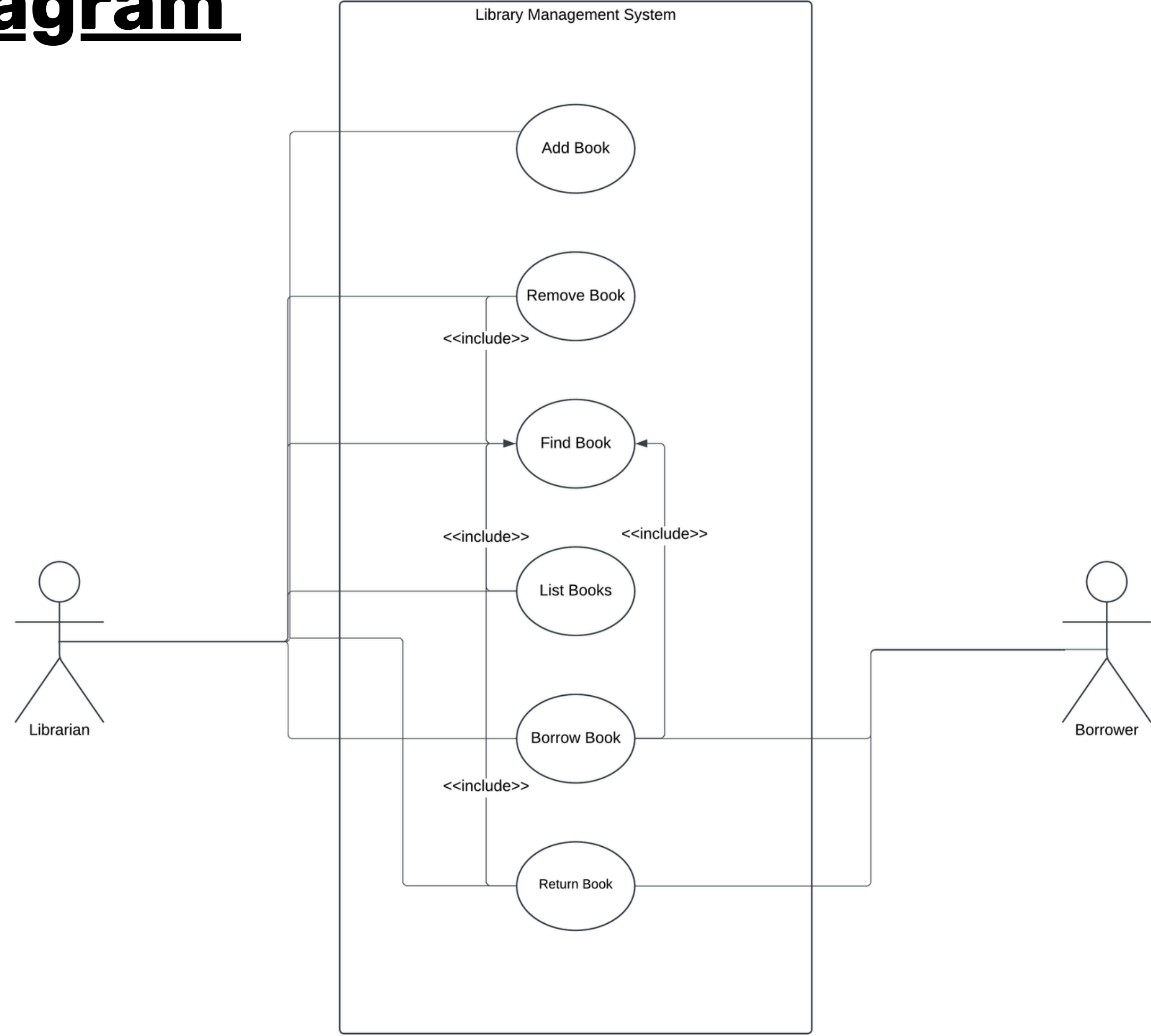
Features

- 1 ADD NEW BOOKS OR UPDATE THE QUANTITY OF EXISTING ONES.
 - 2 REMOVE BOOKS FROM THE LIBRARY.
 - 3 SEARCH FOR BOOKS BY ALL FIELDS.
 - 4 Borrow and return books while maintaining stock levels
 - 5 LIST ALL BOOKS WITH DETAILS.
 - 6 INTERACTIVE COMMAND-LINE INTERFACE WITH HELP FUNCTIONALITY.
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- A decorative graphic in the top right corner consisting of several curved, overlapping bands. The top band is dark teal with thin white horizontal stripes. Below it are several solid dark teal bands, and at the bottom are more bands with thin white horizontal stripes. The bands curve from the top right towards the bottom left.

The Class Diagram



The Use Case Diagram



General Help

- Type help to display a list of available commands.

1. Add a Book

Command: add <title> <category> <author> <email> <quantity>

Adds a new book to the library or updates the quantity if the book already exists.

Example: add JavaProgramming Technical JohnDoe john.doe@example.com 10

2. Remove a Book

Command: remove <title> <author>

Description: Removes a book from the library.

Example: remove JavaProgramming JohnDoe

General Help

3. Find a Book

Command: find <title>

Description: Searches for a book by title.

Example: find JavaProgramming

4. Borrow a Book

Command: borrow <title> <author>

Description: Decreases the available quantity of a book by 1.

Example: borrow JavaProgramming JohnDoe

General Help

5. Return a Book

Command: return <title> <author>

Description: Increases the available quantity of a book by 1, if it hasn't exceeded the maximum stock.

Example: return JavaProgramming JohnDoe

6. List All Books

Command: list all

Description: Lists all books in the library with their details.

7. Exit the System

Command: exit

Description: Exits the application.