Scanner

Data Base

Package – Data

This package will handle all the data management tasks, such as reading and writing data from and to files, as well as storing the data in memory.

**addBorrowedBook(Book book)**  
Adds a borrowed book to the statistics data.

**getMostBorrowedBooks()**

Returns the list of most borrowed books.

**getBorrowedBooksByDay(Date date)**

Returns the number of borrowed books on a specific date.

**readBookData(String fileName)**  
Reads the book data from a file.

**writeStatisticsData(String fileName, Statistics statistics)**

Writes the statistics data to a file.

User Interface

This package will contain all the user interface components, such as menus, forms, and dialog boxes.

**showMainMenu()**

Displays the main menu to the user.

**getUserInput()**

Gets the user input from the menu.

Package – Library

This package will contain the main logic of the library application, such as book borrowing, returning, statistics, etc.

**setTitle(String title)**  
Sets the title of the book.

**setAuthor(String author)**

Sets the author of the book.

**isAvailable()**

Returns the availability status of the book.

**setAvailability**

**(boolean availability)**

Sets the availability status of the book.

**getAuthor()**

Returns the author of the book.

**getTitle()**

Returns the title of the book.

**addBook(Book book)**  
Adds a book to the library.

**borrowBook(Book book, Borrower borrower)**

Borrows a book from the library.

**getStatistics()**

Returns the statistics data.

**returnBook(Book book, Borrower borrower)**

Returns a book to the library.

**getBorrowedBooks()**

Returns a list of borrowed books.

**getAvailableBooks()**

Returns a list of available books.

**setName(String name):**

Sets the name of the borrower.

**setID(String ID)**

Sets the ID of the borrower.

**getID()**

Returns the ID of the borrower.

**borrowBook(Book book)**

Borrows a book from the library.

**getName()**

Returns the name of the borrower.

**returnBook(Book book)**

Returns a book to the library.

**getBorrowedBooks()**

Returns the list of borrowed books.

Project Library