

Library Management System - Individual Report

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Assigned Tasks:

- Books.java – Implementation of Book class and linked list with the ability to add, search and remove books.
- Patrons.java – Implementation of Patron class and linked list with the ability to add and search for patrons.
- LibraryManagementSystem.java – Implementing some LibraryManagementSystem class.
- Report Documentation

Data Structures Used:

- Link List – For managing Books and Patrons

Challenges Faced:

- Managing Link lists and ensuring pointers, insertions and deletions worked properly with search.java.

Solutions:

- Books have an available flag to track if they are currently loaned.
- The Book and Patron classes use a linked list structure ensuring efficient use of memory and easy access to remove and add files.

Conclusion:

The system successfully implements all the features required and provides effective management of books and patrons using suitable data structures.