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# LIBRARY MANAGEMENT SYSTEM

# What we think about a library system ?

- It's a well-organized Software Solution for a Library. It has a Database which is
- constantly managed and updated.
- It helps to provide information on any book present in the library to the User who uses it.

It keeps a track of books issued, returned, and added to the library. Allows users to virtually Browse the books without doing so manually.

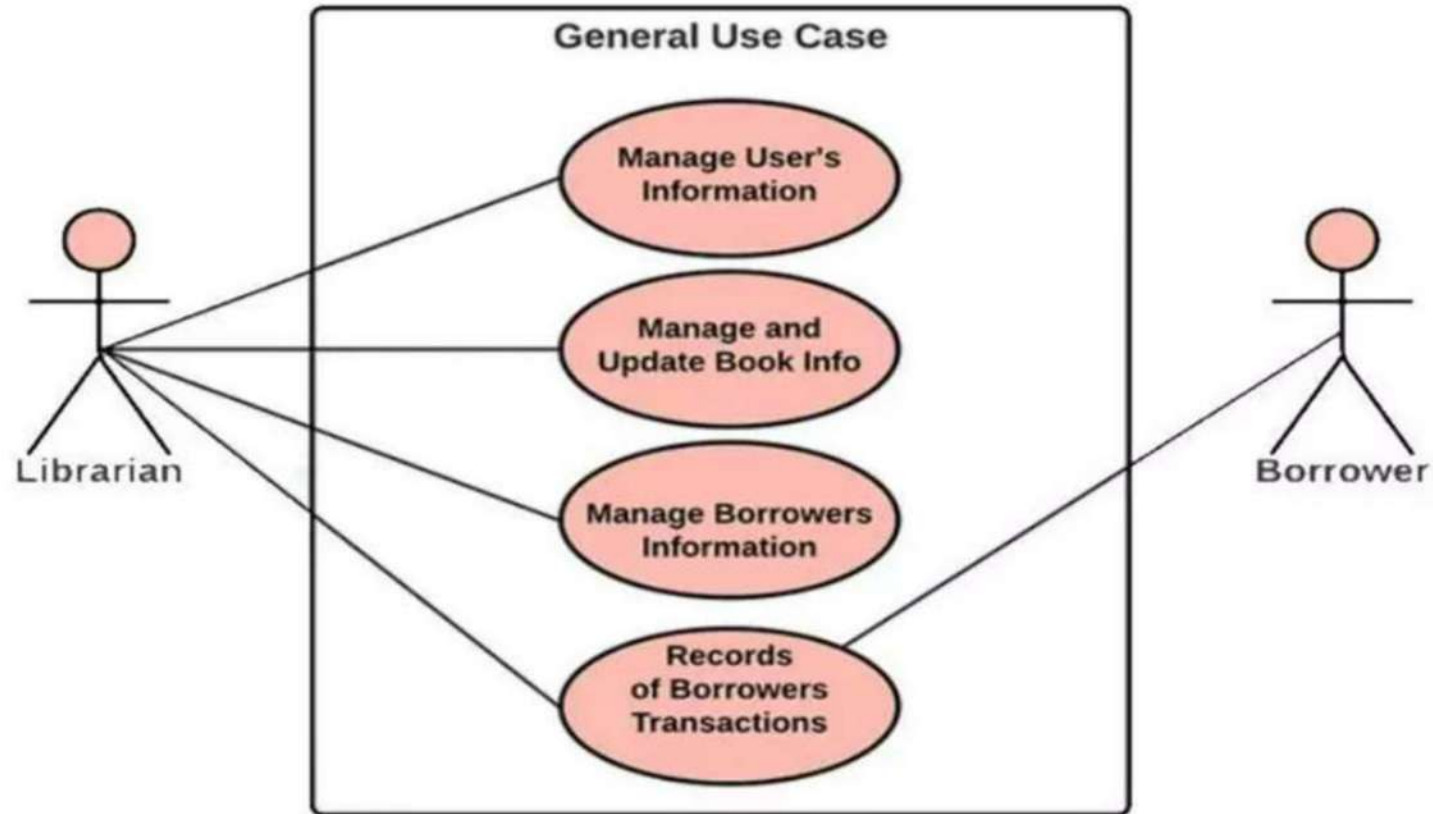


# Library Management System

- ❑ Maintain User friendly, Robust & User customizable software product. In library management system The vital thing that we follow from the beginning is the Software Specification based on current demand.
- ❑ Globalize the concept of Software proficiency and visualize the best outcomes of the Software products from the clients in future aspects.
- ❑ All technical and managerial activities required to deliver the deliverables to the clients/users and make perspective relations among them. A software project has a specific duration, consumes resources, and produces work products.
- ❑ Management categories to complete a software project: Tasks, Activities, Functions

# Library Management System

## LIBRARY MANAGEMENT SYSTEM



# Description Of the Project

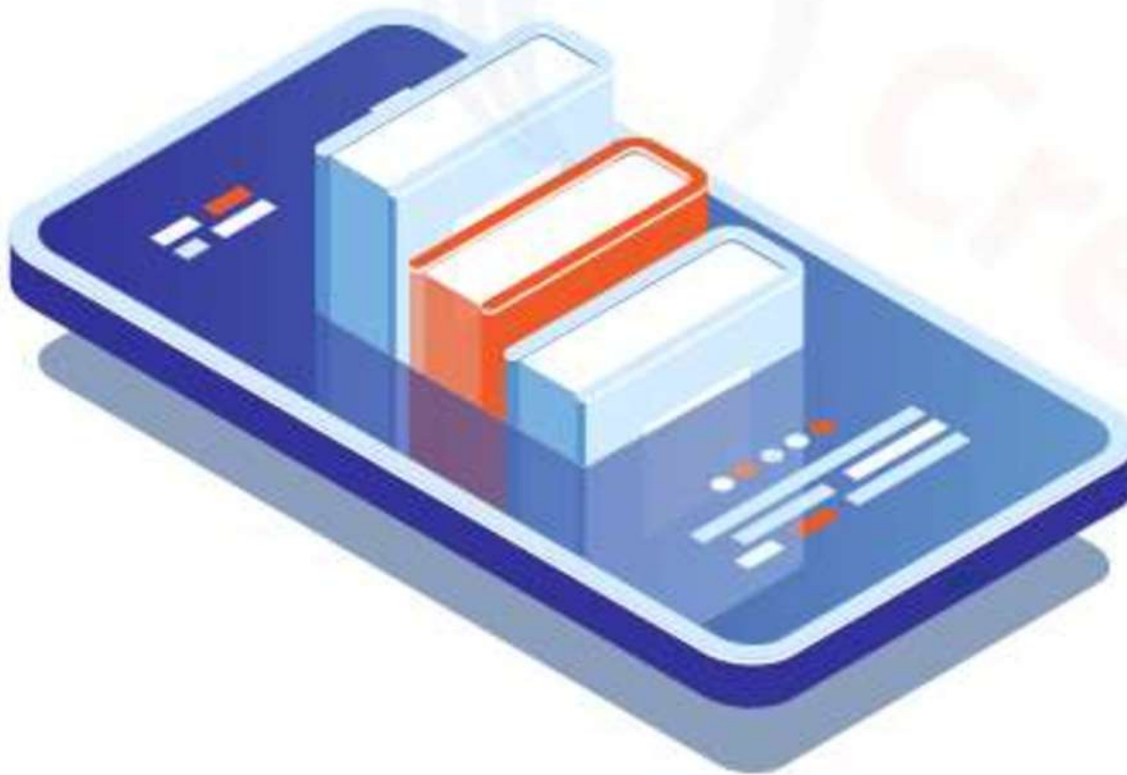
- This is a simple Java console application that models a basic library management system.
- Users can search for books by title, borrow books using their ISBN, and return them.
- The application demonstrates object-oriented principles by using inheritance to categorize books into types such as Textbooks and Novels

# Approach Of This Project

- A base Book class contains shared properties (title, author, ISBN, availability).
- Subclasses Textbook and Novel extend Book and add specific attributes.
- A Library class manages a list of books and provides methods to search, borrow, and return books.
- The Library App class demonstrates usage with hardcoded book examples and operations.



## Library Management Software features



- ▶ Catalog management
- ▶ Membership control
- ▶ Connected to the Web
- ▶ Patron-facing interface
- ▶ Vendor management
- ▶ Circulation control
- ▶ Purchase management
- ▶ Technical support
- ▶ Easy access
- ▶ Bar-code scanning
- ▶ RFID sensors
- ▶ Search functions
- ▶ Fee Management
- ▶ Notification and alerts
- ▶ User-friendliness
- ▶ Self-service

# Expected Output

- Users can search for books by title.
- Borrowed books are marked as "Borrowed" and cannot be borrowed again until returned.
- Returned books become available for borrowing again.
- Different book types are clearly labelled in output.
- This application serves as a foundation for more advanced features like GUI or database integration.



# Conclusion of Library Management System

- The Library Management System efficiently automates and manages the day-to-day operations of a library, including book issuance, returns, member management, and catalog maintenance.
- It reduces manual work, minimizes errors, and enhances the accessibility and organization of library resources. Overall, it ensures a faster, more reliable, and user-friendly experience for both librarians and users