

Software Requirement Specifications

Library Management System

1. Introduction

1.1 Purpose :- The purpose of this document is to outline the requirements for a library Management System. It will help automate the borrowing, returning and management of library books, providing efficiency in library operations.

1.2 Scope :- System will assist librarians in cataloging books, tracking borrowing and returned items and generating reports. It will streamline user access to library's resources and provide real-time updates on book availability.

1.3 Overview :- System will reduce manual errors and speed up library services by managing book inventories, user accounts & transaction logs.

2. General Description: System aims to provide a user-friendly interface for both librarians & users. User can check availability, borrow & return books while librarian can manage books records, tracks overdue books and run reports on library usage.

3. Functional Requirements:

- Book management: Add, remove or update book details.
- User management: Register, manage and delete user accounts.
- Transaction management: Record borrowing and returning books.
- Search: Allow users to search for books by title, author or genre.
- Notifications: send reminders for due dates and overdue books.

4. Interface Requirements:

- user-friendly interface for both librarians & users.
- secure login system for librarians
- A search bar for users to quickly find books.

5. Performance Requirements:-

- Quick response times for searching database and managing transactions
- support for upto 1000 simultaneous users without slowdowns.
- Backup & recovery processes to safeguard book & user data.

6. Design Requirements:-

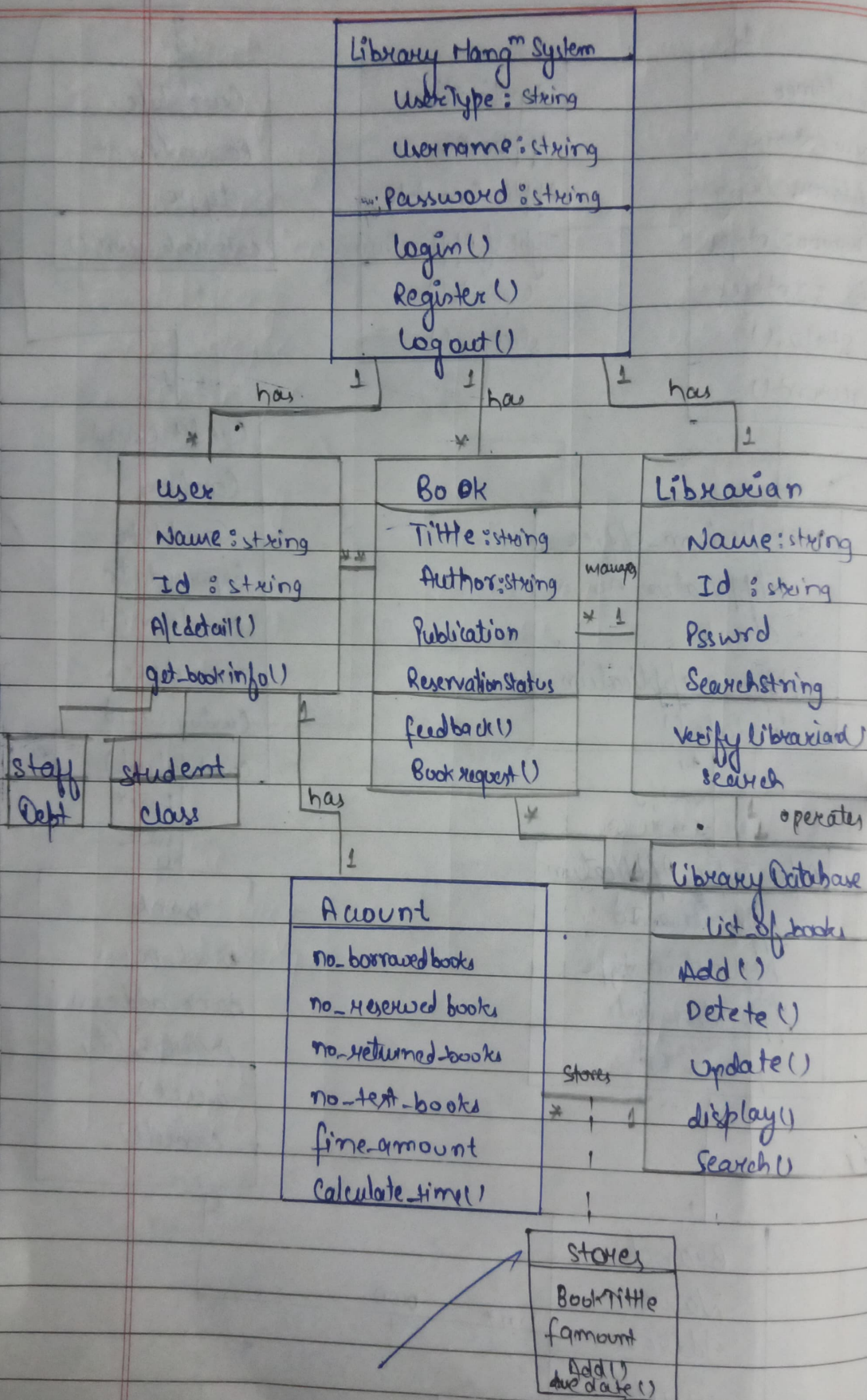
- system run on both window & linux environment
- Database design must support scalability for future growth.
- limited to physical book records.

7. Non-functional Attributes:-

- Security:- ensure secure logins and data encryption
- Systems uptime should be at least 99%
- Capabilities of handling large libraries with more than 100,000 books.

8. Preliminary Schedule & Budget
development time — 6 months
Budget — \$50,000.

8.7 Library Management System



free