

Digital Library Management System

Software Requirements Specification

Version 1.0



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Revision History

Date (dd/mm/yyyy)	Version	Description	Author
1-6-2021	1.0	Digital/Computerized Library Management System is a great way to monitor books, add them, update information in it, search for the suitable one, issue it, and return it when needed.	Bc19050678

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SRS Document

Scope of Project:

In the past, when there was no concept of computerized/digital library management system at all, the librarian job was very bothersome and complex. The traditional library management system had a lot of issues.

Digital/Computerized Library Management System is a great way to monitor books, add them, update information in it, search for the suitable one, issue it, and return it when needed. This digital system has a lot of advantages over the traditional library system.

Functional and non Functional Requirements:

Functional Requirements:

1. Database module: This has two functions – Insertion of data and extraction of data with a user-friendly screen.
2. Report module: For the borrowed books list to display.
3. Available module: To view the availability of books.
4. Search Module: search facility for books and members.
5. Payment module: Payment facility for fine payments.
6. Login and logout module in case the student wish to use PHP.

Users in the system:

1. Admin
2. Librarian
3. Users (who want to issue books from the library)
 - Admin: Add, view, and delete the librarian.

- Librarian: Add, view, issue books, return books, payment.

Non-Functional Requirements

Performance:

Digital library management system provide a fast and efficient way to all Users to process their records without any mistake it provide better performance.

Hardware:

Application will be hardware and OS independent which will make it easy to use on any platform just need a web explore.

User Friendly:

This application is a friendly interface so that user can easily interact with the application.

Efficiency:

The efficiency is Minimum time to execute and open the application rapidly.

Reliability:

Reliability is measured as the probability that a system will not fail to perform its intended functions over a specified time interval.

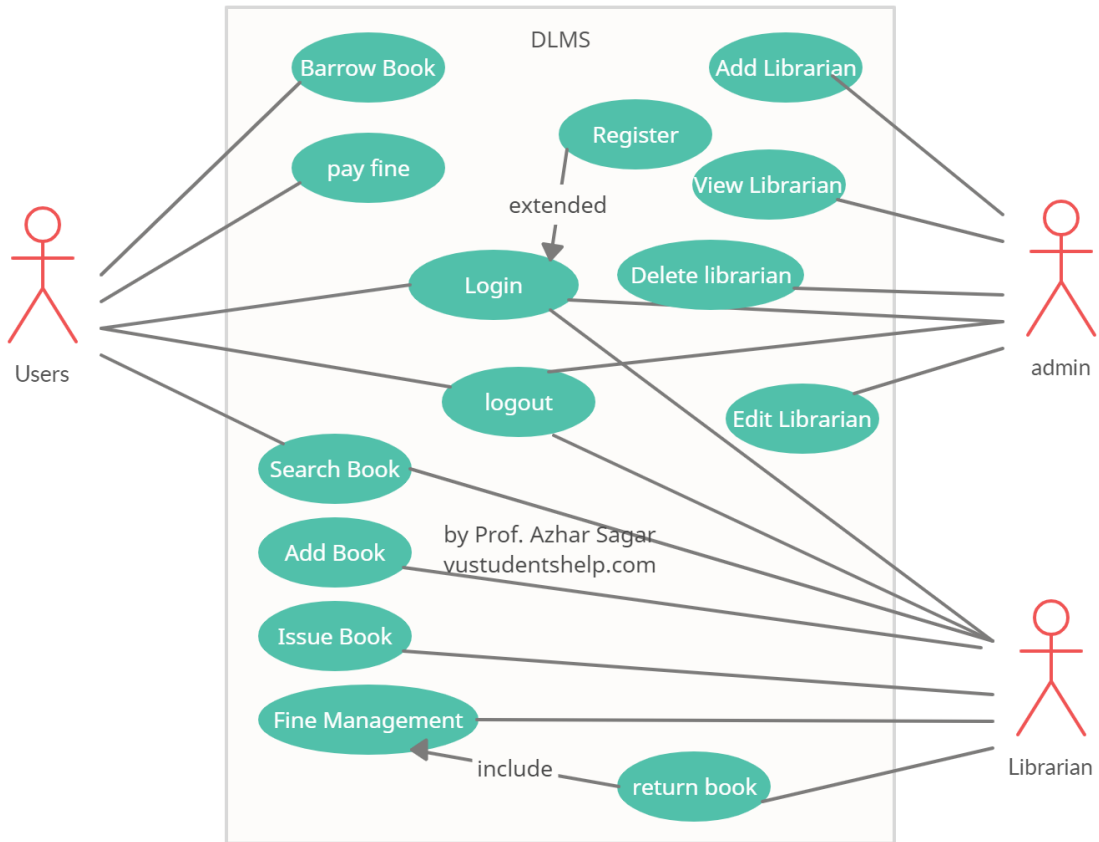
Security:

In every online Application the security is always a concern because of its sensitive nature, our application will be secure with all accepts.

Flexibility:

The DLMS will have flexible approach for future enhancement.

Use Case Diagram(s):



Usage Scenarios:

Use Case Title	Add book
Id	1
Actions	Librarian will click this button to add new book in system.
Description	Librarian will be able to add new book record using this function. A form will be opened and librarian has to fill that form to add new book record.
Alternative Paths	-
Pre-Conditions	Book Record was not added in system
Post Conditions	Book record was saved in system database and appear in system to borrower
Author	S2002E32AC
Exceptions	Fill required fields, book code already exist ,

Use Case Title	Issue Book
Id	2
Actions	Librarian will click this button to issue book to user.
Description	Librarian will be able to add new book record using this function. A form will be opened and librarian has to fill that form to add new book record.
Alternative Paths	Book request panel
Pre-Conditions	Book Record was not added in system
Post Conditions	Book record was saved in system database and appear in system to borrower
Author	S2002E32AC
Exceptions	Fill required fields, book code already exist ,

Adopted Methodology

Adopted Methodology:

As per requirement, we will adopt the methodology named is **VU process model**. The description of VU process model is such as:

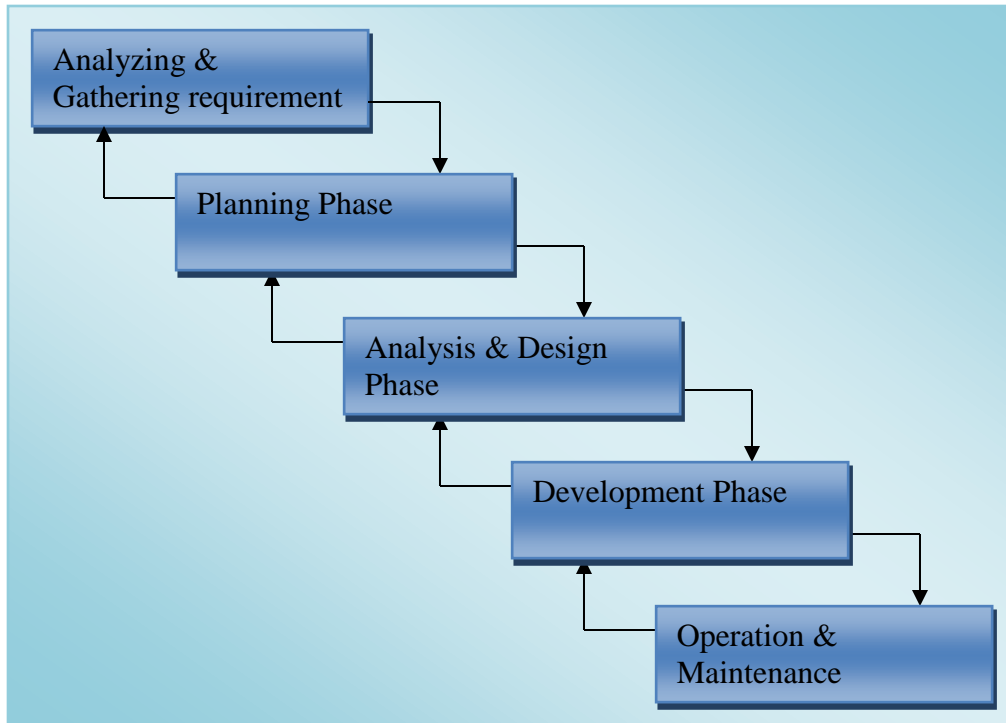
VU Process Model:

VU Process Model is the combination of waterfall methodology and spiral methodology. It is also called hybrid approach of system development. It has five phases.

The five phases of the VU process model are following:

- ❖ Gathering and Analyzing requirement
- ❖ Planning
- ❖ Analysis and Design
- ❖ Development
- ❖ Final Report

In the requirement phase, the system goals, services and constrains are established after discussion with user. The planning phase is synchronized effort to find all the potential to tackle each. This phase usually involves a lot of brainstorming within software development team as well as with respective client. It maximizes the quality of system and minimizes any risks and errors.



Work Plan (Use MS Project to create Schedule/Work Plan)
<Provide Gantt chart of your final project>