Software Requirements Specification Template

Library Management System

Software Requirements Specification

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Revision History

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Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	Printed Name	Title	Date
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1. Introduction

Library Management System is a computerized system which helps user (librarian) to manage the library daily activity in electronic format. It reduces the risk of paper work such as file lost, file damaged and time consuming. It can help user to manage the transaction or record more effectively and time-saving.

1.1 Purpose

The purpose of this project is to provide a friendly environment to maintain the details of books and library members. The main purpose of this project is to maintain easy circulation system using computers and to provide different reports. The Library System is a package to be used by Libraries to improve the efficiency of Librarians, Library employees and Users. The system provides books catalog and information to members and helps them decide on the books to borrow from the library.   The Librarian can keep the books catalog updated all the time so that the members get the updated information all the time.

1.2 Scope

Library Management System product is basically updating the manual library system into a internet-based application so that the users can know the details of their accounts, availability of books and remaining time for borrowing. The project is specifically designed for the use of librarians and library users. The product will work as a complete user interface for library management process and library usage from ordinary users. This can be used by any existing or new library to manage its books and book borrowing, insertion and monitoring. This can work as a powerful library management system for big libraries, and can provide a free easy-to-use system for rising libraries.

1.3 Definitions, Acronyms, and Abbreviations

Acronym	Meaning
LMS	Library Management System
MS SQL	Microsoft Structured Query Language
ISBN	International Standard Book Number

2. General Description

2.1 Product Perspective

LMS is a replacement for the ordinary library management systems which depend on paper work for recording book and users' information. LMS will provide an advanced book search mechanism and will make it easy to borrow, insert and index a book in the library.

2.2 Product Features

Administrators
- Admin should be able to insert, modify and delete books.
- Can accept or reject a new user according to the library policy or payment methods.
- Increase the period for borrowing a book for specific type or group of users.
- Can get the information (status report) of any member who has borrowed a book.
- Add and edit book categories and arrange books by categories.
- Add and edit authors and publishers information.
- Can send lateness warnings to people who have exceeded deadline date.
- Can record books returned by users.

Normal users
- The member should be provided with the updated information about the books catalog.
- Members are given a provision to check their account's information and change it.
- Members have the ability to search through books by subject, title, authors or any information related to the book.
- Can extend the period of borrowing books according to the library policy.
- The customer may suggest a book to be brought to the library book collection.

2.3 User Characteristics

Users of the website are members, librarians and the administrators who maintain the website. Members and librarians are assumed to have basic knowledge of computers and Internet browsing. Administrators of the system should have more knowledge of internal modules of the system and are able to rectify small problems that may arise due to disk crashes, power failures and other catastrophes. Friendly user interface, online help and user guide must be sufficient to educate the users on how to use this product without any problems or difficulties.

2.4   Operating Environment

PROCESSOR	INTEL CORE PROCESSOR OR BETTER PERFORMANCE
OPERATING SYSTEM	WINDOWS 8 ,WINDOWS10, UBUNTU
MEMORY	1GB RAM OR MORE
HARD DISK SPACE	MINIMUM 3 GB FOR DATABASE USAGE FOR FUTURE
DATABASE	MY SQL

2.5 General Constraints

- The information of all users, books and libraries must be stored in a database that is accessible by the website.
- MS SQL Server will be used as SQL engine and database.
- The Online Library System is running 24 hours a day.
- Users may access WLMS from any computer that has Internet browsing capabilities and an Internet connection.
- Users must have their correct usernames and passwords to enter into their online accounts and do actions.

2.6 Assumptions and Dependencies

The product needs the following third party products.
- Microsoft SQL server to store the database.
- *Some other tools to develop the Product.*

The success of this system depends on
- Existence of an Internet service to all people.
- Are librarians and users comfortable with computers and have enough conation to work with the product?
- Website interface must be friendly and easy-to-use.
- *The search mechanism should be simple and fast.*

3. Specific Requirements

3.1 Functional Requirements

- **Administrator Menu:** In this module we can do the following:

  Admin should be able to insert, modify and delete books.
  Can accept or reject a new user according to the library policy.
  Can get the information of any member who has borrowed a book.
  Add and edit book categories and arrange books by categories.
  Can record books returned by users.

- Book entry: In this module we can enter a new book and store it.
- Book issue: In this module we can issue a book to the student.
- Book record: In this module we can keep the records of various books being issued and returned.
- Register student: In this module we can keep the record of how many students have we registered.

3.2 Non-Functional Requirements

- The user should be simple and easy to understand and use. Also be an interactive interface .The system should prompt for the user and administrator to login to the application and for proper input criteria.
- The software provides good graphical interface for the user. Any administrator can operate on the system, performing the required task such as create, update, viewing the details of the book. Allows user to view quick reports like Book Issues/Returned etc in between particular time.
- Error handling: Library management system shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period.
- Performance Requirements: The system shall accommodate high number of books and users without any fault.

3.3 External Interface Requirements

3.3.1 User Interfaces

UI-1: Complete navigation will be permited by Web application and library service selection are done using the keyboard, mouse or combinations of both.

3.3.2 Hardware and Software

The software provides interface for the user where the required services can be stated using hardware which are compatible with the softwares used.

3.3.3 Software Interfaces

SI-1: Database - The system shall communicate with a database through a programmatic interface for the following operations:
SI-2.1:   To manage Library staff, client, and project data.
SI-2.2:   To allow a user to get services from the system.
SI-2.3:   To allow an administrator to approve/reject services.
SI-2.4:   To store all the logs of user.

4 Appendix A: Glossary

No glossary terms available at this time.