

Library Management System

1. Introduction

1.1 Purpose

The purpose of this doc is to specify the requirements for the Library Management System (LMS) which automates the process of managing books, members, transactions.

1.2 Document Convention

The document follows IEEE standards for SRS Requirements Specification.

1.3 Intended Audience

This doc is for Developers, testers, librarians & project stakeholders.

1.4 Project Scope

The LMS provides functionalities for book cataloging, members, registers, issuing, returning & fine calculation. It improves efficiency & reduces manual errors.

1.5 References

IEEE SRS format, standards database design practices & sample library workflows.

2. Overall Description

2.1 Product Perspective

The system replaces manual registers with a centralized computerized database.

2.2 Product Function

It manages book records, user membership, transaction & report generations.

2.3 Operating Environment

web-based application running on windows/linux server with a SQL Database.

2.4 constraints
Access restricted by logged.

2.5 Documentation
user manual and a

3. Specific Requirements

3.1 functional Requirements

- Add, update &
- Register of manage
- Issue and return
- calculate and man

3.2 external Interface

- web interface for
- Database connect

3.3 System Features

- Search books &
- Generate report

3.4 Non-functional

- Secure Authentication
- Response time
- Scalable to h

4. Appendices

4.1 Glossary

LMS -> library

4.2 future Enhancements

Integration with library services

2.4 constraints
Records restricted by rules: transaction must be
logged.

2.6 Documentation
user manual and admin guides will be provided

3. Specific Requirements

3.1 functional Requirements

- Add, update & delete book records.
- Register & manage members
- Issue and return books with due-date tracking
- calculate and manage fines.

3.2 external Interface Requirements

- web interface for users and admin
- Database connectivity.

3.3 System Features

- Search books by title, author or category.
- Generate reports on usage & fines.

3.4 Non-functional Requirements

- Secure Authentication.
- Response time < 2 seconds.
- Scalable to handle 10,000 records.

4 Appendices

4.1 Glossary

LMS - Library management sys, DB.

4.2 future Enhancement

Integration with e-books & digital library services.

