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**Software Requirement Specifications On**

**LIBRARY MANAGEMENT SYSTEM**

Submitted for partial fulfillment of the requirement for the degree of

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**Introduction**

**The "Library management system" has been developed to override the problem prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. With the increase in the number of readers, better management of libraries system is required. The Library management system focuses on improving the management of libraries in a city or town.**

**Purpose**

The purpose of the project is to maintain the details of books and library members of different libraries. The main purpose of this project is to maintain a easy circulation system between clients and the libraries, to issue books using single library card, also to search and reserve any book from different available libraries and to maintain details about the user (fine, address, phone number).Moreover, the user can check all these features from their home.

* 1. **Intended Audience**

The intended audience for this document are:

* The team members of innovative library solutions.
* The administrative staff of university.
* The project supervisor and project coordinator.
  1. **Scope**
* The project is basically updating the manual library system into a web based application so that the user can know the details of their account, availability of the books, issue book etc.
* Also user can provide feedback for adding some new books to the library.
* The ILM System provides information's like details of the books, insertion of new books, deletion of lost books, limitation on issuing books, fine on keeping a book more than one month from the issued date.
  1. **Definitions and Acronyms**
* JAVA –> Platform independence.
* SQL –> Structured query language.
* DFD –> Data flow diagram.
* CFD -> Context flow diagram.
* ER -> Entity relationship.
* IDE -> Integrated development environment.

2. **Overall Description**

* Product perspective:- Proposed Library Management System will take care of the current book detail at any point of time. The book issue, book return will update the current book details automatically so that user will get the update current book details.
* Product function:- The key goal of this initiative is to minimize the work done manually books problems, refund and fines calculations can be handle by this program.

2.1 **User Needs**

We have 2 levels of modules -

* User Module: The registered user can verify the availability of the books and issue the desired book on his/ her profile.
* Administration module: The sub-modules in the administration module are as follows:-
* Register user.
* Entry book details.
* Book issue.

2.2 **Assumptions and Dependencies**: -

All the details entered will be reliable and up to date. This software package is built with the assistance of the sun micro framework using

Swing as the frontend. The backend of Java and MySQL.

**3.** **System Features and Requirements**

**3.1 Functional Requirements :-**

* Book entry : we can store the information of the book in this module.
* Register student: we will keep the new student information in this module.
* Book issue/return : this module allow the issue / return of the book to be monitored.

**3.2 External Interface Requirements :** It should be simple and easy for users to understand and use. It should also be immersive interface. For the user and administrator, the device should prompt the login to the program and correct feedback parameter.

**3.3 System Features**

Database storage: proposed data base is intended to store, retrieve ,update and manipulate information related to university which include book availability , staff information , student details etc.

Response for administrator : The administrator can login and logout . when the administrative into the library system. The system will check for validity of login the response to this action is the administrator will be able to modify , view, add, deleting and other function that can be performed on the database.

**3.4 Nonfunctional Requirements :**

**Hardware interfaces**:

* Operating system: windows 7/8/10
* Hard disk: 40GB or above.
* RAM: 2 GB or above.
* Processor: Pentium(R)Dual core or above.

**Software interface:**

* Core Java
* Net beans IDE 8.0.2
* My SQL