

**Lab experiment no : 1**

**Name:** Develop requirements specification for a given problem

# **Online Library System**

## **Objective:**

To design an software requirement specification based on online library system by using library database.

## **Procedure:**

### **Step1:**

## **Introduction:**

We have decided to investigate the use of an Online Library Management System. This system would be used by members who may be students or professors of that University to check the availability of the books and borrow the books, and by the librarian to update the databases. The purpose of this document is to analyze and elaborate on the high-level needs and features of the *Online Library System*. It focuses on the capabilities and facilities provided by a Library. The details of what all are the needs of the ***Online Library System*** and if it fulfils these needs are detailed in the use-case and supplementary specifications.

## **purpose:**

The purpose of document is to describe the external behavior of the Online Library System. Requirements Specification defines and describes the operations, interfaces, performance, and quality assurance requirements of the Online Library System. The document also describes the nonfunctional requirements such as the user interfaces. It also describes the design constraints that are to be considered when the system is to be designed, and other factors necessary to provide a complete and comprehensive description of the requirements for the software. The Software Requirements Specification captures the complete software requirements

for the system, or a portion of the system. Requirements described in this document are derived from the Vision Document prepared for the Online Library System.

## **Scope:**

The Software Requirements Specification captures all the requirements in a single document. The ***Online Library System*** that is to be developed provides the members of the Library and employees of the library with books information, online blocking of books and many other facilities. The Online Library System is supposed to have the following features.

- The product provides the members with online blocking of books capabilities and the Online Library System is up and running all day.
- The system provides logon facility to the users.
- The system provides the members with the option to check their account and/or change their options like password of the account whenever needed all through the day during the library hours.
- The system allows the members to block the books 24 hours a day and all the through the semester.
- The system lets the library staff to check which all members have blocked the books and whether they can borrow any more books or not.
- The system allows the Librarian to create the books catalog, add/delete books and maintain the books catalog.

## **Step 2:**

### **Over all description :**

#### **Product perspective:**

The Online Library System is a package to be used by Libraries to improve the efficiency of Librarians, Library employees and Users. The Online Library System to be developed benefits greatly the members and the Librarian of University of Houston-Clearlake. 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 (students and the professors) get the updated information all the time.

### **Product Features:**

- Including staff privileges and student privileges
- library locations, material types
- Supplement cataloging with text mining to identify and extract topics, names, companies, etc.
- Member entry
- Account Info(loginid)
- Help

### **User classes and characteristics:**

The system provides different types of services based on the type of users [Member/librarian]. the librarian will be acting as the controller and he will have all the privileges of an administrator. the member can be either a student or staff of the university who will be accessing the library online.

The users of the system are members, librarian of the university and the administrators who maintain the system. The members and the librarian are assumed to have basic knowledge of the computers and Internet browsing. The administrators of the system have more knowledge of the internals of the system and are able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system. The proper user interface, users manual, online help and the guide to install and maintain the system must be sufficient to educate the users on how to use the system without any problems.

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