SOFTWARE REQUIREMENT SPECIFICATIONS

TABLE OF CONTENT

1. INTRODUCTION
   1. PURPOSE
   2. SCOPE
   3. INTENDED AUDIENCE
2. SYSTEM DEFENITIONS
3. PRODUCT PROSPECTIVE
4. SYSTEM REQUIREMENTS
   1. HARDWARE REQUIEMENT
   2. SOFTWARE REQUIREMENT
5. SYSTEM INTERFACES
6. FEASIBILITY STUDY
7. USER NEEDS
8. USER CHARACTERISTICS
9. DATABASE
10. SYSTEM STRUCTURES
11. INTRODUCTION
    1. PURPOSE

The main purpose of this document is to provide the working of a mobile application software which is about a online library management system. Through this system, we have to reduce the manual works and provide a friendly environment for the users, and to provide a large amount of books and its details. This document will explain the purpose, features, requirements, interfaces and specifications of the system

* 1. SCOPE

This document specifies the requirements of the system as well as the features and interfaces. This system can avoid the excuses of the least availability of books. It can provide a vast varieties of books from different parts of the world.

* 1. INTENDED AUDIENCE
* Students and teaching professionals
* Business people
* Engineers and researchers
* Other professional personalities
* Most basically the common people

1. SYSTEM DEFINITIONS

This system consists of a mobile application for online library management system. User can register into the system by providing essential details and then user can log in to the system. The system provides a vide varieties of books under their categories. There are several books available for normal users. There is an option for premium membership in the online library, it will provide a huge list of paid books from different parts of the world. The premium members can pay the membership payment through the provided secured online payment system. User can also cancel the membership. All the details of the books are available in the system as per needs. Book return details can be entered through the page. There are remainders for book return which will be helpful for the users.

The system is secured through password system. User must log in by giving their username and password while each time they enter into the system.

1. PRODUCT PERSPECTIVE

The proposed Library Management System will take care of the current book details 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.

1. SYSTEM REQUIREMENTS
   * 1. HARDWARE REQUIREMENTS

The selection of the hardware configuration is a most important task in software development. The processor should be powerful to handle all the tasks. The hard disk should have the sufficient capacity to solve the applications and database.

The Hardware requirements for the proposed system are:

Processor : Intel Core i7

System bus : 64 bits

Memory : 4 GB RAM or higher

Hard disk : 320 GB or higher

* + 1. SOFTWARE REQUIREMENTS

Windows 10 provides data security by data encryption. It includes improved network, applications and web services. It provides improved reliability and scalability, lower cost of computing and flexible management services.

The software requirements for the proposed system are:

Software : Windows 10

Front-end : JAVA

Back-end : SQLITE and Firebase

1. SYSTEM INTERFACES

This section includes the existing elements those under development, and future components. It is necessary to think about human users of the system and other applications. Here there is four types of interfaces

* User
* Hardware
* Software
* Communications

1. FEASIBILITY STUDY

Feasibility analysis is the procedure for identifying the candidate system, evaluating and selecting the most feasible system. This is done by investigating the existing system under the idea of new system. It is a test of a system proposal according to its work ability, ability to meet user needs, etc.

1. USER NEEDS

Users need to have to access a vast amount of books, while in normal library there is a limited collections of book are available. All types and latest editions of books are needed for users. They have to access different books at same time.

1. USER CHARACTERISTICS

The Online Library Management System is a mobile application software which works as a virtual library. The users can take several books for a time and return it within the time period through this application. There are two types of users in this application, one is Administration and the other is normal external users.

* ADMIN

Admin have the control of the customers, list of books and its details, return of books, premium membership features, etc.

* EXTERNAL USERS

External users are normal people who have to access books for different purposes.

1. DATABASE

Database design is the process of producing a detailed data model of database. This

data model contains all the needed logical and physical design choices and physical

storage The process of doing database design generally consists of a number of steps

which will be carried out by the database designer. Usually, the designer must:

 Determine the data to be stored in the database.

 Determine the relationships between the different data elements.

 Superimpose a logical structure upon the data on the basis of these relationships.

In this project database design generally, the data is to be stored in the

database whether it can more relation for each module. And it provides the

logical relation between them.

1. SYSTEM STRUCTURE

Log in

Register

Admin

External Users

Payment

Premium Registration

Take Book

Return Book

Book Details

Books Lists

Books Categories