CSP201

Software Requirements Specification

Document

TOPIC- LIBRARY
MANAGEMENT SYSTEM

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SUBMITTED TO:-
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1. Introduction

Name of my library management system is " Vedas". My project provides a platform for the users to manage the library very easily.The computer system must be linking database with my webpages.I are going to use PHP and XAMPP server for the backend and HTML and CSS for frontend.

2. Product Perspective

My project is totally independent and self-contained. It is not a part of any larger system. Its my attempt to develop a library management system. It may not provide all the features a but it has some features which work very well.

3. System Interfaces

The web browser is generally going to interact with the internal server in the present time. For interacting with server, PHP is going to play an important role.No API's are required. Purely PHP can be used for this task.

4. Interfaces

Graphical User Interface will work in my system.

User can interact with the library management website by clicking and typing at certain places as it is the best method for the websites.

There is no separate provision for the differently abled person.

5. Hardware Interfaces

In online server mode my project does not require any special hardware components. It can work on any device which supports web browsing.There are no minimum RAM requiremnents but it should be good if you have at least 2GB RAM.

6. Software Interfaces

At current i have used XAMPP version 3.2.2 as my local server. For editing i have used SUBLIME TEXT 3.0. Sublime text acts as a good tool as i can write both frontend and backend scripts in it.
I have used the MySQL server version 10.1.21-Maria DB and Apache server version 2.4.25.

7. Communications Interfaces

HTTP protocol is used for transmission and reception of data on the users end.
HTTP post protocol is used to send data to the php pages.

8. Memory Constraints

*No memory constraints in online mode of my project.
But in offline local server mode it requires the memory of the system.
It uses the disk memory and moves the added data to the local xampp mysql folder.*

9. User Characteristics

*User must have the basic knowledge of browsing the webites and should have a normal understanding of English language.
He/She should follow the steps to perform a specific task on our website.It will we helpful for all librarians belonging to any institute.*

10. Security

For security purposes i have used the password encryption techniques.
I have used 'ripemd128' encryption for password so that anyone who accidently access databases cann't steal the administrator password from it.

11. Availability

Only i have one copy of our project currently.Another copy will be submitted to the mam. I will try to upload it on internet after developing it to a very good level.

12. Methodology

To start with, we will be first linking our php script with the sql server through the connection handle.Then sql queries will run on the server and information will be retrieved.The result of the query will be presented to user through the use of html tables and other tags. Each link which is selected by the user will run a query in the background and as soon as the page will load, result will be displayed. Different inputs from the user will be taken through html forms.As user submits them, they will be sent to the apache server through HTTP POST protocol. It will act as a argument for our query on the basis of which result will be displayed.

13. Product Functions

User can perform functions like :

1. Login using password

2. Add books

3. Borrow books

4. Add new publishers

5. Add new authors

6. Find the placing of books in library

7. Return Books

8. Get details of books borrowed by different people and their count

9. Get details of books written by each single author

10. Get details of books published by each publisher

11. Certain constraints on borrowing books are applied

14. Reliability

My project is fully reliable. It doesn't crash and provides a good user experience. For reliability i provide user with a menubar which can be used while navigating the different pages.