JABALPUR ENGINEERING COLLEGE

A SYNOPSIS ON

Online Library Management
(Web Based System)

Submitted to the

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA
(UNIVERSITY OF MADHYA PRADESH), BHOPAL

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<table>
<tr><td>**Submitted To**</td><td>**Submitted by**</td></tr>
<tr><td>Dr. Samar Upadhyay</td><td>Rajkumari Vishwakarma</td></tr>
<tr><td>Head of Department</td><td>**0201CA181026**</td></tr>
</table>

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About the Project

Online Library Management System is a system which maintains the information about the books present in the library, their authors, the members of library to whom books are issued, library staff and all. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task. Owing to the advancement of technology, organization of an Online Library becomes much simple.

The Online Library Management System has been designed to computerize and automate the operations performed over the information about the members, book issues and returns and all other operations. This computerization of library helps in many instances of its maintenances. It reduces the workload of management as most of the manual work done is reduced

Objectives the Project

The project aims and objectives that will be achieved after completion of this project are discussed in this subchapter. The aims and objectives are as follows:

- The product provides a framework, which is error free. We know a Online library management system is actually a critical process having many calculations and operations. So each simple error laid to big problem. So it should be error free and our objective is to build error free software.

- Online book reading.☐

- A search column to search availability of books.☐

- Facility to download required book.☐

- Video tutorial for students.☐

    1) An Admin login page where admin can add books, videos or page sources

    2) Open link for Learning Websites

Module

1. NORMAL USER
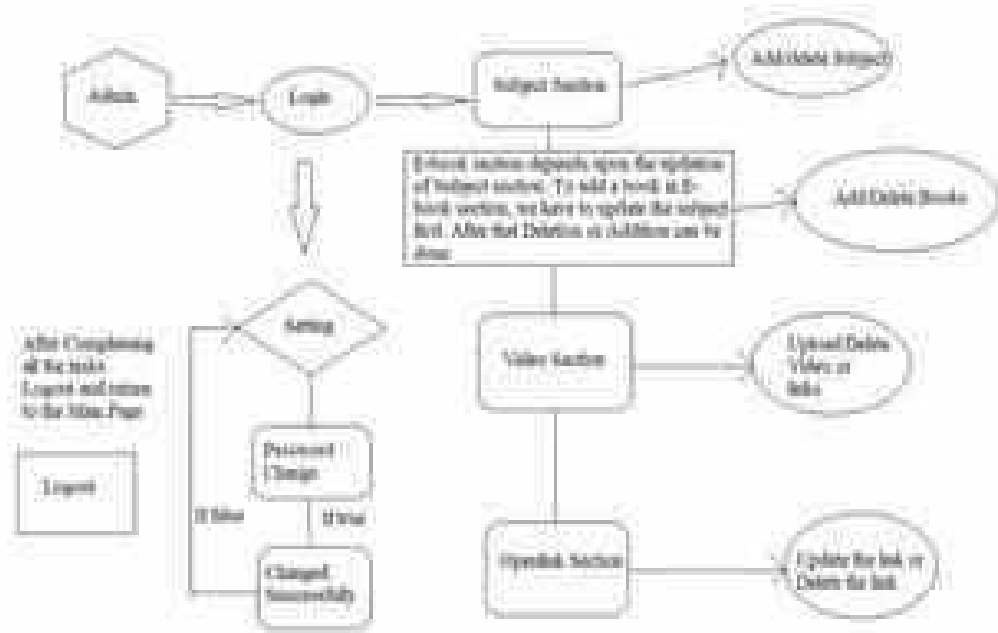
1.1 USER LOGIN

Description of feature

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system .

The user id and password will be verified and if invalid id is there user is allowed to not enter the system.

- user id is provided when they register
- The system must only allow user with valid id and password to enter the system
- The system performs authorization process which decides what user level can acess to.
- The user must be able to logout after they finished using system.

1.2 REGISTER NEW USER

Description of feature

This feature can be performed by all users to register new user to create account.

Functional requirements

- System must be able to verify information
- System must be able to delete information if information is wrong

2. ADMIN

2.1 ADMIN LOGIN

Description of feature

This feature used by the user to login into system. They are required to enter user id and password before they are allowed to enter the system .

The user id and password will be verified and if invalid id is there user is allowed to not enter the system.

- The system must only allow user with valid id and password to enter the system

- The system performs authorization process which decides what user level can acess to.

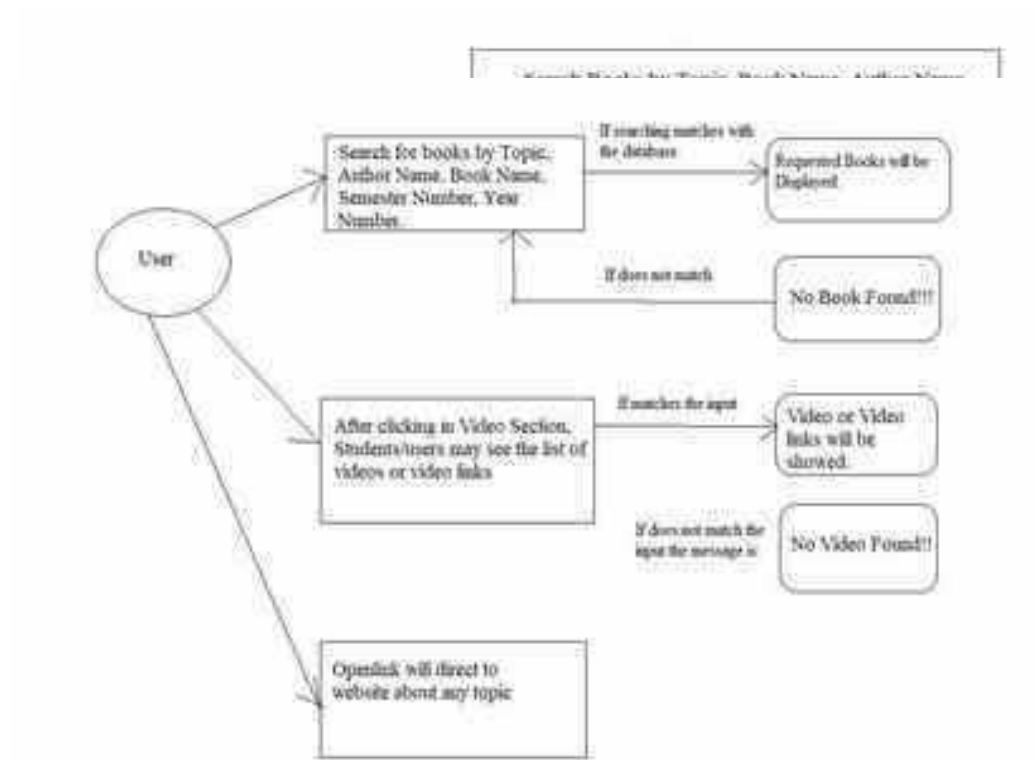- The user must be able to logout after they finished using system.

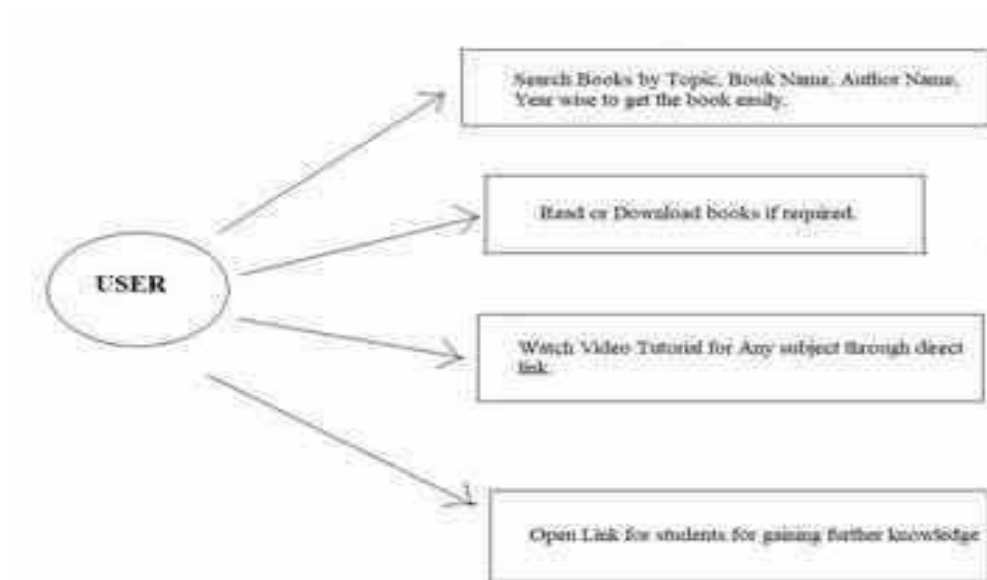# DFD

1. DATA FLOW DIAGRAM FOR ADMIN LOGIN

After entering to the home page of the website, Admin can choose the Admin Login option where they are asked to enter username & password, and if he/she is a valid user then a teacher login page will be displayed.

3. USE CAESE DIAGRAM FOR USER

2.   USE CAESE DIAGRAM FOR USER

After entering to the home page of the website , student can choose the USER LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a student login page will be displayed.

Hardware Requirement

Client Side

RAM	64 MB (Recommended)	
Fixed disk	200 MB free Space	
Pointing Device	Mouse or Compatible	
Connecting device	Modem or Phone(Recommended)	

Server Side

Computer	Intel® or Compatible Any Pentium Processor	
Memory (RAM)	1GB RAM minimum	
Hard Disk Space	Minimum Space for Software 80 GB Actual requirements will vary based on System configuration and the applications and features chosen to install as well as SQL Server Space Allocation	
External Stroage Device (Pen Drive)	Required for Installation	

Software Requirement

Client Side

Browser	Any Browser	

Server Side

Operating System	Windows XP SP2 or Above	
Front end	PHP 5.2.5 or Above	
Development Platform (IDE)	Visual Studio Code	
Backend	MySQL 5.0.51 or Above	
Server API	Apache/2.2.8 (Win32) DAV	

About Technology

The front end is designed using of html , Php ,css, Java script

- **HTML- Hyper Text Markup Languageis**

  the main markuplanguage for creating web pages and other information that can be displayed in a web browser.HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>), within the web page content. HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty elements and so are unpaired, for example <img>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based content. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

- **CSS- Cascading Style Sheets**

  is a style sheet language used fordescribing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts.

This separation can improve content accessibility, provide more flexibility and control in the specification. of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design)

.CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when14 read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied.CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable.

- **js- JavaScript**

is a dynamic computer programminglanguage. It is most commonly used as part of web browsers, whose implementations allow client- side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the Self and Scheme programming languages. It is a multi- paradigm language, supporting object-oriented, imperative, and functional programming styles. The application of JavaScript to use outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications. On the client side, JavaScript was traditionally implemented as an interpreted language but just-in-time compilation is now performed by recent (post-2012) browsers.

- **PHP – Hypertext PreProcessor**

  PHP a server-side scripting language designed for webdevelopment but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: HypertextPreprocessor, a recursive backronym.PHP code is interpreted by a webserver with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

- **MySQL DataBase**

  ("My S-Q-L", officially, but also called "My Sequel") is (as ofJuly 2013) the world's second most widely used open-source relational database management system (RDBMS). It is named after co-founder Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation .MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases

  include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, Drupal and other software. MySQL is also used in many high-profile, large-scale websites, including Wikipedia, Google (though not for searches), Facebook, Twitter, Flickr, and YouTube