

Project Report

On

E-Library Management System

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E-LIBRARY MANAGEMENT SYSTEM

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Bachelor of Computer Application

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Abstract:

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 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

CHAPTER 1

INTRODUCTION

This chapter gives an overview about the aim , objectives ,background and operation environment of the system.

1.1 PROJECT AIMS AND OBJECTIVES

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:

- Online book reading.
- A search column to search availability of books.
- Facility to download required book.
- Video tutorial for students.
 - An Admin login page where admin can add books, videos or page sources
 - Open link for Learning Websites

1.2 BACKGROUND OF PROJECT

E-Library Management System is an application which refers to library systems which are generally small or medium in size. It is used by librarian to manage the library using a computerized system where he/she can add new books, videos and Page sources.

Books and student maintenance modules are also included in this system which would keep track of the students using the library and also a detailed description about the books a library contains. With this computerized system there will be no loss of book record or member record which generally happens when a non computerized system is used.

All these modules are able to help librarian to manage the library with more convenience and in a more efficient way as compared to library systems which are not computerized.

PROCESSOR	INTEL CORE PROCESSOR OR BETTER PERFORMANCE
OPERATING SYSTEM	WINDOWS VISTA ,WINDOWS7, UBUNTU
MEMORY	1GB RAM OR MORE
HARD DISK SPACE	MINIMUM 3 GB FOR DATABASE USAGE FOR FUTURE
DATABASE	MY SQL

CHAPTER 2

SYSTEM ANALYSIS

In this chapter, we will discuss and analyze about the developing process of Library Management System including software requirement specification (SRS) and comparison between existing and proposed system . The functional and non functional requirements are included in SRS part to provide complete description and overview of system requirement before the developing process is carried out. Besides that, existing vs proposed provides a view of how the proposed system will be more efficient than the existing one.

2.1 SOFTWARE REQUIREMENT SPECIFICATION

2.1.1 GENERAL DESCRIPTION

PRODUCT DESCRIPTION:

Library Management System is a computerized system which helps user(librarian) to manage the library daily activity in electronic format. It reduces the risk of paper work such as file lost, file damaged and time consuming. It can help user to manage the transaction or record more effectively and time-saving.

PROBLEM STATEMENT:

The problem occurred before having computerized system includes:

- File lost
When computerized system is not implemented file is always lost because of human environment. Some times due to some human error there may be a loss of records.
- File damaged
When a computerized system is not there file is always lost due to some accident like spilling of water by some member on file accidentally. Besides some natural disaster like floods or fires may also damage the files.
- Difficult to search record
When there is no computerized system there is always a difficulty in searching of records if the records are large in number .
- Space consuming
After the number of records become large the space for physical storage of file and records also increases if no computerized system is implemented.
- Cost consuming
As there is no computerized system the to add each record paper will be needed which will increase the cost for the management of library.

2.1.2 SYSTEM OBJECTIVES

- Improvement in control and performance
The system is developed to cope up with the current issues and problems of library .The system can add user, validate user and is also bug free.
- Save cost
After computerized system is implemented less human force will be required to maintain the library thus reducing the overall cost.

- Save time
Librarian is able to search record by using few clicks of mouse and few search keywords thus saving his valuable time.
- Option of online Notice board
Librarian will be able to provide a detailed description of workshops going in the college as well as in nearby colleges
- Lecture Notes
Teacher have a facility to upload lectures notes in a pdf file having size not more than 10mb

2.1.3 SYSTEM REQUIREMENTS

2.1.3.1 NON FUNCTIONAL REQUIREMENTS

- Product Requirements

EFFICIENCY REQUIREMENT

When a library management system will be implemented librarian and user will easily access library as searching and book transaction will be very faster .

RELIABILITY REQUIREMENT

The system should accurately performs member registration ,member validation , report generation, book transaction and search

USABILITY REQUIREMENT

The system is designed for a user friendly environment so that student and staff of library can perform the various tasks easily and in an effective way.

ORGANIZATIONAL REQUIREMENT

IMPLEMENTATION REQUIREMENTS

In implementing whole system it uses html in front end with php as server side scripting language which will be used for database connectivity and the backend ie the database part is developed using mysql.

DELIVERY REQUIREMENTS

The whole system is expected to be delivered in six months of time with a weekly evaluation by the project guide.

2.1.3.2 FUNCTIONAL REQUIREMENTS

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.

Functional requirements

- 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 access 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

1.3 REGISTER NEW BOOK

Description of feature

This feature allows to add new books to the library

Functional requirements

- System must be able to verify information
- System must be able to enter number of copies into table.
- System must be able to not allow two books having same book id.

1.5 SEARCH BOOK

DESCRIPTION OF FEATURE

This feature is found in book maintenance part . we can search book based on book id , book name , publication or by author name.

Functional requirements

- System must be able to search the database based on select search type
- System must be able to filter book based on keyword entered
- System must be able to show the filtered book in table view

Functional requirements

- System should be able to add detailed information about events .
- System should be able to display information on notice board available in the homepage of site

2.1.4 SOFTWARE AND HARDWARE REQUIREMENTS

This section describes the software and hardware requirements of the system

2.1.4.1 SOFTWARE REQUIREMENTS

- Operating system- Windows 7 is used as the operating system as it is stable and supports more features and is more user friendly
- Database MYSQL-MYSQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to understand and easy to write.
- Development tools and Programming language- HTML is used to write the whole code and develop webpages with css, java script for styling work and php for sever side scripting.

2.1.4.2 HARDWARE REQUIREMENTS

- Intel core i5 2nd generation is used as a processor because it is fast than other processors and provide reliable and stable and we can run our pc for longtime. By using this processor we can keep on developing our project without any worries.
- Ram 1 gb is used as it will provide fast reading and writing capabilities and will in turn support in processing.

Existing System:

- Early days Libraries are managed manually. It required lot of time to record or to retrieve the details. The employees who have to record the details must perform their job very carefully. Even a small mistake would create a lot of problems. Security of information is very less. Report generations of all the information is very tough task.
- Maintenance of Library catalogue and arrangement of the books to the catalogue is very complex task. In addition to its maintenance of member details, issue dates and return dates etc. manually is a complex task.
- All the operations must be performed in perfect manner for the maintenance of the library with out any degradation which may finally result in the failure of the entire system.

Proposed System:

To solve the inconveniences as mentioned in the existing system, an **Online Library** is proposed. The proposed system contains the following features:

- The students will register them through Online
- Individually each member will have his account through which he can access the information he needs.
- Book details like authors, number of copies totally maintained by library, present available number of books, reference books, non-reference books etc. all this information can be made handy.
- Regarding the members designation, number of books was issued.
- Issue dates and returns of each member is maintained separately and fine charged if there is any delay in returning the book.
- Administrator can add, update the books.
- Time consuming is low, gives accurate results, reliability can be improved with the help of security.

2.3 SOFTWARE TOOLS USED

The whole Project is divided in two parts the front end and the back end.

2.3.1 Front end

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

- **HTML- HTMLorHyper Text Markup Language**is 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 . 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(CSS)** 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 (when

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.

- **JAVA SCRIPT- JavaScript(JS)** is a dynamic computer programming language. 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- PHP** is a server-side scripting language designed for web development 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, 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- MySQL("My S-Q-L", officially, but also called "My Sequel") is (as of July 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

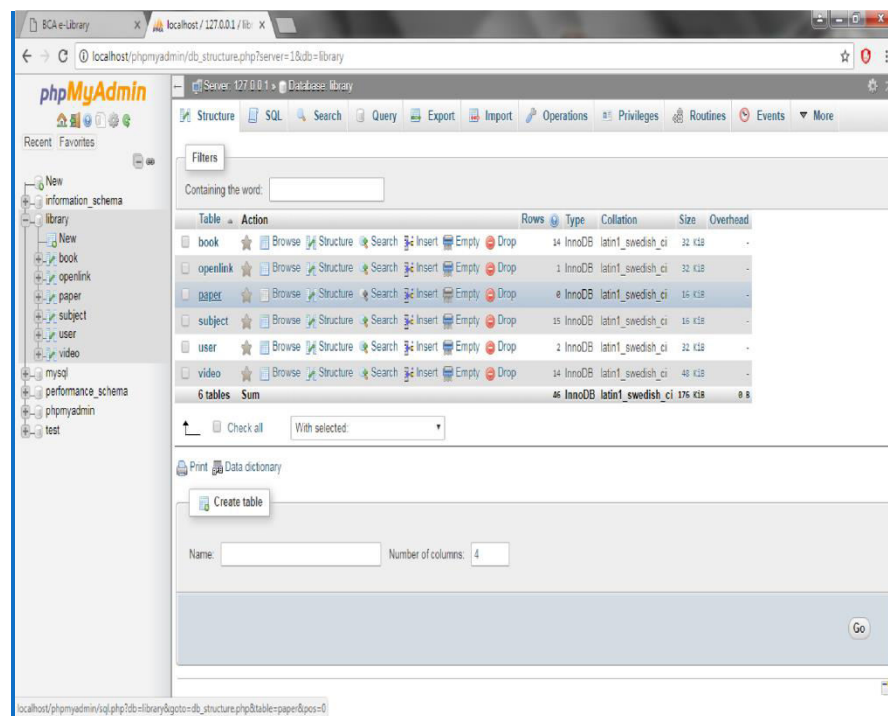
CHAPTER 3

SYSTEM DESIGN

3.1 TABLE DESIGN

VARIOUS TABLES TO MAINTAIN INFORMATION

➤ Library Table from Database



➤ Admin Table from Database

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'user' table is selected, and its structure is displayed. The table contains two rows of data.

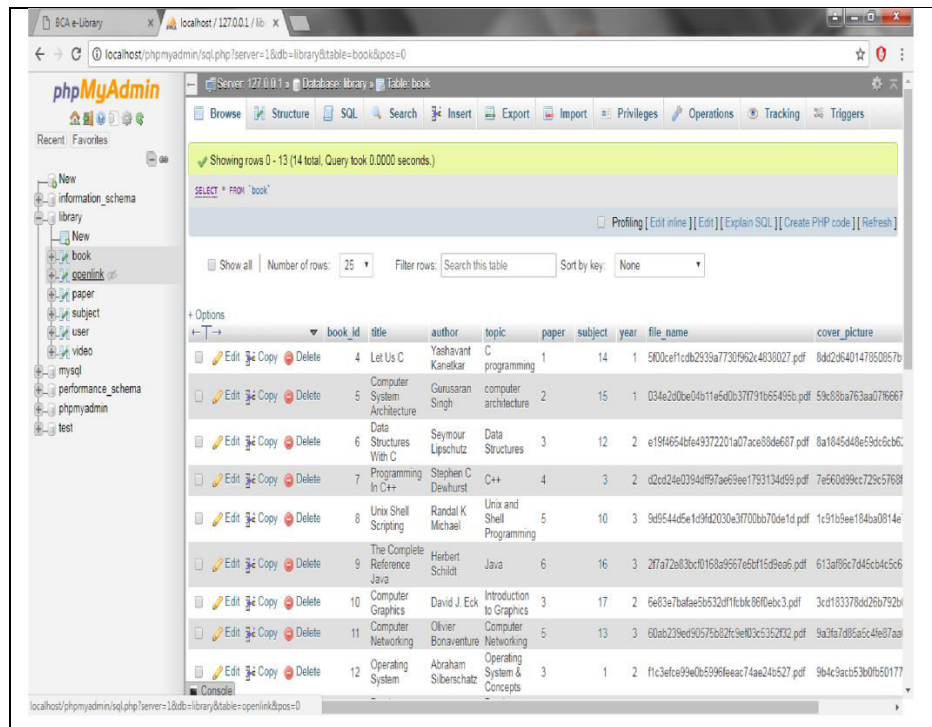
user_id	email	password	first_name	last_name
2	admin@admin.com	\$2y0589cH0C1vFR.mVgPZQ1fFeLuBZ0SRPSjDlhcKvj uf...	Admin	Admin
3	abir@bca.com	\$2y0584IH0LMPKzCbIKAcSikze.mA1hP4NaI81hcV6GFST...	Abir	Roy

➤ Subjects Table from Database

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'subject' table is selected, and its structure is displayed. The table contains 24 rows of data.

subject_id	subject_name
1	Operating System
3	C++
10	Unix & Shell Programming
12	Data Structure
13	Computer Network
14	C Programming
15	Computer Architecture
16	Java
17	Graphics
18	Database Management System
19	Mathematics for Computing
20	Windows Programming
21	Visual Basic
22	Software Project Management & Quality Assurance
24	Udemy learning

➤ Books Table from Database Books Table from Database



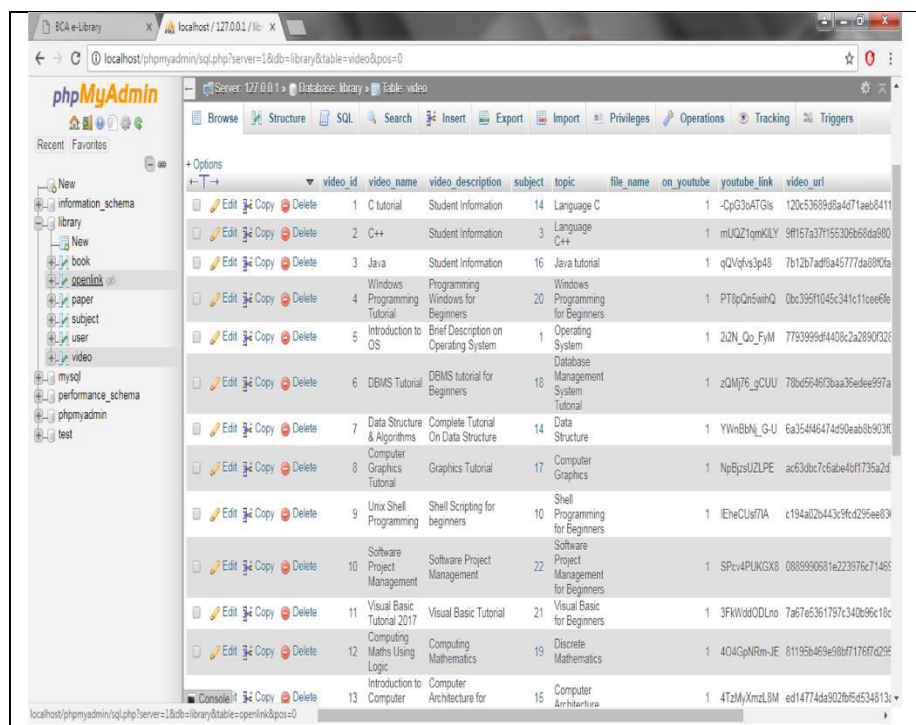
Showing rows 0 - 13 (14 total, Query took 0.0000 seconds.)

SELECT * FROM 'book'

Number of rows: 25 Filter rows: Search this table Sort by key: None

book_id	title	author	topic	paper	subject	year	file_name	cover_picture
4	Let Us C	Yashavant Kanetkar	C programming	1	14	1	500ce1fcd2939a7730f962a4830027.pdf	84d2d640147850857b
5	Computer System Architecture	Gurusaran Singh	computer architecture	2	15	1	034e2d0be04b11a5d0b370791b65495b.pdf	53c8ba763aa0776667
6	Data Structures With C	Seymour Lipschutz	Data Structures	3	12	2	e194654bfe49372201a07ace8da687.pdf	8a1845448e69dc5cb6
7	Programming In C++	Stephen C Dewhurst	C++	4	3	2	d2cd24e0394d797ae69ee1793134d99.pdf	7e560d99cc729c5768
8	Unix Shell Scripting	Randal K Michael	Unix and Shell Programming	5	10	3	9d5444de1d94d030e3f0700b70de1d.pdf	1c91b5ee184ba0814e
9	The Complete Reference Java	Herbert Schildt	Java	6	16	3	27a72e83bc0f168a9667e6bf15d9ea6.pdf	613af86c7d45cb4c5c6
10	Computer Graphics	David J. Eck	Introduction to Graphics	3	17	2	6e83e7bafae5b532df1fcb4b80f0ebc3.pdf	3cd183378dc28b792b
11	Computer Networking	Olivier Bonaventure	Computer Networking	5	13	3	60ab239ed50575b62fc9e803c5352f32.pdf	9a23fa7d85a5c4e807aa
12	Operating System	Abraham Silberschatz	Operating System & Concepts	3	1	2	1fc3efce99e0b5996eeac74aa24c527.pdf	9b4c3ac53b0fb50177

➤ Videos Table from Database



Showing rows 0 - 13 (14 total, Query took 0.0000 seconds.)

SELECT * FROM 'video'

Number of rows: 25 Filter rows: Search this table Sort by key: None

video_id	video_name	video_description	subject	topic	file_name	on_youtube	youtube_link	video_url
1	C tutorial	Student Information	14	Language C	1	-CpG3aATGis	120c53689d8a4d71aeb8411	
2	C++	Student Information	3	Language C++	1	mUQZ1qmKLY	98167a3711530b68da890	
3	Java	Student Information	16	Java tutorial	1	qQVqvs3p48	7b12b7ad8a45777da880a	
4	Windows Programming Tutorial for Beginners	Windows Programming for Beginners	20	Windows Programming for Beginners	1	PT8pQn5withQ	0bc395f1045c341c110ee6e	
5	Introduction to OS	Brief Description on Operating System	1	Operating System	1	Z2N_Qo_FjM	775399d4408c2a2890328	
6	DBMS Tutorial for Beginners	DBMS tutorial for Beginners	18	Database Management System Tutorial	1	zQM76_gYUu	78bd5646d3baa36ede997a	
7	Data Structure & Algorithms	Complete Tutorial On Data Structure	14	Data Structure	1	YWmBmN_G-U	6a35446474d90ab0b903K	
8	Computer Graphics Tutorial	Graphics Tutorial	17	Computer Graphics	1	Np8psUJLPE	ac53dcb7c8abe40f1735a2d	
9	Unix Shell Programming	Shell Scripting for beginners	10	Shell Programming for Beginners	1	IEheCUst7IA	c194a02b443c9fd295ee83	
10	Software Project Management	Software Project Management	22	Project Management for Beginners	1	SPcv4PUKGX8	088990681e223976c71465	
11	Visual Basic Tutorial 2017	Visual Basic Tutorial	21	Visual Basic for Beginners	1	3FKWd0DLno	7a67e5361797c340e96c18c	
12	Computing Maths Using Logic	Computing Mathematics	19	Discrete Mathematics	1	4O4SpNRm-JE	81195b469e9bf71767d29f	
13	Computer Architecture for	Computer Architecture for	15	Computer Architecture	1	4TzMLXmz1BM	ed14774da902b5f5d34813c	

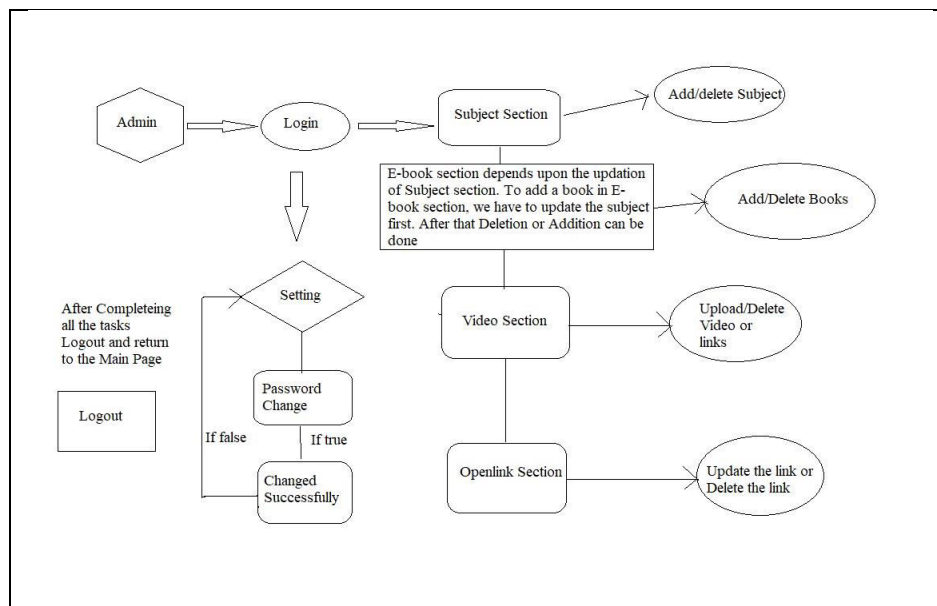
➤ Open link Table from Database

The screenshot shows the phpMyAdmin interface for a database named 'library'. The 'openlink' table is selected, and its structure is displayed. The table has the following columns: link_id, link_title, link_description, subject, topic, and link. A single row is shown with the following data: link_id 2, link_title 'Udemy', link_description 'Student information', subject '24', topic 'Online Courses', and link 'https://www.udemy.com/courses/development/'.

link_id	link_title	link_description	subject	topic	link
2	Udemy	Student information	24	Online Courses	https://www.udemy.com/courses/development/

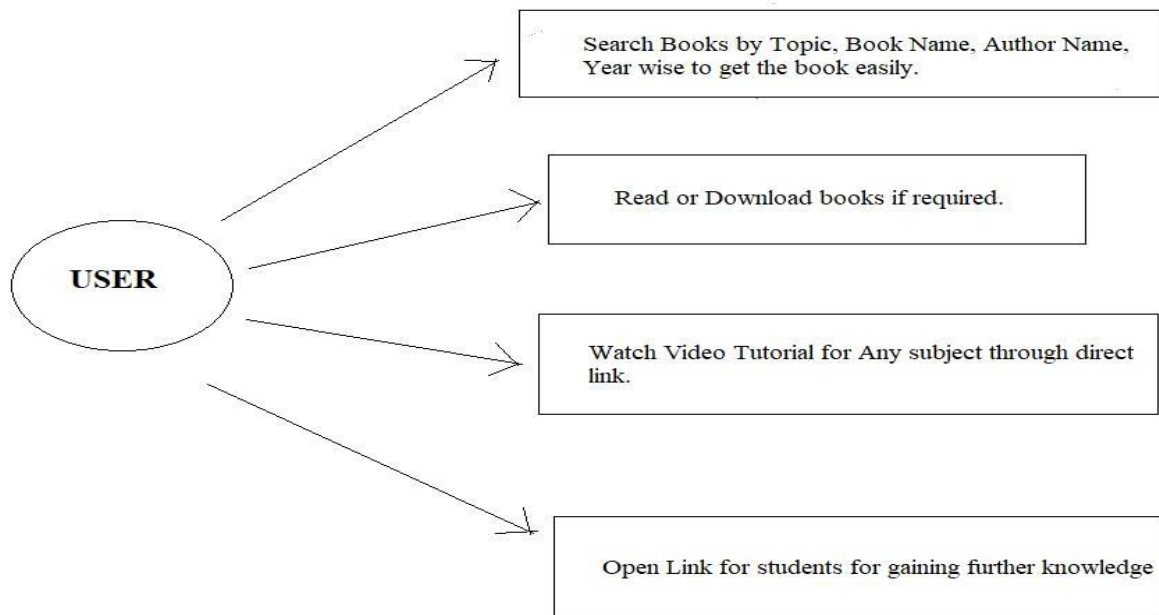
3.2 DATA FLOW DIAGRAMS

DATA FLOW DIAGRAM FOR ADMIN LOGIN



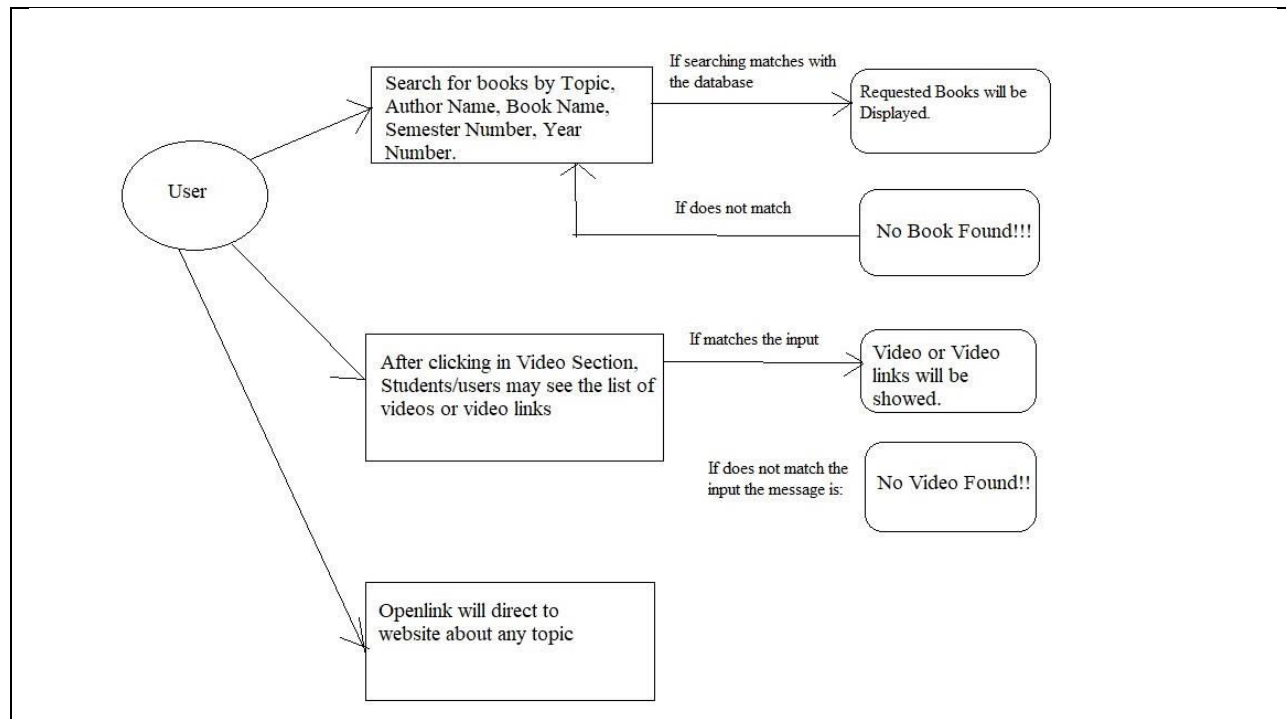
After entering to the home page of the website , Admin can choose the Admin Login option where they are asked to enter username & password , and if he/she is a valid user then a teacher login page will be displayed.

USE CASE DIAGRAM FOR USER

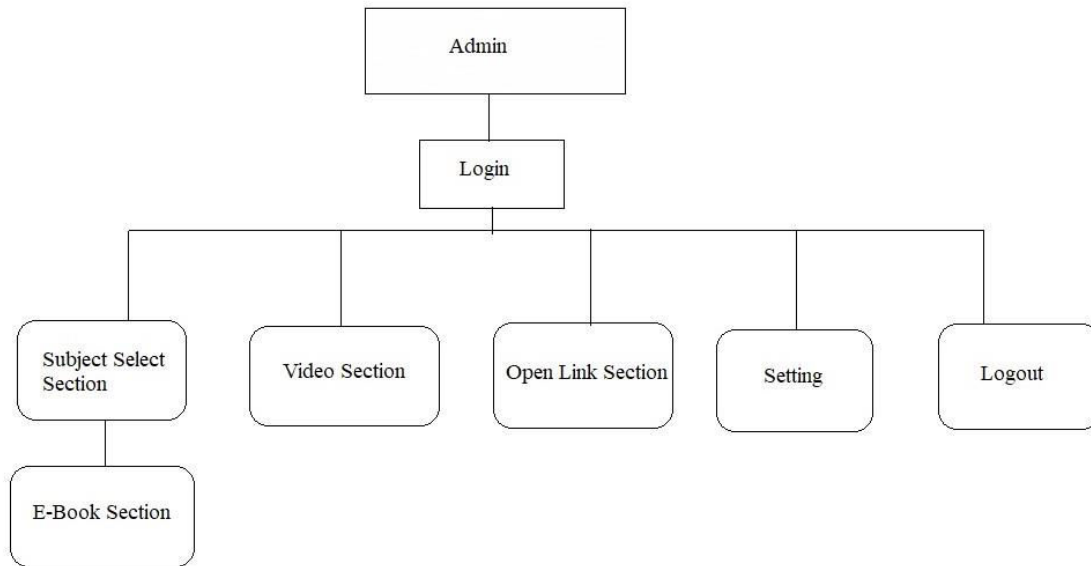


After entering to the home page of the website , student can choose the USER LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a student login page will be displayed.

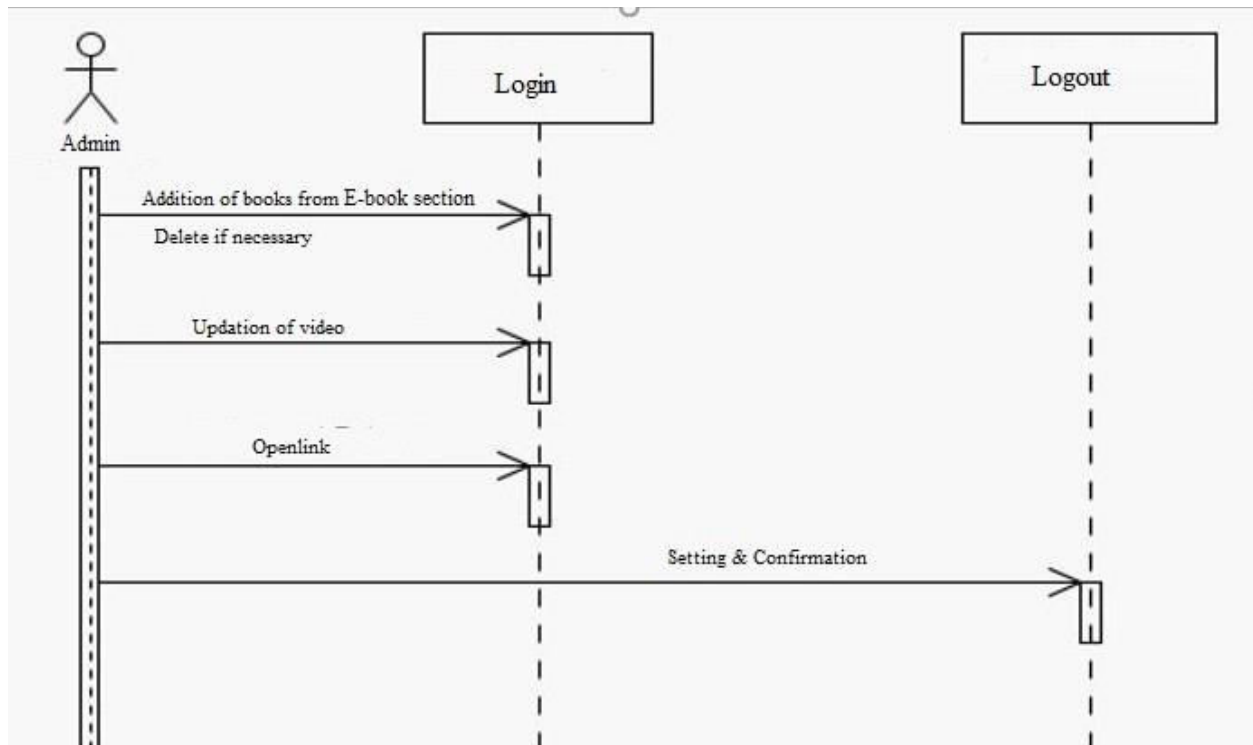
DATA FLOW DIAGRAM FOR USER



USER CASE DIAGRAM FOR ADMIN



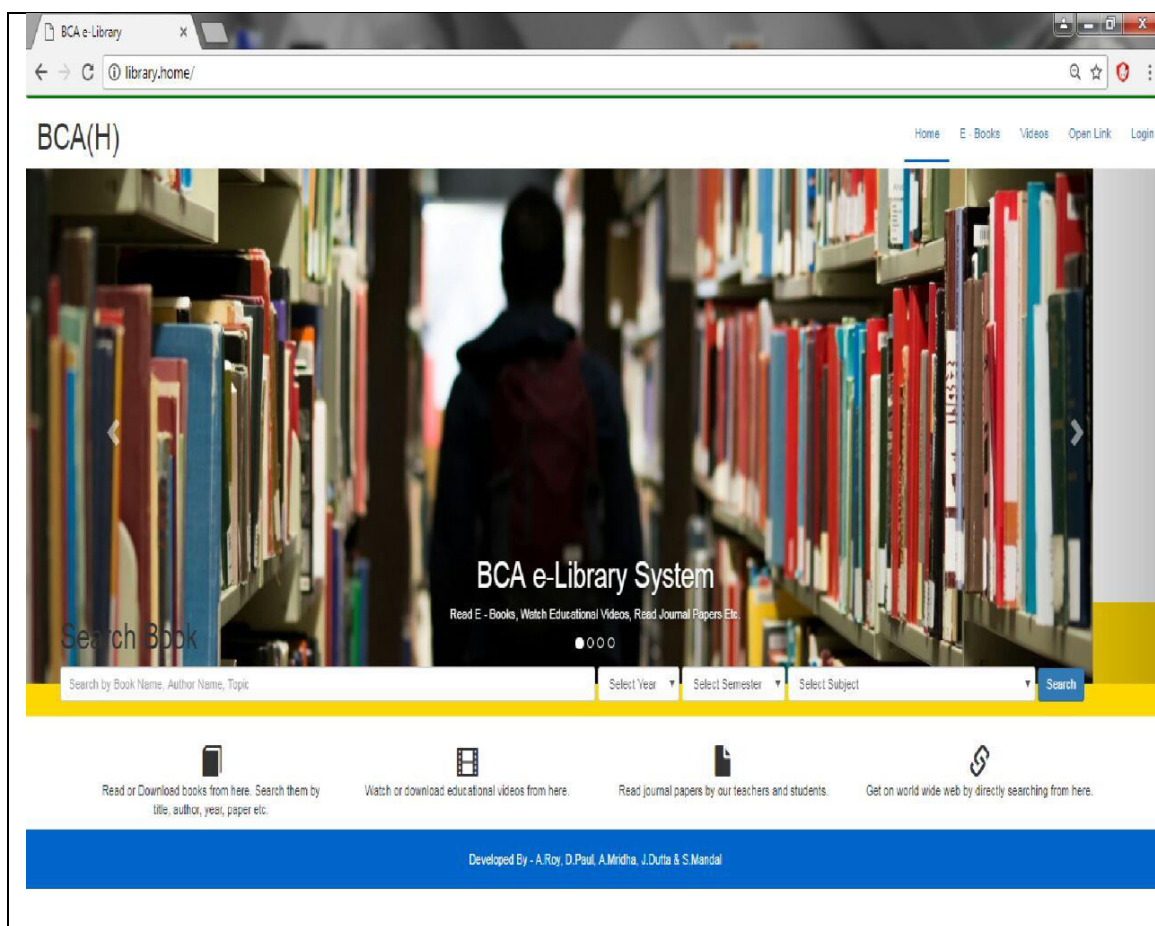
SEQUENCE DIAGRAM



CHAPTER 4

SYSTEM IMPLEMENTATION

4.1 Screenshot for homepage



4.2 Screenshot of e-books from user.

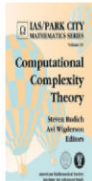



BCA e-Library x

library.home/ebook

BCA(H)

Home E-Books Videos Open Link Login

Search by Book Name, Author Name, Topic: Select Year Select Semester Select Subject

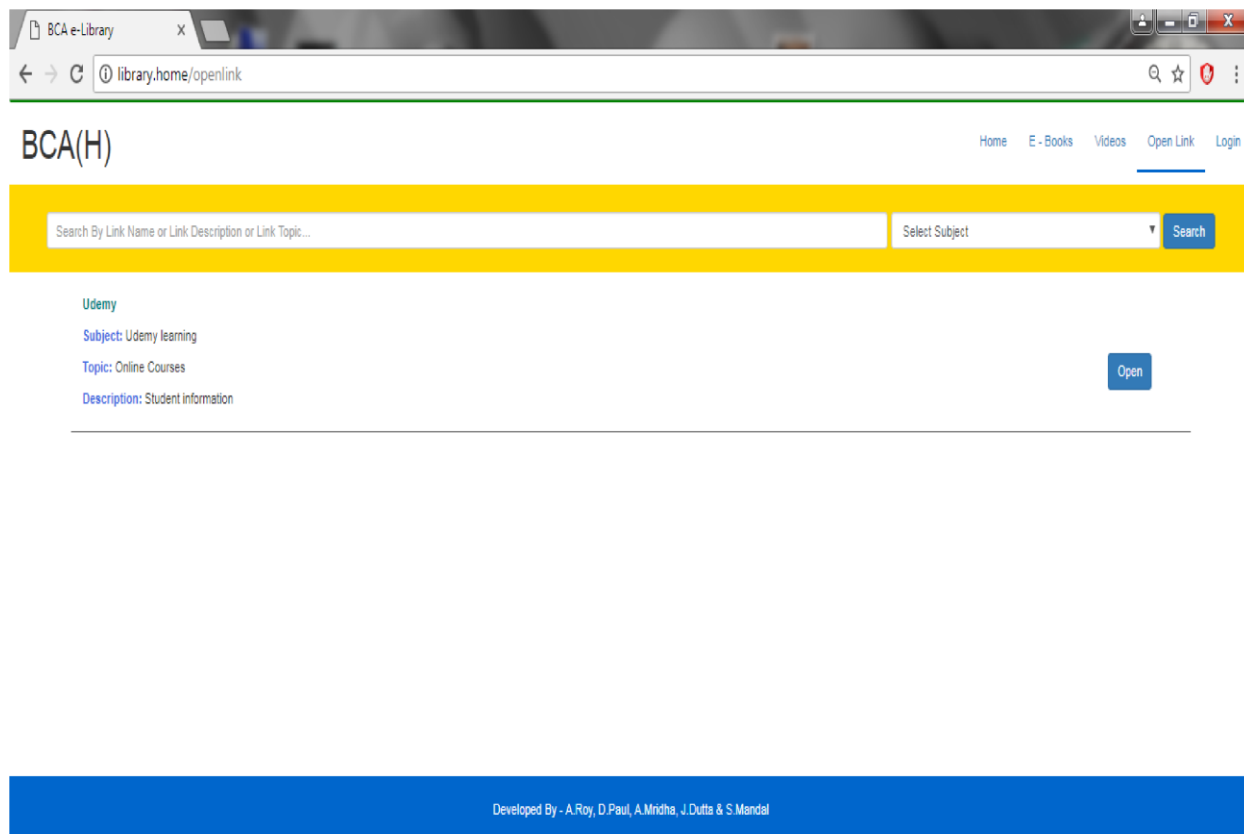
	<p>Computational Complexity Theory</p> <p>Author: Avi Wigderson, Steven Rudich</p> <p>Semester: 3 / Subject: Mathematics for Computing / Year: 2</p> <p>Topic: Mathematics for Computing</p> <p><input type="button" value="Read"/></p>
	<p>Computer Graphics</p> <p>Author: David J. Eick</p> <p>Semester: 3 / Subject: Graphics / Year: 2</p> <p>Topic: Introduction to Graphics</p> <p><input type="button" value="Read"/></p>
	<p>Computer Networking</p> <p>Author: Olivier Bonaventure</p> <p>Semester: 5 / Subject: Computer Network / Year: 3</p> <p>Topic: Computer Networking</p> <p><input type="button" value="Read"/></p>
	<p>Computer System Architecture</p> <p>Author: Guruseran Singh</p> <p>Semester: 2 / Subject: Computer Architecture / Year: 1</p> <p>Topic: Computer Architecture</p> <p><input type="button" value="Read"/></p>

4.3 Screenshot of videos from user

The screenshot shows a web browser window with the address bar displaying "library.home/videos". The page title is "BCA(H)". The navigation menu includes "Home", "E - Books", "Videos" (which is highlighted), "Open Link", and "Login". Below the navigation menu is a yellow search bar with the placeholder text "Search By Video Name or Video Description or Video Topic..." and a "Search" button. To the right of the search bar is a dropdown menu labeled "Select Subject". Below the search bar, there is a list of video tutorials, each with a title, views, subject, topic, description, and a "Play" button.

Video Title	Views	Subject	Topic	Description	Play Button
C tutorial	Views: 1	Subject: C Programming	Topic: Language C	Description: Student Information	Play
C++	Views: 1	Subject: C++	Topic: Language C++	Description: Student Information	Play
Computer Graphics Tutorial	Views: 0	Subject: Graphics	Topic: Computer Graphics	Description: Graphics Tutorial	Play
Computer Networking	Views: 0	Subject: Computer Network	Topic: Computer Networking for Beginners	Description: Fundamental Networking	Play

4.4 Screenshot of open-link from user



4.5 Screenshot of login for admin

BCA(H) library

Not secure | library.home/auth

Home E - Books Videos Open Link Login

Authentication

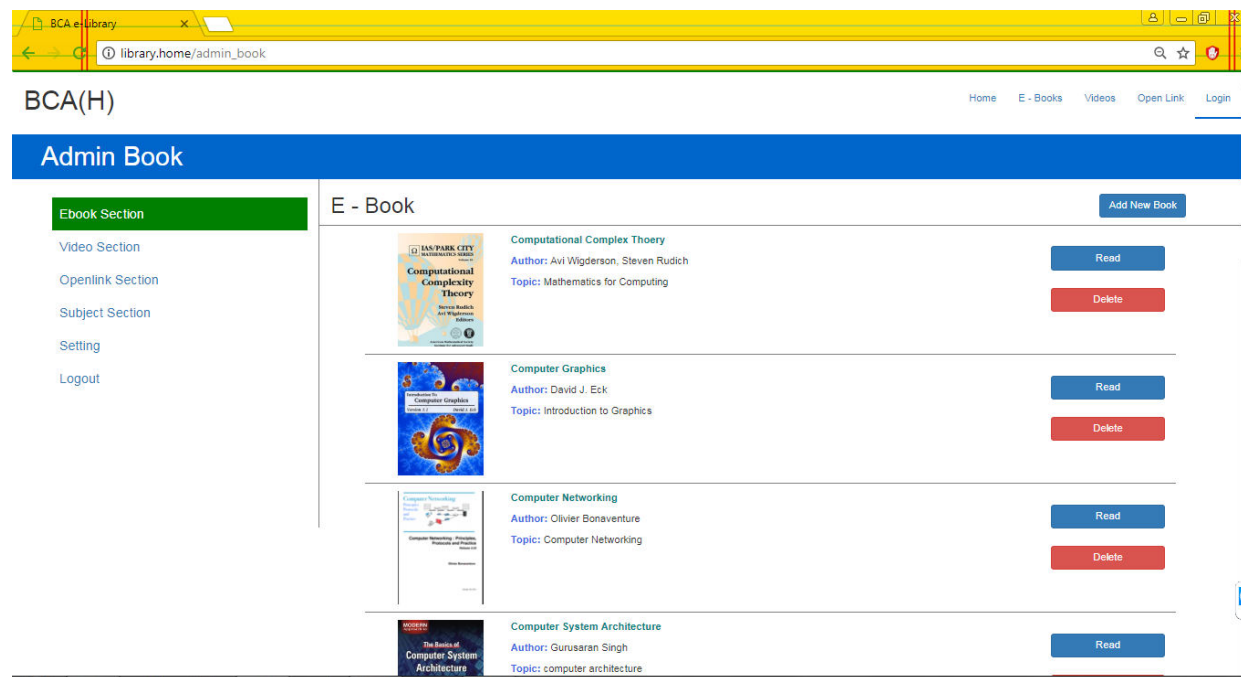
LOG IN

abir@bca.com

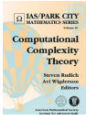
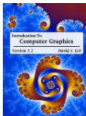


Log In

Developed By - A.Roy, D.Paul, A.Mridha, J.Dutta, S.Mandal & S.Giri

4.6 Screenshot of e-book from admin



The screenshot displays the 'Admin Book' interface of the BCA(H) system. The browser address bar shows 'library.home/admin_book'. The page features a blue header with the title 'Admin Book' and navigation links: Home, E - Books, Videos, Open Link, and Login. A left sidebar contains a green 'Ebook Section' button and links for Video Section, Openlink Section, Subject Section, Setting, and Logout. The main content area, titled 'E - Book', includes an 'Add New Book' button and a list of four e-books. Each entry shows a book cover, title, author, topic, and 'Read'/'Delete' buttons.

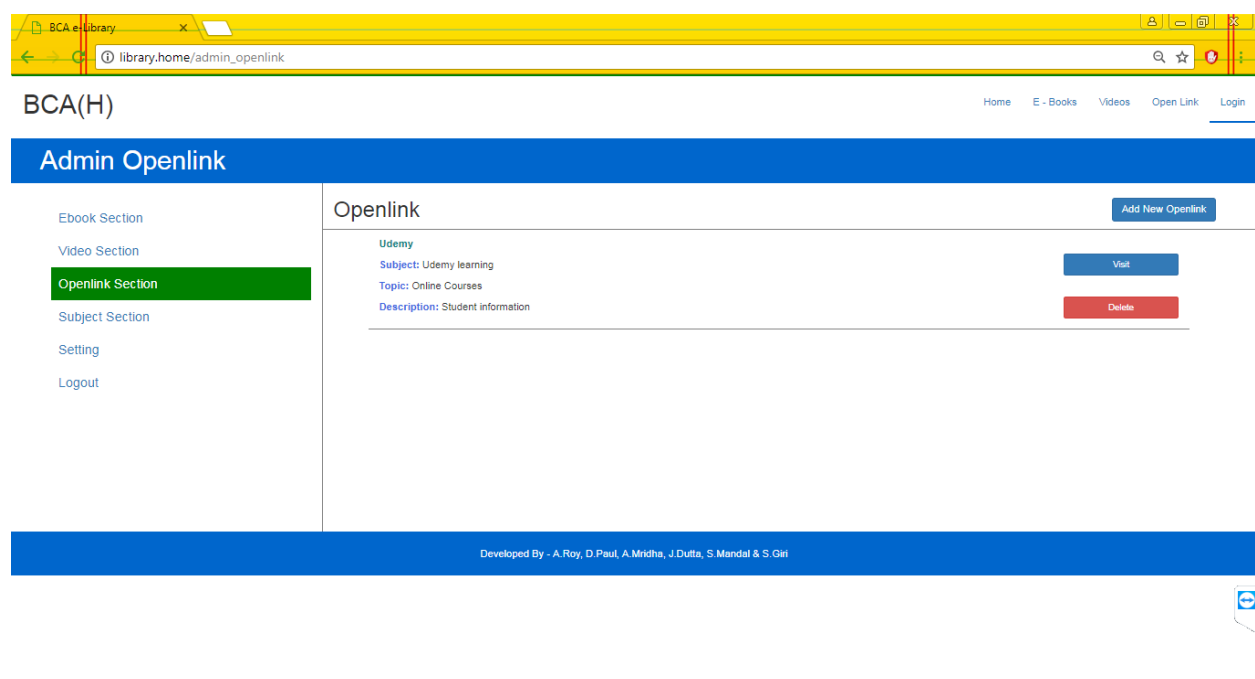
Book Cover	Title	Author	Topic	Read	Delete
	Computational Complexity Theory	Author: Avi Wigderson, Steven Rudich	Topic: Mathematics for Computing	Read	Delete
	Computer Graphics	Author: David J. Eick	Topic: Introduction to Graphics	Read	Delete
	Computer Networking	Author: Olivier Bonaventure	Topic: Computer Networking	Read	Delete
	Computer System Architecture	Author: Gurusaran Singh	Topic: computer architecture	Read	

4.7 Screenshot of videos from admin

The screenshot displays the 'Admin Video' section of the BCA(H) library management system. The interface includes a sidebar with navigation options: Ebook Section, Video Section (highlighted), Openlink Section, Subject Section, Setting, and Logout. The main content area, titled 'Video', lists four video entries. Each entry shows the video title, number of views, subject, topic, and description, with corresponding 'Play' and 'Delete' buttons. An 'Add New video' button is located in the top right corner of the video list.

Video	Views	Subject	Topic	Description	Play	Delete
C tutorial	1	C Programming	Language C	Student Information	Play	Delete
C++	1	C++	Language C++	Student Information	Play	Delete
Computer Graphics Tutorial	1	Graphics	Computer Graphics	Graphics Tutorial	Play	Delete
Computer Networking	1	Computer Network	Computer Networking for Beginners		Play	Delete

4.8 Screenshot of open-link from admin



4.9 Screenshot of subjects from admin

The screenshot shows a web application interface for managing subjects. The browser address bar displays `library.home/admin_subject`. The page title is **BCA(H)**. The navigation menu includes [Home](#), [E - Books](#), [Videos](#), [Open Link](#), and [Login](#). The main heading is **Admin Subject**. On the left, a sidebar menu lists: [Ebook Section](#), [Video Section](#), [Openlink Section](#), [Subject Section](#) (highlighted in green), [Setting](#), and [Logout](#). The main content area is titled **Openlink** and contains a form with a field for **Subject Name** and an [Add Subject](#) button. Below the form is a table of subjects, each with [Edit](#) and [Delete](#) buttons.

Subject Name	Edit	Delete
C Programming	Edit	Delete
C++	Edit	Delete
Computer Architecture	Edit	Delete
Computer Network	Edit	Delete
Data Structure	Edit	Delete
Database Management System	Edit	Delete
Graphics	Edit	Delete
Java	Edit	Delete
Mathematics for Computing	Edit	Delete
Operating System	Edit	Delete
Software Project Management & Quality Assurance	Edit	Delete
Udemy learning	Edit	Delete

5.0 Screenshot of settings from admin

BCA(H) Home E - Books Videos Open Link Login

Setting

Ebook Section

Video Section

Openlink Section

Subject Section

Setting

Logout

Setting

Old Password

New Password

Confirm Password

Submit

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5.1 MODULE DESCRIPTION

For Library Management System it is divided into the following Modules:

CHAPTER 5 **SYSTEM TESTING**

The aim of the system testing process was to determine all defects in our project .The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

- 1.Unit testing
- 2.integration testing

UNIT TESTING

Unit testing is undertaken when a module has been created and successfully reviewed. In order to test a single module we need to provide a complete environment i.e. besides the module we would require

- The procedures belonging to other modules that the module under test calls
- Non local data structures that module accesses
- A procedure to call the functions of the module under test with appropriate parameters

Unit testing was done on each and every module that is described under module description of chapter 4

1. Test For the admin module

- Testing admin login form-This form is used for log in of administrator of the system. In this we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask for username and password
- Student account addition- In this section the admin can verify student details from student academic info and then only add student details to main library database it contains add and delete buttons if user click add button data will be added to student database and if he clicks delete button the student data will be deleted

- Book Addition- Admin can enter details of book and can add the details to the main book table also he can view the books requests .

2. Test for Student login module

- Test for Student login Form-This form is used for log in of Student .In this we enter the libraryid, username and password if all these are correct student login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for libraryid, username and password.
- Test for account creation- This form is used for new account creation when student does not fill the form completely it asks again to fill the whole form when he fill the form fully it gets redirected to page which show waiting for conformation message as his data will be only added by administrator after verification.

3. Test for teacher login module-

Test for teacher login form- This form is used for logg in of teacher .In this we enter the username and password if all these are correct teacher login page will open other wise if any of data is wrong it will get redirected back to the login page and again ask for username and password.

INTEGRATION TESTING

In this type of testing we test various integration of the project module by providing the input .The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

CHAPTER 6

CONCLUSION & FUTURE SCOPE

This website provides a computerized version of library management system which will benefit the students as well as the staff of the library.

It makes entire process online where student can search books, staff can generate reports and do book transactions. It also has a facility for student login where student can login and can see status of books issued as well request for book or give some suggestions. It has a facility of teacher's login where teachers can add lectures notes and also give necessary suggestion to library and also add info about workshops or events happening in our college or nearby college in the online notice board.

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teachers as well as online assignments submission facility , a feature Of group chat where students can discuss various issues of engineering can be added to this project thus making it more interactive more user friendly and project which fulfills each users need in the best way possible.

CHAPTER 7

REFERENCES

- http://www.w3schools.com/html/html_intro.asp
http://www.Udemy.com/css/css_background.asp
http://www.w3schools.com/js/js_datatypes.asp

