

“ONLINE LIBRARY MANAGEMENT SYSTEM”

A

Practical

Project Report

submitted

in partial fulfillment

for the award of the Degree of

Bachelor of Technology

In Department of Computer Science & Engineering

(with specialization in Computer Engineering)



Supervisor:

Mrs. Rubal Gill

Sr. Lecturer

Department of Computer Science & Engineering

Submitted By:

Prakash Gurjar(12ESKCS737)

Sourabh Chourasia(12ESKCS754)

Gaurav Singh(13ESKCS901)

Ashutosh Jha(13ESKCS900)

VII Sem. CS-II (G2)

Department of Computer Science & Engineering

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Rajasthan Technical University, Kota

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**SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY,
MANAGEMENT & GRAMOTHAN, JAIPUR**

CERTIFICATE

I hereby declare that the work, which is being presented in the Project Report, entitled “**Online Library Management System**” in partial fulfillment for the award of Degree of “Bachelor of Technology” in Department of Computer Science & Engineering with Specialization in **Computer Engineering**, and submitted to the **Department of Computer Science & Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur**, Rajasthan Technical University is a record of my own investigations carried under the Guidance of **Mr. Neeraj Dhawan, Reader**, Department of , Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur.

Prakash Gurjar(12ESKCS737)
Sourabh Chourasia(12ESKCS754)
Gaurav Singh(13ESKCS901)
Ashutosh Jha(13ESKCS900)
VII Sem. CS-II (G2)
B.Tech. (Computer Science & Engineering)
Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Counter Signed by

Mrs. Rubal Gill
Sr. Lecturer
Department of Computer
Science & Engineering

Mr. Neeraj Dhawan
Reader
Department of Computer
Science & Engineering

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ABSTRACT

The project of “LIBRARY MANAGEMENT SYSTEM” gives us the complete information about the library. We can enter the record of new books and retrieves the details of books available in the library. We can issue the books to the students and maintain their records and can also check the total number of books available in the library stock. In this project we can maintain the late fine of students who returns the issued books after the due date. The system can keep track of Users, Librarians, Vendors, Books and relationship between them. Using JSP and JDBC we can create an internet based Graphical user interface and allows users and librarians to access the system remotely.

Tools & language used: JAVA, HTML, Java Script, MYSQL, JDBC, Eclipse

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:

1. Online book reservation.
2. Request column for librarian for providing new books.
3. Users login page where users can find books reserved by him/her and date of return.
4. A search column to search availability of books.
5. Admin panel where librarian is responsible to do all activities regarding to library and book.
6. Only admin can add users. No sign up option for students.
7. Admin is responsible to issue books and make an entry of return books.
8. All the works of library can be done via this online portal.

1.2 BACKGROUND OF PROJECT

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 record various transactions like issue of books, return of books, addition of new books, addition of new students etc.

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.

In addition, report module is also included in Online Library Management System. If user's position is admin, the user is able to generate different kinds of reports like lists of students registered, list of books, issue and return reports.

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.

1.3 OPERATION ENVIRONMENT

PROCESSOR	INTEL CORE PROCESSOR FOR BETTER PERFORMANCE
OPERATING SYSTEM	WINDOWS8, WINDOWS7, WINDOWS VISTA
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 analyze about the developing process of Online 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.

- **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. Sometimes due to some human error there may be a loss of records.
- 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 becomes 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

- **SYSTEM REQUIREMENTS**

NON FUNCTIONAL 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.

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 i.e.

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 registered by Librarian.
- 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 Admin (Librarian) 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 by Admin.

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 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.

1.5 ISSUE BOOKS AND RETURN BOOKS

DESCRIPTION OF FEATURE

This feature allows to issue and return books and also view reports of book issued.

Functional requirements

- System must be able to enter issue information in database.
- System must be able to update number of books.
- System must be able to search if book is available or not before issuing books
- System should be able to enter issue and return date information

1.6 EVENT ADDITION

DESCRIPTION OF FEATURE

This feature allows teacher and student to add information about various workshops being conducted in college and colleges nearby.

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 and Windows 8 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 jsp for sever side scripting.

1. **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

2.2 EXISTING VS PROPOSED SYSTEM

- i. Existing system does not have any facility of teachers login or student login where as proposed system will have a facility of student login as well as teacher's login.
- ii. Existing system does not have a facility of online reservation of books whereas proposed system has a facility of online reservation of books.
- iii. Existing system does not have any facility of online notice board where description of workshops happening in our college as well as nearby colleges is being provided.
- iv. Existing system does not have any facility to generate student reports as well book issue reports whereas proposed system provides librarian with a tool to generate reports.
- v. Existing system does not has any facility for book request and sugeestions where as in proposed system after logging in to their accounts student can request books as well as provide suggestions to improve library.

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 , JSP ,CSS, Java script

- **HTML- HTML or Hyper Text Markup Language** is the main markup language 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 for describing 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.

- **JSP- Java Server Pages (JSP)** is a technology that helps software developers create dynamically generated web pages based on HTML, XML, or other document types. Released in 1999 by Sun Microsystems, **JSP** is similar to PHP and ASP, but it uses the Java programming language.

To deploy and run Java Server Pages, a compatible web server with a servlet container, such as Apache Tomcat or Jetty, is required. Architecturally, JSP may be viewed as a high-level abstraction of Java servlets. JSPs are translated into servlets at runtime; each JSP servlet is cached and re-used until the original JSP is modified. JSP can be used independently or as the view component of a server-side model–view–controller design, normally with JavaBeans as the model and Java servlets (or a framework such as Apache Struts) as the controller. This is a type of Model 2 architecture. JSP allows Java code and certain pre-defined actions to be interleaved with static web markup content, such as HTML, with the resulting page being compiled and executed on the server to deliver a document. The compiled pages, as well as any dependent Java libraries, contain Java bytecode rather than machine code. Like any other Java program, they must be executed within a Java virtual machine(JVM) that interacts with the server's host operating system to provide an abstract, platform-neutral environment. JSPs are usually used to deliver HTML and XML documents, but through the use of OutputStream, they can deliver other types of data as well.

2.3.2 BACK END- The back end is designed using mysql which is used to design the databases



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

Database Tables

Table: category

S.No.	Field Name	Data Types	Length	Description
1.	Categoryid	Varchar	20	Unique identification id for category
2.	Categoryname	Varchar	30	Category's name

Table: users

S.No.	FieldName	Data Types	Length	Description
1.	Username	varchar	20	Name of user
2.	Fathername	varchar	20	Father's name
3.	Userid	varchar	20	Unique identification Id
4.	Password	varchar	15	Password
5.	Usertype	Enum		Type of user
6.	Address	varchar	255	Complete address of User
7.	Dob	Date		Date Of Birth
8.	Mobileno	varchar	15	Mobile no of user
9.	e-mail	varchar	50	E-Mail of user
10.	Exp. Date	Date (YYYY-MM-DD)		Registration Expiry Date
11.	Gender	Enum		Gender Of User

Table: login detail

S.No.	Field Name	Data Types	Length	Description
1.	Loginid	Varchar	20	Unique identification id for logindeatil
2.	Userid	Varchar	20	Identification id for user
3.	Usertype	Enum		Type of user
4.	Logindate	Date		Date of login
5.	Logintime	Time		Time of login
6.	Loginday	Varchar	10	Day of login

Table: publisher

S.No.	Field Name	Data Types	Length	Description
1.	Publisherid	varchar	20	Unique identification id for publisher
2.	Publishername	varchar	20	Publisher's name
3.	Address	varchar	255	Address of publisher
4.	City	varchar	30	City of publisher
5.	State	varchar	30	State of publisher
6.	Pin	varchar	10	Pin number
7.	Mobileno	varchar	15	Mobile no of publisher
8.	e-mail	varchar	50	E-Mail of publisher

Table: supplier

S.No.	Field Name	Data Types	Length	Description
1.	Supplierid	varchar	20	Unique identification id for supplier
2.	Suppliername	varchar	20	Supplier's name
3.	Publisherid	varchar	20	Publisher id
4.	Address	varchar	255	Address of supplier
5.	City	varchar	30	City of supplier
6.	State	varchar	30	State of supplier
7.	Pin	varchar	10	Pin number
8.	Mobileno	varchar	15	Mobile no of supplier
9.	e-mail	varchar	50	E-Mail of supplier

Table: staff

S.No.	Field Name	Data Types	Length	Description
1.	Userid	Varchar	20	Unique identification id for user
2.	Designation	Varchar	20	Designation for user
3.	Salary	Int		Salary of user
4.	Joiningdate	Date		Date of joining
5.	Workedtill	Time		Date of last worked day

Table: book

S.No.	Field Name	Data Types	Length	Description
1.	Bookid	varchar	20	Unique identification id for book
2.	Bookname	varchar	50	Book's name
3.	Categoryid	varchar	20	Identification id of category
4.	Supplierid	varchar	20	identification id of supplier
5.	Authorname	varchar	50	Author's name of book
6.	Isbn	varchar	20	ISBN number
7.	Editionno	int	05	Edition no of book
8.	Editionyear	int	05	Edition year of book
9.	Price	int	05	Price of book
10.	Description	varchar	255	Description about book
11.	Stock	int	10	No of books for this id

Table: query

S.No.	Field Name	Data Types	Length	Description
1.	Queryid	varchar	20	Unique identification id for query
2.	Userid	varchar	20	Identification id for user
3.	Subject	varchar	255	Subject for query
4.	Query	Text	65535	Query details
5.	Response	Text	65535	Response of query

Table: reservedbook

S.No.	Field Name	Data Types	Length	Description
1.	Reserveid	Varchar	20	Unique identification id for reserved book
2.	Userid	Varchar	20	Identification id for user
3.	Bookid	Varchar	20	Identification id for book
4.	Reserveddate	Date	20	Reserve date of book

Table: issued book

S.No.	Field Name	Data Types	Length	Description
1.	Issueid	Varchar	20	Unique identification id for issuedbook
2.	Userid	Varchar	20	Identification id for user
3.	Bookid	Varchar	20	Identification id for book
4.	Reserveddate	Date	20	Reserve date of book
5.	Issueddate	Date	255	Issue date of book
6.	tentative_return Date	Date	30	Tentative return date of book

Table: returned book

S.No.	Field Name	Data Types	Length	Description
1.	Returned	Varchar	20	Unique identification id for returnedbook
2.	Userid	Varchar	20	Identification id for user
3.	Bookid	Varchar	20	Identification id for book
4.	Reserveddate	Date	20	Reserve date of book
5.	Issueddate	Date	255	Issue date of book
6.	tentative_return Date	Date	30	Tentative return date of book
7.	actual_return Date	Date	30	Actual return date of book
8.	Fine	Int	10	Total fine on issued books
9.	Paidstatus	Enum	15	Status of fine payment

4.0 Uml Diagrams

4.1 ER-Diagram

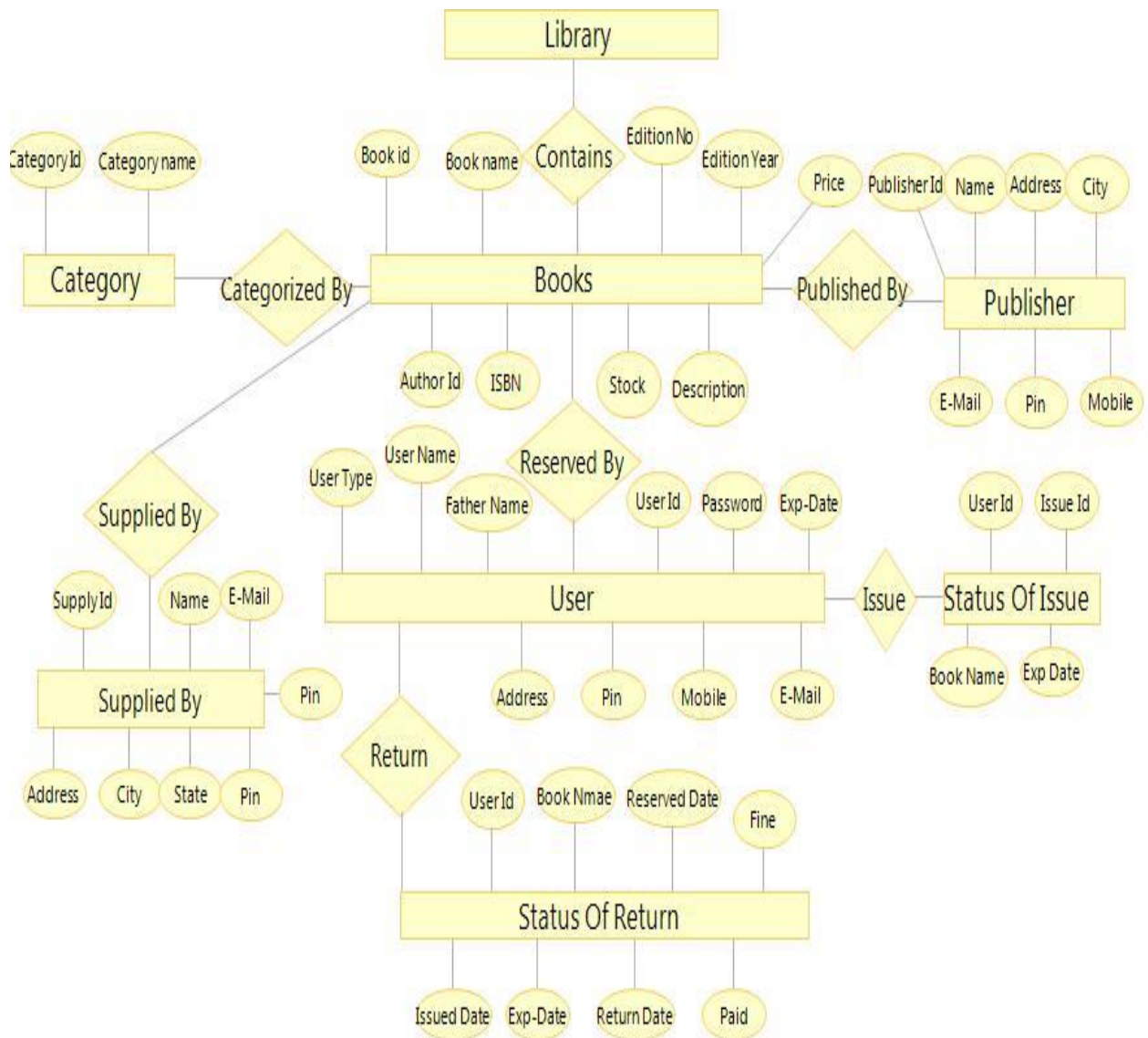


Figure 1

4.2 Use Case Diagram

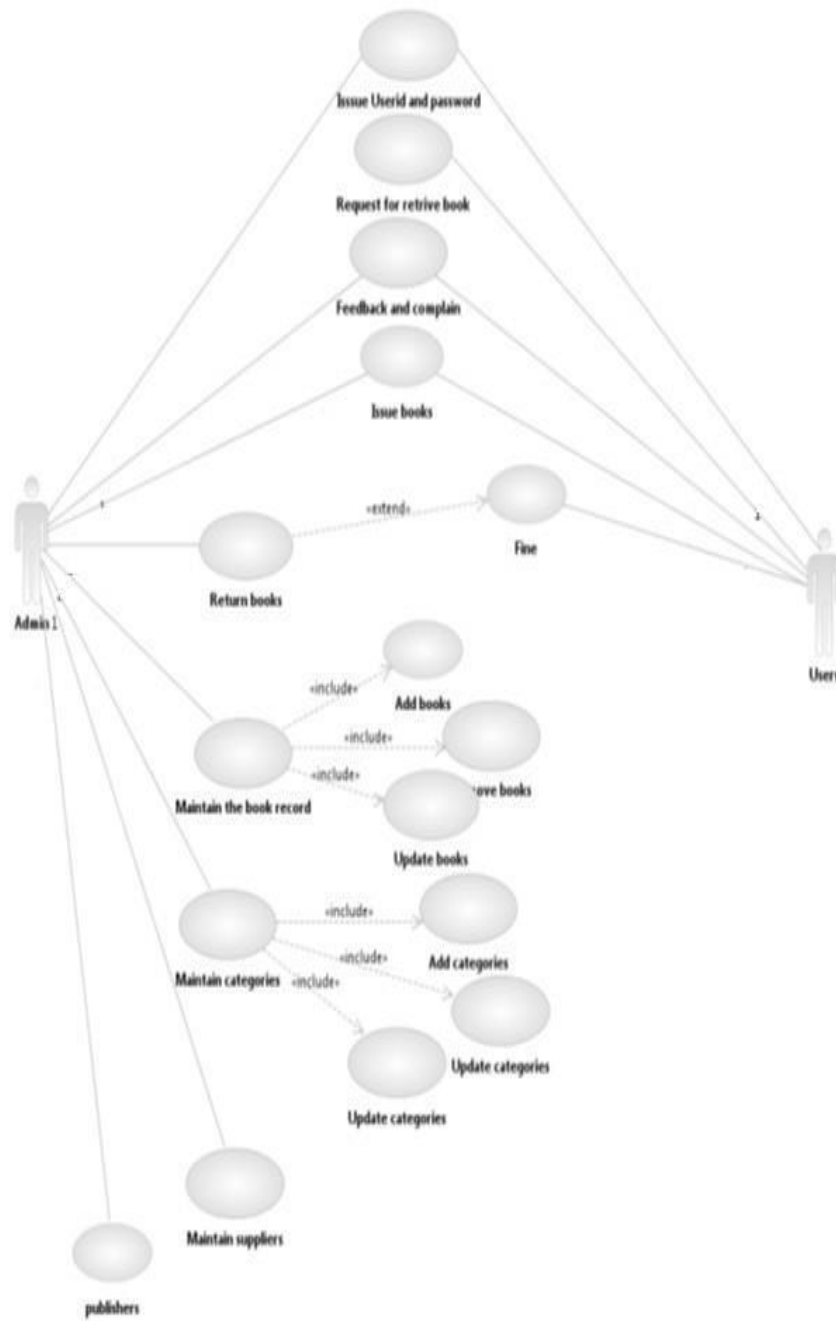


Figure 2

4.3 Activity Diagram

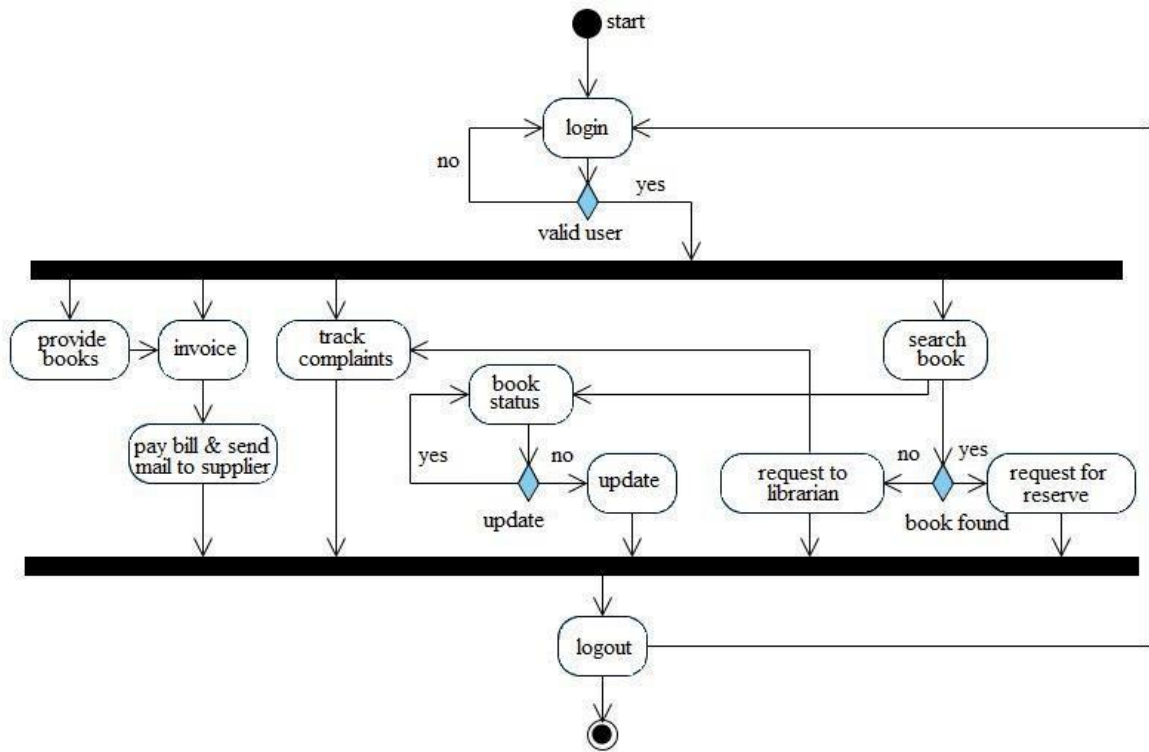


Figure 3

4.4 Data Flow Diagram

Context Level Diagram (Level 0):-

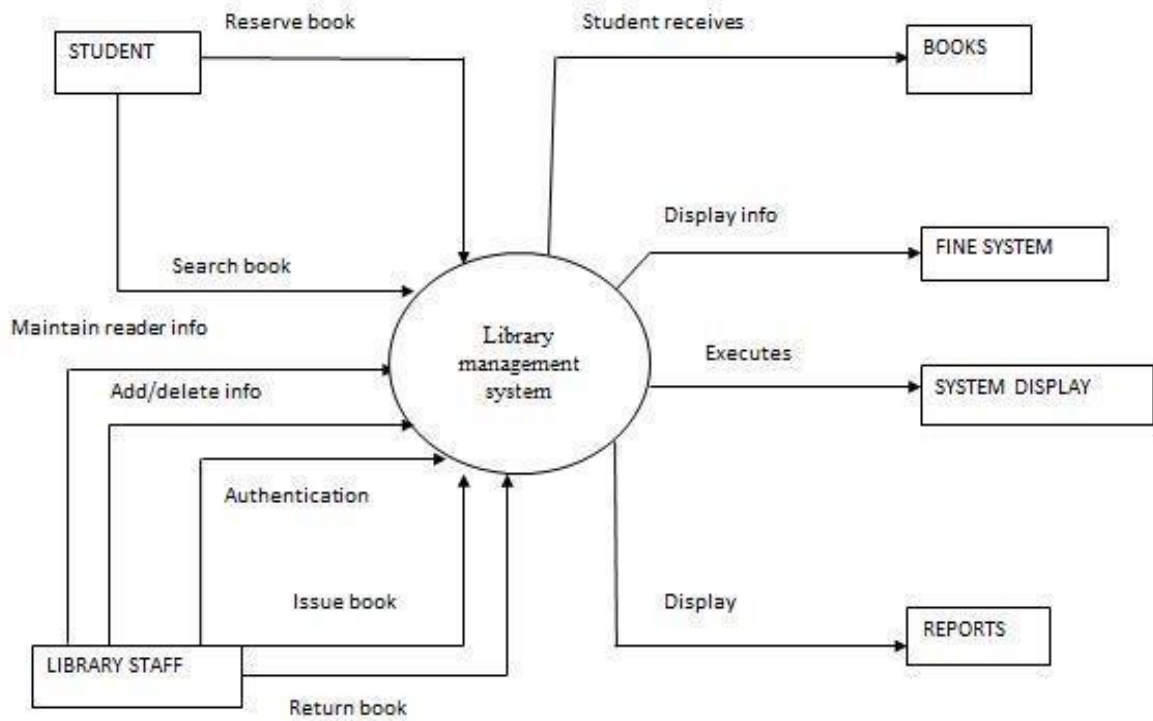


Figure 4

Level 1 DFD (For Student):-

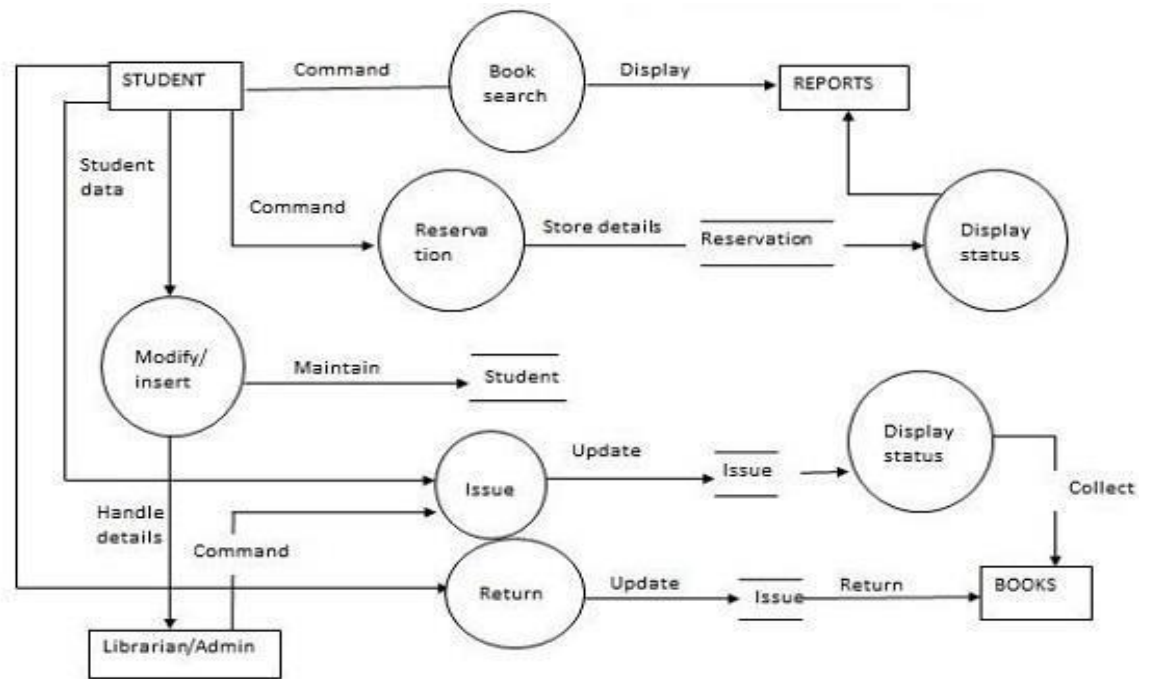


Figure 5

Level 1 DFD (For Librarian):-

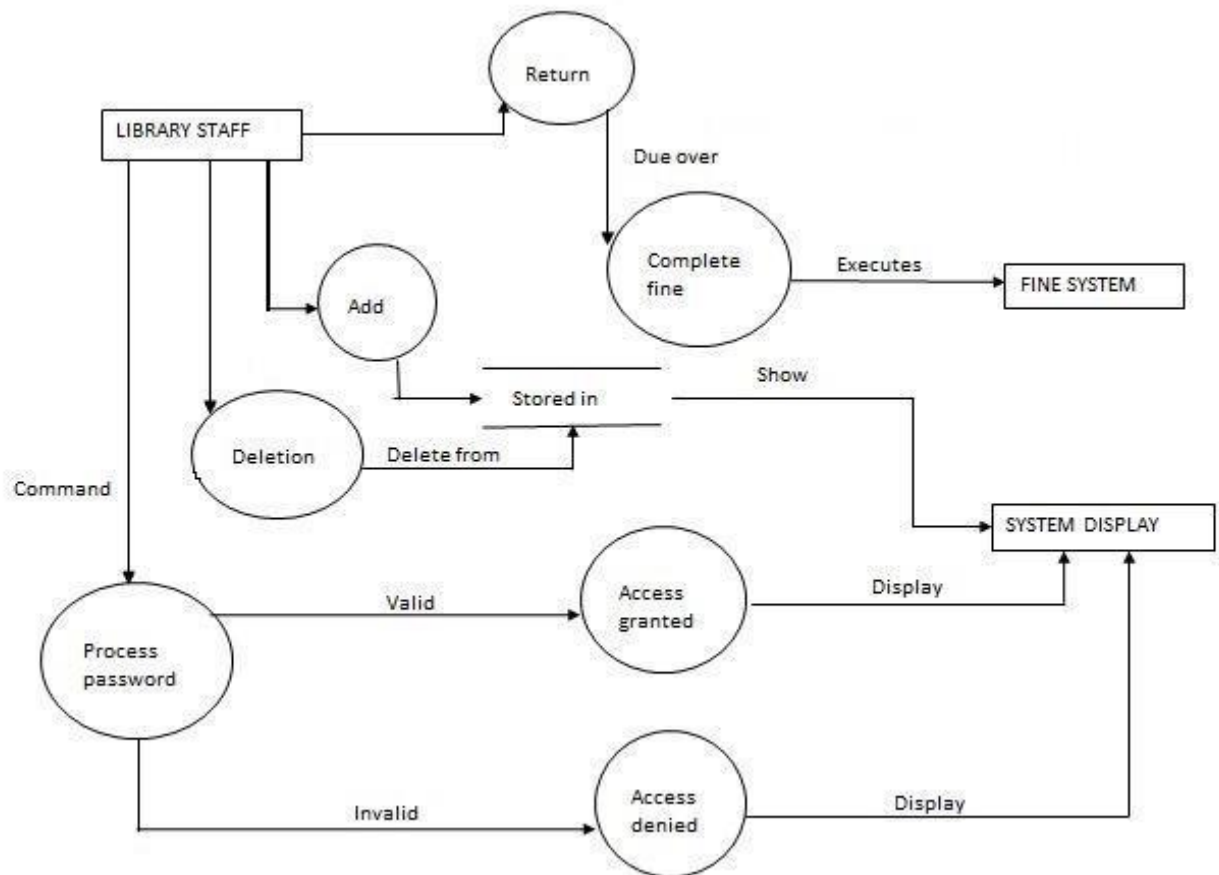


Figure 6

4.5 Sequence Diagram

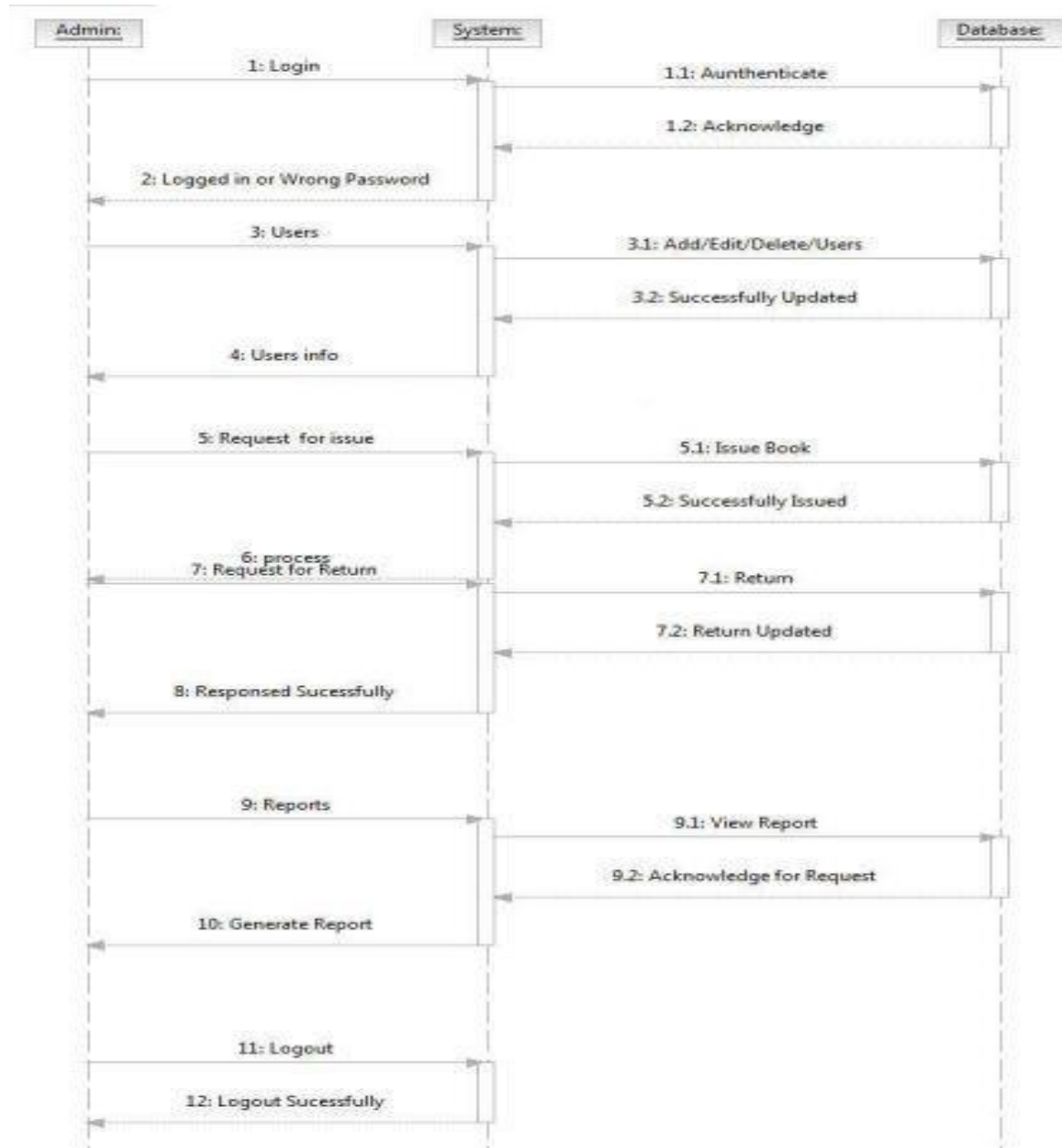


Figure 7

Sequence diagram of member searching book:-



Figure 8

4.6 Class Diagram

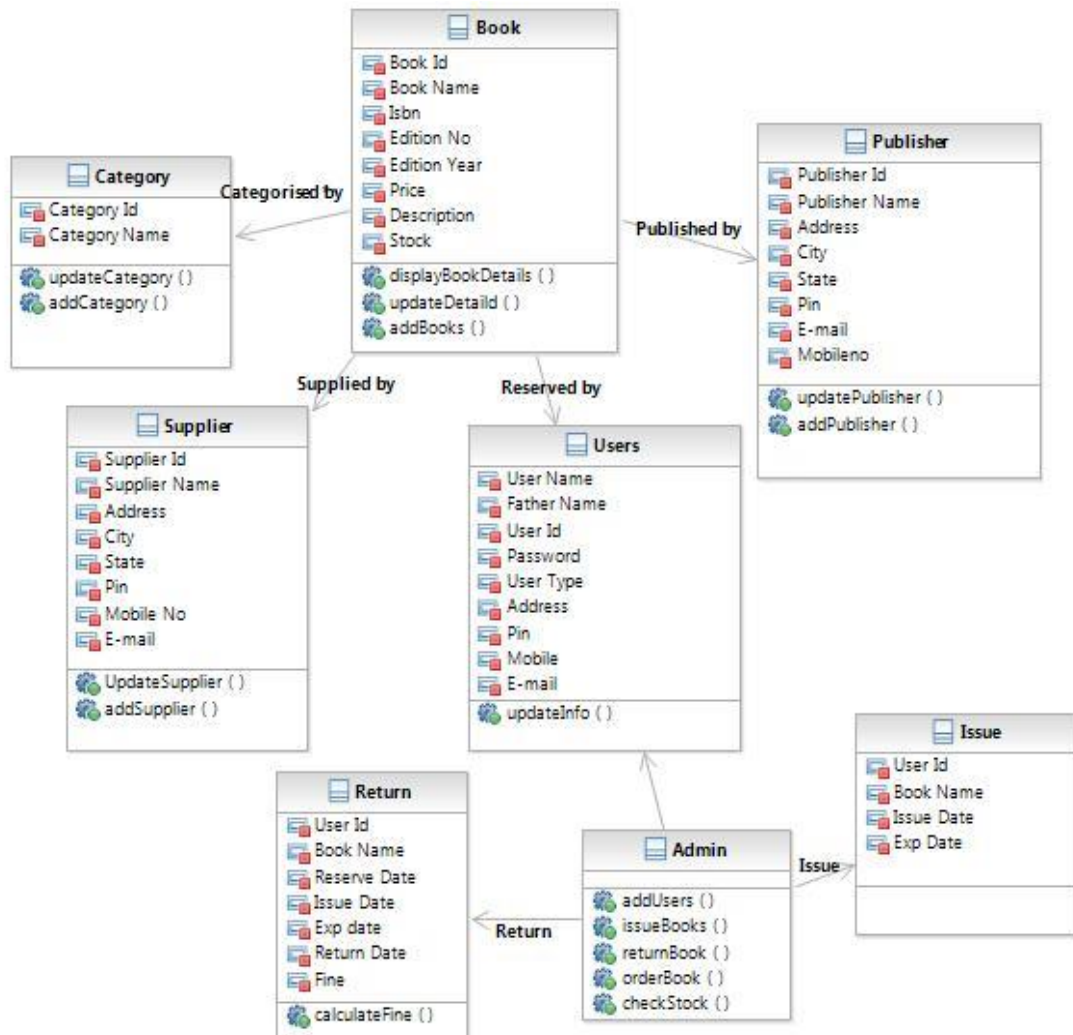


Figure 9

CHAPTER 4

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

4.1 UNIT TESTING

Unit testing is undertaken when a module has been created and succesfully reviewed .In order to test a single module we need to provide a complete environment ie 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

- ☐ 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.

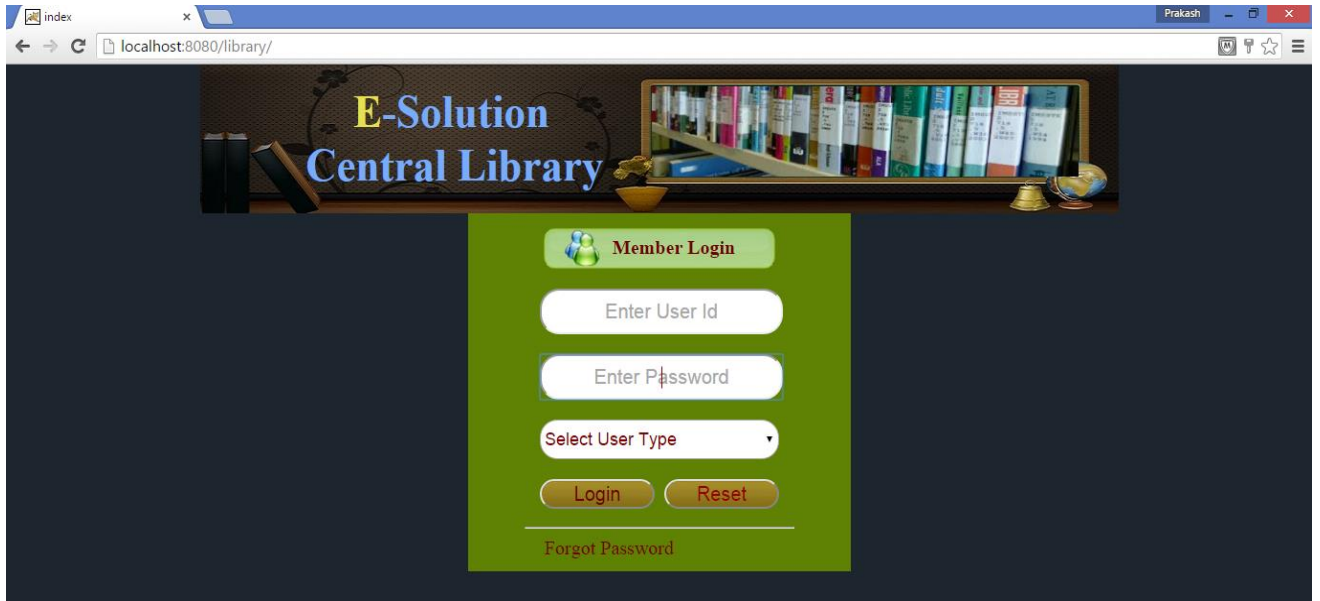
4.2 INTEGRATION TESTING

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 5

USER INTERFACES

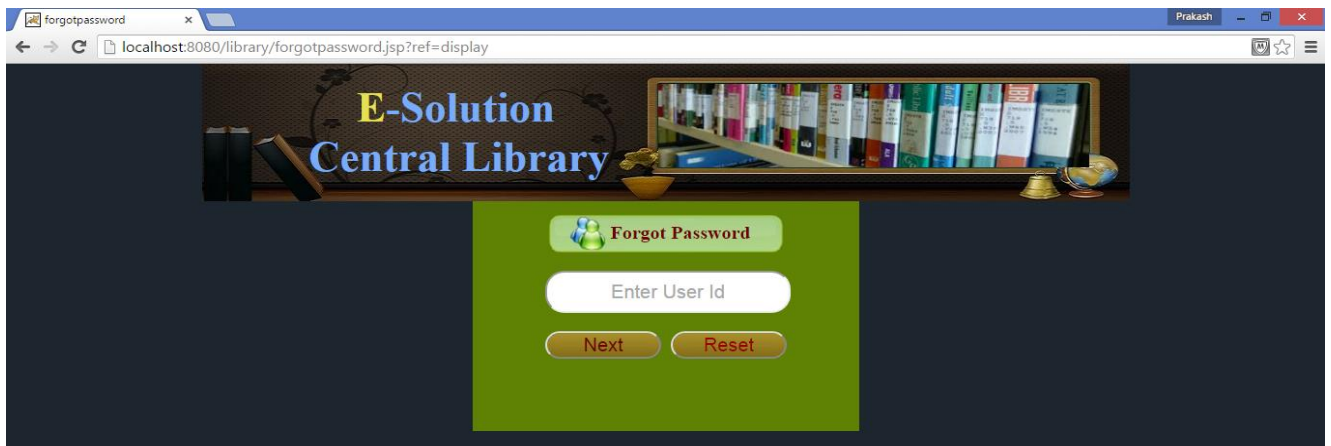
User Login Page:-



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/library/'. The page features a header banner with the text 'E-Solution Central Library' and an image of a bookshelf. Below the banner, there is a green login form. The form contains the following elements:

- A green button labeled 'Member Login' with a small icon of two people.
- A text input field labeled 'Enter User Id'.
- A text input field labeled 'Enter Password'.
- A dropdown menu labeled 'Select User Type'.
- Two orange buttons labeled 'Login' and 'Reset'.
- A link labeled 'Forgot Password' at the bottom of the form.

Forget password:-



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/library/forgotpassword.jsp?ref=display'. The page features a header banner with the text 'E-Solution Central Library' and an image of a bookshelf. Below the banner, there is a green form for the 'Forgot Password' process. The form contains the following elements:

- A green button labeled 'Forgot Password' with a small icon of a person.
- A text input field labeled 'Enter User Id'.
- Two orange buttons labeled 'Next' and 'Reset'.

Admin Login Page:-

The screenshot shows a web browser window with the URL `localhost:8080/library/admin/logout.jsp`. The page features a header with the library's name and a bookshelf image. The main content area is a green box with the following elements:

- Admin Login** (with a user icon)
-
-
-

Admin Home:-

The screenshot shows the Admin Home page with the URL `localhost:8080/library/admin/adminhome.jsp?ref=display`. The page includes a navigation menu and a main content area.

Navigation Menu:

- HOME
- CATEGORY
- PUBLISHER
- BOOK
- SUPPLIER
- USERS
- STOCK
- REPORTS
- QUERY
- LOG OUT

Left Sidebar:

- See Login Details
- Send Reminder Mail
- Send Fine Mail
- Refresh

Main Content Area:

Hello Welcome To "The Central Library" Admin Panal.

Admin(Librarian) is responsible to manage all the activities that are conducting in library like issuing book, adding book information, add users, generate reports.

- All the process of issuing book must be done via online portal of "The Central Library".
- To issue a book first user have to reserve a book via online.
- After this a user can get its issued book from librarian.
- The book is issued for the period of 60 days, after that there is a fine of 5 rs per day.
- A user an reserved and issued only 5 books at a time.
- Fine must be paid at the time of returning book.

Footer:

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
Copyright © 2015 The Central Library All Rights Reserved

Category:-

logincheck

category

Prakash

localhost:8080/library/admin/category.jsp?ref=display

E-Solution
Central Library

HOME

CATEGORY

PUBLISHER

BOOK

SUPPLIER

USERS

STOCK

REPORTS

QUERY

LOG OUT

Add

Search

Refresh

Category Id	Category Name		
olmscat100	Agriculture	Edit	Delete
olmscat101	Architecture	Edit	Delete
olmscat102	Business and Management	Edit	Delete
olmscat103	Engineering	Edit	Delete
olmscat104	Fun and Games	Edit	Delete
olmscat105	History	Edit	Delete
olmscat106	Health, Mind and Body	Edit	Delete
olmscat107	Medical	Edit	Delete
olmscat108	Novel	Edit	Delete
olmscat109	Politics	Edit	Delete
olmscat110	Religion	Edit	Delete

Publisher:-

logincheck

publisher

Prakash

localhost:8080/library/admin/publisher.jsp?ref=display

E-Solution
Central Library

HOMECATEGORYPUBLISHERBOOKSUPPLIERUSERSSTOCKREPORTSQUERYLOG OUT

Add

Search

Refresh

Publisher Id	Publisher Name				
olmspub100	Softback Publishers	Details	Edit	Delete	Distributers
olmspub101	The MaGraw Hill Education Pvt. Ltd.	Details	Edit	Delete	Distributers
olmspub102	Genius Publications(INDIA)	Details	Edit	Delete	Distributers
olmspub103	Aashirwad Publication Pvt. Ltd.	Details	Edit	Delete	Distributers
olmspub104	S. Chand and Co. Ltd	Details	Edit	Delete	Distributers
olmspub105	Mind Feel Publishers	Details	Edit	Delete	Distributers
olmspub106	Jaypee Brothers Medical Pvt. Ltd.	Details	Edit	Delete	Distributers
olmspub107	Ratna Sagar Pvt. Ltd.	Details	Edit	Delete	Distributers
olmspub108	Summertown	Details	Edit	Delete	Distributers

Add Publisher:-

The screenshot shows the 'Add Publisher' form in the E-Solution Central Library admin interface. The browser address bar shows the URL: localhost:8080/library/admin/publisher.jsp?ref=add. The form is titled 'Add Publisher' and includes a 'Search' button and a 'Refresh' button. The form fields are as follows:

Field	Value
Publisher Id	olmspub111
Publisher Name	Enter Publisher Name
Publisher Address	Enter Publisher Address
City	Enter City Name
State	Select State
PIN	Enter Publisher's Pin
Phone No.	Enter Publisher's Phone No.
E-Mail	Enter Publisher's E-Mail
Save	Reset

At the bottom of the page, there is a navigation bar with links: Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out. Below the navigation bar, the copyright notice reads: Copyright © 2015 The Central Library All Rights Reserved.

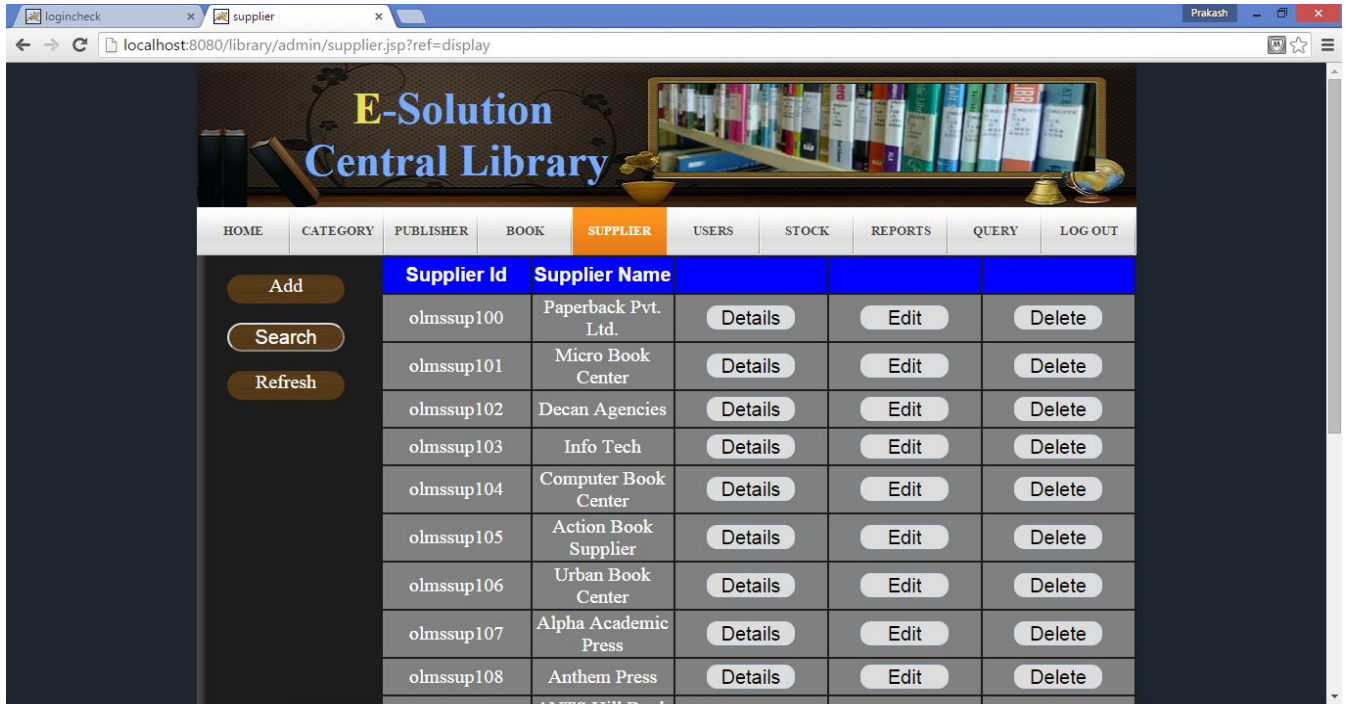
Book:-

The screenshot shows the 'Book' management page in the E-Solution Central Library admin interface. The browser address bar shows the URL: localhost:8080/library/admin/book.jsp?ref=display. The page features a header with the text 'E-Solution Central Library' and a navigation bar with links: Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out. The main content area displays a table of books with the following data:

Book Id	Book Name	Author Name			
olmsbook100	Hardware Security	Rajat Shubra	Details	Edit	Delete
olmsbook101	Bride Engineering	Jim J. Zhao	Details	Edit	Delete
olmsbook102	Java	E. Balagurusamy	Details	Edit	Delete
olmsbook103	Basic First Add	Ravi Kumar	Details	Edit	Delete
olmsbook104	Wild Flowers In Bed Of Rocks	Sharmista Basu	Details	Edit	Delete
olmsbook105	Software Engineering	Deepak Jain	Details	Edit	Delete
olmsbook106	Algorithms	Harsh Bhasin	Details	Edit	Delete
olmsbook107	Managing Big Data	Chandrakant Niakodi	Details	Edit	Delete

On the left side of the table, there are search and filter options: 'Add', 'Search', 'Via Id' (with an input field 'Enter Book Id' and a 'Go' button), 'Via Name', and 'Refresh'.

Supplier:-



logincheck x supplier x Prakash

localhost:8080/library/admin/supplier.jsp?ref=display

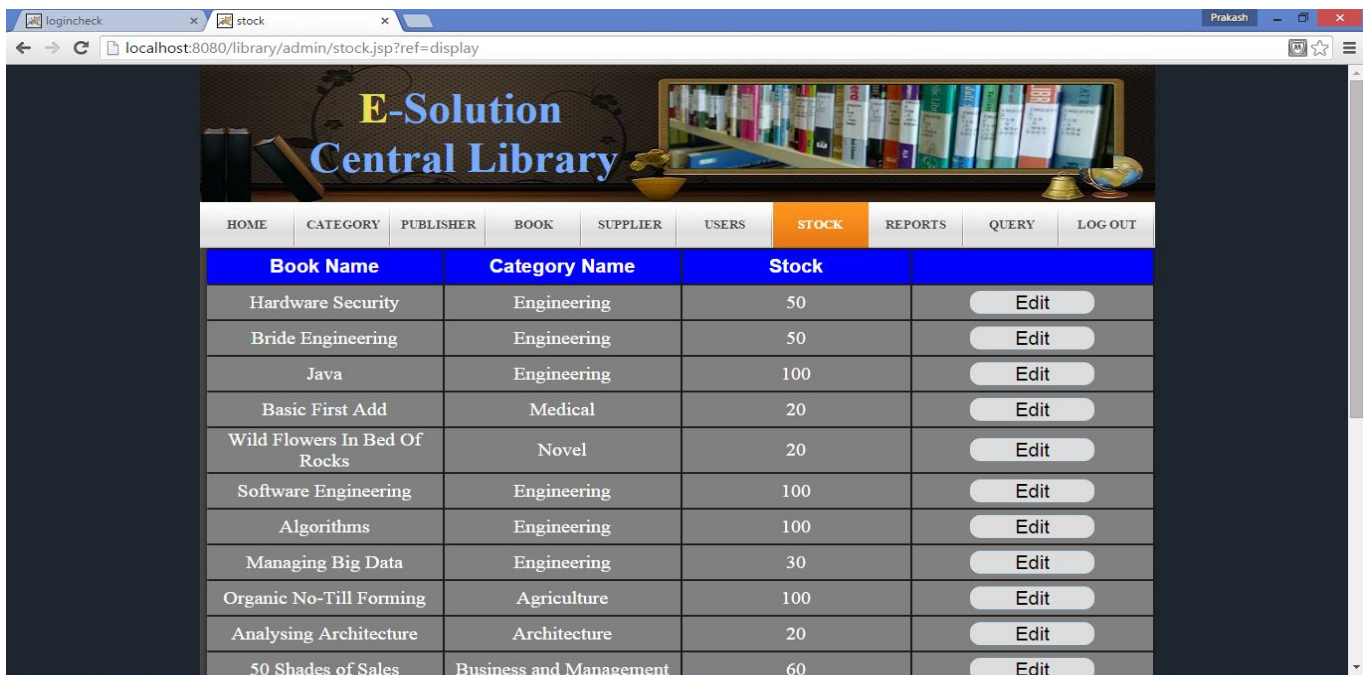
E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK **SUPPLIER** USERS STOCK REPORTS QUERY LOG OUT

Add Search Refresh

Supplier Id	Supplier Name			
olmssup100	Paperback Pvt. Ltd.	Details	Edit	Delete
olmssup101	Micro Book Center	Details	Edit	Delete
olmssup102	Decan Agencies	Details	Edit	Delete
olmssup103	Info Tech	Details	Edit	Delete
olmssup104	Computer Book Center	Details	Edit	Delete
olmssup105	Action Book Supplier	Details	Edit	Delete
olmssup106	Urban Book Center	Details	Edit	Delete
olmssup107	Alpha Academic Press	Details	Edit	Delete
olmssup108	Anthem Press	Details	Edit	Delete

Stock:-



logincheck x stock x Prakash

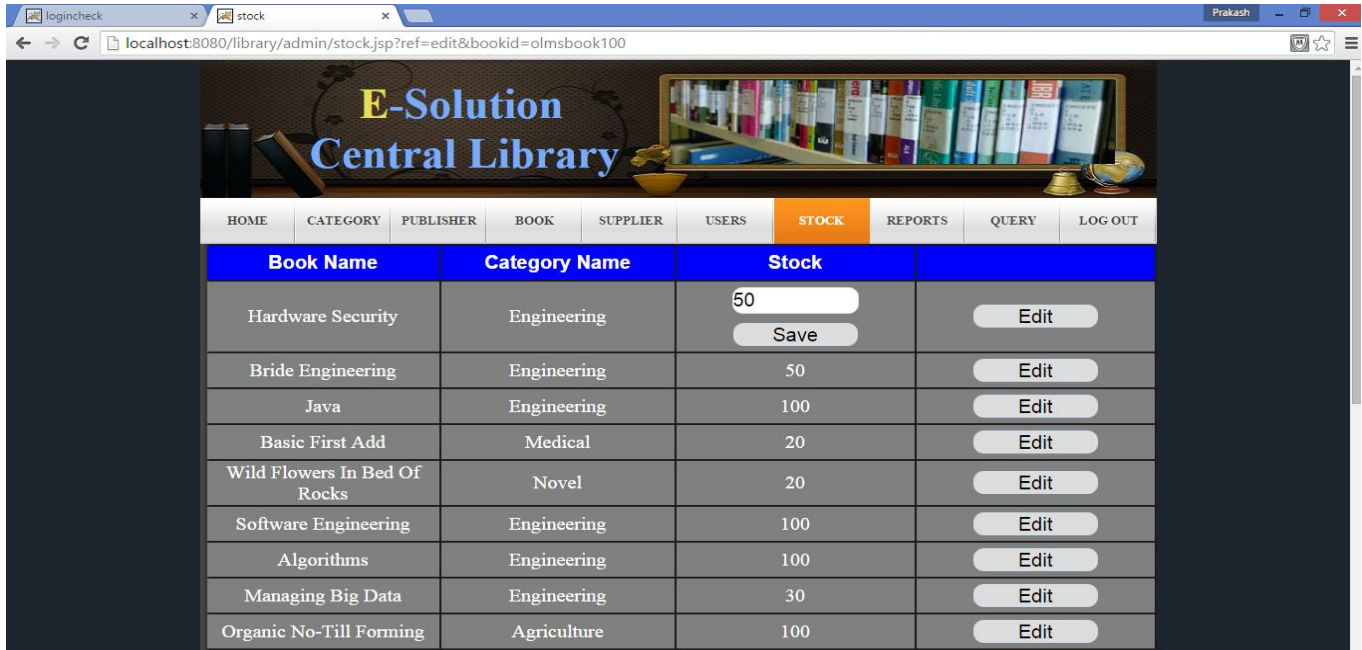
localhost:8080/library/admin/stock.jsp?ref=display

E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK SUPPLIER USERS **STOCK** REPORTS QUERY LOG OUT

Book Name	Category Name	Stock	
Hardware Security	Engineering	50	Edit
Bride Engineering	Engineering	50	Edit
Java	Engineering	100	Edit
Basic First Add	Medical	20	Edit
Wild Flowers In Bed Of Rocks	Novel	20	Edit
Software Engineering	Engineering	100	Edit
Algorithms	Engineering	100	Edit
Managing Big Data	Engineering	30	Edit
Organic No-Till Forming	Agriculture	100	Edit
Analysing Architecture	Architecture	20	Edit
50 Shades of Sales	Business and Management	60	Edit

Stock Editing:-



E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK SUPPLIER USERS **STOCK** REPORTS QUERY LOG OUT

Book Name	Category Name	Stock	
Hardware Security	Engineering	<input type="text" value="50"/>	<input type="button" value="Edit"/>
		<input type="button" value="Save"/>	
Bride Engineering	Engineering	50	<input type="button" value="Edit"/>
Java	Engineering	100	<input type="button" value="Edit"/>
Basic First Add	Medical	20	<input type="button" value="Edit"/>
Wild Flowers In Bed Of Rocks	Novel	20	<input type="button" value="Edit"/>
Software Engineering	Engineering	100	<input type="button" value="Edit"/>
Algorithms	Engineering	100	<input type="button" value="Edit"/>
Managing Big Data	Engineering	30	<input type="button" value="Edit"/>
Organic No-Till Forming	Agriculture	100	<input type="button" value="Edit"/>

Reserve Book Report:-



E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK SUPPLIER USERS STOCK **REPORTS** QUERY LOG OUT

Reserved Books Issued Books Returned Books

Reserve Id	User Id	Book Name	Reserve Date	
10000	olmsusers103	Hardware Security	2015-12-21	<input type="button" value="Issue Book"/>
10001	olmsusers103	Software Engineering	2015-12-21	<input type="button" value="Issue Book"/>
10002	olmsusers103	Analysing Architecture	2015-12-21	<input type="button" value="Issue Book"/>
10003	olmsusers103	Auroville Architecture	2015-12-21	<input type="button" value="Issue Book"/>
10004	olmsusers103	Basic First Add	2015-12-21	<input type="button" value="Issue Book"/>

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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Issued Book Report:-

The screenshot shows a web browser window with the URL `localhost:8080/library/admin/reports.jsp?ref=issued`. The page features a header with the library name and a navigation menu. Below the menu, there are tabs for 'Reserved Books', 'Issued Books' (which is active), and 'Returned Books'. A search bar is located below these tabs. The main content area displays a table of issued books with columns for Issue Id, User Id, Book Name, Reserve Date, Issue Date, Tentative Return Date, and a 'Return Book' button. The footer contains a navigation link and a copyright notice.

Issue Id	User Id	Book Name	Reserve Date	Issue Date	Tentative Return Date	
10001	olmsusers103	Software Engineering	2015-12-21	2015-12-21	2016-02-19	<button>Return Book</button>
10002	olmsusers103	Analysing Architecture	2015-12-21	2015-12-21	2016-02-19	<button>Return Book</button>
10003	olmsusers103	Auroville Architecture	2015-12-21	2015-12-21	2016-02-19	<button>Return Book</button>

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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Return Book Report:-

The screenshot shows a web browser window with the URL `localhost:8080/library/admin/reports.jsp?ref=returned`. The page layout is similar to the previous one, but the 'Returned Books' tab is active. The table below the search bar has columns for Return Id, User Id, Book Name, Reserve Date, Issue Date, Tentative Return Date, Actual Return Date, Fine, and a 'Delete' button. The footer is identical to the previous screenshot.

Return Id	User Id	Book Name	Reserve Date	Issue Date	Tentative Return Date	Actual Return Date	Fine	
10001	olmsusers103	Software Engineering	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0	<button>Delete</button>
10002	olmsusers103	Analysing Architecture	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0	<button>Delete</button>

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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Return Book Search:-

E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK SUPPLIER USERS STOCK **REPORTS** QUERY LOG OUT

Reserved Books Issued Books Returned Books

Search

Enter Return Id

Go

Return Id	User Id	Book Name	Reserve Date	Issue Date	Tentative Return Date	Actual Return Date	Fine	
10001	olmsusers103	Software Engineering	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0	Delete
10002	olmsusers103	Analysing Architecture	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0	Delete

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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Query:-

E-Solution Central Library

HOME CATEGORY PUBLISHER BOOK SUPPLIER USERS STOCK REPORTS **QUERY** LOG OUT

Query Id	User Id	Query Subject	Query Description	Query Response		
100001	olmsusers103	Related to my id card	My id card has been lost. Kindly issue a new id card.	null	Send Response	Delete

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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Query Response:-

aboutus x query x Prakash

localhost:8080/library/admin/query.jsp?ref=response&queryid=100001&userid=olmsusers103&subject=Related%20to%20my%20id%20card&response=null

E-Solution Central Library

HOME	CATEGORY	PUBLISHER	BOOK	SUPPLIER	USERS	STOCK	REPORTS	QUERY	LOG OUT
------	----------	-----------	------	----------	-------	-------	---------	-------	---------

Query Id	100001
User Id	olmsusers103
Query Subject	Related to my id card
Response	null
Send	Reset

Home | Category | Publisher | Book | Supplier | Users | Stock | Reports | Query | Log Out
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User Main:-


1.

home x AdminHome x Prakash

localhost:8080/library/home.jsp?ref=display

E-Solution Central Library

HOME	PROFILE	BOOK SEARCH	HISTORY	ABOUT US	QUERY	LOG OUT
------	---------	-------------	---------	----------	-------	---------



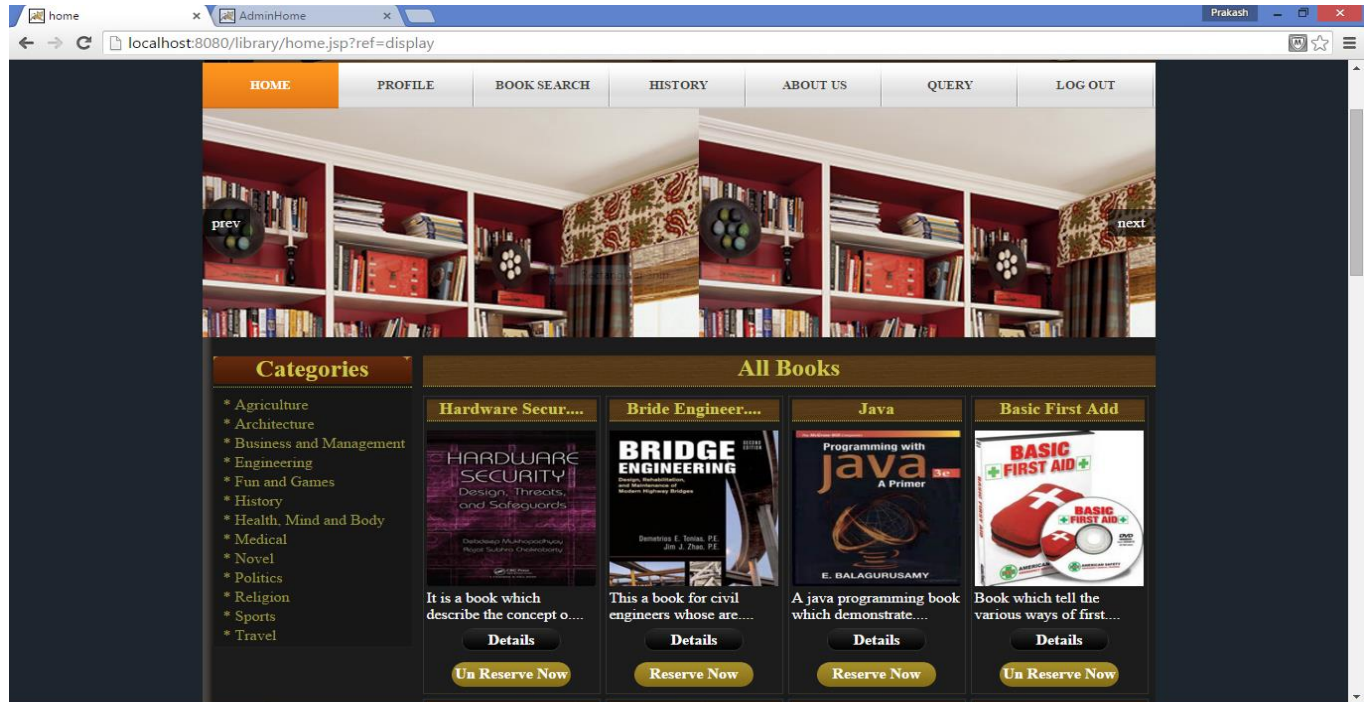
Categories

- * Agriculture
- * Architecture
- * Business and Management
- * Engineering
- * Fun and Games
- * History
- * Health, Mind and Body

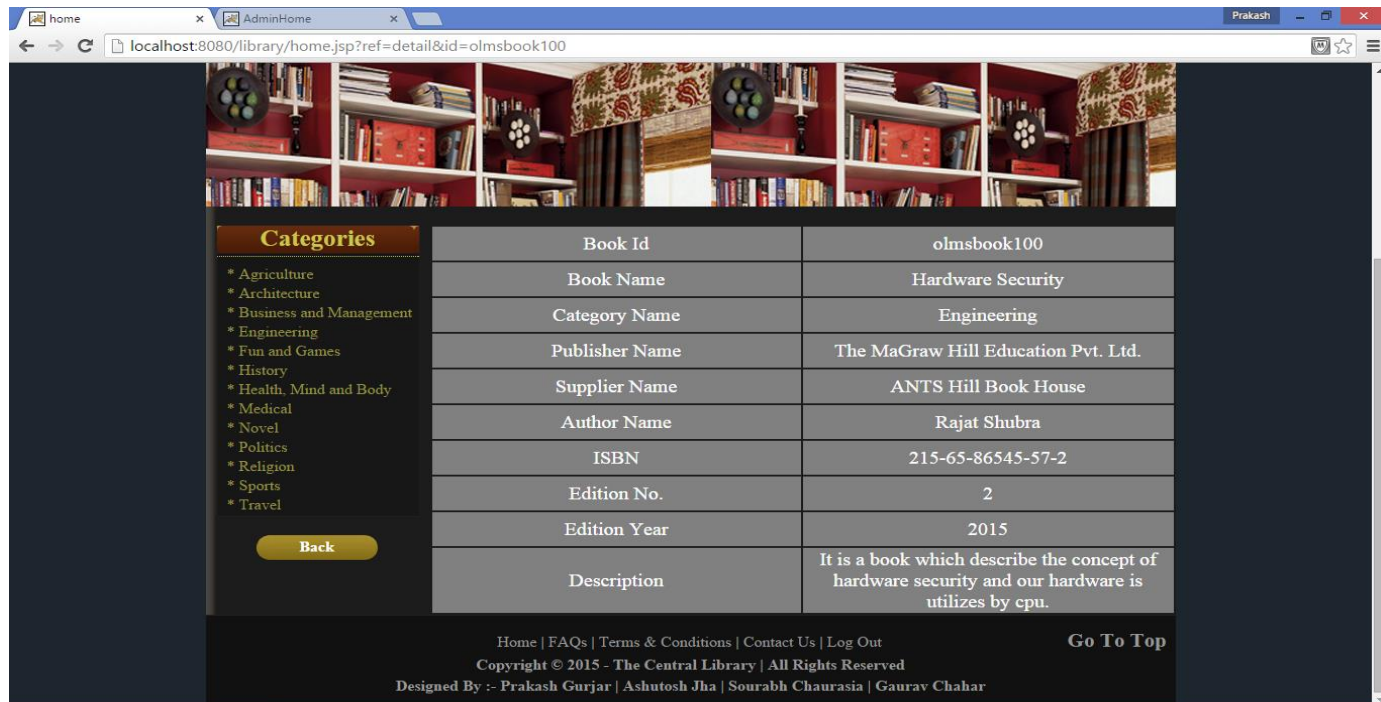
All Books

Hardware Secur....	Bride Engineer...	Java	Basic First Add
HARDWARE SECURITY Design, Threats, and Safeguards	BRIDGE ENGINEERING Design, Analysis, and Construction	Programming with Java A Primer	BASIC FIRST AID

2.



Book Details:-



User Profile:-

profile x users x Prakash

localhost:8080/library/profile.jsp?ref=display

Categories

- * Agriculture
- * Architecture
- * Business and Management
- * Engineering
- * Fun and Games
- * History
- * Health, Mind and Body
- * Medical
- * Novel
- * Politics
- * Religion
- * Sports
- * Travel

User Id	olmsusers103
User Name	Prakash Gurjar
Father's Name	Jagdish Prasad
Date OF Birth	1994-04-27
Gender	Male
User Type	Staff
Address	jaipur,rajasthan
Mobile No	9509889840
E-Mail	gurjarprakash007@gmail.com
Valid Till	2020-01-01
Designation	Clerk
Joining Date	2015-01-01
Salary	20000
Edit Information	
Change Password	

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Designed By :- Prakash Gurjar | Ashutosh Jha | Sourabh Chaurasia | Gaurav Chahar

Go To Top

Book Search:-

booksearch x users x Prakash

localhost:8080/library/booksearch.jsp?ref=display

Categories

- * Agriculture
- * Architecture
- * Business and Management
- * Engineering
- * Fun and Games
- * History
- * Health, Mind and Body
- * Medical
- * Novel
- * Politics
- * Religion
- * Sports
- * Travel

Enter Text

Enter Text For Search

Search Via

Book Name

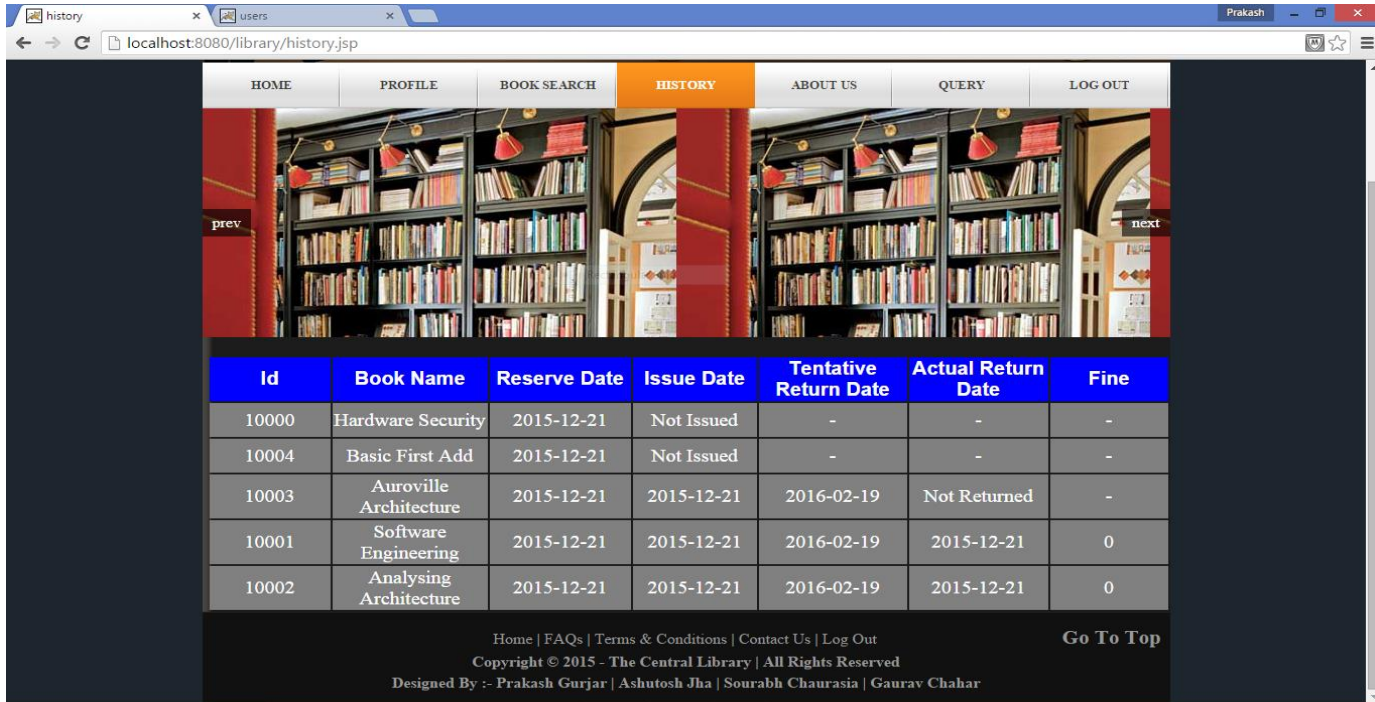
[Search](#)

[Reset](#)

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Designed By :- Prakash Gurjar | Ashutosh Jha | Sourabh Chaurasia | Gaurav Chahar

Go To Top

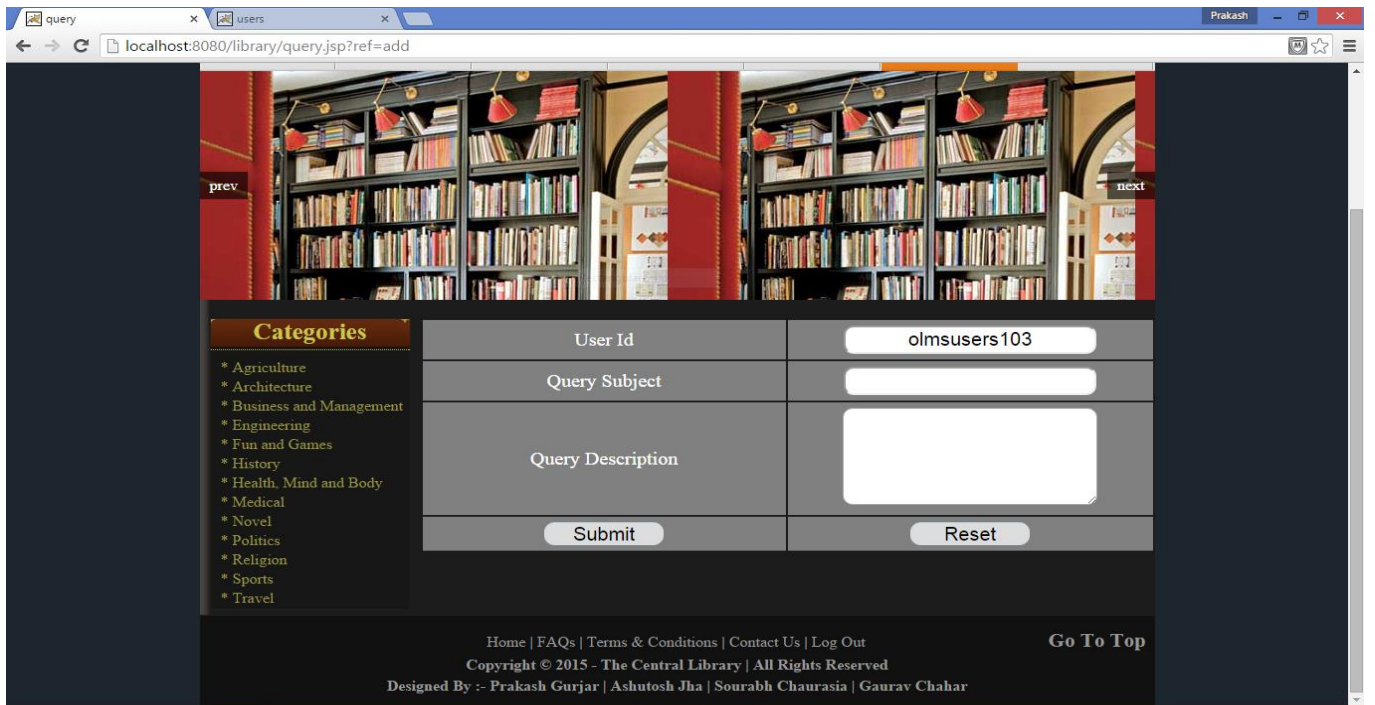
History:-



The screenshot shows a web browser window with the URL `localhost:8080/library/history.jsp`. The page has a navigation bar with links: HOME, PROFILE, BOOK SEARCH, HISTORY (highlighted), ABOUT US, QUERY, and LOG OUT. Below the navigation bar is a banner image of a library interior with bookshelves. On the left and right sides of the banner are 'prev' and 'next' buttons respectively. Below the banner is a table with 7 columns: Id, Book Name, Reserve Date, Issue Date, Tentative Return Date, Actual Return Date, and Fine. The table contains 5 rows of data. At the bottom of the page, there is a footer with links: Home | FAQs | Terms & Conditions | Contact Us | Log Out, copyright information: Copyright © 2015 - The Central Library | All Rights Reserved, and designers: Designed By :- Prakash Gurjar | Ashutosh Jha | Sourabh Chaurasia | Gaurav Chahar. A 'Go To Top' link is also present.

Id	Book Name	Reserve Date	Issue Date	Tentative Return Date	Actual Return Date	Fine
10000	Hardware Security	2015-12-21	Not Issued	-	-	-
10004	Basic First Add	2015-12-21	Not Issued	-	-	-
10003	Auroville Architecture	2015-12-21	2015-12-21	2016-02-19	Not Returned	-
10001	Software Engineering	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0
10002	Analysing Architecture	2015-12-21	2015-12-21	2016-02-19	2015-12-21	0

Query:-



The screenshot shows a web browser window with the URL `localhost:8080/library/query.jsp?ref=add`. The page has a navigation bar with links: HOME, PROFILE, BOOK SEARCH, HISTORY, ABOUT US, QUERY (highlighted), and LOG OUT. Below the navigation bar is a banner image of a library interior with bookshelves. On the left and right sides of the banner are 'prev' and 'next' buttons respectively. Below the banner is a form with a 'Categories' list on the left and a form area on the right. The 'Categories' list includes: * Agriculture, * Architecture, * Business and Management, * Engineering, * Fun and Games, * History, * Health, Mind and Body, * Medical, * Novel, * Politics, * Religion, * Sports, and * Travel. The form area has fields for 'User Id' (with value 'olmsusers103'), 'Query Subject', and 'Query Description'. There are 'Submit' and 'Reset' buttons at the bottom of the form. At the bottom of the page, there is a footer with links: Home | FAQs | Terms & Conditions | Contact Us | Log Out, copyright information: Copyright © 2015 - The Central Library | All Rights Reserved, and designers: Designed By :- Prakash Gurjar | Ashutosh Jha | Sourabh Chaurasia | Gaurav Chahar. A 'Go To Top' link is also present.

CHAPTER 5

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 6

REFERENCES

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- http://www.w3schools.com/css/css_background.asp
- http://www.w3schools.com/js/js_datatypes.asp
- http://www.w3schools.com/sql/sql_insert.asp
- http://www.w3schools.com/sql/sql_update.asp
- http://www.w3schools.com/php/php_forms.asp
- Fundamentals of software engineering by Rajib mall, PHIllearning
- Web development and application development by Ivan Byross BPB publications