E-BOOK LIBRARY

A

Project Report

Submitted

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DIPLOMA IN

COMPUTER SCIENCE & ENGINEERING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA BHOPAL (M.P.)

Academic Session 2020-2023

Project Guide

Guest faculty (CS&E)
(Faculty member & Subject Expert)

Project Co-Guide

Guest faculty (CS&E)
(Faculty member & Subject Expert)

Submitted by

1. VEDPRAKASH BILSARE
2. NIKITA BISEN
3. JYOTI PATLE
4. HARDAM MOHARE
5. KAJAL DAMAHE
6. ROSHNI BOPCHE
7. JAYDEEP RAHANGDALE
8. BHAVNA PARDHI

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
GOVERNMENT POLYTECHNIC COLLEGE BALAGHAT – 481001 (M.P.)

GOVERNMENT POLYTECHNIC COLLEGE BALAGHAT

DECLARATION

We are Student of Diploma in Government Polytechnic College Balaghat Department of Computer Science and Engineering hereby declares that we own full responsibility for the information. Results and conclusions provided in this project work Titled "**E-BOOK LIBRARY**" submitted to RGPV (Diploma wing) for the award of diploma in…… to the best of our knowledge, this project work has not been submitted in part or full elsewhere in any other institution / organization for the award of any certificate/ diploma / degree. We have completely taken care in acknowledging the contribution of others in this academic work. We further declare that in case of any violation of intellectual property rights and particulars declare, found at any stage as the candidate will be solely responsible for the same.

NAME OF STUDENT	ROLL NUMBER	SIGN.OF STUDENT
VEDPRAKASH BILSARE	20012C04056	
NIKITA BISEN	20012C04034	
JYOTI PATLE	20012C04018	
HARDAM MOHARE	20012C04015	
KAJAL DAMAHE	20012C04020	
ROSHNI BOPCHE	20012C04046	
JAYDEEP RAHANGDALE	20012C04017	
BHAVNA PARDHI	20012C04009	

GOVERNMENT POLYTECHNIC COLLEGE BALAGHAT

CERTIFICATE

Certificate that this project report entitled "……." Which is being submitted by Mr./Ms. VEDPRAKASH BISARE (20012C04056), NIKITA BISEN (20012C04034), JYOTI PATLE (20012C04018), HARDAM MOHARE (20012C04015), KAJAL DAMAHE (20012C04020), ROSHNI BOPCHE (20012C04046), JAYDEEP RAHANGDALE(20012C04017),BHAVNA PARDHI (20012C04009), a Boniface student of Government Polytechnic College Balaghat in partial fulfillment for the award of Diploma in computer science and Engineering during the year 2020-2023 is record of Student`s own work carried out under our guidance. It is certified that all being deposited in the polytechnic library. The project of report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said diplomatist is further understood that bye this certificate the undersigned do not endorse or approve any statement made, opinion expressed or conclusion drawn there in but approve the project only for the purpose for which it is submitted.

PLACE: - BALAGHAT

DATE: -

External Examiners
Name and signature

Guide Name and signature

GOVERNMENT POLYTECHNIC COLLEGE BALAGHAT

CERTIFICATE BY THE EXAMINER

The Project work entitled "**E-BOOK LIBRARY**" submitted by VEDPRAKASH BILSARE (20012C04056), NIKITA BISEN (20012C04034), JYOTI PATLE (20012C04018), HARDAM MOHARE (20012C04015), KAJAL DAMAHE (20012C04020), ROSHNI BOPCHE (20012C04046), JAYDEEP RAHANGDALE (20012C04017), BHAVNA PARDHI (20012C04009), here by recommended for the award of the Diploma in Computer Science & Engineering of RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA BHOPAL.

Sign of Internal Examiner
Name: -
(Date)……

Sign of External Examiner
Name: -
(Date)……

Exam venue: -

Department of Comp. Sc. &
Engineering Government Polytechnic
College Balaghat (M.P.)

ACKNOWLEDGEMENT

We have taken of efforts to complete this project "E-BOOK LIBRARY" within a stipulated time. However, it would not have been possible without the kind support and help of many individuals and organization. We would like to extend our sincere thanks to all of them.

We are highly indebted to the entire project committee I/C H.O.D. Miss. UMA GHOSH (Head of project committee), Miss PRAGYA BALLEY, Mr. SHARAD DAHATE, Miss VIMLA UIKEY, Miss. TRAPTI ADKANE, Miss. LAXMI THAKUR for their constant guidance, supervision as well as for providing necessary information regarding the project & also for their support in completing the project. We are also obliged to extend my thanks to respected principal sir Mr. R.M. SONWAY for providing all the required amenities.

We would like to express our gratitude towards the entire faculty member, Technical and Non-Technical staff of Department of Computer Science and Engineering for their kind co-operation and encouragement which helps us in completion of this project.

We would like to express our special gratitude and thanks to our reverential parents for their constant inspiration of emotional support to complete this project. We would like to extend our special thanks to industry person for giving us such attention and time. Last but not least we would like to thanks to all the friends and people who have not only willingly helped us out their abilities but also constantly extended their support by suggestion as well as criticism during development of the project.

PLACE: - BALAGHAT
DATE: -

NAME OF STUDENTS	ROLL NO.
1. VEDPRAKASH BILSARE	20012C04056
2. NIKITA BISEN	20012C04034
3. JYOTI PATLE	20012C04018
4. HARDAM MOHARE	20012C04015
5. KAJAL DAMAHE	20012C04020
6. ROSHNI BOPCHE	20012C04046
7. JAYDEEP RAHANGDALE	20012C04017
8. BHAVNA PARDHI	20012C04009

ABSTRACT

The library management system is the application software that is developed to make a record of Book, book searching, Book catalogs, all other fine books, popular and other Library related works. The aim of the project is to make the manual handling of Library system into computerized system which includes all above features. The scope of this software application is to generate the automatic process of manual handling of library records and to as well as related information.

E-BOOK LIBRARY Website in which the user can read and buy books online. The main purpose of this website is to provide offline Library of visual environment. Some interface will be in our website as well the user will enter our website and will be able to read the book only after login. User cannot copy the text in this website and also download to items then be has to pay the minimum fee only. The user can also give feedback, comments after reading the book (reading material); the data is stored in e-book format, File format, Pdf format, research papers, magazines has also been integrated in this website.

CONTENT

LIST OF DIAGRAMS

CHAPTER-1

1.INTRODUCTION: -

We have created E-Book Library management system in our project. From this the user can read the book in online medium. In this our data will be in e-book and PDF format. We have included research papers and magazines in our website to make the website unique.

A Library Management System (LMS) is a software application designed to manage and automate the daily operations of a library. The system helps librarians manage the library's resources, such as books, magazines, and other materials, as well as track activities, inventory, and patron information.

The primary goal of an LMS is to streamline the library's operations and make it easier for patrons to access and use library resources. The system typically includes several modules such as:

Cataloguing Module: This module is used to catalo and classify library materials such as books, journals, and magazines. It helps librarians manage and organize the library's resources.

Patron Management Module: This module is used to manage patron information such as names, addresses.

Reporting Module: This module generates reports that help librarians track the library's performance, such as circulation statistics, inventory reports, and patron demographics.

LMSs can be customized to fit the specific needs of different types of libraries, such as school libraries, public libraries, and university libraries. They can also be integrated with other library systems, such as interlibrary loan systems, to facilitate resource sharing between libraries.

Overall, an LMS helps librarians manage library resources more efficiently, improves the patron experience, and enhances the library's overall effectiveness.

1.1OBJECTIVE: -

The main of this project is to provide an easy to handle and automated library management system. This project also provides features and an interface for maintaining librarian, records, student's history of issues. The Owner can easily update, delete and insert data in the database with this project.

The main objectives behind the development of this project are as follows:

- Library data manage on system.
- Offline visualization of The Library
- Provide the Magazine
- Provide the Research paper
- Provide All Technical & Non-Technical E- book
- Provide The E-Notes of Related Books.
- Documentation Remove (Digitalize Data).
- To utilize the information of Book.
- To manage record of student who.

1.2 SCOPE: -

As we all know that the users will get the benefit of our website looking add the growing young generation. Now a day most of the people do not believe in reading while sitting in the library, that's why we will add all the book like technical book non-technical book in our website. Along with this. We will also add research paper, magazines to our website so that our growing generation will be benefit more.

The website we are designing will be benefit for all the students in the future. They will not have to wander for any book in our website with this hope we are making this website so that students get benefits from it in future.

1.3 PROBLEM STATEMENT: -

As we know, any user or student does not find any notes or books related to study in proper format, they can search that content. Keeping in mind the problem of having to visit different websites and Visualization of offline library is not detected. we came up with the idea of creating this website which allows users to search for books and notes. Don't face any problem to do.

We will usually consider following inter-related type of feasibility study they are:

1. **Technical Feasibility: -**

   We concern here with specifying equipment and software that will satisfy the user requirement. It will run any platform (machine). It will run with minimum system requirements and with minimum system resources acquired during run. New module can be added later on the application, if required in the future.

2. **Operational Feasibility: -**

   The system will be easy to use as user interface is GUI based. The system is easy to use so no any special skills will be required to use the system. New user will find it easy to use. So, the project will be operationally feasible.

3. **Economic Feasibility: -**

   The procedure is to determine the benefit and saving that are expected from the project and compare them with the cost. As internet as the cheapest way of communication, we can perform communication using web. The cost is just the cost of using the internet based on the channel allocation.so the project will be economical feasible.

4. **Social Feasibility: -**

   The project will be socially feasible as today user want quick services in everywhere in a large geographical area in feasibility study face, we had undergone though various steps which are describe: Identify the exception of user from computerized system.

1.4 ADVANTAGE: -

- Easy to Access.
- It is a paperless work and the effort required in it is also less.

- You can access the information of the recent activities of the research paper in easy way.
- Provide the Research paper.
- All book Available for Reading and Learning.
- Offline visualization of e- book.
- Documentation removes (Digitalize data).
- Library data manage on system
- Offline visualization.

CHAPTER-2

2. LITERATURE SURVEY

2.1 TECHNOLOGIES: -

a. HTML: -

Hypertext Mark-up Language (HTML) is the standard mark-up language for creating web pages and web applications. .HTML is the language used to create Webpages. "Hypertext" refers to the hyperlinks that an HTML page may contain. "Mark-up language" refers to the way tags are used to define the page layout and elements within the page. The first line defines what type of contents the document contains. "" Means the page is written in HTML5. Properly formatted HTML pages should include, and tags, which are all included in the example above. The page title, metadata, and links to referenced files are placed between the tags. The actual contents of the page go between the tags.

b. CSS: -

CSS stand for Cascading Style Sheets.CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colours are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the mark-up languages HTML or XHTML

c. JAVA SCRIPT: -

JavaScript is a scripting language developed by Netscape Navigator to enable web author interactivity sites. Although it shares many of the features and structures of the full java language, it was developed independently. JavaScript can interact with HTML source code, enabling web authors to spice up their sites with dynamic content. JavaScript is endorsed by a number of software companies and is an open language that anyone can use without purchasing a license. It is supported by recent browsers from Netscape and Microsoft, though internet explorer supports only a subset, which Microsoft calls JavaScript. Scripts return with JavaScript can be embedded into HTML documents.

d. PHP: -

The full form of PHP is “Hypertext Pre-processor” its original name was “Personal Home Page”. Resume Lerdorf software engineer, Apache team member is the creator and original driving force behind PHP. The first part of PHP was developed for his personal use in late 1994.By the middle of 1997; PHP was beginning used approximately 50,000 sites worldwide. PHP is server-side scripting Language like ASP, which can be embedded in HTML Tags or used as stand-alone. PHP is open-source software (OSS) PHP files have a file extension of “. Php” or “. Php3” or “phtml”. PHP doesn’t do anything about what a page looks and sound like. In fact, most of what PHP does is invisible to the end user. Someone looking at a PHP page

will necessarily be able to tell that it was not written purely in HTML, because usually the result of PHP is HML. PHP supports many advantages.

e. MYSQLI: -

MySQLi (MySQL Improved) is a PHP extension used for accessing MySQL databases. It is a modernized and more robust version of the original MySQL extension, offering numerous benefits such as:

1. Object-oriented interface: MySQLi supports both procedural and object-oriented programming styles, making it easier to write database-driven applications in PHP.

2. Prepared statements: MySQLi supports prepared statements, which are precompiled SQL statements that can be parameterized and executed multiple times with different parameters. Prepared statements can help prevent SQL injection attacks and improve performance.

3. Multiple statements: MySQLi supports executing multiple statements in a single query, which can reduce network round-trips and improve performance.

4. Enhanced security features: MySQLi includes various security features such as SSL encryption, server-side prepared statements, and support for password hashing algorithms.

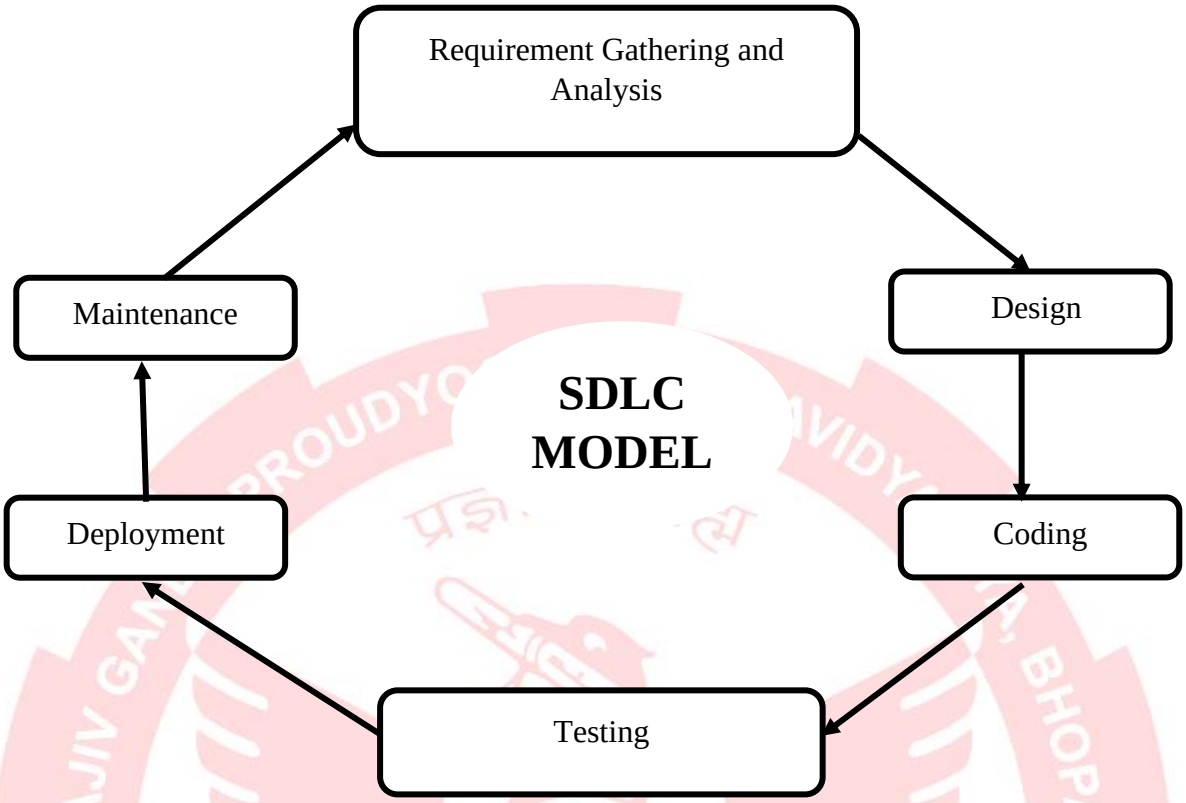
5. Better error handling: MySQLi provides more detailed error messages compared to the original MySQL extension, making it easier to debug database errors.

MySQLi is available in PHP 5 and later versions and is widely used by developers for building dynamic web applications.

2.2 SOFTWARE DEVELOPMENT LIFE CYCLE (SDLC MODEL): -

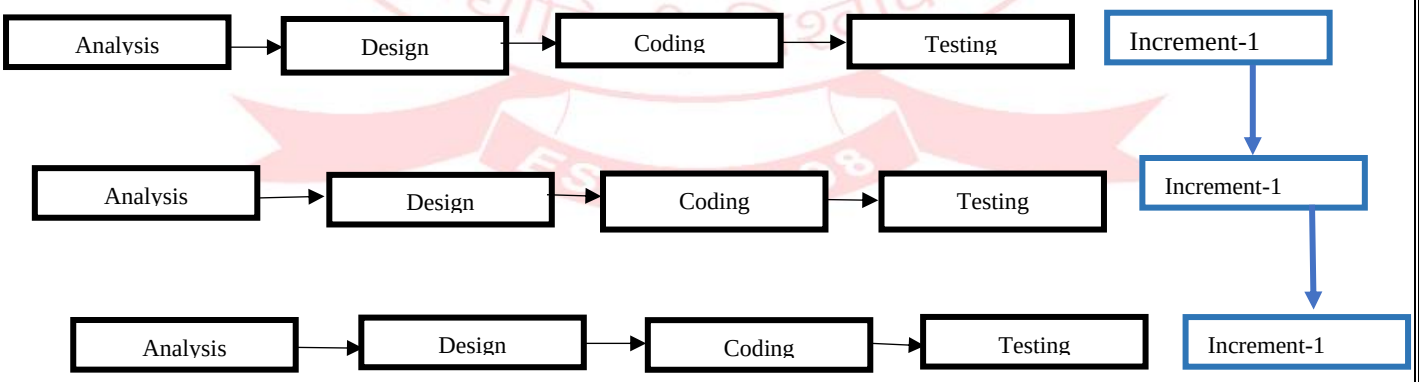
Software Development Life Cycle (SDLC) is a systematic process for building software that ensures the quality and correctness of the software built. The system development should be complete in the pre-defined time frame and cost. SDLC consists of a detailed planned which explains how to plan, built, and maintain specific software. Every phase of the SDLC life cycles its own process and deliverable that fit into the next phase.

- Phase 1: Requirement Gathering and Analysis
- Phase 2: Design
- Phase 3: Coding
- Phase 4: Testing
- Phase 5: Deployment
- Phase 6: Maintenance



2.3 INCREMENTEL MODEL:

Incremental model is a process of software development where requirements divided into multiple standalone modules of the software development cycle. In this model, each module goes through the requirements, design, implementation, and testing phase.



When we use the Incremental Model?

- When the requirements are superior.
- A project has a length development schedule.
- When software team are not very well skilled or trained.
- When the customer demands a quick release of the product.

Advantages of the Incremental Model: -

- Errors are easy to be recognized.
- Easier to test and debug.
- More flexible.
- Simple to manage risk because it handles during its iteration.
- The client gets important functions early.

Disadvantages of the Incremental Model: -

- Need for good planning.
- Total Cost is high.
- Well defined module interfaces are needed.

CHAPTER – 3

3.1 ANALYSIS

1. FUNCTIONAL REQUIREMENTS: -

This facility is given to the user to login to the system. They will have to enter the user id and password before they are allowed to enter the system. user id and password will invalid id then user is not allowed to login into the system.

User ID is provided while registering the system should allow only valid ID and password to enter the system. the system performs the anionization process of access a user can have.

2. NON-FUNCTIONAL REQUIREMENTS: -

When library management system is implemented, the librarian and book transactions will be much faster. The system must register correctly. (Example report generation) book transaction and search.

The system has been designed to be user friendly, so that different tasks can be done easily and efficiently in the form of manuals. In implementing the whole system, it is front end with PHP using HTML as its server-side scripting language. Which will be done for database connectivity. the database part is developed using MYSQL.

3. HARDWARE REQUIREMENT: -

- Ram: 512 MB or Higher.
- Processor: Dual core or Higher
- Hard disk: 20 GB or Higher

4. SOFTWARE REQUIREMENT: -

- Operating system: WINDOWS 7/8/10/11.
- Client-side scripting language: PHP, HTML, CSS, JAVA SCRIPT.
- Database: MySQLI DATABASE

CHAPTER-4

5. DESIGN: -

Software design is a process to transform user requirements into some suitable form, which helps the programmer in software coding and implementation.

Here we have used the following diagrams to design the software:

4.1 ER Diagram
4.2 Use Case Diagram
4.3 Data Flow Diagram

4.1 ER-DIAGRAM: -

The name of the E-R model is the Entity Relationship Model. It is a high-level data model. This model has been used to define the data elements and relationship for a system in other words, "In DBMS, ER model is a data model that describes the structure of the database with the help of diagrams".

The E-R model is also called the E-R diagram because it presents the entities in the form of a diagram (picture) and shows the relationship between the entities. This model was developed by Peter in 1976. The E-R model is used to present the conceptual schema of the real-world.

Component of E-R Model –

There are three main components of the ER model which are as follows: -

a. Entity
b. Relationship
c. Attribute

Entity: -

An entity can be any person, place, car and real word object. In the ER diagram, an entity is represented by a rectangle. Entity must have an attribute and a unique key.

Entity set: -

An entity set is a group of entities of the same type that share similar properties. Example of this – Student, Teacher, Class and Course can be considered as entities in a school database. If a student is an entity, then the datasets of all the students are called entity set.

Relationship: -

Relationship is used to describe the relation between entities. It is represented by a diamond.

For example: -

Teacher teaches at school and soldier enrols in a military. Here leachate and enrols are called relationship.

Attribute: -

Attribute is used to describe the property of an entity. It is represented by oval. For example- student is an entity and its subject name, subject code and gender are its attributes.

ER-DIAGRAM FOR ONLINE E-LIBRARY MANAGEMENT SYSTEM

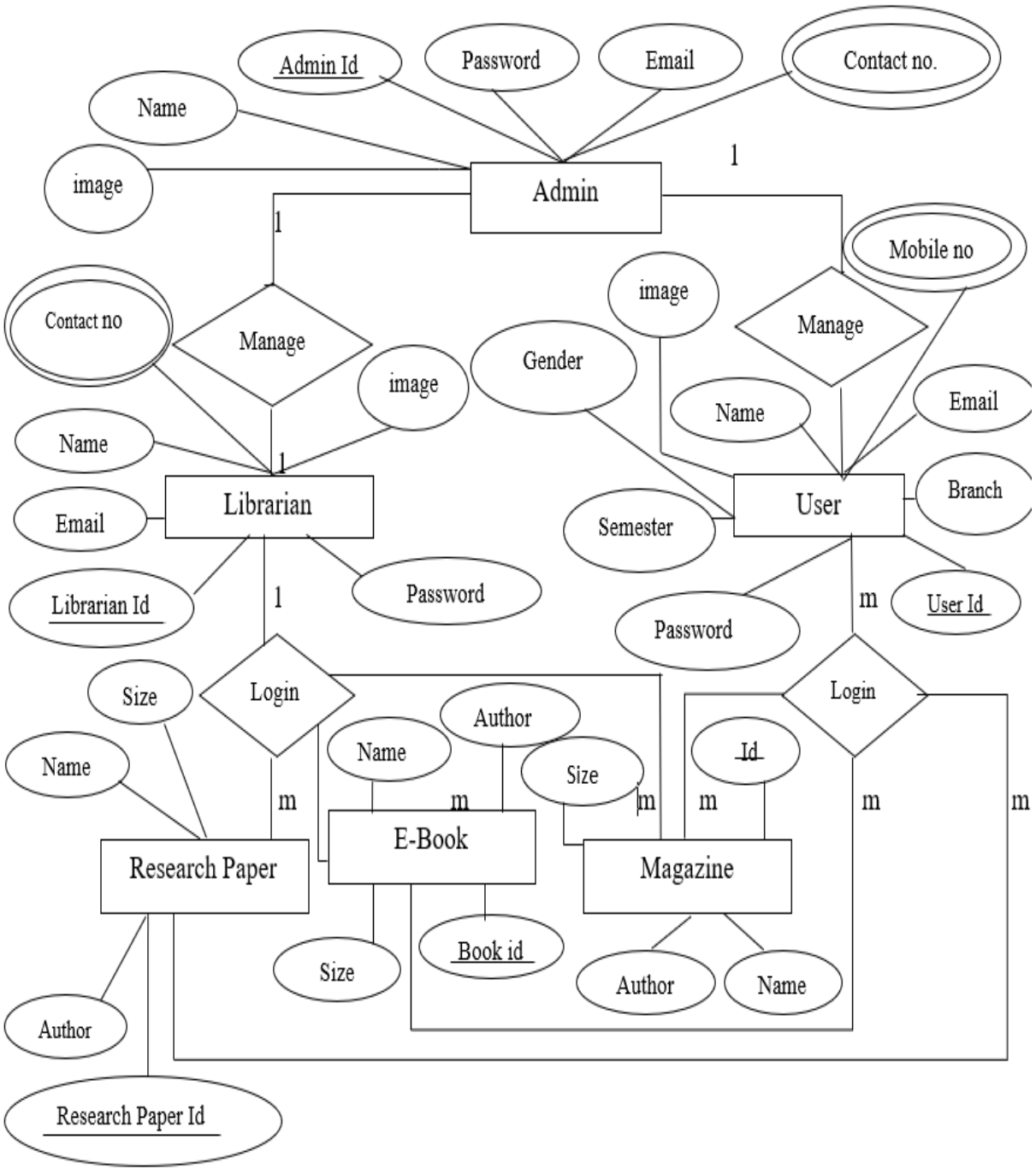


Fig: E-R DIAGRAM

4.2 USE CASE DIAGRAM:

Use Case Diagram capture the system's functionality and requirements by using actors and use case. Use case represent high-level functionalities and how a user will handle the system. Use-cases are the core concepts of Unified Modeling language modeling. A use case diagram should be simple and contains only a few shapes. If yours contain more than 20 use cases, you are probably missing use case diagram. Use cases represent only the functional requirements, and implementation constraints must be represented separately, again, with other UML diagrams.

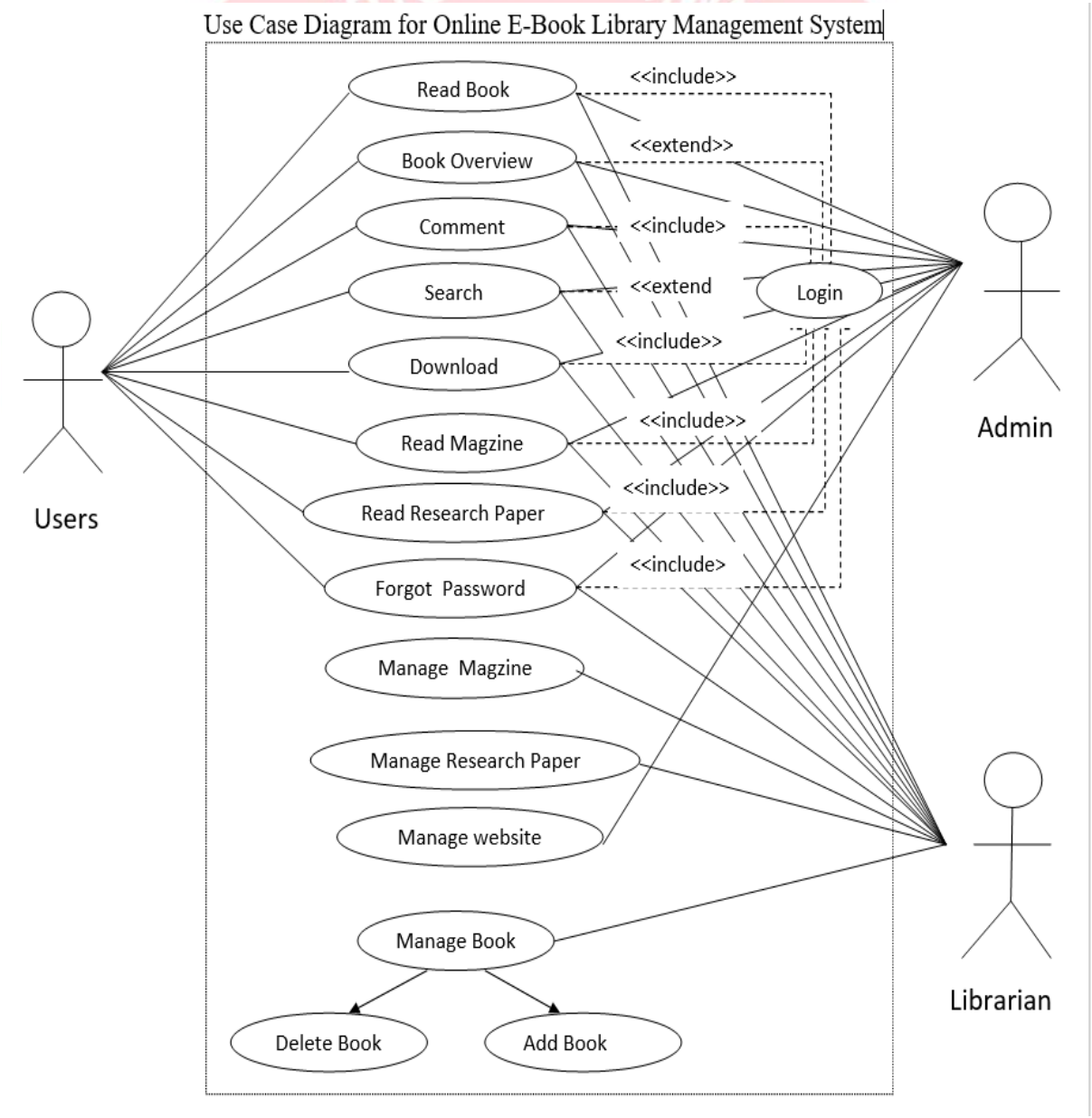


Fig: Use Case Diagram

4.3 DATA FLOW DIAGRAM: -

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points.

DFD is the abbreviation for Data Flow Diagram. The flow of data of a system or a process is represented by DFD. It is a graphical tool, useful for communicating with users, managers and other personnel. it is useful for analysing existing as well as proposed system. Data Flow Diagram can be represented in several ways. The DFD belongs to structured-analysis modelling tools. Data Flow diagrams are very popular because they help us to visualize the major steps and data involved in software-system processes.

Levels in DFD: -

a. DFD Level 0

b. DFD Level 1

c. DFD Level 2

a. DFD Level 0: -

DFD Level 0 is also called a Context Diagram. It's a basic overview of the whole system or process being analyzed or modeled. It's designed to be an at-a-glance view, showing the system as a single high-level process, with its relationship to external entities. It should be easily understood by a wide audience, including stakeholders, business analysts, data analysts and developers.

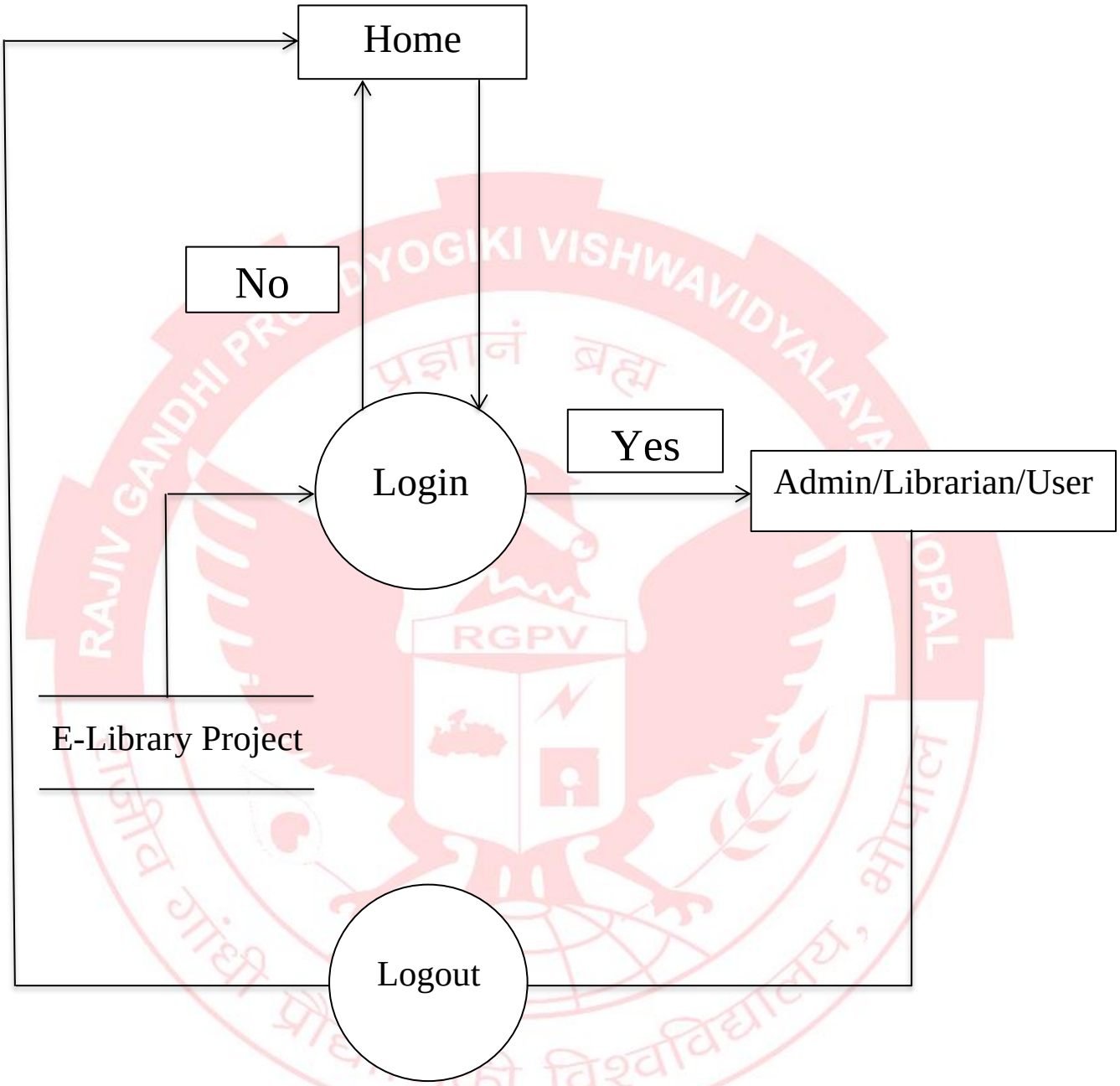


Fig: - DFD Level - 0

b. DFD Level 1: -

In 1-level DFD, the context diagram is decomposed into multiple bubbles/processes. In this level, we highlight the main functions of the system and breakdown the high-level process of 0-level DFD into subprocesses.

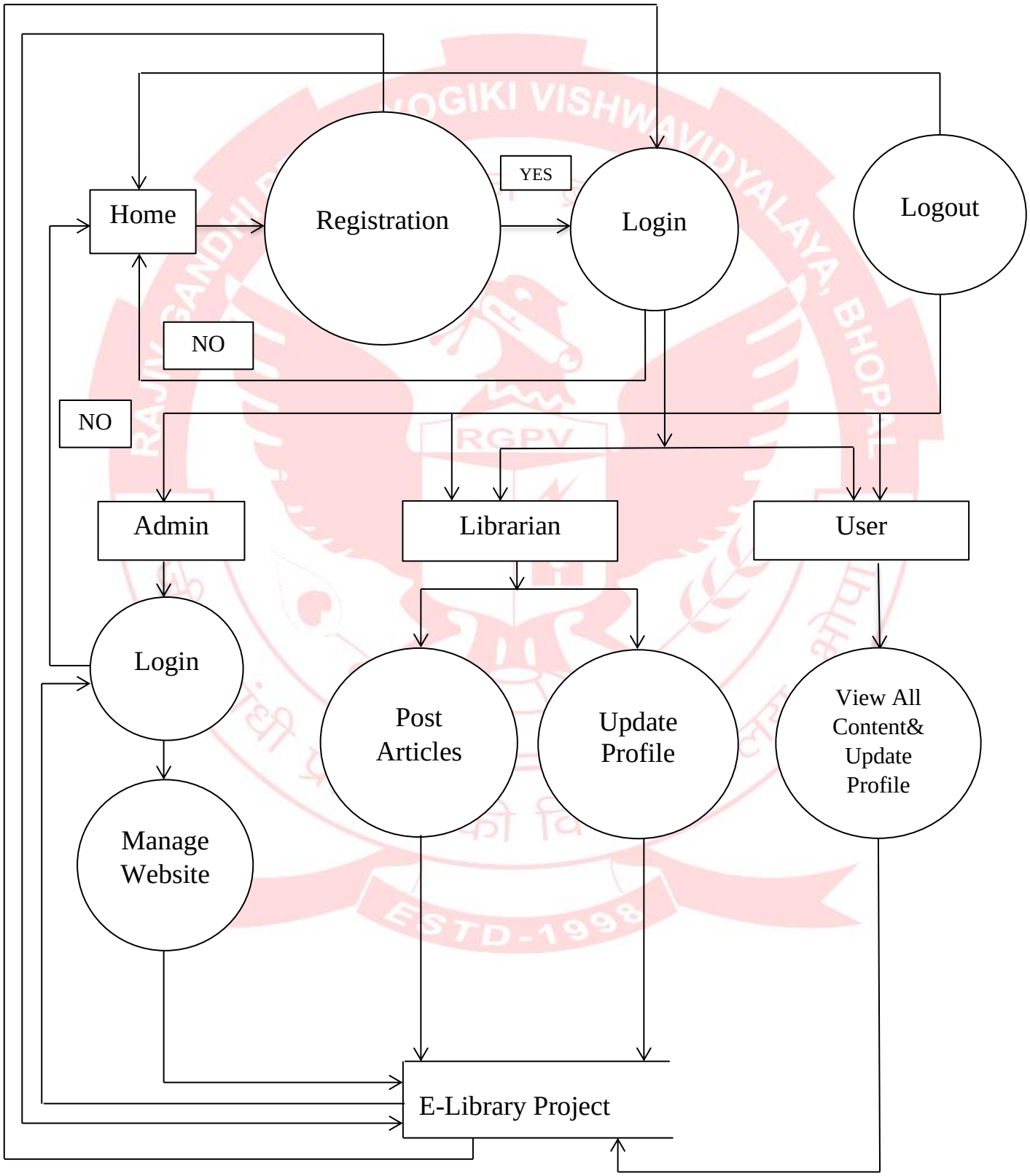


Fig: DFD level - 1

c. DFD LEVEL – 2:

2-level DFD goes one step deeper into parts of 1-level DFD. It can be used to plan or record the specific/necessary detail about the system's functioning.

We have already seen how a level 0 context diagram can be decomposed (exploded) into a level 1 DFD. In DFD modelling terms we talk of the context diagram as the "parent" and the level 1 diagram as the "child".

This same process can be applied to each process appearing within a level 1 DFD. A DFD that represents a decomposed level 1 DFD process is called a level 2 DFD. There can be a level 2 DFD for each process that appears in the level 1 DFD.

Constructing level 2 (and lower) DFDs — functional decomposition

The level 1 data-flow diagram provides an overview of the system. As the software engineers' understanding of the system increases it becomes necessary to expand most of the level 1 process to a second or even third level in order to depict the detail within it. Decomposition is applied to each process on the level 1 diagram for which there is enough detail hidden within the process. Each process on the level 2 diagrams also needs to be checked for possible decomposition, and so on.

A process box that cannot be decomposed further is marked with an asterisk in the bottom right-hand corner. A brief narrative description of each bottom-level process should be provided with the dataflow diagrams to complete the documentation of the data-flow model. These make up part of the process definitions which should be supplied with the DFD.

Each process on the level 1 diagram is investigated in more detail, to give a greater understanding of the activities and data-flows. Normally processes are decomposed where:

- There are more than six data-flows around the process
- The process name is complex or very general which indicates that it incorporates a number of activities.

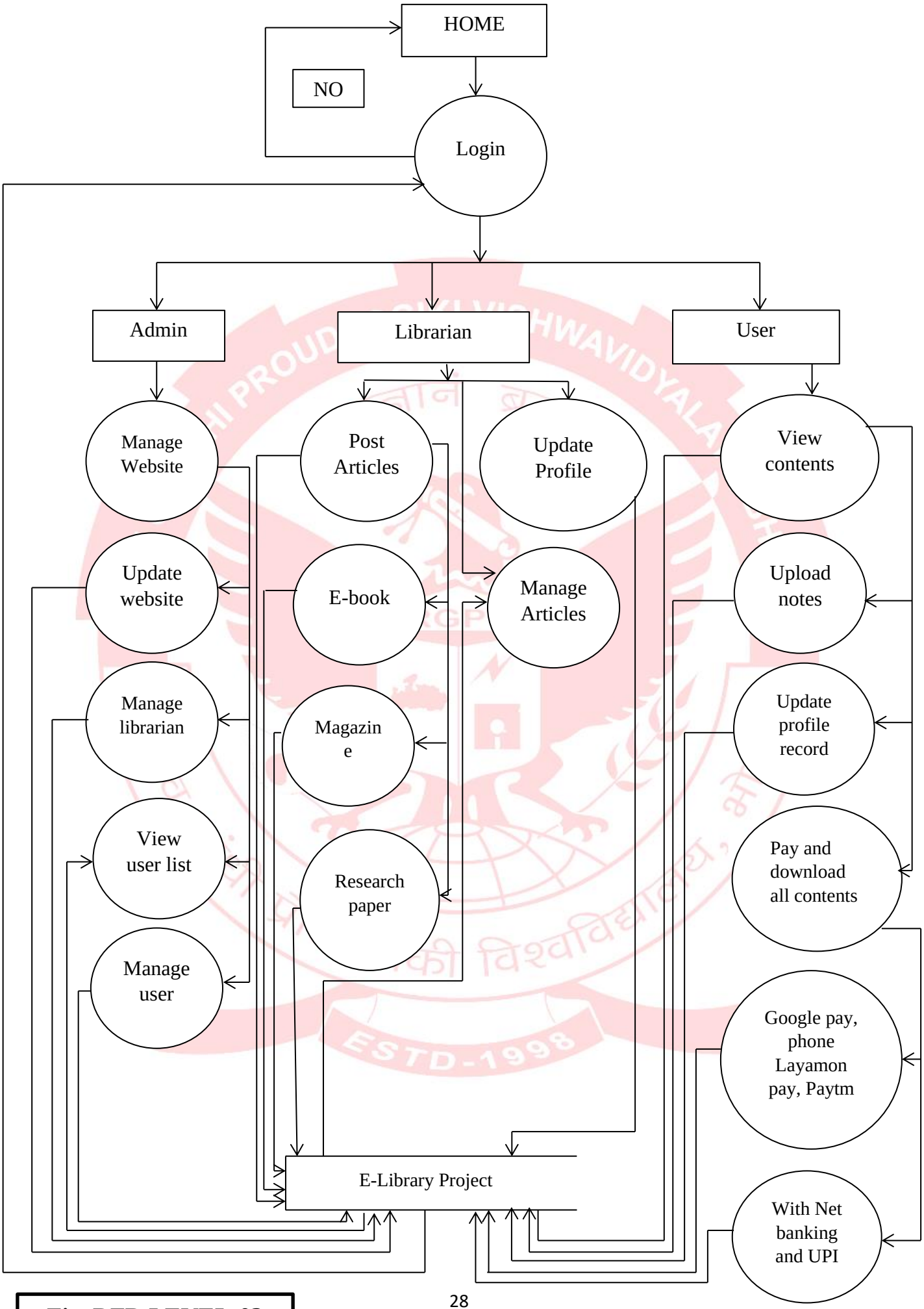


Fig. DFD LEVEL-02

CHAPTER- 5

5. CODING

5.1 Home page coding:

```
<!DOCTYPE html>
<html>
<head>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Website Title</title>
  <link
href="https://fonts.googleapis.com/css2?family=Roboto+Mono:wght@600&dis
play=swap" reel="stylesheet">
  <style>
    *,
*: before,
*: after {
    padding: 0;
    margin: 0;
    box-sizing: border-box;
}
body {
    background-color: #02070d;
}
.container {
    width: 450px;
    position: absolute;
    transform: translate (-50%, -50%);
    left: 50%;
    top: 50%;
}
.container *{
    color: #000000;
    font-family: "Roboto Mono”, monospace;
}
#day {
    position: relative;
    font-size: 20px;
```

```
    text-transform: uppercase;
    color: #ffffff;
    text-align: center;
}
. wrapper {
    text-align: center;
}
#time {
    font-size: 70px;
    display: inline-block;
}
#midday {
    display: inline-block;
    font-size: 30px;
}
  </style>
<style>
    /* Reset default browser styles */
* {
  box-sizing: border-box;
  margin: 0;
  padding: 0;
}
/* Set font properties */
body {
  font-family: Arial, sans-serif;
  font-size: 16px;
  line-height: 1.5;
}
/* Style header */
header {
  display: flex;
  flex-wrap: wrap;
  justify-content: space-between;
  align-items: center;
  /* background-image: URL("7ceefc8b-617f-460e-9294-ab08b035647c.jpg");
*/
```

```
   background-color: black;
  opacity: 1.0;
  color: #off;
  padding: 10px;
   position: -web kit-sticky; /* Safari */
  position: sticky;
  top: 0;
}
/* Style logo */
. logo imp {
width:87px;
margin:1px;
display: flex;
height: 80px;
}
/* Style navigation menu */
nav ul {
  display: flex;
  flex-wrap: wrap;
  list-style: none;
  font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;
  font-size: 20px;
}
nav ul li {
  margin: 0 10px;
}
nav ul li a {
  color: #off;
  text-decoration: none;
}
nav ul li a: hover {
  transform: scale (1);
  border-bottom: 2px solid #ff7300;
  text-decoration: overlie;
}
/* Style slider section */
. imgslider {
```

```
            width: 100%;
            height: 700px;
            background-image: URL("1.jpg");
            background-size: 100% 100%;
            box-shadow: rgba (0, 0, 0, 0.16) 0px 1px 4px, rgba (51, 51, 51) 0px 0px
0px 3px;
            animation: changeImage 25s linear infinite;
        }
        @keyframes changeImage {
        0% {
           background-image: URL ("wallpaperflare.com_wallpaper (5).jpg");
        }
        25% {
           background-image: URL ("wallpaperflare.com_wallpaper (6).jpg");
        }
        30% {
           background-image: URL ("wallpaperflare.com_wallpaper (7).jpg");
        }
        50% {
           background-image: URL ("wallpaperflare.com_wallpaper (9).jpg");
        }
        55% {
           background-image: URL ("wallpaperflare.com_wallpaper (10).jpg");
        }
        75% {
           background-image: URL("pexels-bri-schneiter-346529.jpg");
        }
        80% {
           background-image: URL ("wallpaperflare.com_wallpaper (11).jpg");
        }
        100% {
           background-image: URL ("wallpaperflare.com_wallpaper (11).jpg");
    }
}
. imgslider h1{
    text-align: center;
    padding: 20px;
```

```
    color: white;

  font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif
}
</style>
 <style>
    /* Footer styles */
footer {
    background-color: #f5f5f5;
    padding: px;
    color: black;
    opacity: 5;
    text-align: center;
  }
   /* Footer content styles */
  . footer-content {
    display: flex;
    flex-wrap: wrap;
    justify-content: space-between;
  }
   /* Footer styles */
footer {
    background-color: #000000;
    color: #off;
    padding: 60px 0;
  }
    /* Footer content styles */
  . footer-content {
    display: flex;
    flex-wrap: wrap;
    justify-content: space-between;
    margin-bottom: 40px;
  }
  . footer-section {
    flex: 1;
    margin-right: 20px;
  }
```

```
. footer-section h2 {
  font-size: 18px;
  margin-bottom: 30px;
 }
 . footer-section ul {
  list-style: none;
  padding: 0;
  margin: 0;
 }
 . footer-section a {
  color: #off;
  text-decoration: none;

}
 . footer-section a: hover {
  background-color: orange;
  color: red;
 }
 . footer-section. About p {
  padding: 50px;
  margin: 2px;
  font-size: 14px;
  line-height: 1;
  margin-bottom: 10px;
 }
  . contact span {
  display: block;
  margin-bottom: 10px;
 }
  . socials imp {
  display: inline-block;
  margin-right: 18px;
  border: 1px solid #off;
  padding: 8px;
  border-radius: 0%;
  transition: all 0.3s ease;
  size:1px;
```

```
  width: 40px;
 }
  . socials wingover {
  background-color: #off;
  color: #232323;
 }
  /* Contact form styles */
 . contact-form input,
 . contact-form text area {
  width: 100%;
  padding: 10px;
  margin:10px;
 }
 </style>
</head>
<body>

 <header>
  <div class="logo">
   <imp sac="ebook-logo.jpg"><I class="fab fa-Facebook"></I>
  </div>
  <nav>
   <ul>
        <li><a her="about us.html">About Us</a></li>
    <li><a her="esp.">Services</a></li>
        <li><a her="Gallery">Gallery</a></li>
    <li><a her="contacts'">Contact Us</a></li>
    <li><a her="3loginbutton.php">Login</a></li>
    <li><a her="register">Registration</a></li>
   </ul>
  </nav>
 </header>
 <section class="imgslider">
  <div class="container">
   <div class="clock">
     <div id="day"></div>
     <div class="wrapper">
```

```
            <div id="time"></div>
            <div id="midday"></div>
          </div>
        </div>
      </div>
<! --Script-->
  <script sac="j.js"></script>
    <h1> WELLCOME TO THIS WEBSITE
      </h1>
  </section>
    <footer>
       <div class="footer-content">
        <div class="footer-section about">
          <h2 class="logo-text">My Website Name</h2>
          <p>
          My Website Name Is E-Library Management System<bra>
          A Library Management System is a software application designed to manage a library. The system helps librarian manage the library's resources, such as books, magazines, and other materials, as well as track activities, inventory, and patron information.
          </p>
          <div class="contact">
            <span><I class="fast fa-phone"></I> 6260640557</span>
            <span><I class="fast fa-envelope"></I>vedbilsare876@gmail.com</span>
          </div>
          <div class="socials">
            <imp sac="fb.jpg"><I class="fab fa-Facebook"></I>
            <imp sac="twit.jpg"><I class="fab fa-twitter"></I>
            <imp sac="insta.jpg"><I class="fab fa-Instagram"></I>
            <imp sac="indeed.jpg"><I class="fab fa-indeed"></I>
          </div>
        </div>
        <div class="footer-section links">
          <h2>Quick Links</h2>
          <ul>
            <li><a her="#">Home</a></li>
```

```
            <li><a her="about us.html">About</a></li>
            <li><a her="esp.">Services</a></li>
            <li><a her="#">Blog</a></li>
          </ul>
        </div>
        <div class="footer-section contact-form">
          <h2>Contact Us</h2>
          <form action="#" method="post">
          <input type="Name" name="name" class="text-input contact-input"
placeholder="Enter your Name....">
          <input type="email" name="email" class="text-input contact-input"
placeholder="Your email address...">
            <text area name="message" class="text-input contact-input"
placeholder="Your message..."></text area>
            <button type="submit" name="submit" class="ban ban-big contact-
ban">
              <I class="fast fa-envelope"></I>
              Send
            </button>
          </form>
        </div>
      </div>
      <div class="footer-bottom">
        &copy; 2023 My Website Name | E-Library management System
      </div>
    </footer>
</body>
</html>
```

5.4 User Registration

```
<?php
include 'connection';
if(asset($_POST['submit'])) {

  $roll no= mysqli_real_escape_string ($registration, $_POST ['roll no']);
  $first name = mysqli_real_escape_string ($registration, $_POST ['first
name']);
```

```
  $phone number = mysqli_real_escape_string ($registration, $_POST ['phone number']);
  $email= mysqli_real_escape_string ($registration, $_POST['email']);
  $password = mysqli_real_escape_string ($registration, md5($_POST['password']));
  $confirm password = mysqli_real_escape_string ($registration, md5($_POST ['confirm password']));
  $Branch = mysqli_real_escape_string ($registration, ($_POST['Branch']));
  $Semester = mysqli_real_escape_string ($registration, ($_POST['Semester']));
  $gender = mysqli_real_escape_string ($registration, ($_POST['gender']));
  $image = $_FILES['image’] ['name'];
  $image size = $_FILES['image’] ['size'];
  $image_tmp_name = $_FILES['image’] ['TypeName'];
  $image folder = 'uploaded/’. $image;

  $select = mysqli_query ($registration, "SELECT * FROM user WHERE roll no = '$roll no' AND password = '$password'") or die ('query failed');

  if(mysqli_num_rows($select) > 0) {
    $message [] = ' roll no already exist';
  } else {
    if ($password! = $confirm password) {
      $message [] = 'confirm password not matched!';
    } elseif ($image size > 2000000) {
      $message [] = 'image size is too large!';
    } else {
      $insert = mysqli_query ($registration, "INSERT INTO `user` (roll no, firstname,phonenumber,email,password,confirmpassword,Branch,Semester,gender, image) VALUES('$roll no', '$first name’, ‘phone number’, ‘email', '$password’, ‘confirm password','$Branch','$Semester','$gender', '$image')") or die('query failed');

      if($insert) {
        move_uploaded_file ($image_tmp_name, $image folder);
        $message [] = 'registered successfully!';
        header ('location: login.php');
      } else {
```

```
            $message [] = 'registration failed!';
          }
        }
      }
}

?>
<!DOCTYPE html>
<html Lang="end">
<head>
   <meta charset="UTF-8">
   <meta http-equip="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>register</title>
   <! -- custom CSS file link -->
   <! -- <link reel="stylesheet" her="CSS/style.css"> -->
   <style>
      @import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@100;200;300;400;
500;600&display=swap');
: root {
   --blue: #3498db;
   --dark-blue: #2980b9;
   --red: #e74c3c;
   --dark-red: #c0392b;
   --black: #333;
   --white: #off;
   --light-bag: #epee;
   --box-shadow:0 5px 10px rgba (0,0,0,.1);
}
*{
   font-family: 'Poppins', sans-serif;
   margin:0; padding:0;
   box-sizing: border-box;
   outline: none; border: none;
   text-decoration: none;
}
```

```
*: -web kit-scrollbar {
  width: 10px;
}
*: -web kit-scrollbar-track {
  background-color: transparent;
}
*: -web kit-scrollbar-thumb {
  background-color: var (--blue);
}
. ban,
. delete-ban {
  width: 100%;
  border-radius: 5px;
  padding:10px 30px;
  color: AR (--white);
  display: block;
  text-align: center;
  cursor: pointer;
  font-size: 20px;
  margin-top: 10px;
}
. ban {
  background-color: var (--blue);
}
. ban: hover {
  background-color: var (--dark-blue);
}
. delete-ban {
  background-color: var (--red);
}
. delete-ban: hover {
  background-color: var (--dark-red);
}
. message {
  margin:10px 0;
  width: 100%;
  border-radius: 5px;
```

```
  padding:10px;
  text-align: center;
  background-color: var (--red);
  color: AR (--white);
  font-size: 20px;
}
. form-container {
  min-height: 100vh;
  background-color: var (--light-bag);
  display: flex;
  align-items: center;
  justify-content: center;
  padding:20px;
}
. form-container form {
  padding:20px;
  background-color: var (--white);
  box-shadow: var (--box-shadow);
  text-align: center;
  width: 800px;
  border-radius: 5px;
}
.text {
   align-items: left;
text-align: left;
}
. form-contain
near form h3{
  margin-bottom: 10px;
  font-size: 30px;
  color: AR (--black);
  text-transform: uppercase;
}
. form-container form. box {
  width: 40%;
  border-radius: 5px;
  padding:12px 10px;
```

```
  font-size: 18px;
  color: AR (--black);
  margin:11px 24px;
  background-color: var (--light-bag);
}
. form-container form p {
  margin-top: 15px;
  font-size: 20px;
  color: AR (--black);
}
. form-container form p a {
  color: AR (--red);
}
. form-container form p a: hover {
  text-decoration: underline;
}
.container {
  min-height: 100vh;
  background-color: var (--light-bag);
  display: flex;
  align-items: center;
  justify-content: center;
  padding:20px;
}
.container. profile {
  padding:20px;
  background-color: var (--white);
  box-shadow: var (--box-shadow);
  text-align: center;
  width: 400px;
  border-radius: 5px;
}
.container. profile imp {
  height: 150px;
  width: 150px;
  border-radius: 50%;
  object-fit: cover;
```

```
  margin-bottom: 5px;
}
.container. profile h3{
  margin:5px 0;
  font-size: 20px;
  color: AR (--black);
}

.container. profile p {
  margin-top: 20px;
  color: AR (--black);
  font-size: 20px;
}
.container. profile p a {
  color: AR (--red);
}
.container. profile p a: hover {
  text-decoration: underline;
}
. update-profile {
  min-height: 100vh;
  background-color: var (--light-bag);
  display: flex;
  align-items: center;
  justify-content: center;
  padding:20px;
}
. update-profile form {
  padding:20px;
  background-color: var (--white);
  box-shadow: var (--box-shadow);
  text-align: center;
  width: 700px;
  text-align: center;
  border-radius: 5px;
}
. update-profile form imp {
```

```
  height: 200px;
  width: 200p;
  border-radius: 50%;
  object-fit: cover;
  margin-bottom: 5px;
}
. update-profile form. flex {
  display: flex;
  justify-content: space-between;
  margin-bottom: 20px;
  gap:15px;
}
. update-profile form. flex. input Box {
  width: 49%;
}
. update-profile form. flex. input Box span {
  text-align: left;
  display: block;
  margin-top: 15px;
  font-size: 17px;
  color: AR (--black);
}
. update-profile form. flex. input Box. box {
  width: 100%;
  border-radius: 5px;
  background-color: var (--light-bag);
  padding:12px 14px;
  font-size: 17px;
  color: AR (--black);
  margin-top: 10px;
}
@media (max-width:650px) {
  . update-profile form. flex {
    flex-wrap: wrap;
    gap:0;
  }
  . update-profile form. flex. input Box {
```

```
    width: 100%;
  }
}
    </style>
</head>
<body>
<div class="form-container">
  <form action="" method="post" ectype="multipart/form-data">
    <h3>register now</h3>
    <?php
    if(asset($message)) {
      foreach ($message as $message) {
        echo '<div class="message"> ‘. $message.'</div>';
      }
    }
    ?>
    <div class="text">
    <input type="text" name="roll no" placeholder="Enter Your Enrollment No" class="box" required>
    <input type="text" name="first name" placeholder="Enter Your First Name" class="box" required>
    <! -- <input type="text" name="last name" placeholder="Enter Your Last Name" class="box" required> -->
    <input type="text" name="phone number" placeholder="Enter Your Phone Number" class="box" required>
    <input type="email" name="email" placeholder="enter email" class="box" required>
    <input type="password" name="password" placeholder="Enter Your Password" class="box" required>
    <input type="password" name="confirm password" placeholder=" Enter your Confirm Password" class="box" required>
    <input type="text" name="Branch" placeholder="Enter Your Branch" class="box" required>
    <input type="text" name="Semester" placeholder=" Enter Your Semester" class="box" required>
    <label>Gender</label>
      &nabs;
```

```
        <input type="radio “name="gender “value="Male “required>
        <label>Male</label>
        &nabs;
            <input type=
"radio “name="gender “value="Female “required>
        <label>Female</label>
    <input type="file" name="image" class="box" accepts="image/jpg,
image/jpeg, image/pang">
  </div>
    <input type="submit" name="submit" value="register now" class="ban">
    <p>already have an account? <a her="lagniappe">login now</a></p>
  </form>
</div>
</body>
</html>
```

CHAPTER-6

6. TESTING

6.1 What is Testing:

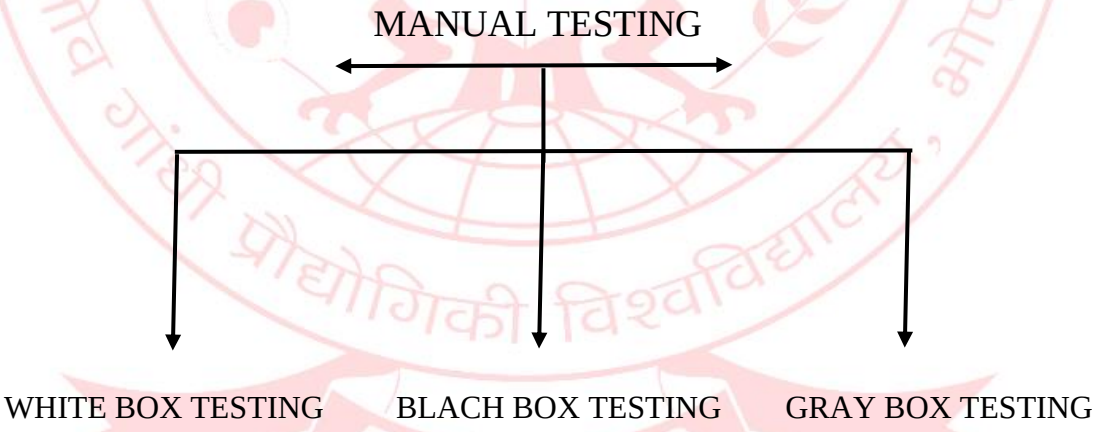
Software testing is a process whose purpose is to evaluate the functionality of software application and to find out whether the developed software meets the specified requirements and does not contain any errors.

6.2 Why Need Testing:

While making software, we make some mistakes are harmful, then some human beings make mistakes all the time. Some mistakes are not harmful, then some mistakes can be very dangerous. To rectify all these mistakes, we have to test the software.

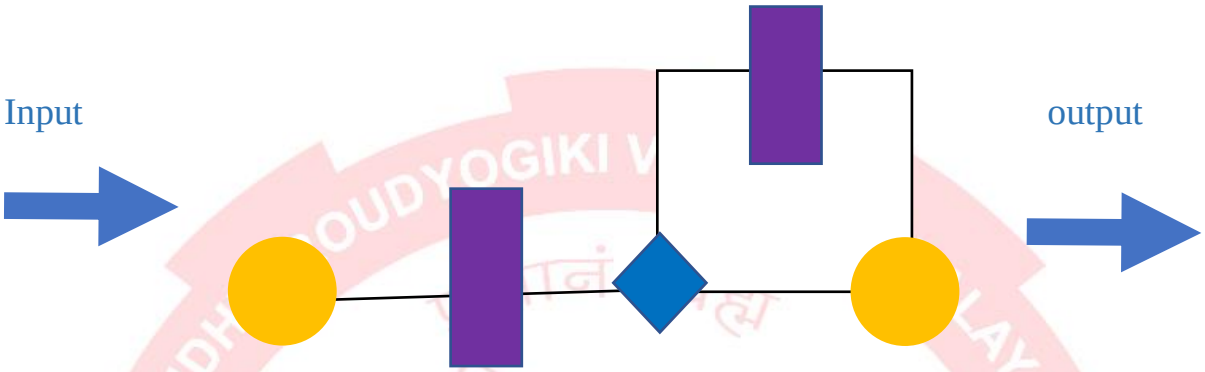
1. Software testing is done to find all possible defects and errors in the software.
2. Software testing is also done to ensure the quality of the software product. If the quality is better than customers will use a greater number of software products.
3. To increase the performance of the software.
4. To prove that there is no fault in the software.
5. To ensure that the software is made as per the requirement of the customer or not?
6. Software testing is also done to stay in business.

6.3 Types of Testing:-



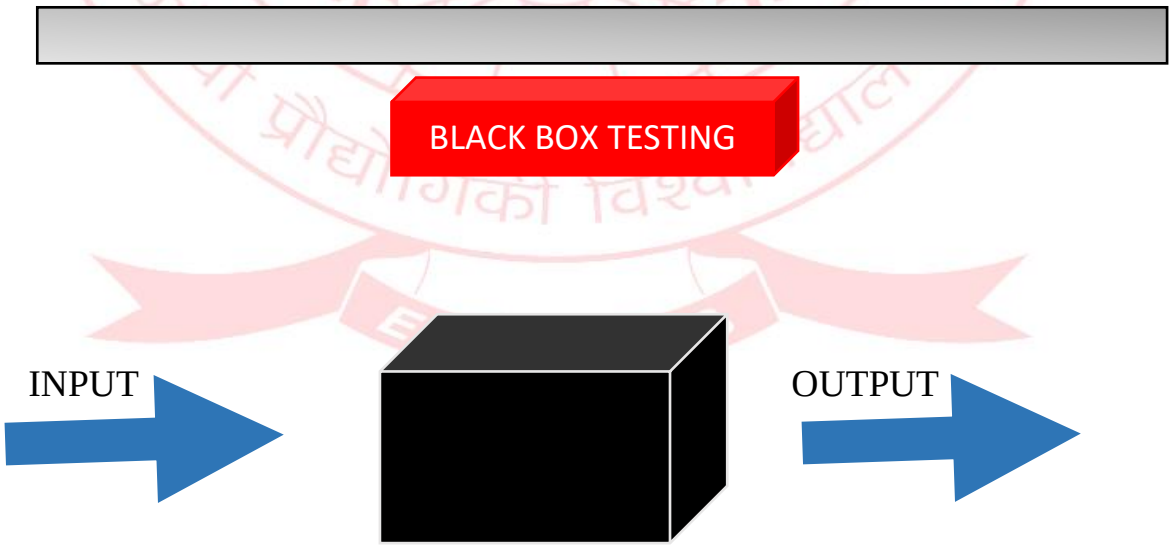
A. WHITE BOX TESTING: -

White box testing is the detailed investigation of internal logic and structure of the code. White box testing is also called glass called glass testing or open box testing. In order to perform white box testing on an application a tester needs to know internal work



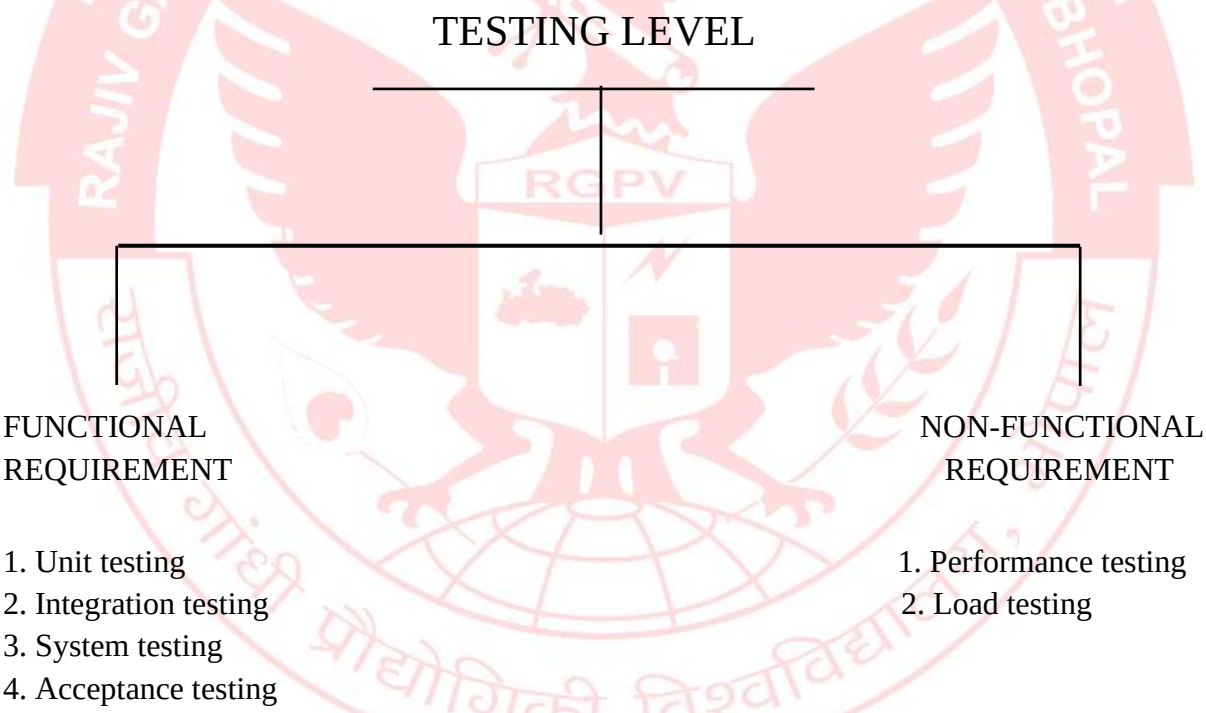
B. BLACK BOX TESTING: -

The technique of testing without having any knowledge of the interior working of the application is called black box testing. The tester is oblivious to the system architecture and does not have access to the source code. Typically, while performing a black box text, a tester will interact with the system user interface by providing inputs and examining outputs without knowing how and where the inputs are worked upon.



C. GRAY BOX TESTING: -

Gray Box Testing is a software testing technique which is a combination of Black Box Testing technique and White Box Testing technique. In Black Box Testing technique, tester is unknown to the internal structure of the item being tested and in White Box White Box Testing the internal structure is known to tester. The internal structure is partially known in Gray Box Testing.



FUNCTIONAL TESTING: -

1.UNIT TESTING: -

It focuses on smallest unit of software design. In this we test an individual unit or group of inter related units. It is often done by programmer by using sample input observing its corresponding outputs.

2. INTEGRATION TESTING: -

Integration testing is defined as the testing of combine parts of application to determine if function correctly.

Integration testing is of four types: -

- Top Down
- Bottom Up
- Sandwich
- Big Bang

Bottom-up integration: -

In this testing begins with unit testing, followed by tests of progressively higher-level module is thereafter.

Top-down integration: -

In this testing higher level modules are tested first and progressively, lower-level module is thereafter.

3. SYSTEM TESTING: -

In this software is tested such that it works fine for different operating system. It is covered under the black box testing technique. In this we just focus on required input and output without focusing on internal working. In this we have security testing, street, recovery testing and performance testing.

4. ACCEPTANCE TESTING: -

Acceptance testing is a level of software testing where a system is tested for acceptability. Acceptance testing, a testing technique performed to determine whether or not the software system has met the requirement specifications. The main purpose of this test is to evaluate the system's compliance with the business requirements and verify if it is having met the required criteria for delivery to end users.

There are various forms of acceptance testing:

1. User Acceptance
2. Testing Business
3. Alpha Testing
4. Beta Testing

1. ALPHA TESTING: -

Alpha testing is a type of acceptance testing, performed to identify all possible issues/ bugs before releasing the product to everyday users or the public. Alpha Testing performed at developer's site. Reliability and Security Testing are not performed in-depth Alpha Testing. Alpha testing involves both the white box and black box techniques.

2. BETA TESTING: -

Beta Testing of a product is performed by "real users" of the software application in a "real environment" and can be considered as a form of external User Acceptance Testing. Beta testing is performed by clients or End Users who are not employees of the organization. Beta Testing typically uses Black box Resting.

NON-FUNCTIONAL TESTING: -

1. PERFORMANCE TESTING: -

Performance testing a non-functional testing technique performed to determine the system parameters in terms of responsiveness and stability under various workload. Performance testing measure the quality attributes of the system, such as scalability, reliability and resource usage.

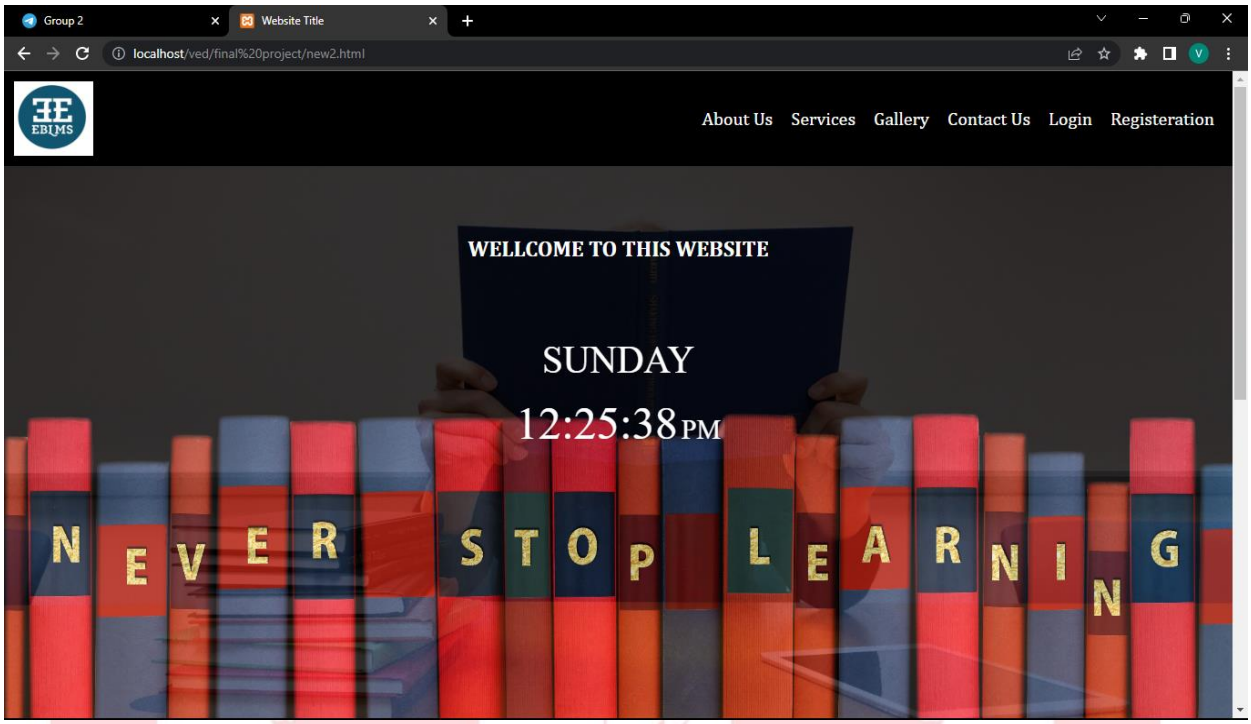
Performance Testing Techniques: -

- **Load testing-** It is the simplest form of testing conducted to understand behavior of the system under a specific load. load testing will result in measuring import business critical transactions and load on the database, application server etc. are also monitored.
- Stress testing- It is performed to find the upper limit capacity of the system and also to determine how the system performs if the current load goes well above expected maximum.

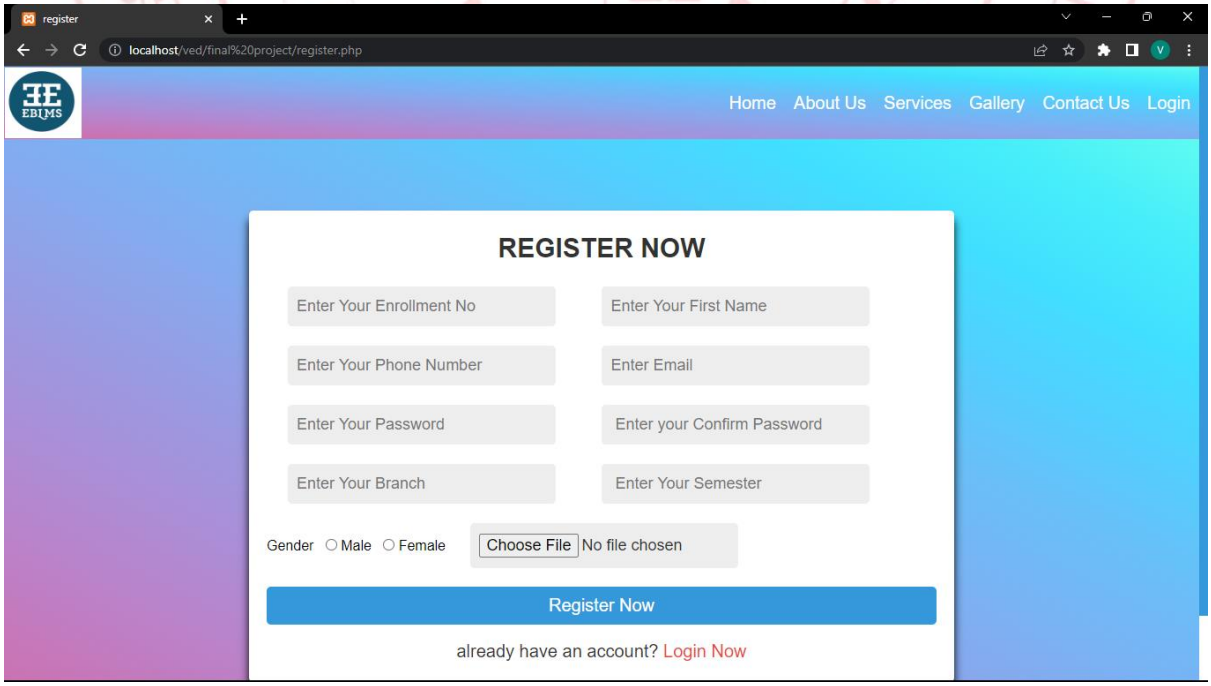
CHAPTER – 7

OUTPUT SCREEN

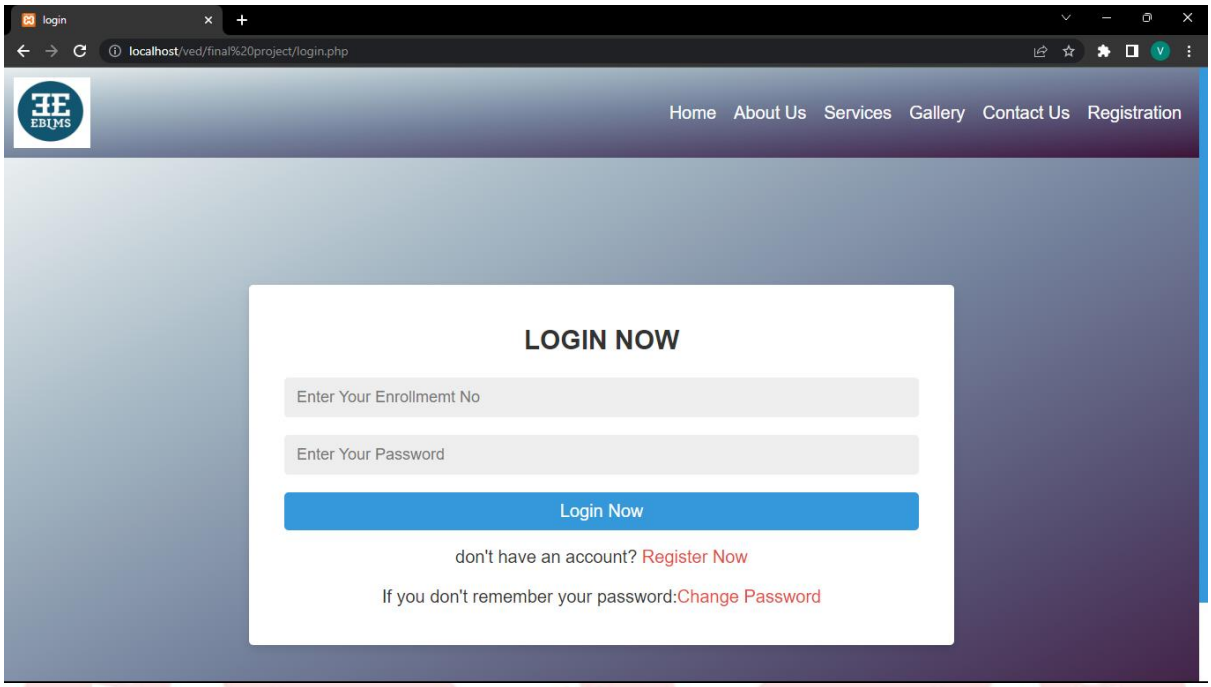
7.1 Output screen of Home Page:



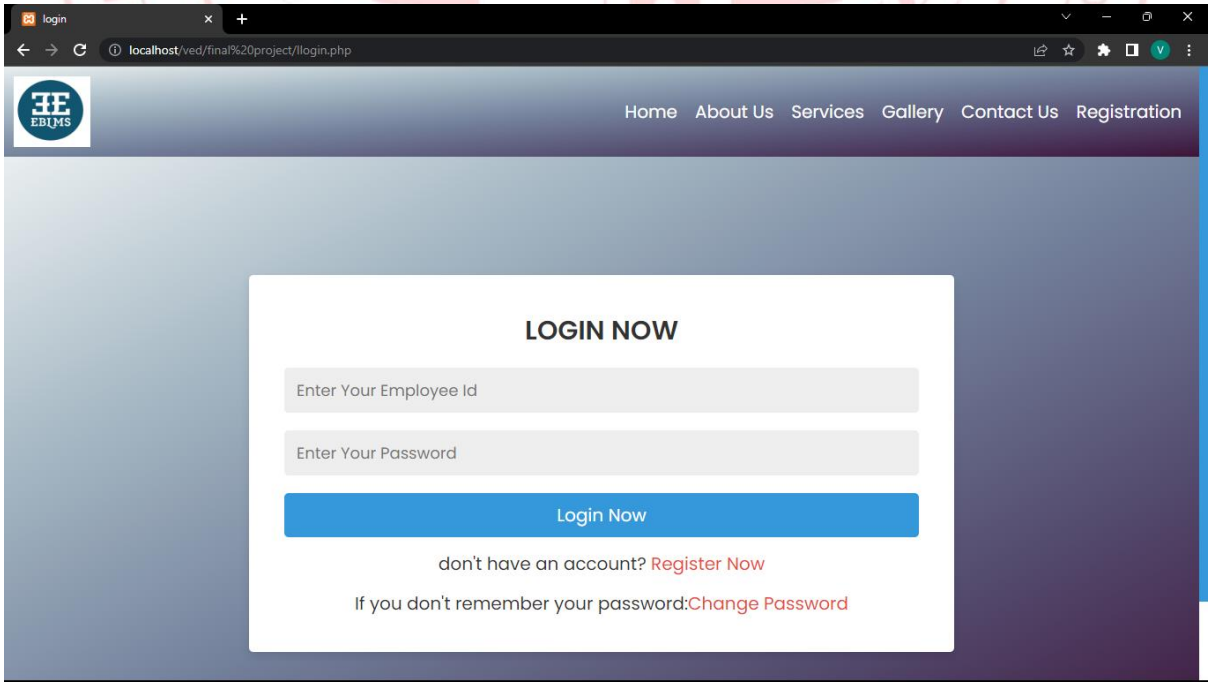
7.2 Output Screen of User Registration Page:



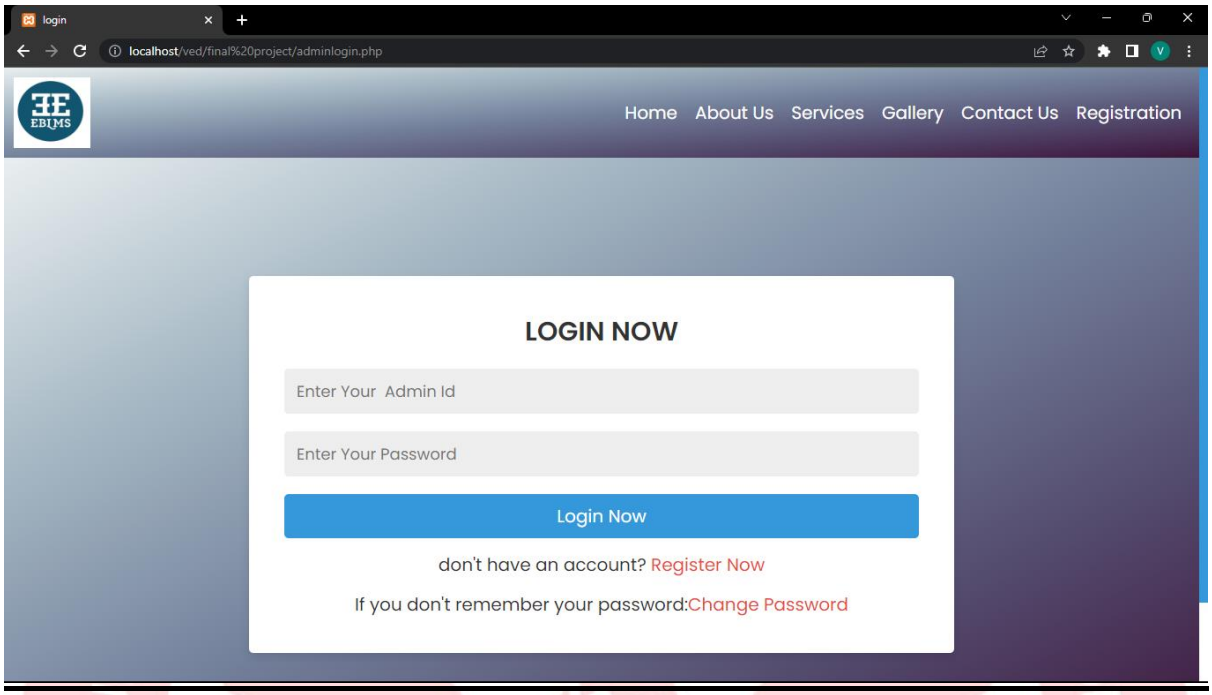
7.3 Output Screen of User Login Page:



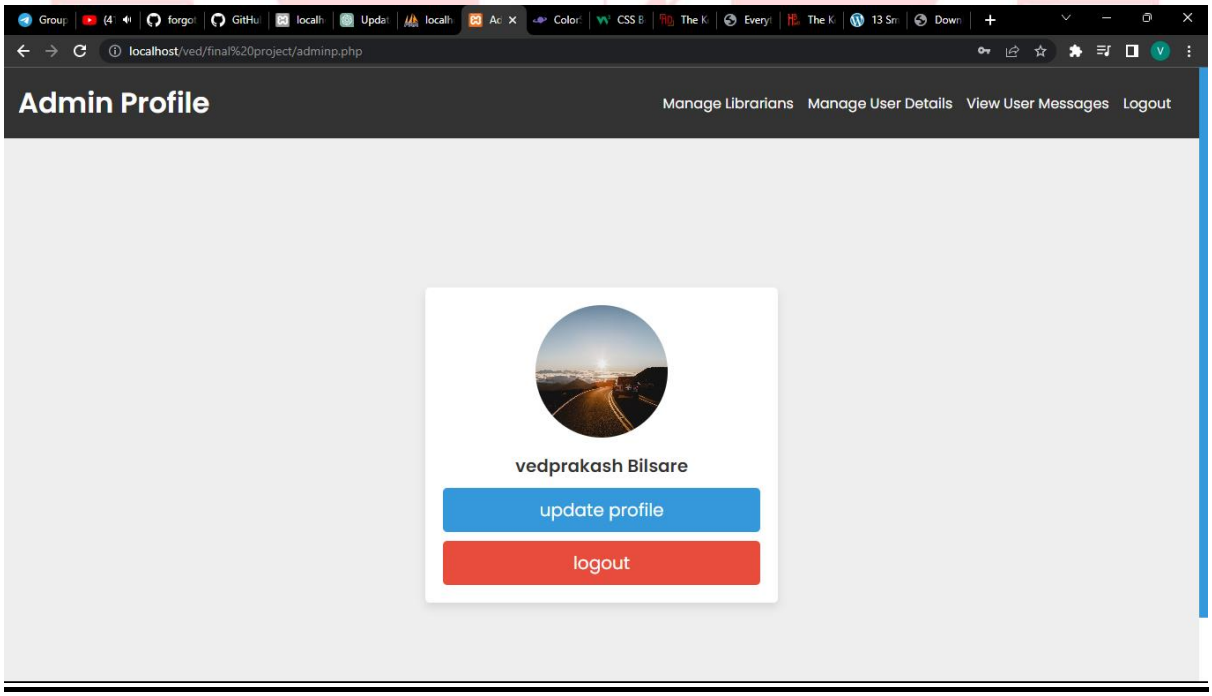
7.4 Output Screen of Librarian Login Page:



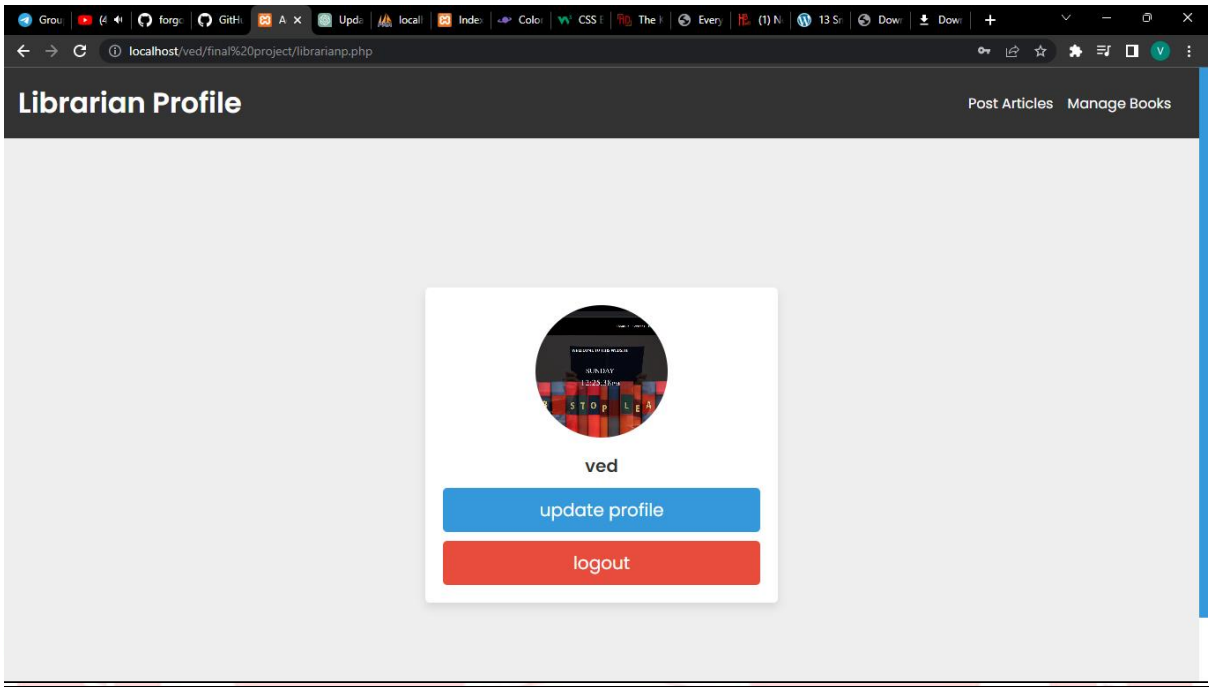
7.5 Output Screen of Admin Login Page:



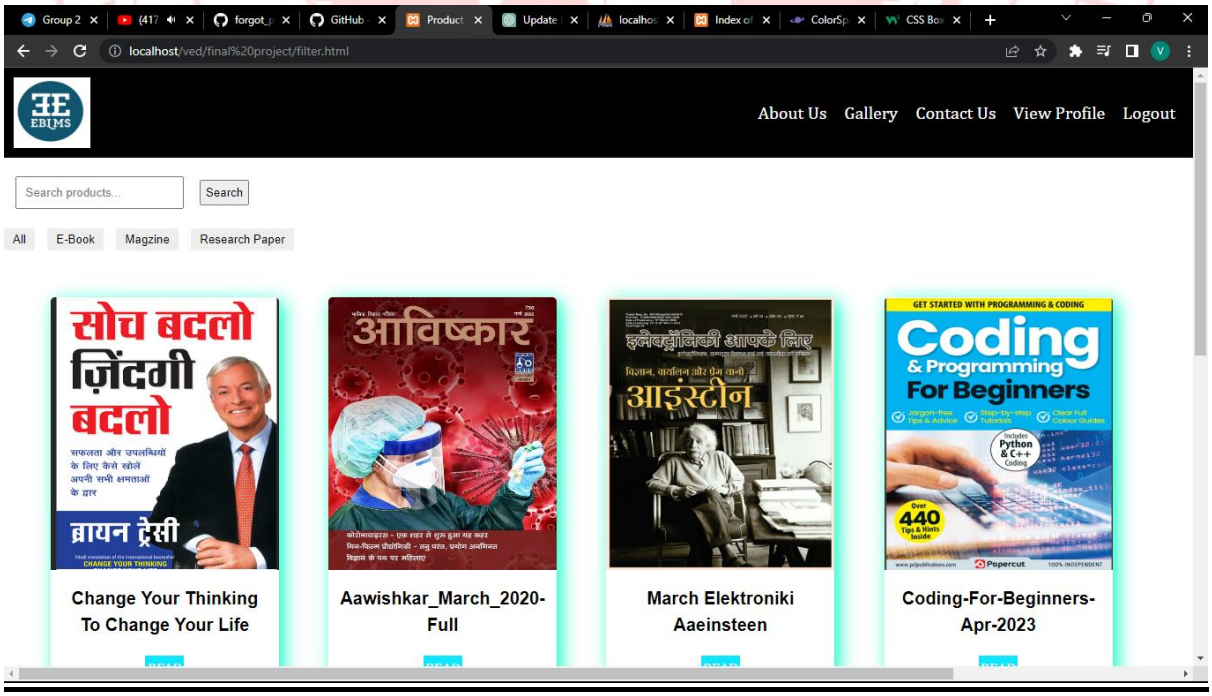
7.6 Output Screen of Admin panel Page:



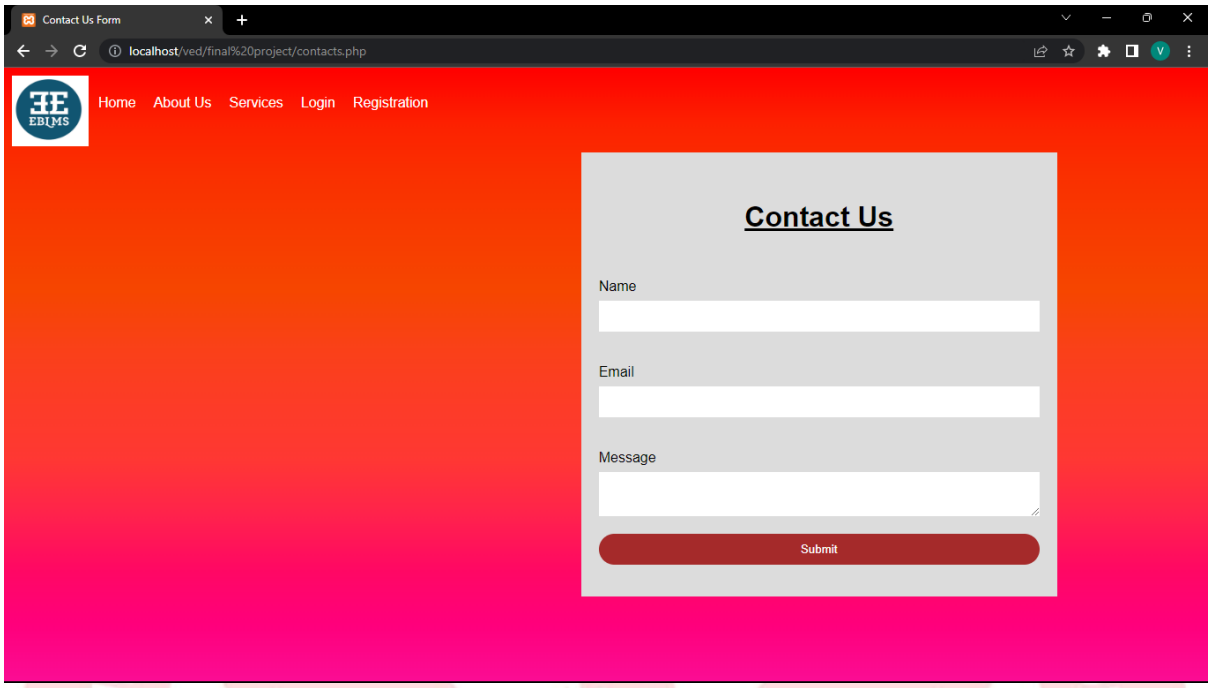
7.7 Output Screen of Librarian panel Page:



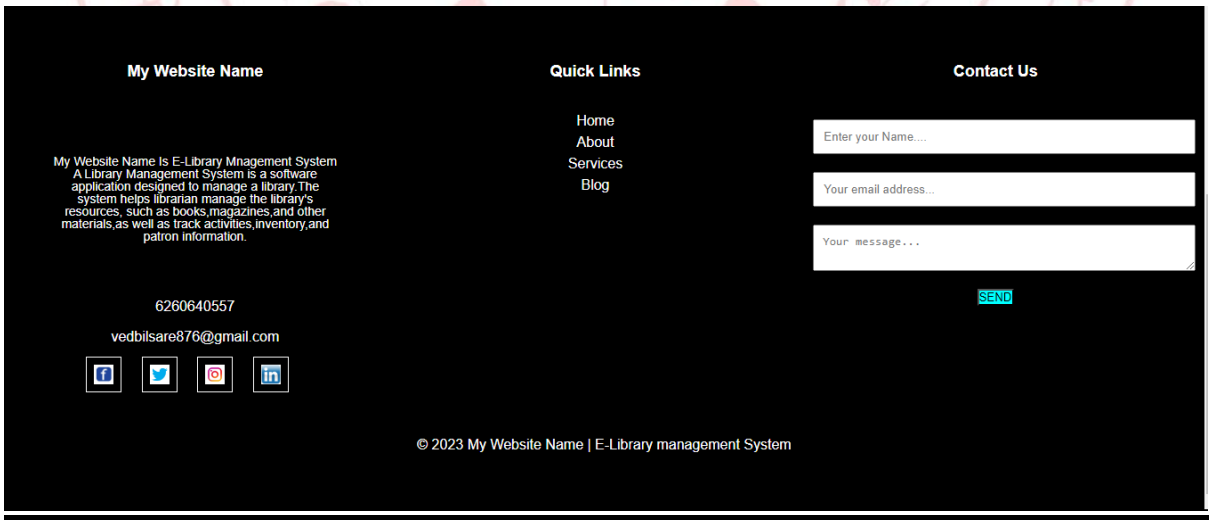
7.8 Output Screen of User panel Page:



7.9 Output Screen of Contacts Page:



7.10 Output Screen of Footer Page:



CHAPTER-8

3. COST ESTIMATION:

The constructive cost model (COCOMO) is a procedural software cost estimation model development by Barry W. Boehm. The model parameters are derived from fitting a registration formula using data from historical project (61 project for COCOMO 81 and 63 projects for COCOMO 1) Basic COCOMO computer software development effort (and cost) as a function of program size is expressed in estimate thousands of sources line of code (SDLC, KLOC).COCOMO applies to three classes of software project:

1. **Organic projects** – "Small" teams with "good" experience working with "less then rigid" requirement.
2. **Semi-detached projects** –
   "Medium" teams with mixed experience working with "less then rigid" requirement.
3. **Embedded project** –
   Developed within a set of "tight" constrains. It is also combination of organic and semi-detached projects (Hardware, software, operational). The estimated effort and scheduled time for the project are given by the relation:

Effort (E) = a*(KLOC) ^b PM

Scheduled time (D) = c*(E) ^d M {M: months}

Average resource size (Required Persons) = E/D P **{P: Persons}**

Productivity of Software = KLOC/E

Where,

E = Total effort required for the project in Persons-Months (PM).

D = Total time required for the project Development in months (M).

KLOC = The size of the code for the project in kilo lines of code.

a, b, c, d = The constants parameters for a software project.

The coefficient a, b, c and d are given in the following table:

Project Type	a	b	c	d
Organic	2.4	1.05	2.5	0.38
Semi-detached	3.0	1.12	2.5	0.35
Embedded	3.6	1.20	2.5	0.32

CALCULATION:

Estimated size of project is (in LOC) = 11029 LOC
Estimated size of project is (in KLOC) = 11029 /1000
= 11.029 KLOC

Organic:

Effort (E) = a*(KLOC) ^b PM
= 2.4 * (11.029) ^1.05
= 2.4 * 12.43
= 29.84 PM
Total time Development (D) = c*(E)^d M
= 2.5 * (29.84) ^0.38
= 2.5 * 3.63
= 9.08 Months
No. of Persons = 8 Persons
Cost of salary in 1 month for 1 person = 8,000 R.S.
Cost of salary in 1 month for 8 person = 64,000 R.S.
The Final cost is = 9.08 * 8,000
= 72,640 R.S.

CHAPTER – 9

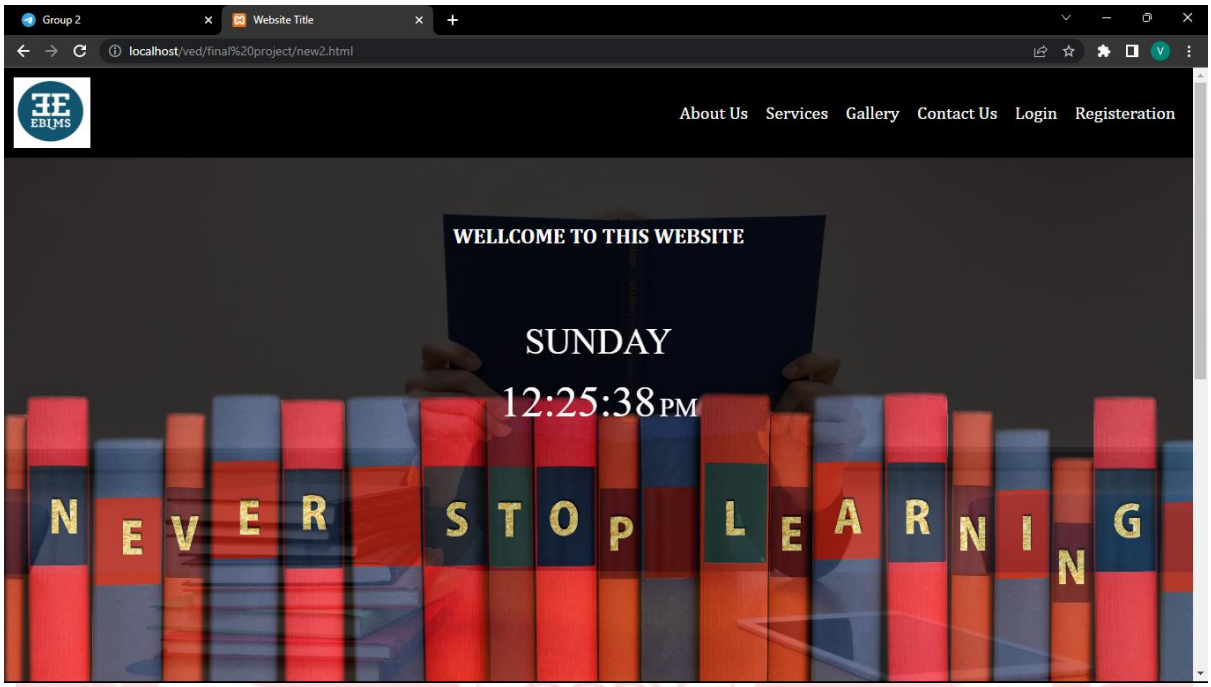
CONCLUSION:

As we know the name of our project is E-Book Library Management System in which we are providing E-Books, Research Papers and Magazines which is Important for all students in future. It is going to happen they can make their study better by studying from this website. And in future we will try to make our website even more unique so that users can do proper study.

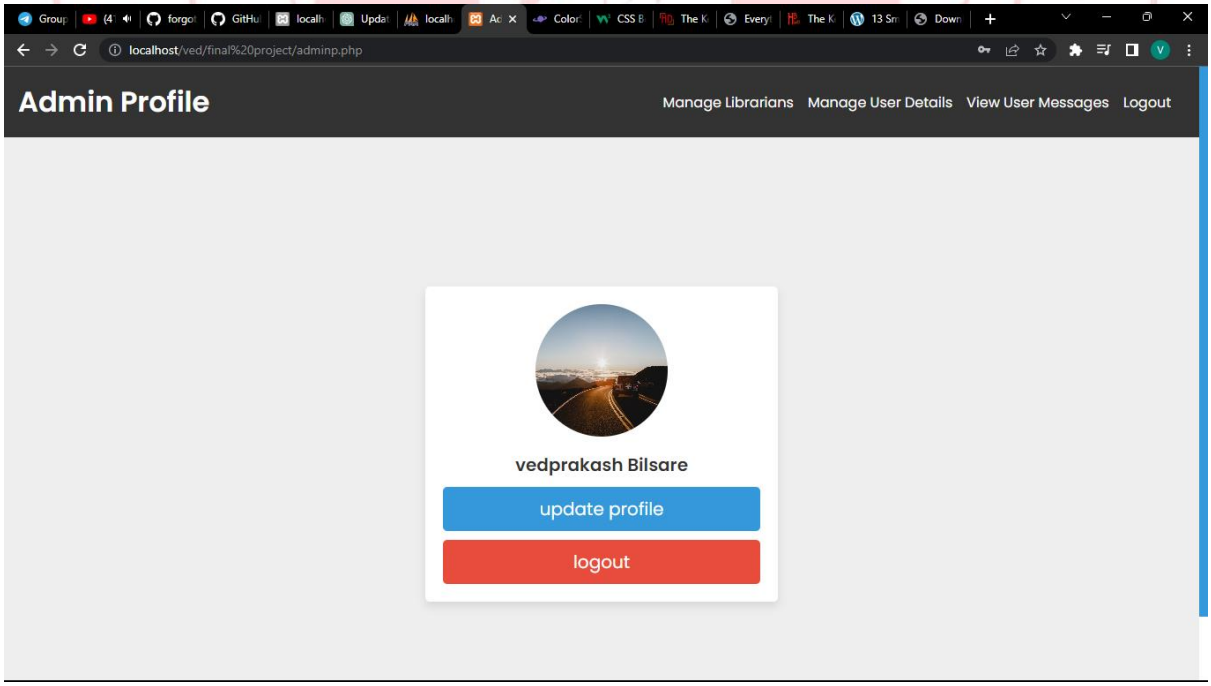
CHAPTER – 10

10. USER MANUAL:

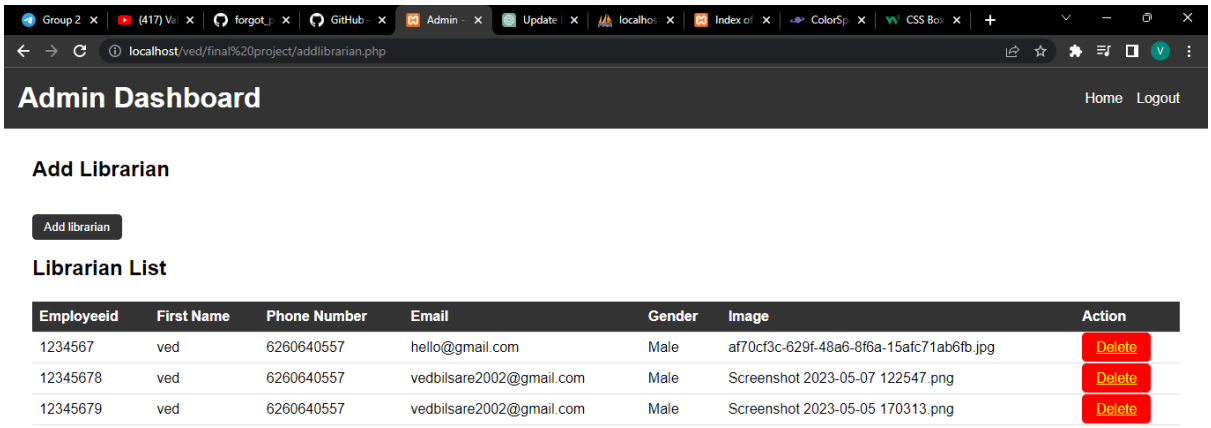
- Now our home page is open.



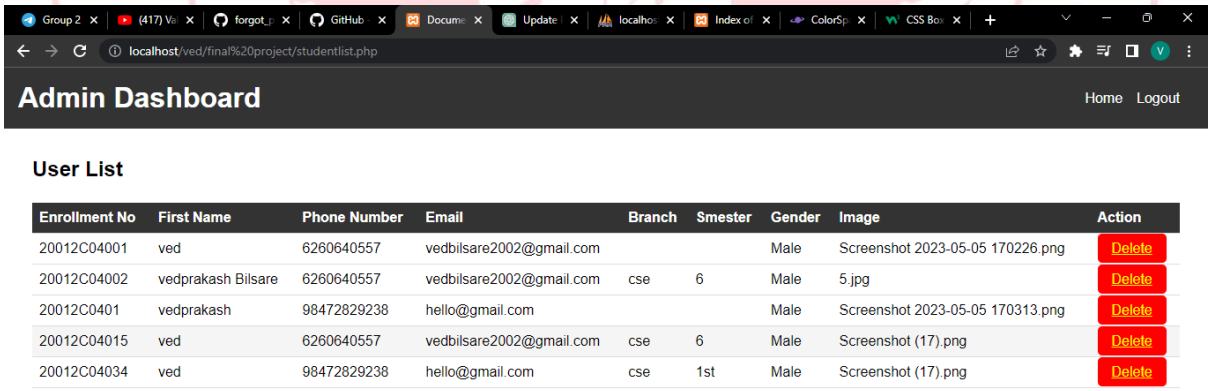
- If you are an **Admin** then you will be provided the following facilities after login:



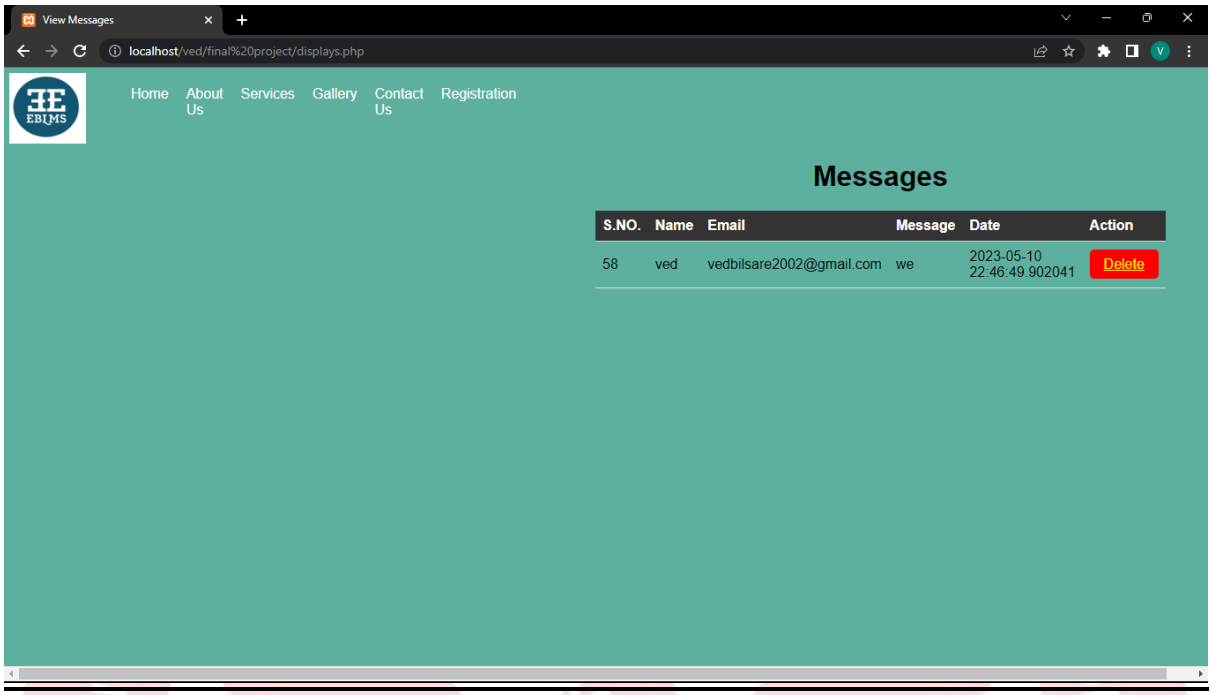
Manage Librarian:



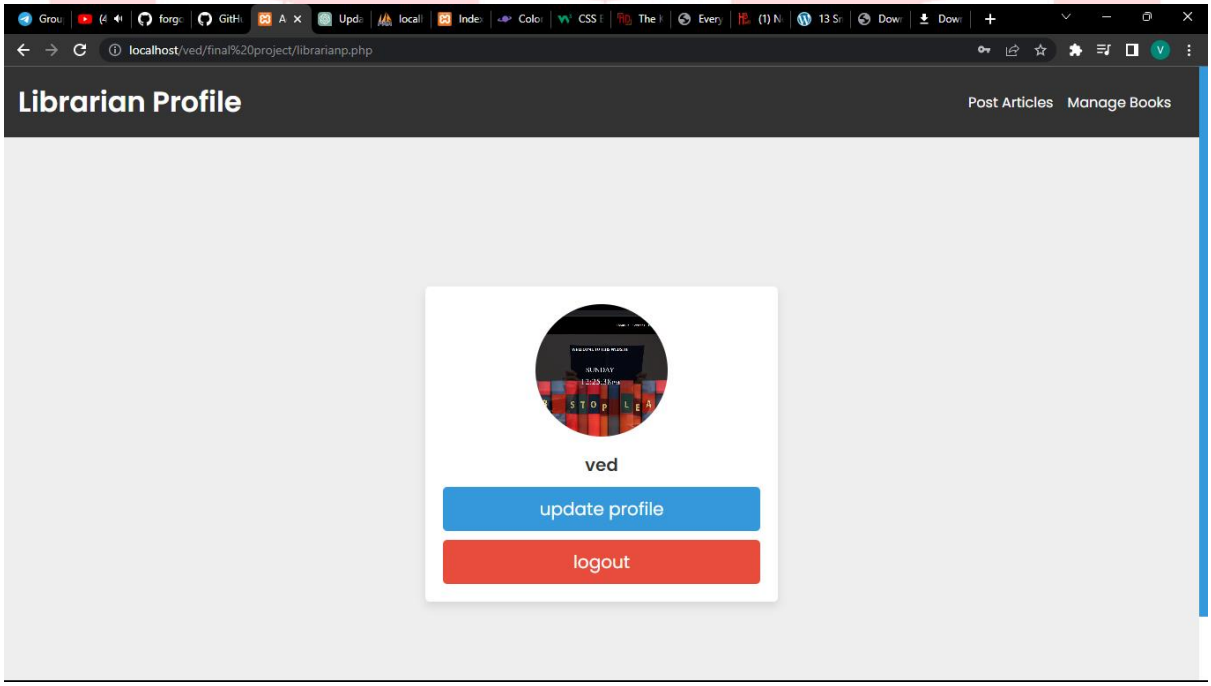
Manage User:



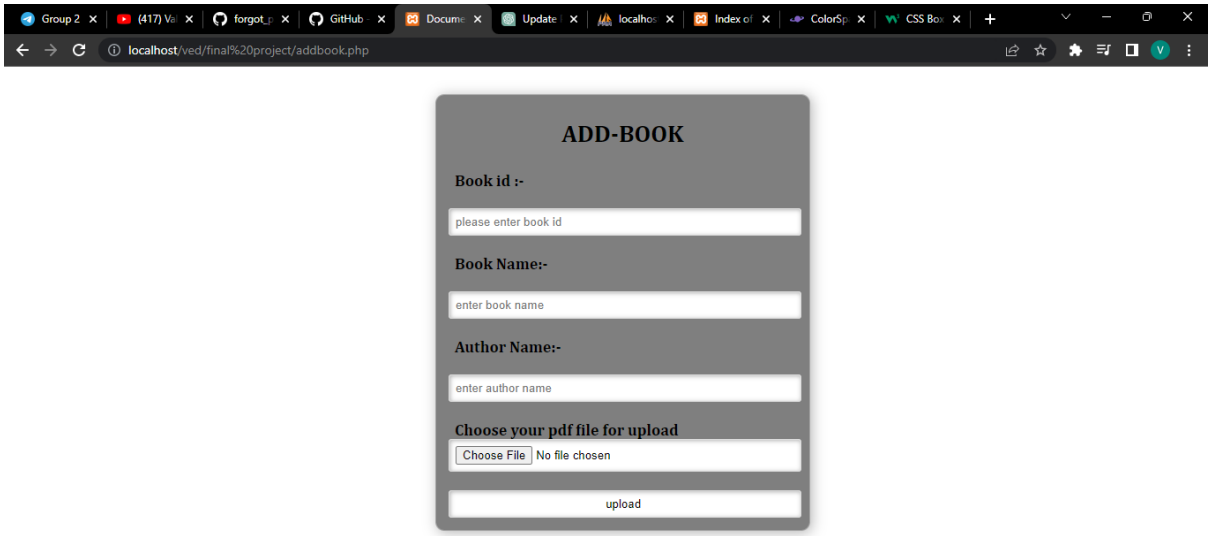
View User Message:



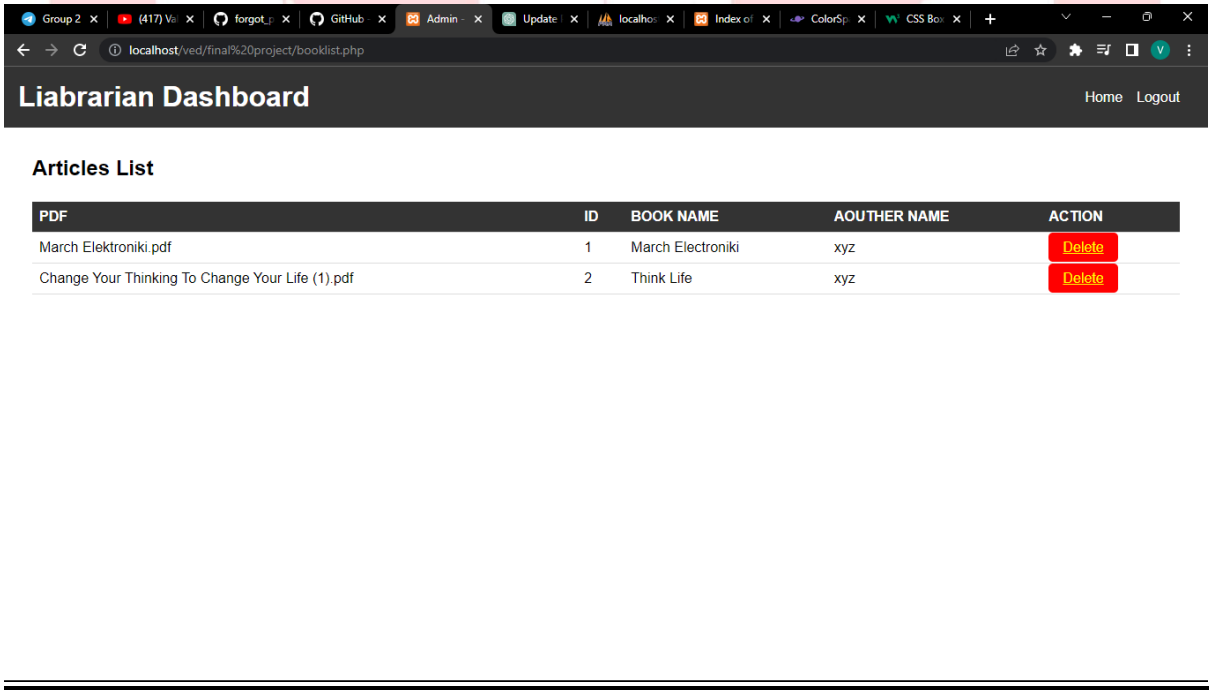
- If you are a **Librarian then** you will be provided the following facilities after login:



Post Articles:

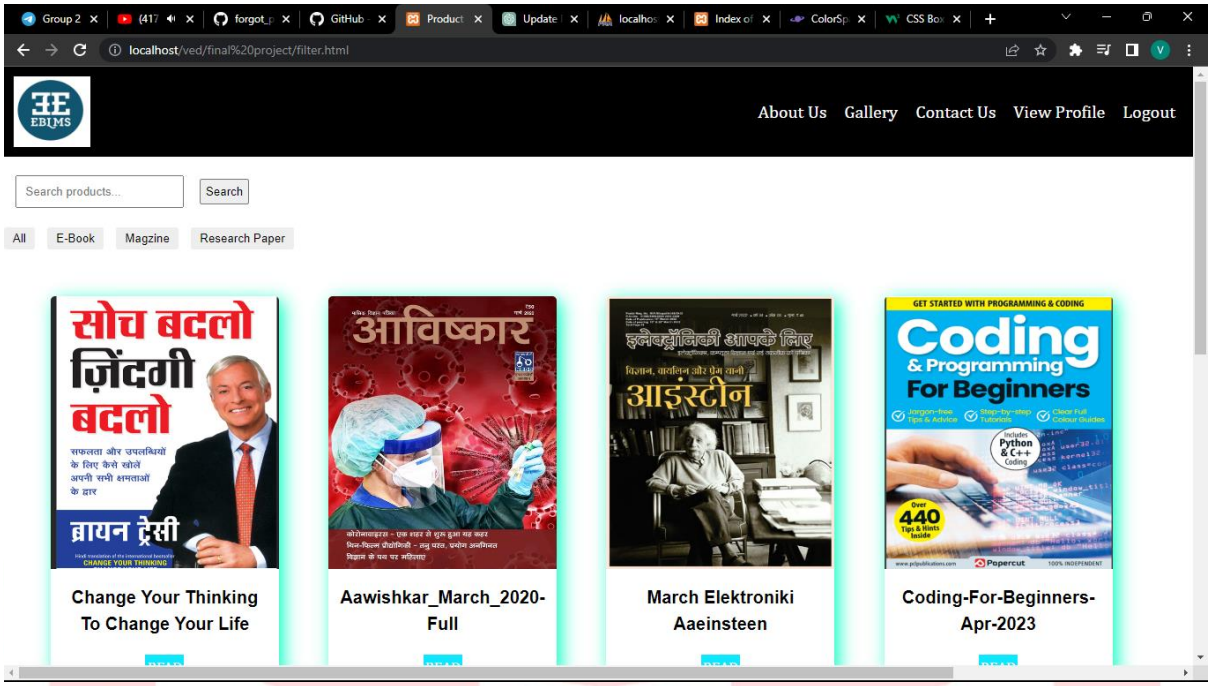


Manage Books:

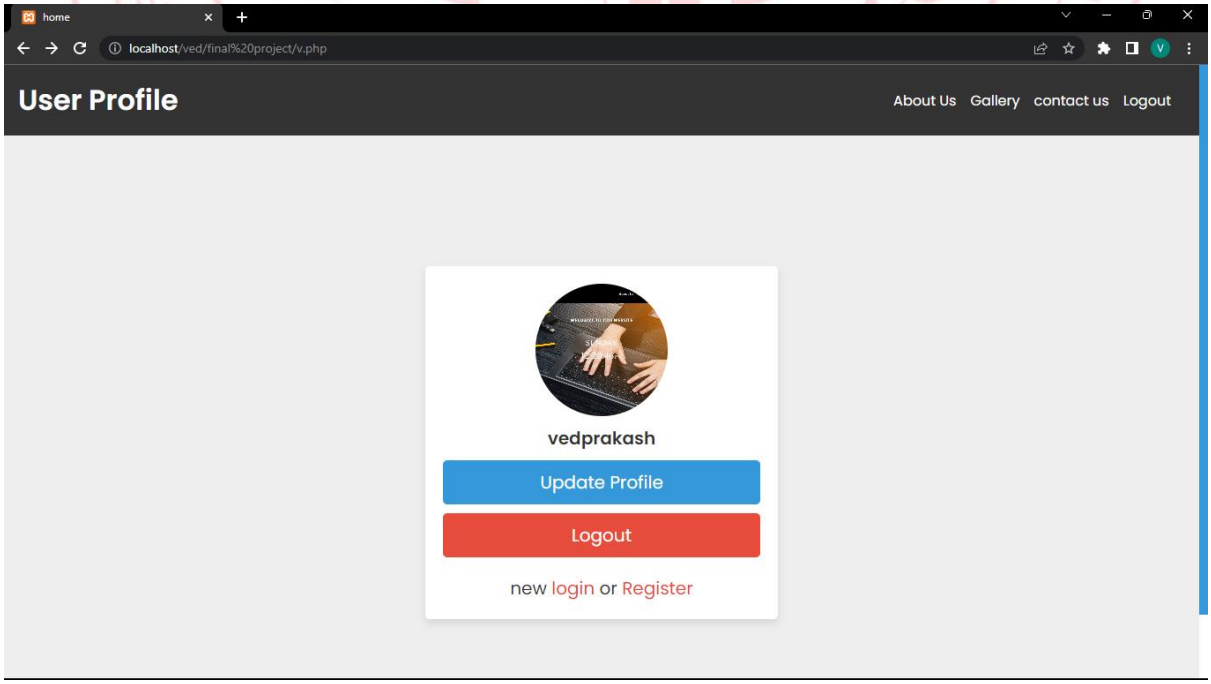


• If you are a **User** then you will be provided the following facilities after login:

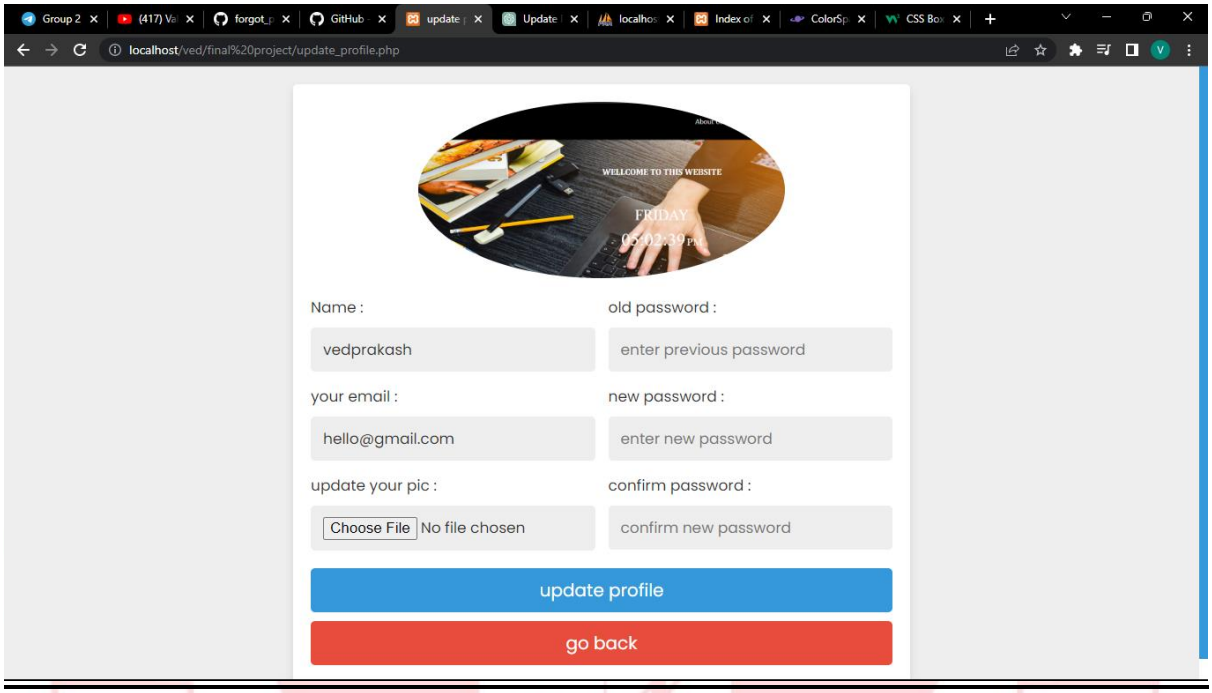
Read Books:



View Profile:



Update Profile:



CHAPTER – 11

BIBLIOGRAPHY:

1. www.google.com
2. National Digital Library of India
3. https://openlibrary.org/
4. https://www.ebookselibrary.com/
5. https://library.harvard.edu/
6. Online eBook Library - Online Digital Library
7. ACM Digital Library
8. https://ehindistudy.com/2015/09/15/sdlc-in-hindi/
9. https://ehindistudy.com/2015/07/21/e-r-model-in-hindi/
10. https://ehindistudy.com/2020/10/15/types-of-software-testing-in-hindi/
11. https://www.javatpoint.com/uml-use-case-diagram
12. https://www.geeksforgeeks.org/software-engineering-cocomo-model/
13. https://www.hindimeit.com/what-is-incremental-mode-in-hindi-incremental-model-kya-hain/
14. 44Books.com
15. Colo Space - 3 Colour Gradient.
16. Guided by YouTube channel with:
    1. Thapa Technical.
    2. Coding with Elias.
    3. Code with harry.
17. Fullpdf.com (For Research Paper).