INTRODUCTION

1. INTRODUCTION

Library Management System is a project which aims in developing a computerized system to maintain all the daily work of the library. 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.

In case of manual system, they need a lot of time, manpower etc. here almost all work is computerized. So accuracy is maintained. Maintaining is very easy. It can do with in a few minutes. This system can be accessed by the administrators. It is the job of administrator to mark attendance and maintain accurately.

1.1 Purpose and scope

The main intention of developing Library Management System is to computerized the traditional way of maintaining the daily transactions of the library. And in order to overcome the problems that are being commonly faced by the Librarians in manually maintaining a record of transactions of books and students such as visits to Library to search for the books etc. the website is being created and this helps to effectively handle the problems addressed above by enabling the librarians to keep a record on books by using site in the system and also enabling the students to take the book they wanted very easily.

The project also includes the facility to view the books which are available and those which are issued and all the books in the library.

This project is basically a desktop application which means self-contained software runs on the system on which it has been installed under the user control and it will work for a particular institute or college only.

SYSTEM ANALYSIS

2. SYSTEM ANALYSIS

At this step the developers decide a roadmap of their plan and try to bring up the best software model suitable for the project. System analysis includes understanding of software product limitations, learning system related problems or changes to be done in existing systems beforehand, identifying and addressing the impact of project of organization and personnel etc. The project team analyses the scope of the project and plans the schedule and resources accordingly.

2.1. Proposed Website

This application is built for automating the processing of library management. It also enhances the speed of the performing daily work of library easily.

HTML, PHP and with the operating system windows 10 is used on the proposed system. We convert the existing system into computerized system as accurate and the data can be stored sequentially. The time consuming is low and processing is speedily. Proper updating modifications can be easily done using the proposed system.

2.2Advantages of the Proposed System

- A computer can work more efficiently than compared to a human being.
- The work becomes easy for the employees and thus, some amount of human resources is saved.
- Data accuracy is maintained.
- Accurate information can be achieved within a short span of time.
- Data can be accessed easily and randomly.
- This also saves a lot of time.
- Provides security by the login system.
- Because of the login system, unauthorized persons cannot access the data.
- Complexity of the work can be reduced by using the system which was not possible in manual or semi-automated system. So it saves the time utmost.

REQUIREMENT ANALYSIS

3. REQUIREMENT ANALYSIS

If the feasibility report is positive towards undertaking the project, next phase starts with gathering requirements from the user. Analysts and engineers communicate with the client and end users to know their ideas on what the software should provide and which features they want the software to include.

Requirements analysis is done in the order to understand the software system is too solved. The problem could be automating an existing manual process, developing a new automated system, or a combination of the two. For large system that have many features, and that need to perform many different tasks, understanding the requirement of the system is a major task. The emphasis in requirement analysis is on identifying what I needed from the system, not how the system will perform its goals.

3.1 Hardware and software Specification

The configuration of the system on which the package is developed is as follows:

A. Hardware:

- Processor: 11th Gen Intel(R) Core (TM) i5-1135G7 @ 2.40GHz 2.42 GHz
- Hard disk: 1 TB
- Ram: 8 GB
- Key board: QWERTY
- Printer : Any **B. Software:**
- Operating System: Windows 10
- Front End Tool : HTML, PHP (for connectivity)
- Database : MySQL
- Browser: Google Chrome
- Editor: Notepad

3.2 Feasibility Study

The feasibility study is necessary to determine whether the proposed system feasible considering the technical, operational and economic factors. By having a detailed feasible study the maintenance will have a clear-cut view of the proposed system with the benefits and drawbacks.

All projects are feasible – given unlimited resources and infinite time. Unfortunately, the development of computer- based system or product is more likely plagued by a scarcity of resources and difficult delivery dates. It is both necessary and prudent to evaluate the feasibility of a project at the earliest possible time. Months or year of effort, thousands or millions of dollars, and untold professional embarrassment can be averted if an ill-conceived system is recognised early in the definition phase.

- ***Technical Feasibility:***

  This project technically feasible because of the below mentioned feature: The project developed in HTML with graphical user interface. It provides the high level of reliability and compatibility.

- ***Economic Feasibility:***

  Since the proposed system is an integral part of the decentralized computerization of the total organization transaction, it is worth to purchase the hardware needed. Thus the proposed system is economically feasible.

- ***Operational Feasibility:***

  Since the proposed system is easy to use, it is not necessary to train the users to adopt to the new system. Any users with a little bit knowledge of computer can handle the system.

  1. There is no resistance from users to the proposed system.
  2. The proposed system provides better services to the employees and maintenance.
  3. The proposed system reduces the work efforts.

Conclusion of feasibility Study:

The proposed system in economically, technically, operationally feasible. So, the proposed system is acceptable.

SYSTEM DESIGN

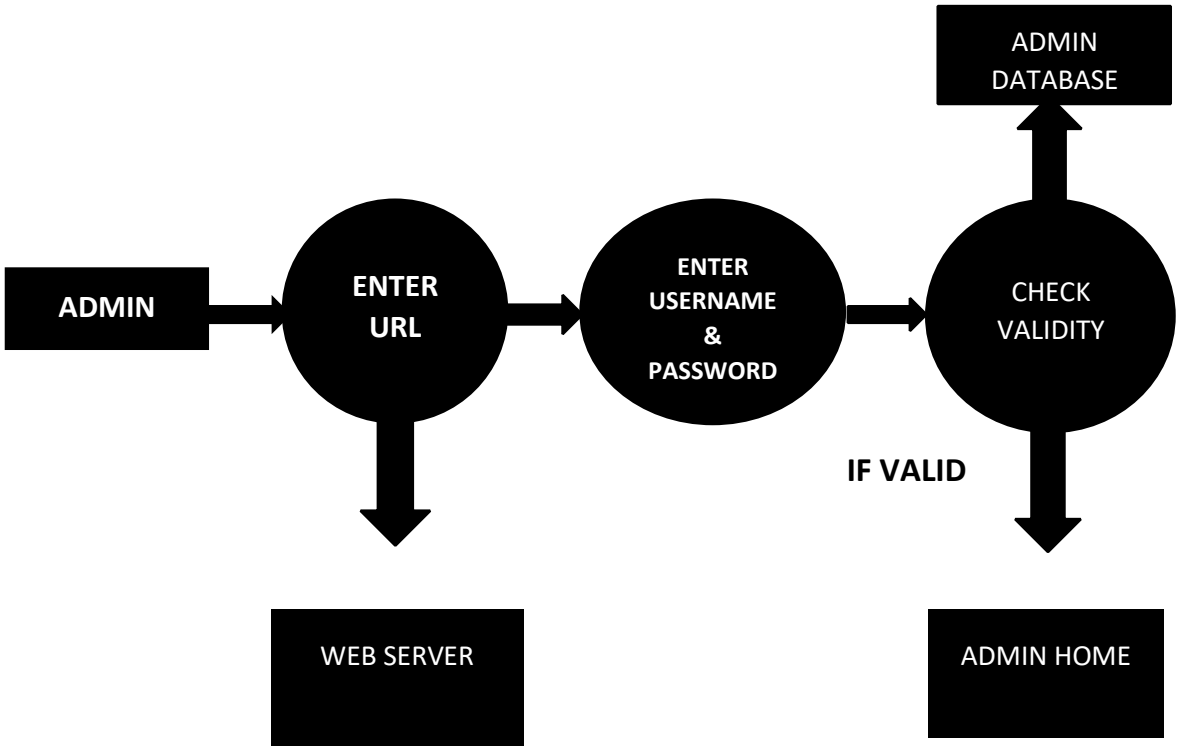
4.SYSTEM DESIGN

Software design is an interaction process through which the requirements are translated into a “BLUE PRINT” for constructing the software. Software design is both a process and a model. The design process is set of steps that enable the designer to describe all aspects of the software to be built.

The design model is the equivalent of an architect’s plan for a house. It begins by representing the totally of the things to be built, and slowly refines the thing that guide for consulting each design.

DATA FLOW DIAGRAMS

DATA FLOW DIAGRAM FOR ADMIN LOGIN



After entering to the home page of the website, Admin can select the admin login where it asked to enter the username and password, and if he/she is a valid user then the admin home page will be displayed else it again re-asks for valid username and password.

TABLE DESIGN

BOOK TABLE FOR KEEPING TRACK OF RECORDS

FIELD	DATA TYPE	DEFAULT	KEY	NULL
isbnno	Varchar (30)	None		No
bookname	Varchar (30)	None		No
authorname	Varchar (30)	None		No
category	Varchar (30)	None		No

REGISTER TABLE FOR STUDENT INFORMATION

FIELD	DATA TYPE	DEFAULT	KEY	NULL
id	Varchar (30)	None	Primary key	No
name	Varchar (30)	None		No
year	Varchar (30)	None		No
section	Varchar (30)	None		No

CODING

5.CODING

Home.php

```
<?php
if($_SERVER["REQUEST_METHOD”] == "POST”) {
$name=$_POST['name'];
$pwd=$_POST['password'];
$conn=mysqli_connect('localhost','root','','library') or die(mysqli_error($conn));
$query=mysqli_query ($conn,"select * from admin");
$data =mysqli_fetch_assoc($query); if($data["username"]!
="$name”) {
echo "<script>alert ('Username doesnot exist!’) </script>";
}
else {
if($pwd==$data["password"]) { session_start
();
$_SESSION["user"]=$name; header("location:
adminhome.php");
}
else {
echo "<script>alert ('password is Incorrect’) </script>";
}
}
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>HOME PAGE</title>
```

```
<link rel="stylesheet" href="style.css">
<link rel="stylesheet" href="index.css">
</head>
<body>
<form action="<?php echo $_SERVER['PHP_SELF'];?>" method="POST">
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
</div>
<div class="content">
<h1>HEY<br><span>ADMIN LOGIN</span><br>HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="aform">
<h2>AdminLogin</h2>
<input type="text" name="name" placeholder="Enter Username Here" required>
<input type="password" name="password" placeholder="Enter Password Here"
required><br><br>
<button class="btnn" type="submit">LoginHere</button>
</div>
</div>
</div>
</form>
</body>
</html>
```

Adminhome.php

```
<?php
session_start(); if(is_null($_SESSION["user"]))
{
header ("Location: home.php");
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Index page</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
```

```
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="logout.php"><button class="btn">LOGOUT</button></a>
</div>
</div>
<div class="content">
<h1>WELCOME<br><span>HOME ADMIN</span><br>HOW ARE YOU</h1><br>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
</div>
</body>
</html>
```

Books.php

```
<?php
session_start(); if(is_null($_SESSION["user"]))
{
header ("Location: home.php");
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>AdminHome</title>
<link rel="stylesheet" href="style.css">
<link rel="stylesheet" href="books.css">
</head>
<body>
<div class="main">
```

```
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="adminhome.php">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
<div class="content">
<h1>YOU CAN DO<br><span>ANYTHING YOU</span><br>WANT HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="bform">
<h2>YOU CAN DO</h2>
<a href="addbook.php"><button class="btnn"
type="submit">AddBook</button></a>
<a href="deletebook.php"><button class="btnn"
type="submit">DeleteBook</button></a>
<a href="issuebook.php"><button class="btnn"
type="submit">IssueBook</button></a>
<a href="allbooks.php"><button class="btnn" type="submit">AllBooks</button></a>
```

```
<a href="availablebooks.php"><button class="btnn"
type="submit">AvailableBooks</button></a>
<a href="issued.php"><button
class="btnn"type="submit">IssuedBooks</button></a>
</div>
</div>
</div>
</body>
</html>
```

Addbook.php

```
<?php
session_start();
if(is_null($_SESSION["user"]))
{
header("Location: home.php");
}
if($_SERVER["REQUEST_METHOD”] == "POST”) {
$isbn=$_POST['isbn'];
$bookname=$_POST['book'];
$author=$_POST['author'];
$category=$_POST['category'];
$con=mysqli_connect('localhost','root','','library') or die(mysqli_error($con));
$duplicate=mysqli_query ($con,"selectisbnno from books where isbnno='$isbn';");
$dup=mysqli_fetch_assoc($duplicate);
if($dup==null) {
$sql="INSERT INTO books VALUES('$isbn','$bookname','$author','$category')";
 if (mysqli_query ($con, $sql)) {
echo "<script>alert ('Book successfully added’) </script>";
}
```

```
}
elseif($dup["isbnno”] =="$isbn”) {
echo "<script>alert ('Already Book is existed’) </script>";
}
else {
$sql="INSERT INTO books VALUES('$isbn','$bookname','$author','$category')";
if (mysqli_query ($con, $sql)) {
echo "<script>alert ('Book successfully added’) </script>";
} else {
echo "<script>alert ('Book is not added’) </script>";
}
}
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Add Books</title>
<link rel="stylesheet" href="style.css">
<link rel="stylesheet" href="addbook.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
</div>
```

```
<div class="content">
<h1>ADD<br><span>NEW BOOKS</span><br>HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="aform">
<h2>ADD BOOK</h2>
<form action="<?php echo $_SERVER['PHP_SELF'];?>" method="POST">
<input type="text" name="isbn" placeholder="Enter Book Number" required <input type="text" name="book" placeholder="Enter Book Name" required>
<input type="text" name="author" placeholder="Enter Author Name" required><br><br>
<label for="category">SELECT CATEGORY</label><br>
<select name="category" required>
<option value="computers">Computers</option>
<option value="science">Science</option>
<option value="statistics">Statistics</option>
</select>
<button class="btnn" type="submit">ADD</button>
<button class="btnn" type="submit"><a href="books.php">BACK</a></button>
</form>
</div>
</div>
</div>
</body>
</html>
```

Deletebook.php

```
<?php
session_start (); if(is_null($_SESSION["user"]))
{
```

```
header ("Location: home.php");
}
if($_SERVER["REQUEST_METHOD”] == "POST”) {
$isbn=$_POST['isbn'];
$category=$_POST['category'];
$con=mysqli_connect('localhost','root','','library') or die(mysqli_error($con));
$duplicate=mysqli_query ($con,"selectisbnno from books where isbnno='$isbn';");
$dup=mysqli_fetch_assoc($duplicate);
if($dup==null) {
echo "<script>alert ('Book Is not existed’) </script>";
}
else {
$sql="DELETE FROM books where isbnno='$isbn'";
if (mysqli_query ($con, $sql)) {
echo "<script>alert ('Book successfully deleted’) </script>";
 header ('Refresh: 0; url=books.php');
}
}
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Delete Book</title>
<link rel="stylesheet" href="style.css">
<link rel="stylesheet" href="deletebook.css">
</head>
<body>
<div class="main">
```

```
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
</div>
<div class="content">
<h1>DELETE <br><span>THE BOOKS</span><br>HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="dform">
<h2>DELETE BOOK</h2><br>
<form action="<?php echo $_SERVER['PHP_SELF']; ?>" method="POST" required>
<label for="book">BOOK NO</label>
<input type="text" name="isbn" placeholder="Enter Book Number"
required><br><br>
<label for="category">SELECT CATEGORY</label>
<select name="category" required>
<option value="computers">computers</option>
<option value="science">Science</option>
<option value="statistics">statistics</option>
</select>
<button class="btnn" type="submit">DELETE</button>
<button class="btnn" type="submit"><a href="books.php">BACK</a></button>
</form>
</div>
</div>
</div>
</body>
</html>
```

Issuebook.php

```
<?php
session_start (); if(is_null($_SESSION["user"]))
{
header ("Location: home.php");
}
if($_SERVER["REQUEST_METHOD”] == "POST”) {
$isbn=$_POST['isbn'];
$id=$_POST['id'];
$conn=mysqli_connect('localhost','root','','library') or die(mysqli_error($conn));
$book=mysqli_query ($conn,"selectisbnno, bookname,authorname,category from
books where isbnno='$isbn';");
 $bdata=mysqli_fetch_assoc($book);
 if($bdata==null) {
echo "<script>alert ('Please Add the book’) </script>";
header('Refresh:0,url=addbook.php');
}
else {
$isb=$bdata['isbnno'];
$bookname=$bdata['bookname'];
$stu=mysqli_query($conn,"selectid,name from register where id='$id';");
$sdata=mysqli_fetch_assoc($stu); if($sdata==null)
{
echo "<script>alert('StudentId is not found')</script>";
header('Refresh:0,url=signup.php');
}
else{
$sid=$sdata['id'];
$sname=$sdata['name'];
```

```
$duplicate=mysqli_query ($conn,"selectisbn from issued where isbn='$isbn';");
$dup=mysqli_fetch_assoc($duplicate); if($dup==null)
{
$issue=mysqli_query ($conn,"INSERT into ISSUED
values('$isbn','$bookname','$sid','$sname');");
 if($issue) {
echo "<script>alert ('Book Issued') </script>";
}
}
elseif($dup["isbn"] =="$isbn") {
echo "<script>alert ('Book Is not available') </script>";
}
else{
$issue=mysqli_query ($conn,"INSERT into ISSUED
values('$isb','$bookname','$sid','$sname');");
 if($issue) {
echo "<script>alert ('Book s Issued') </script>";
}
}
}
}
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Issue Book</title>
<link rel="stylesheet" href="style.css">
<link rel="stylesheet" href="ibform.css">
```

```
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
</div>
<div class="content">
<h1>ISSUE BOOKS<br><span>TO STUDENTS</span><br>HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="ibform">
<h2>ISSUE BOOKS</h2><br>
<form action="<?php echo $_SERVER['PHP_SELF'];?>" method="POST" required>
<label for="book">BOOK NO</label>
<input type="text" name="isbn" placeholder="Enter Book Number"
required><br><br>
<label for="studentid">TO</label>
<input type="text" name="id" placeholder="Enter StudentId" required>
<button class="btnn" type="submit">ISSUE</button>
<button class="btnn" type="submit"><a href="books.php">BACK</a></button>
</form>
</div>
</div>
</div>
</body>
</html>
```

Allbooks.php

```
<?php
session_start ();
if(is_null($_SESSION["user"]))
{
header ("Location: home.php");
}
$result="";
$conn=mysqli_connect ("localhost", "root", "", "library");
$result=mysqli_query ($conn,"select * from books;");
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>ALL BOOKS</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
```

```
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
<div class="table">
<table id="table" border="2px">
<?php
if($result==""“) {
 die;
} elseif($result->num_rows>0) {
?>
<h1>ALL BOOKS<br></h1><br>
<th>BOOK NUMBER</th>
<th>BOOK NAME</th>
<th>AUTHOR NAME</th>
<th>CATEGORY</th>
<?php }
?>
<tbody>
<?php
if($result->num_rows>0) {
while($row=$result->fetch_assoc()) {
?>
<tr>
```

```
<td><?php echo $row['isbnno'];?></td>
<td><?php echo $row['bookname'];?></td>
<td><?php echo $row['authorname'];?></td>
<td><?php echo $row['category'];?></td>
</tr>
<?php
} }
else {
echo "<script>alert ('No Books are founded') </script>";
 header ('Refresh: 0; url=books.php');
}
?>
</tbody>
</table>
</div>
</div>
</body>
</html>
```

Availablebooks.php

```
<?php
session_start();
if(is_null($_SESSION["user"]))
{
header("Location:home.php");
}
$result="";
$conn=mysqli_connect("localhost", "root", "", "library");
```

```
$result=mysqli_query($conn,"selectisbnno,bookname,authorname,category from
books where isbnno not in (select isbn from issued);");
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Available Books</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
```

```
<div class="table">
<table id="table" border="2px">
<?php
if($result==""“) {
 die;
} elseif($result->num_rows>0) {
?>
<h1>AVAILABLE BOOKS<br></h1><br>
<th>BOOK NO</th>
<th>BOOK NAME</th>
<th>AUTHOR NAME </th>
<th>CATEGORY</th>
<th>ACTION</th>
</tr>
<?php }
?>
<tbody>
<?php
if($result->num_rows>0){
 while($row=$result->fetch_assoc()){
?>
<tr>
<td><?php echo $row['isbnno'];?></td>
<td><?php echo $row['bookname'];?></td>
<td><?php echo $row['authorname'];?></td>
<td><?php echo $row['category'];?></td>
<td><a href="issuebook.php" class='btn'>ISSUE</a></td>
</tr>
<?php
```

```
} }
else {
echo "<script>alert ('No books are available')</script>";
header ('Refresh: 0; url=books.php');
}
?>
</tbody>
</table>
</div>
</div>
</body>
</html>
```

Issued.php

```
<?php
session_start();
 if(is_null($_SESSION["user"]))
{
header("Location: home.php");
}
$conn=mysqli_connect("localhost", "root", "", "library");
$result=mysqli_query($conn,"select *from issued;");
?>
<?php
if (isset($_GET['isbn'])) {
$isbn=$_GET['isbn'];
$query1="delete from issued where isbn='$isbn'";
$run1=mysqli_query($conn,$query1);
```

```
if ($run1) {
header('Location: issued.php');
}
else{
echo "<script>alert('Book is not returned')</script>";
 header('Refresh: 0; url=books.php');
}
}?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Issued Books</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
```

```
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
<div class="table">
<table id="table" border="2px">
<?php
if($result==""“) {
die;
} elseif($result->num_rows>0) {
?>
<tr><h1>ISSUED BOOKS<br></h1></tr><br
<th>BOOK NO</th>
<th>BOOK NAME</th>
<th>STUDENT ID</th>
<th>STUDENT NAME</th>
<th>ACTION</th>
</tr>
<?php }
?>
<tbody>
<?php
if($result->num_rows>0){
while($row=$result->fetch_assoc()){
$isbn=$row['isbn'];
?>
<tr>
```

```
<td><?php echo $row['isbn'];?></td>
<td><?php echo $row['b_name'];?></td>
<td><?php echo $row['id'];?></td>
<td><?php echo $row['name'];?></td>
<td><?php echo "<a class='btn' href=issued.php?isbn=".$row['isbn'].">RETURN</a>
"?></td>
</tr>
<?php
}
}
else{
echo "<script>alert('No books are issued')</script>";
 header('Refresh: 0; url=books.php');
}
?>
</tbody>
</table>
</div>
</div>
</body>
</html>
```

Signup.php

```
<?php
if(isset($_POST['id']))
{
$id=$_POST['id'];
$sname=$_POST['sname'];
```

```
$year=$_POST['year'];
$sec=$_POST['sec'];
$con=mysqli_connect('localhost','root','','library') or die(mysqli_error($con));
$sql="INSERT INTO register VALUES('$id','$sname','$year','$sec')";
if(mysqli_query($con,$sql))
{
echo"<script>alert('Successfully Registered')</script>";
header('Refresh: 0; url=books.php');
}
else
{
echo "<script>alert('All fields are Required')</script>";
}
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Student registration</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
```

```
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
<div class="content">
<h1>STUDENTS<br><span>REGISTER</span><br>HERE</h1>
<p class="par">Hi Welcome to the Vijayam Library Management System</p>
<div class="form">
<h2>New User</h2>
<form action="<?php echo $_SERVER['PHP_SELF'];?>" method="POST" required>
<input type="text" name="id" placeholder="Enter Student ID" required>
<input type="text"name="sname" placeholder="Enter Student Name"
required><br><br>
<label for="year">SELECT ACADEMIC YEAR</label><br>
<select name="year" required>
<option value="1">1st year</option>
<option value="2">2nd year</option>
<option value="3">3rd year</option>
</select>
<input type="text" name="sec" placeholder="Enter Section" required>
<button class="btnn" type="submit">Register</button>
```

```
<button class="btnn" type="submit"><a href="books.php">BACK</a></button>
</form>
</div>
</div>
</div>
</div>
</body>
</html>
```

About.php

```
<?php
session_start();
 if(is_null($_SESSION["user"]))
{
header("Location: home.php");
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>aboutpage</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
```

```
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="#"><button class="btn">Search</button></a>
</div>
</div>
<div class="content">
<h1 align="center"><span>ABOUT US</span></h1><br>
<p class="par" >Library Management System is a project which aims in developing a computerized system to maintain all the daily work of the library. 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.<br><br>
The project also includes the facility to view the books which are available and those which are issued and all the books in the library.
This project is basically a desktop application which means self-contained software runs on the system on which it has been installed under the user control and it will work for a particular institute or college only.
</p>
</div>
</body>
</html>
```

Contact.php

```
<?php
session_start();
if(is_null($_SESSION["user"]))
{
header("Location: home.php");
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>contact page</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">VIJAYAM</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="about.php">ABOUTUS</a></li>
<li><a href="books.php">BOOKS</a></li>
<li><a href="contact.php">CONTACT</a></li>
<li><a href="signup.php">REGISTRATION</a></li>
</ul>
```

```
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="Type To text">
<a href="logout.php"><button class="btn">LOGOUT</button></a>
</div>
</div>
<div class="content">
<h1>CONTACT US HERE</h1><br>
<p class="par">Name: C R KRANTHI<br>contact:9876543201<br>Email: kranthi12345@gmail.com<br> Qualification: BCA.
</p>
</div>
</body>
</html>
```

Logout.php

```
<?php
session_start(); unset($_SESSION['user']);
session_destroy();
echo "<script>alert('logged out successfully')</script>";
header('Refresh: 0; url=home.php');
?>
```

Style.css

```
*{
   margin: 0; padding: 0;
}
. main {
width: 100%; background:url(bgimg.jpg); background-position: center;
background-size: cover; height: 100vh;
}
. navbar{
   width: 1200px; height: 75px; margin: auto;
}
.icon{
   width: 200px; float: left; height: 75px;
}
.logo{
color: #ff7200; font-size: 35px; font-family: Arial; padding-left: 20px; float: left;
padding-top: 10px; margin-top: 5px
}
.menu{
   width: 400px; float: left; height: 70px;
} ul{
   float: left; display: flex; justify-content: center; align-items: center;
}
ulli{
   list-style: none; margin-left: 62px; margin-top: 27px; font-size: 14px;
}
ul li a{  text-decoration: none; color: #fff; font-family: Arial; font-weight: bold;
transition: 0.4s ease-in-out;
```

```
}
ul li a:hover{
color: #ff7200;
}
.search{
   width: 330px; float: left; margin-left: 270px;
}
.srch{
font-family: 'Times New Roman'; width: 200px; height: 40px;
background: transparent; border: 1px solid #ff7200; margin-top: 13px;
color: #fff; border-right: none; font-size: 16px; float: left; padding: 10px;
border-bottom-left-radius: 5px; border-top-left-radius: 5px;
}
.btn{
width: 100px; height: 40px; background: #ff7200; border: 2px solid #ff7200;
margin-top: 13px; color: #fff; font-size: 15px; border-bottom-right-radius: 5px;
border-bottom-right-radius: 5px; transition: 0.2s ease; cursor: pointer;
}
.btn:hover{ color: #000;}
.btn:focus {outline: none;}
.srch:focus { outline: none;}
.content{
   width: 1200px; height: auto; margin: auto; color: #fff; position: relative;}
.content .par{
padding-left: 20px; padding-bottom: 25px; font-family: Arial; font-size:25px;
 color: #fff; letter-spacing: 1.2px; line-height: 30px;}
.content h1{
font-family: 'Times New Roman'; font-size: 65px; padding-left: 20px;
 margin-top: 9%; letter-spacing: 2px;
```

```
}
.content span{
color: #ff7200; font-size: 65px;}
.form{
   width: 250px; height: 470px; position: absolute; top: -20px; left: 870px;
background: linear-gradient (to top, rgba(0,0,0,0.8)50%,rgba(0,0,0,0.8)50%);
transform: translate (0%, -5%); border-radius: 10px; padding: 25px;
}
.form h2{
width: 220px; font-family: sans-serif; text-align: center; color: #ff7200;
 font-size: 22px; background-color: #fff; border-radius: 10px; margin: 2px;
padding: 8px;
}
.form input{
width: 240px; height: 35px; background: transparent; border-top: none;
border-bottom: 1px solid #ff7200; border-right: none; border-left: none;
color: #fff; font-size: 15px; letter-spacing: 1px; margin-top: 30px;
font-family: sans-serif;
}
. form select {
width: 240px; height: 35px; background: transparent; border-top: none;
border-bottom: 1px solid #ff7200; border-right: none; border-left: none;
color: #fff; font-size: 15px; letter-spacing: 1px; margin-top: 10px;
font-family: sans-serif;
}
.form option{color:#ff7200;}
.form input:focus{ outline: none;}
::placeholder{
color: #fff; font-family: Arial;
```

```
}
.btnn{
width: 240px; height: 40px; background: #ff7200; border: none; margin-top: 30px;
font-size: 18px; border-radius: 10px; cursor: pointer; color: #fff;
 transition: 0.4s ease; }
.btnn:hover { background: #fff; color: #ff7200;}
.btnn a { text-decoration: none; color: #000; font-weight: bold;}
#table
{
   border: 2px; padding-left: 60px; padding-right: 60px; width: 1500px;
}
.table h1{
font-family:'Times New Roman', Times, serif; font-size: 40px;  margin-top:10px;
text-align: center; color: #ff7200;
}
.table th,tr{
font-size: 20px; font-weight: 100; font-family: Arial, Helvetica, sans-serif;  color:#fff;
}
```

Index.css

```
.aform{
width: 250px; height: 340px; top: 40px; left: 870px; position: absolute;
 background: linear-gradient (to top, rgba (0,0,0,0.8)50%, rgba (0,0,0,0.8)50%);
transform: translate (0%,-5%); border-radius: 10px; padding: 25px;
}
.aformh2{
width: 220px; font-family: sans-serif; text-align: center; color: #ff7200;     font-size:
22px; background-color: #fff; border-radius: 10px; margin: 2px; padding: 8px;
}
```

```
.aform input {
width: 240px; height: 35px; background: transparent; font-family: sans-serif;
border-bottom: 1px solid #ff7200; border-top: none; border-right: none;
border-left: none; color: #fff; font-size: 15px; letter-spacing: 1px;margin-top: 30px; }
.aform input: focus { outline: none;}
::placeholder{color: #fff; font-family: Arial;}
```

Ibform.css

```
.ibform{
   width: 250px; height: 400px; position: absolute; top: -20px; left: 870px;
background: linear-gradient(to top, rgba(0,0,0,0.8)50%,rgba(0,0,0,0.8)50%);
transform: translate(0%,-5%); border-radius: 10px; padding: 25px;
}
.ibformh2{
width: 220px; font-family: sans-serif; text-align: center; font-size: 22px;     color:
#ff7200; background-color: #fff; border-radius: 10px; margin: 2px;     padding:
8px;
}
.ibforminput{
width: 240px; height: 35px; background: transparent; border-top: none;
border-bottom: 1px solid #ff7200; border-right: none; border-left: none;
 color: #fff; font-size: 15px; letter-spacing: 1px; font-family: sans-serif;
  margin-top: 30px;
}
.ibforminput:focus{ outline: none;}
::placeholder {color: #fff; font-family: Arial;}
```

Deletebook.css

```
.dform{
   width: 250px; height: 370px; position: absolute; top: -20px; left: 870px;
background: linear-gradient(to top, rgba(0,0,0,0.8)50%,rgba(0,0,0,0.8)50%);
transform: translate(0%,-5%); border-radius: 10px;  padding: 25px;
}
.dformh2{
width: 220px; font-family: sans-serif; text-align: center; background-color: #fff;
font-size: 22px; color: #ff7200; border-radius: 10px; margin: 2px; padding: 8px;
}
.dforminput{
width: 240px; height: 35px; background: transparent; font-family: sans-serif;
border-bottom: 1px solid #ff7200; border-top: none; border-right: none;
border-left: none; color: #fff; font-size: 15px; letter-spacing: 1px;
 margin-top: 30px;
}
.dformselect{
width: 240px; height: 35px; background: transparent; font-family: sans-serif;
border-bottom: 1px solid #ff7200; border-top: none; border-right: none;
border-left: none; color: #fff; font-size: 15px; letter-spacing: 1px;
margin-top: 30px;
}
. dform option{color:#ff7200;}
.dforminput:focus{outline: none;}
::placeholder{
color: #fff;
 font-family: Arial;
}
```

books.css

```
.bform{
   width: 250px; height: 460px; position: absolute; top: -20px; left: 870px;
background: linear-gradient(to top, rgba(0,0,0,0.8)50%,rgba(0,0,0,0.8)50%);
transform: translate(0%,-5%); border-radius: 10px; padding: 25px;
}
.bformh2{
width: 220px; font-family: sans-serif; text-align: center; color: #ff7200;
 font-size: 22px; background-color: #fff; border-radius: 10px; margin: 2px;
padding: 8px;
}
.bforminput{
width: 240px; height: 35px; background: transparent; font-family: sans-serif;
border-bottom: 1px solid #ff7200; border-top: none; border-right: none;
border-left: none; color: #fff; font-size: 15px; letter-spacing: 1px;
 margin-top: 30px;
}
.bforminput:focus{ outline: none;}
::placeholder{ color: #fff; font-family: Arial;}
```

Addbook.css

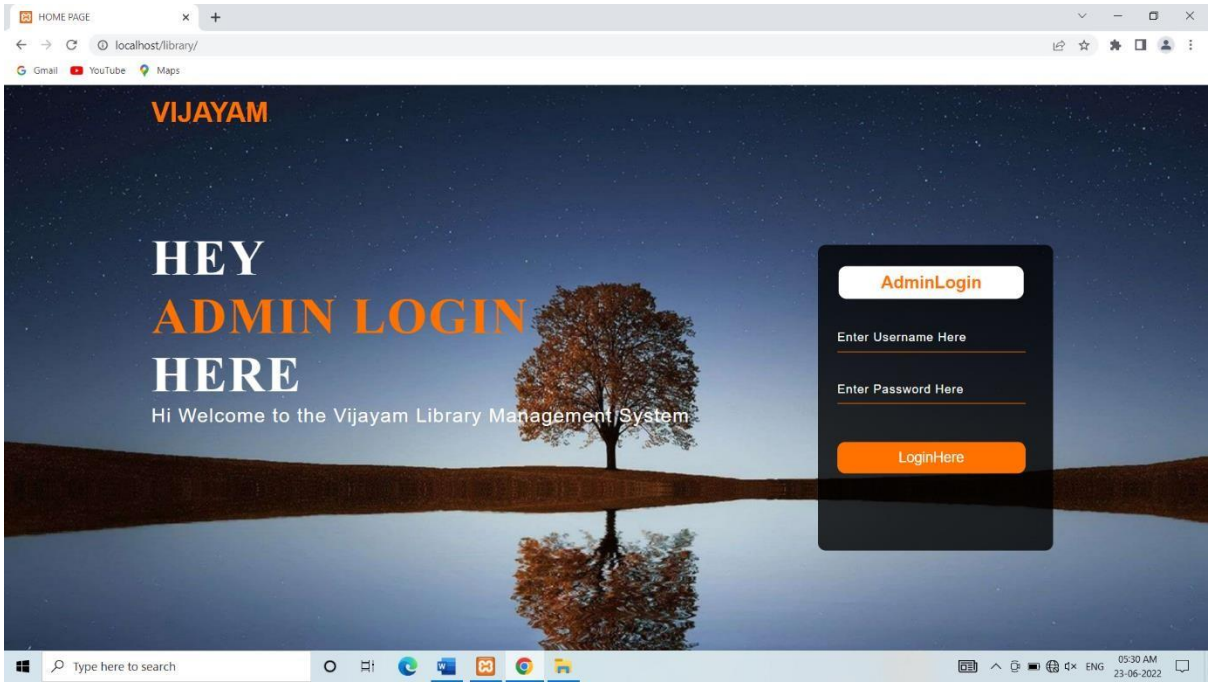
```
.aform{
   width: 250px; height: 475px; position: absolute; top: -20px; left: 870px;
background: linear-gradient (to top, rgba(0,0,0,0.8)50%, rgba(0,0,0,0.8)50%);
transform: translate(0%, -5%); border-radius: 10px; padding: 25px;
}
.aformh2{
width: 220px; font-family: sans-serif; text-align: center; color: #ff7200;
```

```
font-size: 22px; background-color: #fff; border-radius: 10px; margin: 2px;
padding: 8px;
}
.aforminput{
width: 240px; height: 35px; background: transparent; font-family: sans-serif;
border-bottom: 1px solid #ff7200; border-top: none; border-right: none;
border-left: none; color: #fff; font-size: 15px; letter-spacing: 1px;     margin-top:
30px;
}
.aform select {
width: 240px; height: 35px; border-bottom: 1px solid #ff7200; color: #fff;
background: transparent; border-top: none; border-right: none; border-left: none;
font-size: 15px; letter-spacing: 1px; margin-top: 10px; font-family: sans-serif;
}
.aformoption{color:#ff7200;}
.aforminput:focus{ outline: none;}
::placeholder{ color: #fff; font-family: Arial;}
```

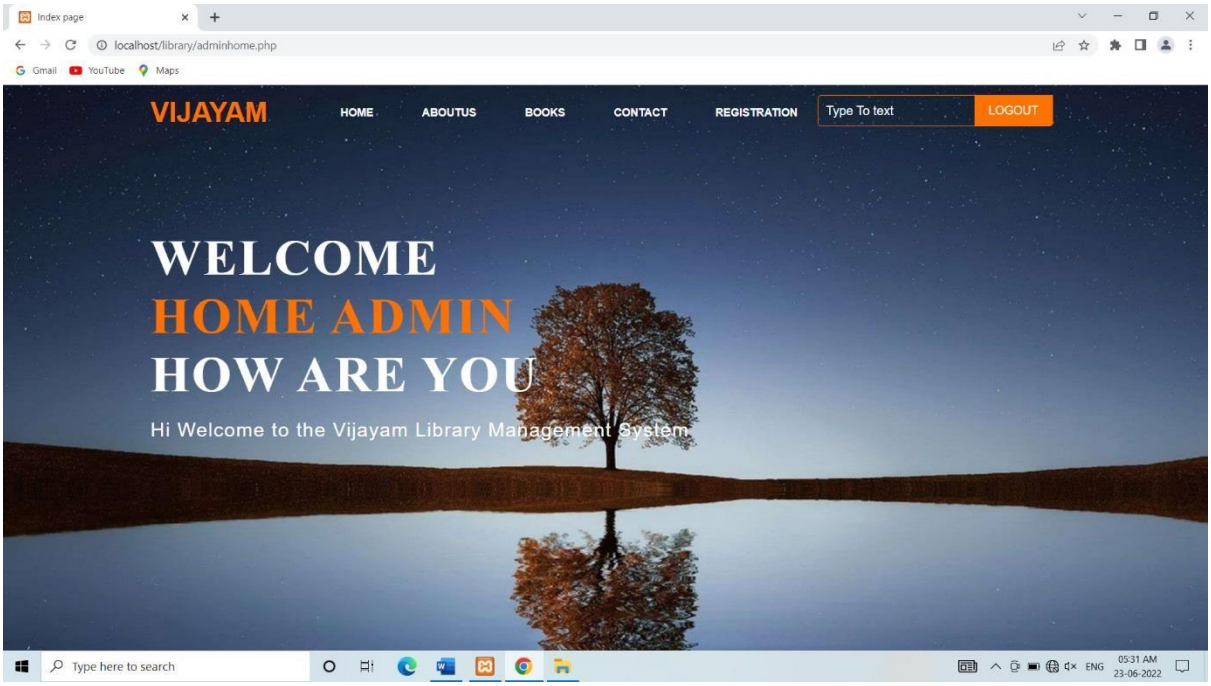
SCREEN SHOTS

6.SCREEN SHOTS

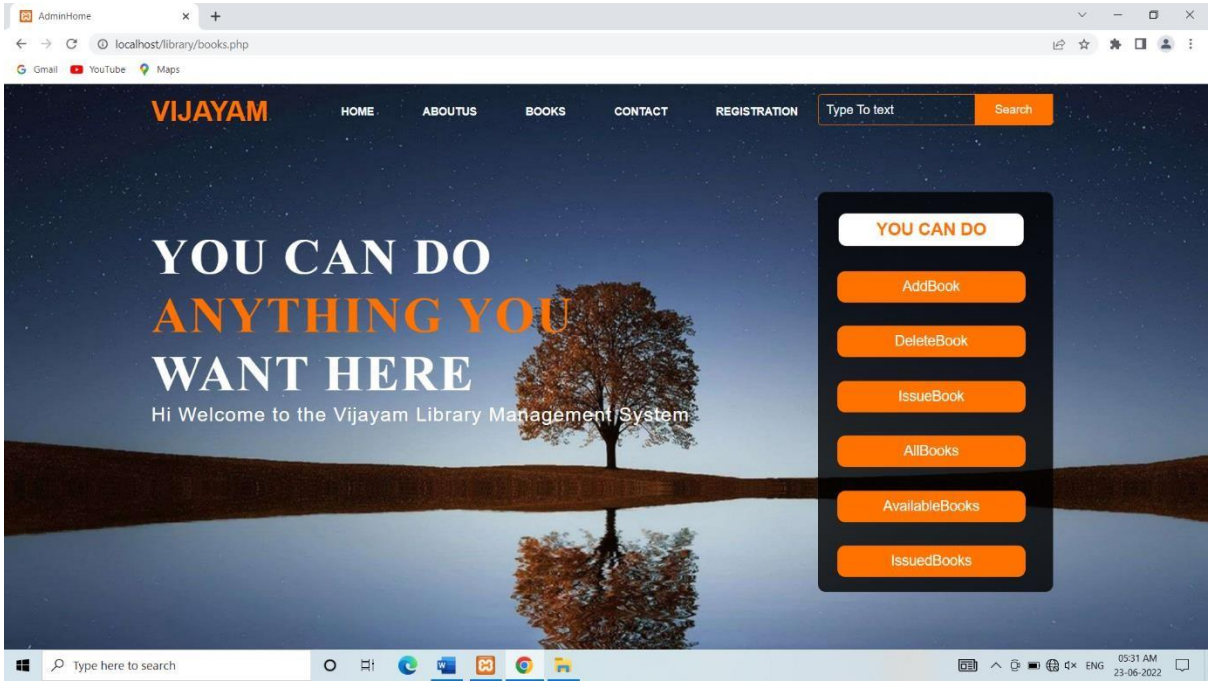
1.HOME PAGE



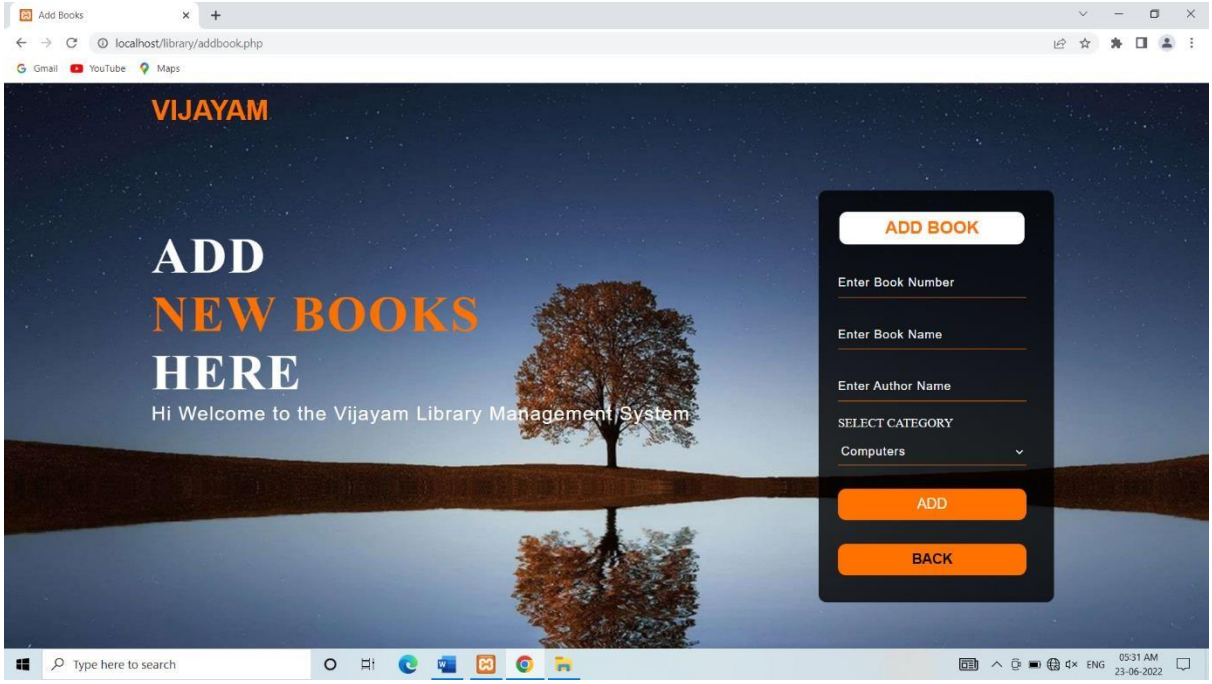
2.Index page



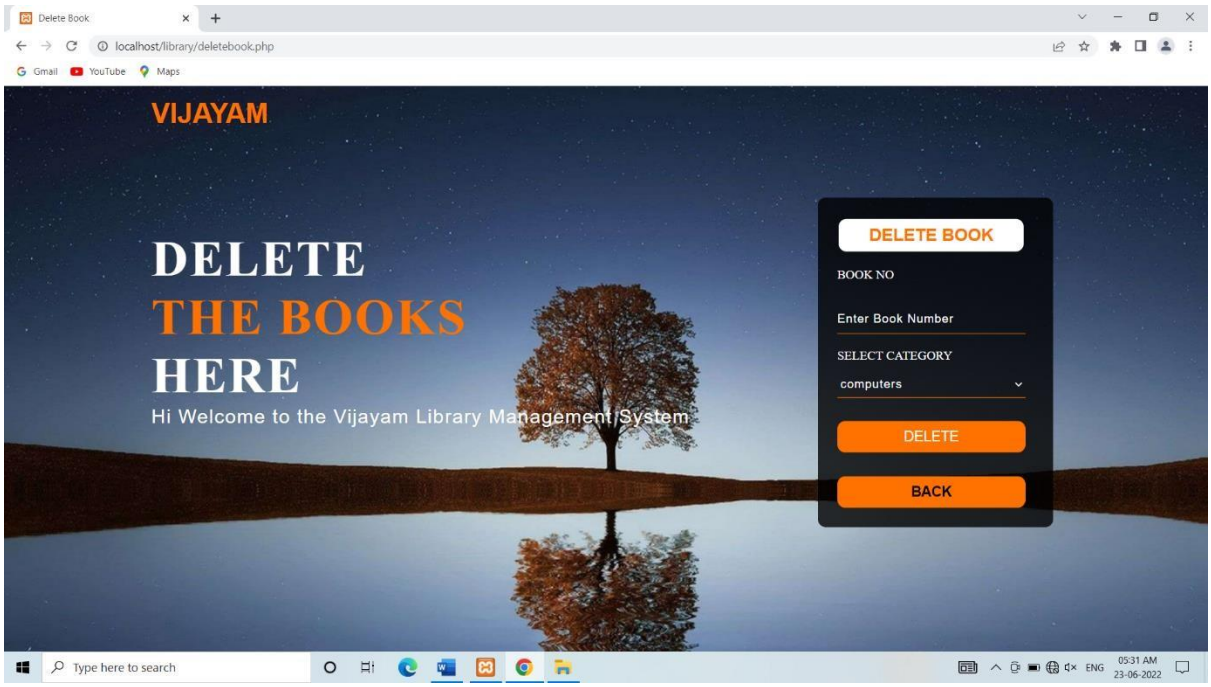
3.Books page



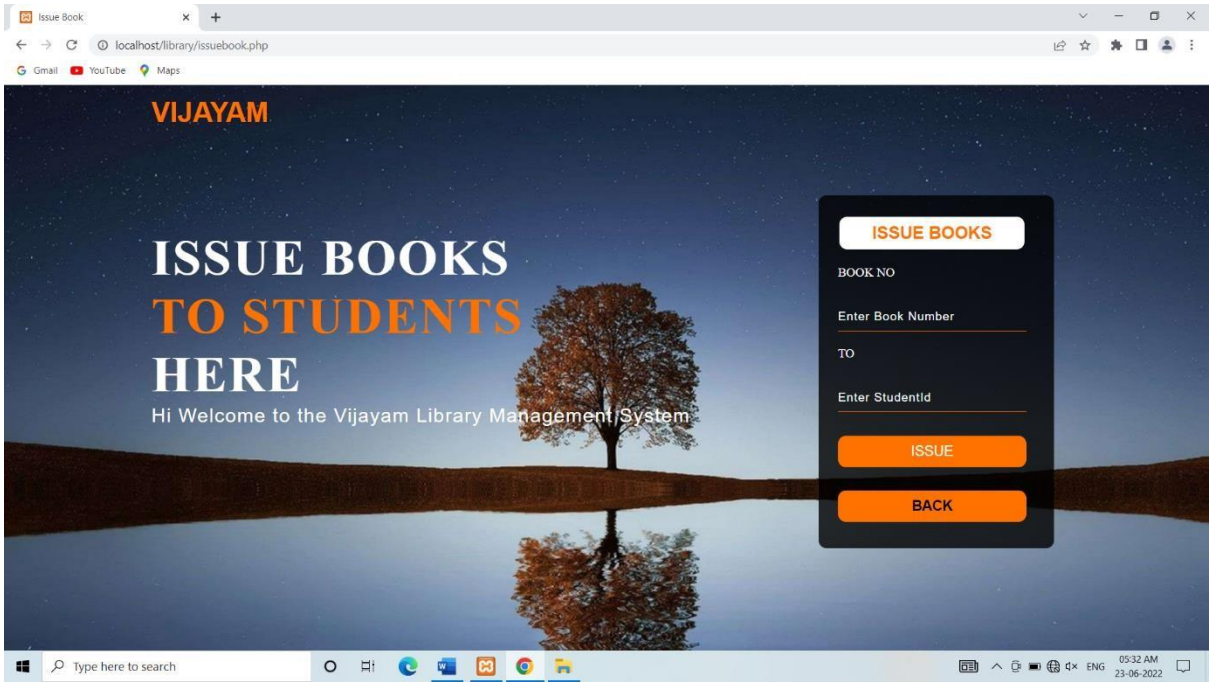
4.Addbook page



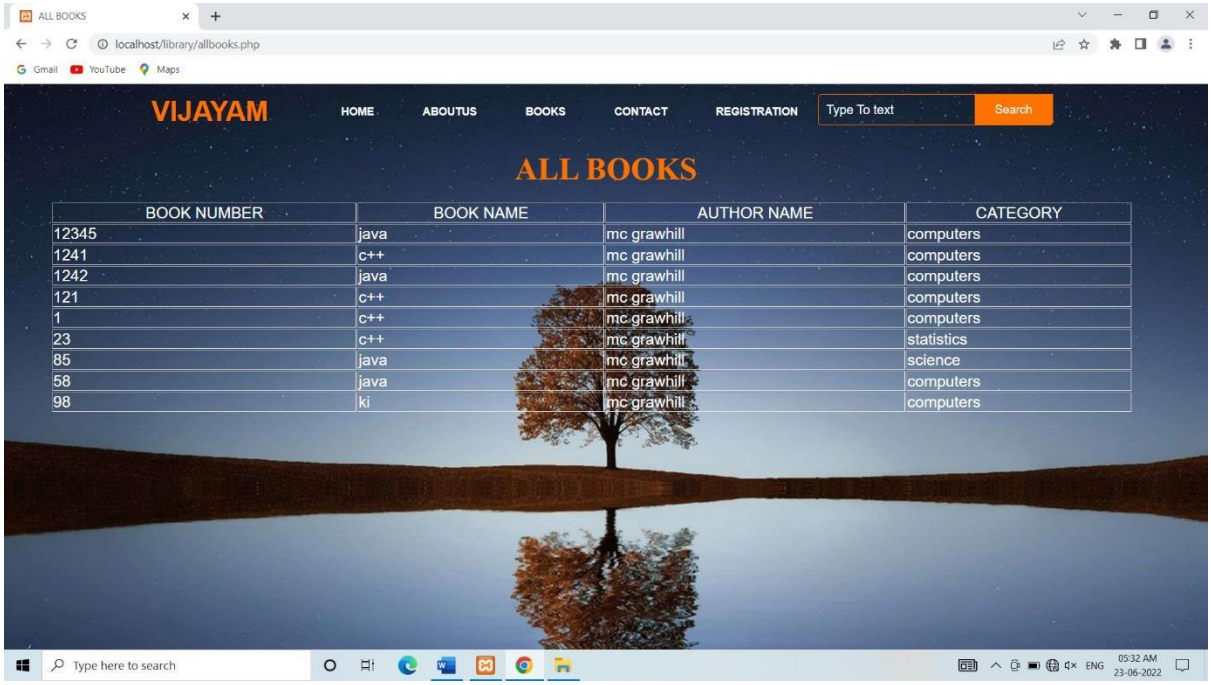
5.Deletebook



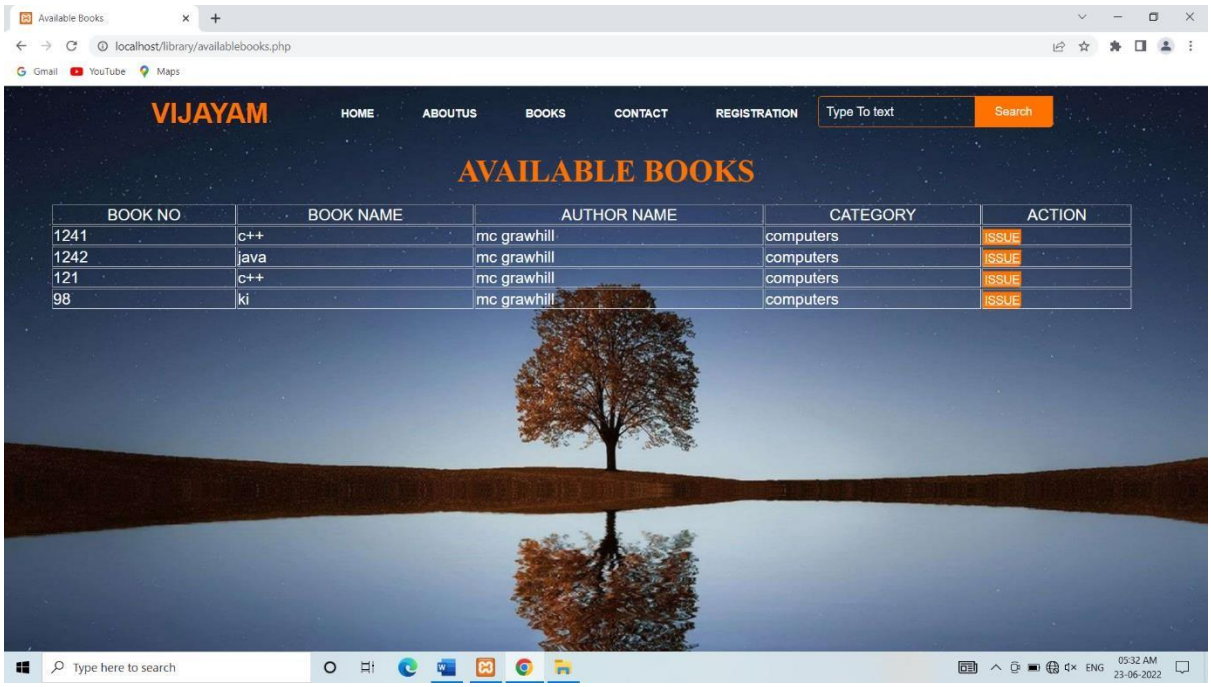
6.Issuebook



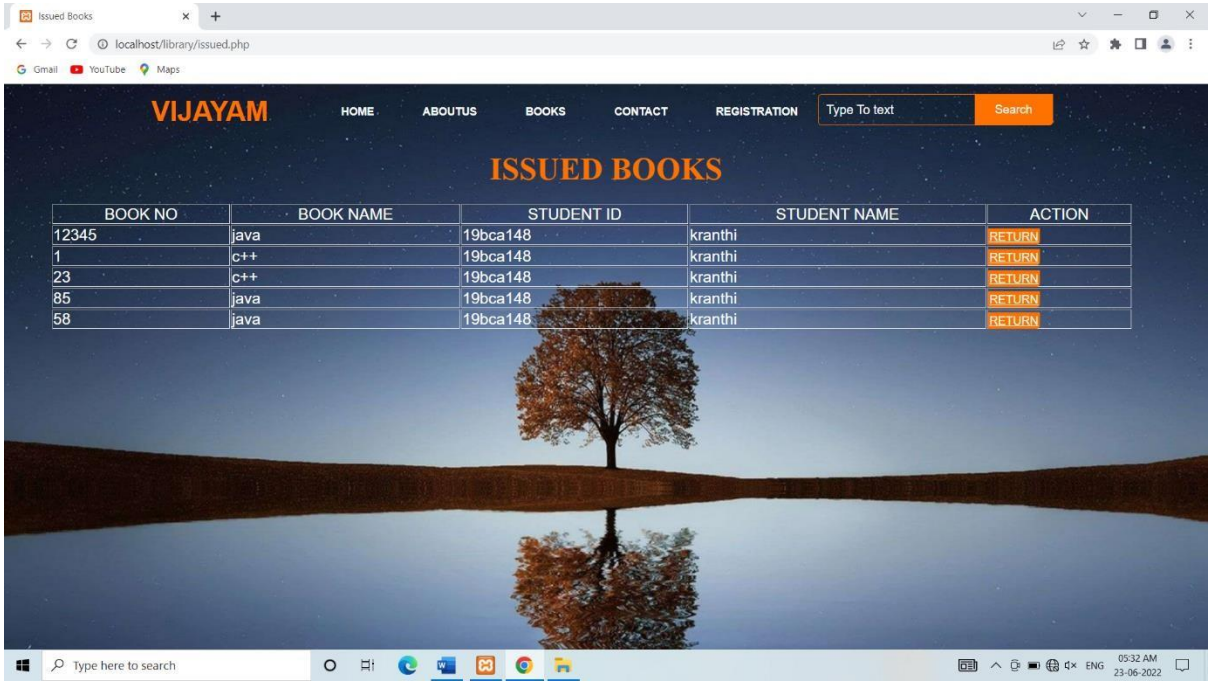
7.Allbooks



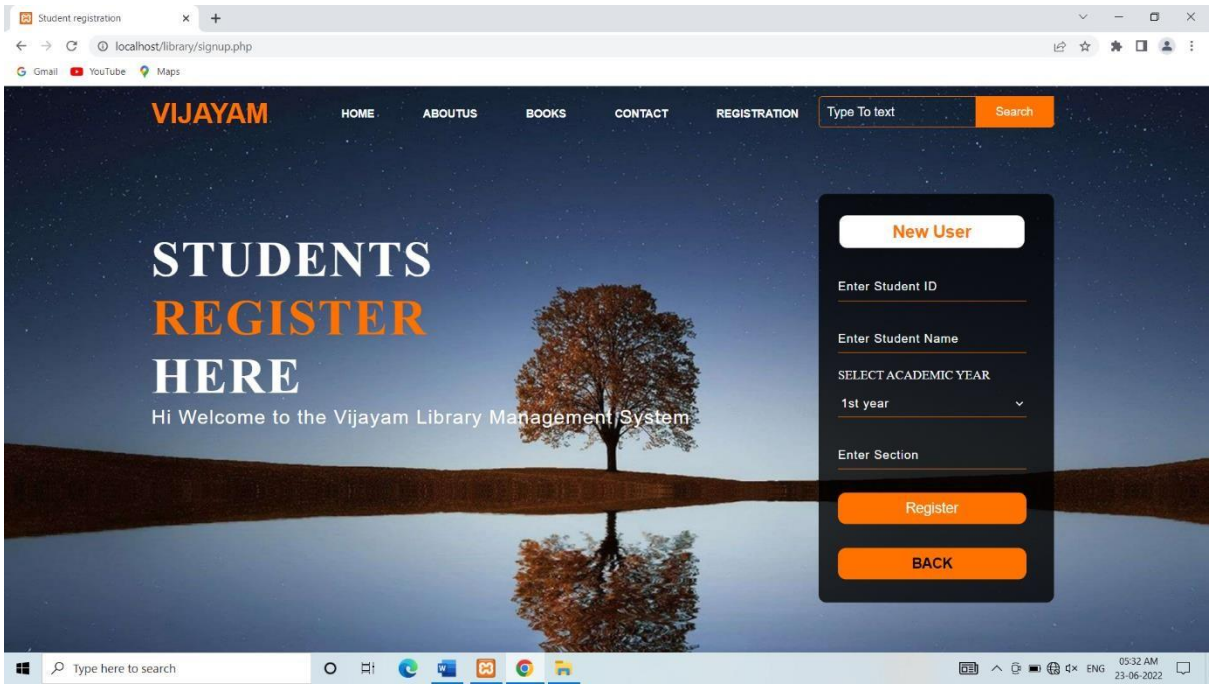
8.Available books



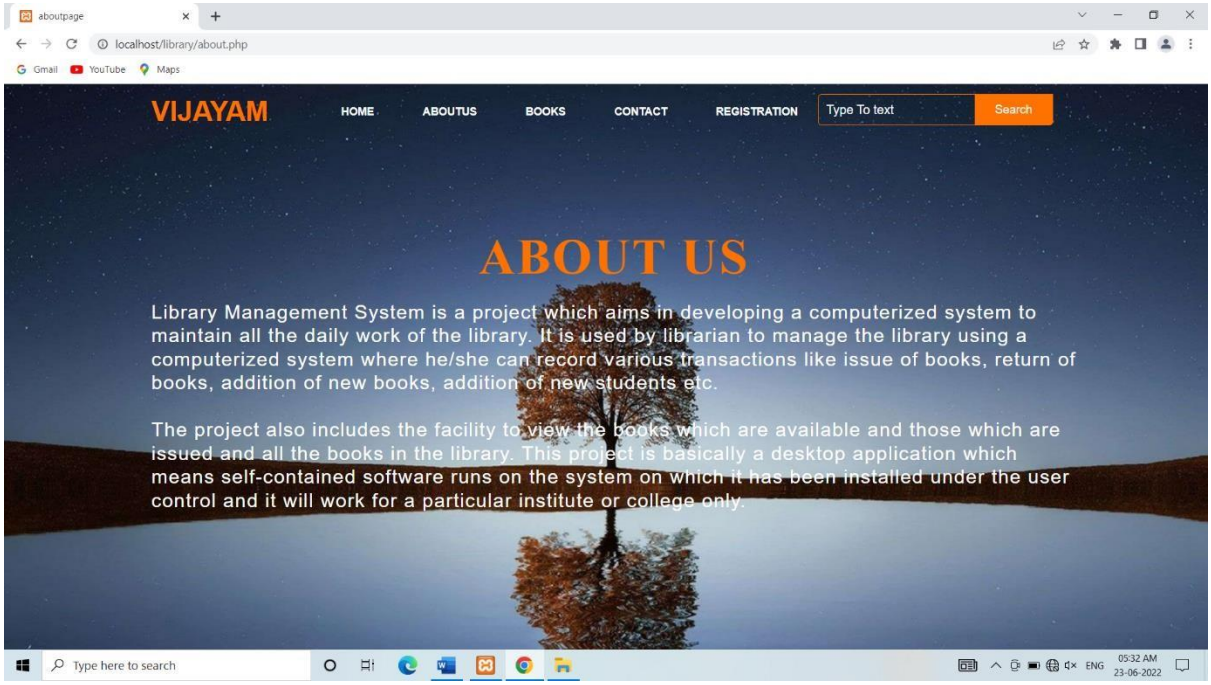
9.Issued books



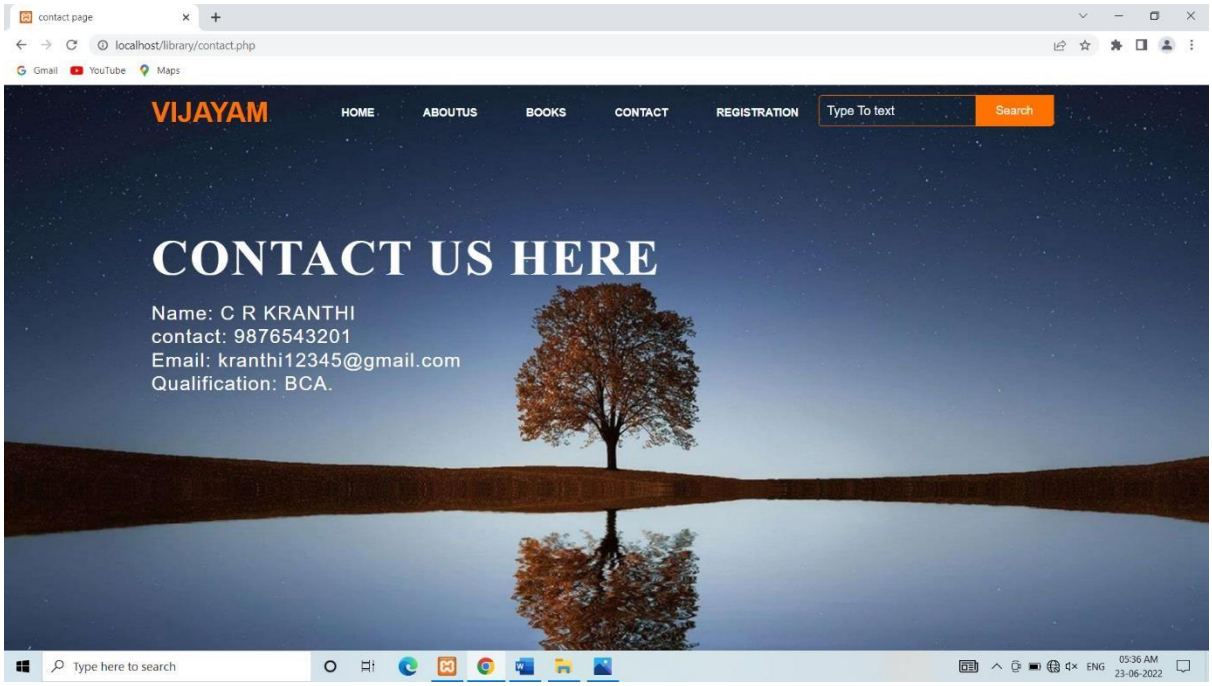
10.Registration page



11.About page



12.Contact page



TESTING

7.TESTING

Testing Strategies:

A strategy for software testing must accommodate low level test that are necessary to verify that validate major system functions against customer requirements. A strategy must provide guidance for the practitioner.

Different Testing Strategies:

1.Unit testing:

Unit testing focuses verification efforts in smallest unit of software design and module. Using the procedural design description as a guide, important control paths are tested uncover error within the boundary of the module.

- Unit test considerations.
- Unit test procedures

2.Integration testing:

Integration testing is a systematic technique for constructing the program structure while conducting test to uncover error associated with interfacing.

There are two types of integration testing:

- **Top-Down Integration:**Top-down integration is an incremental approach to construct a program structures. Modules are integrated by moving down throw hierarchy beginning with main control module.
- **Bottom-Up Integration:**Bottom-up integration as its name implies, begins construction and testing with automatic modules.

3.Regression Testing:

In this contest of an integration test strategy, regression testing is the reexecution of some subset of test that have already been conducted to ensure that changes have not propagate unintended side effects.

Frame Details:

The project is developed comprising of several frames. The names of the frames under the scope of this project are revealed as under:

- Home page
- Admin Home
- Books
- Register
- All books
- Available Books
- Issued books

SYSTEM IMPLEMENTATION

8. SYSTEM IMPLEMENTATION

System implementation is the final phase i.e., putting the utility into action. Implementation is the state in the project where theoretical design turned into working system. The most crucial stage is achieving a new successful system and giving confidence in new system that it will work efficiently and effectively.Once the planning has been completed the major effort is to ensure that the programs in the system are working properly. At the same time concentrate on training user staff.

Implementation procedure:

The major implementation procedures are:

- Test plans
- Training
- Equipment installation
- Conversion

System Implementation Techniques:

The different types of technologies implemented for the construction of this system are:

HTML:

HTML is a Hyper-Text Mark-up Language which is in really a background of any website. Every website can't be structured without the knowledge of html. If we make our web page only with the help of html, then we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as PHP.

PHP:

Precisely, PHP is a very powerful server-side scripting language for developing dynamic web applications. Using PHP, one can build interactive and dynamic websites with ease. PHP script can be embedded into the heart of HTML code. PHP is compatible with various web servers like APACHE and the Microsoft's IIS as well. All the PHP scripts are executed on the server and it supports various databases like MySQL, Oracle, Solid etc., however it is mostly used with the MySQL.

MySQL:

It allows combination, extraction, manipulation and organisation of data in the users' database. It is a platform independent and therefore can be implemented and used across several operating servers such as Windows, Linux server and is compatible with various hardware mainframes. It is fast in performance, stable and provides business value at a low cost.

CONCLUSION AND FUTURE SCOPE

9. 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 do book transactions.

The reason behind motivating our attention explicitly towards this project is to design and implement the above labelled system. In this site we concentrated on the maintaining of data of information regarding to the web browsers etc.

In this website we have designed all the screens keeping in mind that any novice user can also easily navigate.

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teacher's 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 fulfils each user need in the best way possible.

BIBLIOGRAPHY

11.BIBLIOGRAPHY

Before and at the time of developing the project following websites are referred which gear us to see important guidelines for designing and developing the project and project reports.

WEBSITES:

- W3schools.com
- MariaDB Server.com
- Youtube.com
- geeksforgeeks.org
- tutorialspoint.com