



JEPPIAAR
ENGINEERING COLLEGE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

III YEAR B.E. – VI SEM

ACADEMIC YEAR (2023 -24 EVEN SEM)

Name : _____

Register Number : _____

Subject Name : _____

Subject Code : _____

Batch : _____



JEPPIAAR
ENGINEERING COLLEGE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

This is a Bonafide Record Work of _____

Register No _____ submitted for the Anna University Practical

Examination held on _____ **CCS356 OBJECT ORIENTED SOFTWARE**

ENGINEERING LABORATORY during the academic year 2023-2024.

Signature of the Lab-In-Charge

Signature of the HOD

Date: _____

Internal:

External:

Vision of Institution

To build Jeppiaar Engineering College as an Institution of Academic Excellence in Technical education and Management education and to become a World Class University.

Mission of Institution

M1	To excel in teaching and learning, research and innovation by promoting the principles of scientific analysis and creative thinking
M2	To participate in the production, development and dissemination of knowledge and interact with national and international communities
M3	To equip students with values, ethics and life skills needed to enrich their lives and enable them to meaningfully contribute to the progress of society
M4	To prepare students for higher studies and lifelong learning, enrich them with the practical and entrepreneurial skills necessary to excel as future professionals and contribute to Nation's economy

Program Outcomes (POs)

PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Objectives (PEOs)

PEO1	Apply their technical competence in computer science to solve real world problems, with technical and people leadership.
PEO2	Conduct cutting edge research and develop solutions on problems of social relevance.
PEO3	Work in a business environment, exhibiting team skills, work ethics, adaptability and lifelong learning.

Program Specific Outcomes (PSOs)

Students will be able to

PSO1	Exhibit design and programming skills to build and automate business solutions using cutting edge technologies.
PSO2	Strong theoretical foundation leading to excellence and excitement towards research, to provide elegant solutions to complex problems.
PSO3	Ability to work effectively with various engineering fields as a team to design, build and develop system applications

COURSE OUTCOMES:

CO1	Compare Various Software Development Lifecycle Models.
CO2	Evaluate Project Management approaches as well as cost and schedule estimation strategies.
CO3	Perform Formal Analysis on specifications.
CO4	Use UML Diagrams for analysis and design.
CO5	Architecture and design using architectural styles and design patterns, and test the system.

Expt:-

Library management system

AIM:-

To design a library management system using relevant framework,UI design and database.

PROBLEM STATEMENT:-

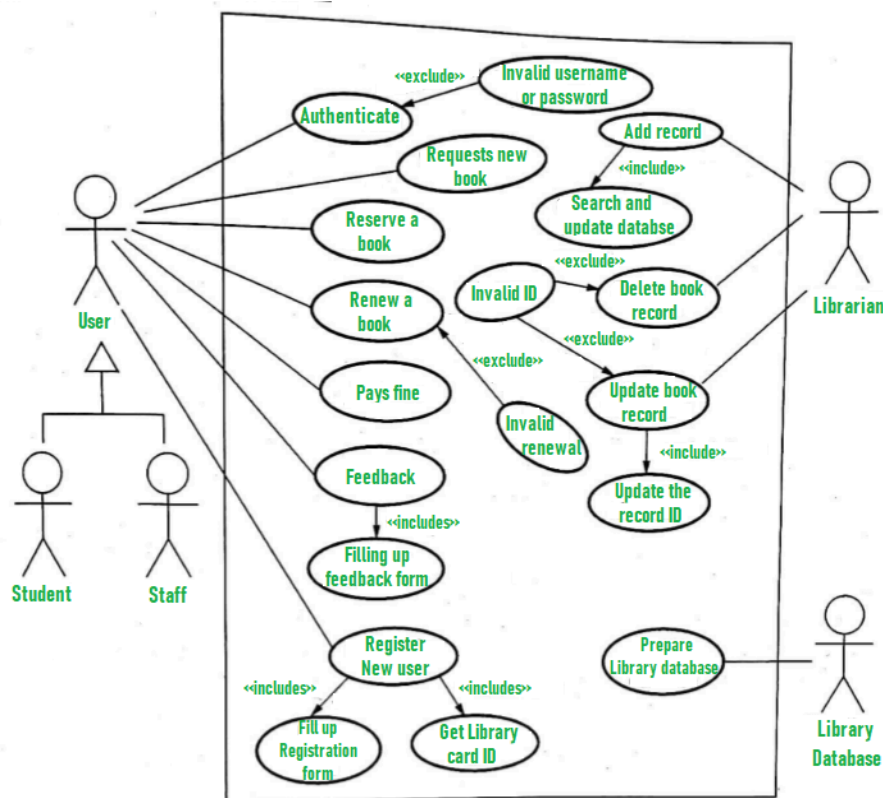
To enable librarians to catalog, classify, and organize materials efficiently, while also providing users with easy access to the library's collection through a user-friendly interface. Here's the basic steps:-

- **Book management:** Add, remove, and update books.
- **Patron management:** Add, remove, and update patrons.
- **Borrowing/returning books.**
- **Search functionality.**
- **Reporting:** Generate reports on books borrowed, popular titles, overdue books, etc.

UML USECASE DIAGRAM:-

Description:-

The Use Case Diagram for the Library Management System outlines the interactions between the various actors and the system itself. Actors represent different types of users interacting with the system, while use cases represent the functionalities offered by the system.



DOCUMENTATION OF USECASE DIAGRAM:-

Actors:

- **Librarian:** Manages the library resources, issues books, manages memberships, etc.
- **Member:** A person registered with the library, can borrow and return books.
- **Administrator:** Manages system settings, user permissions, etc.

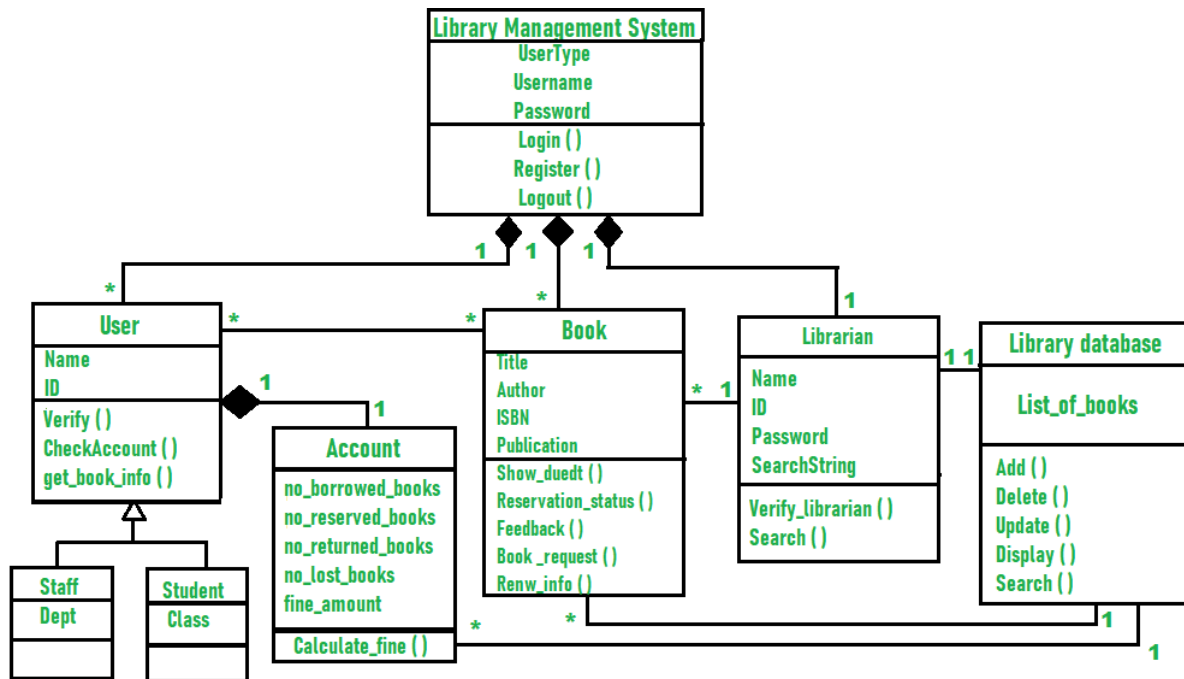
Use Cases:

- **Login:** Actors log in to the system.
- **Search Catalog:** Actors search for books in the library catalog.
- **Borrow Book:** Members borrow books from the library.
- **Return Book:** Members return books to the library.
- **Manage Book:** The Librarian manages book inventory (add, remove, update).
- **Generate Report:** The administrator generates reports on library activities.
- **Manage System Settings:** The administrator configures system settings.
- **Notify Overdue:** The system notifies members of overdue books.

UML CLASS DIAGRAM:-

Description:-

A UML (Unified Modeling Language) class diagram for a library management system would visually represent the structure of the system in terms of classes, their attributes, methods, and the relationships among them.



CLASS DIAGRAM FOR LIBRARY MANAGEMENT SYSTEM

DOCUMENTATION OF CLASS DIAGRAM:-

1. Classes: a. Library:

- **Attributes:-**
- name: string
- location: string
- **Methods:-**
- addBook(book: Book)
- removeBook(book: Book)
- searchBook(title: string): Book
- listBooks(): List<Book>

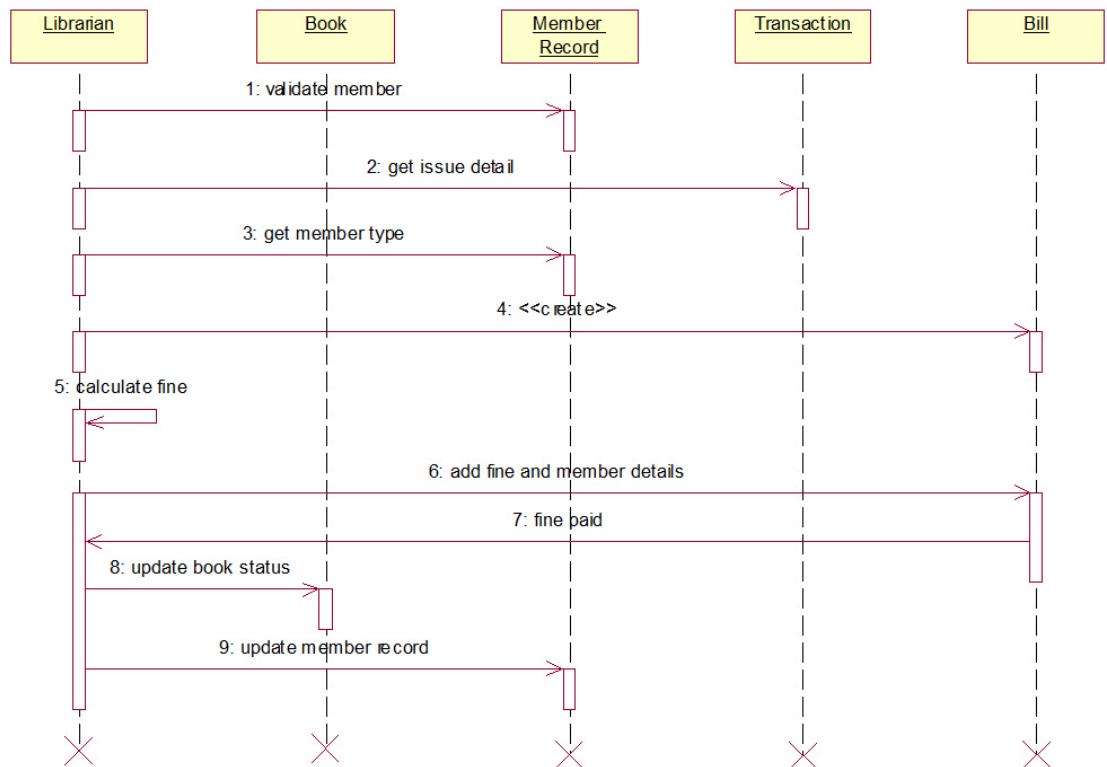
b. Book:

- **Attributes:-**
- title: string
- author: string
- ISBN: string
- genre: string
- availability: boolean
- **Methods:-**
- checkOut()
- returnBook()

UML INTERACTION DIAGRAM:-

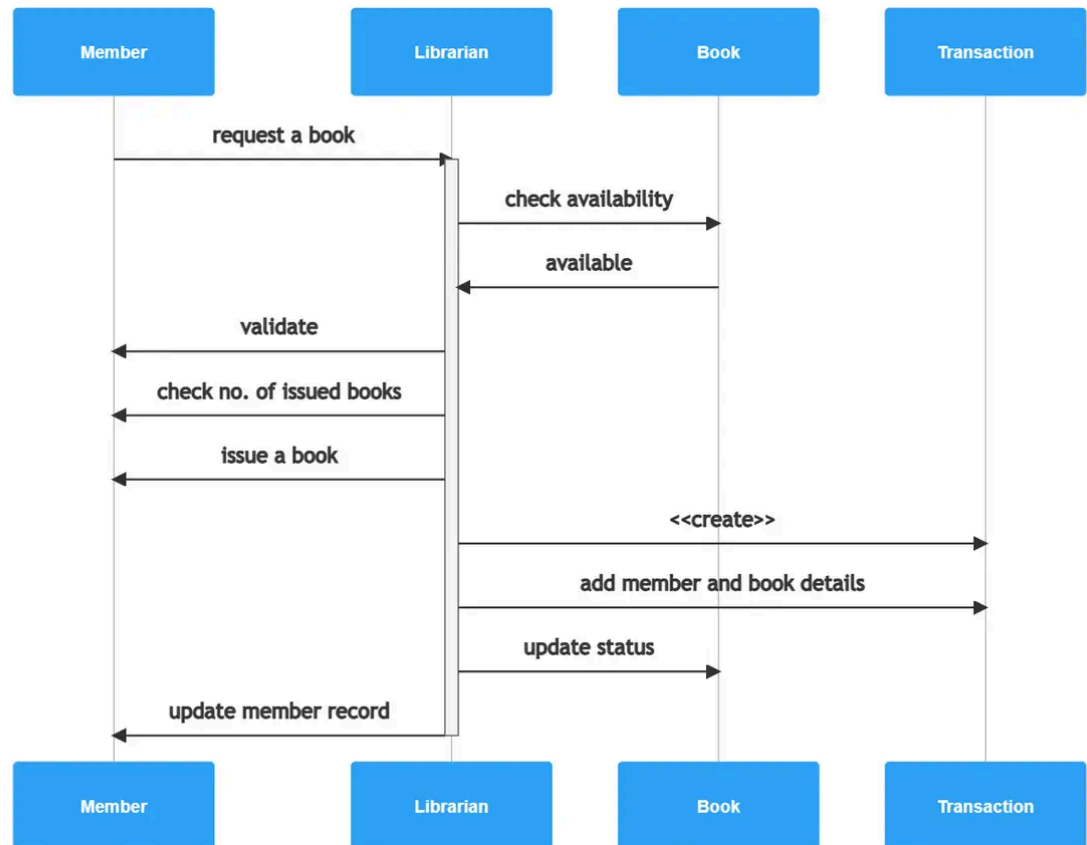
Description:-

A UML interaction diagram, particularly a sequence diagram, for a library management system (LMS) would illustrate the interactions between various components or objects within the system during a specific process or scenario.



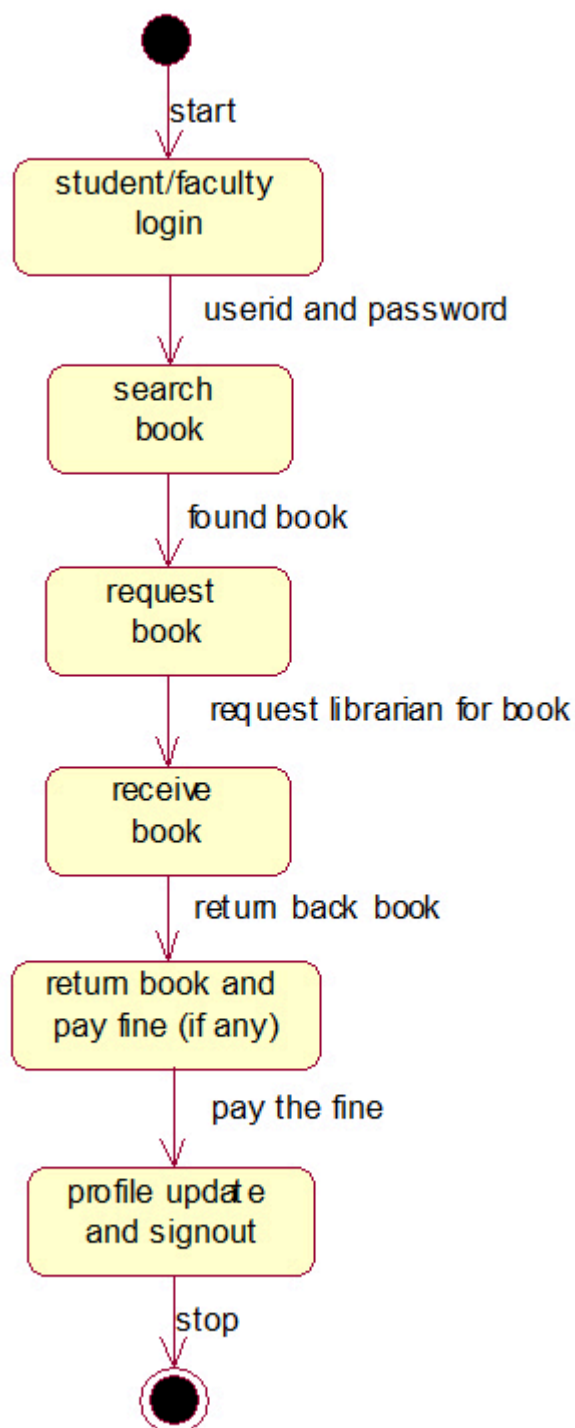
UML SEQUENCE DIAGRAM:-

1. Member -> Librarian: Request book checkout
2. Librarian -> Catalog: Search for book availability
3. Catalog -> Librarian: Confirm book availability
4. Librarian -> Member: Confirm checkout
5. Member -> Transaction: Initiate checkout
6. Transaction -> Book: Update status to check out



UML STATECHART DIAGRAM:-

Creating a UML State Chart diagram for a library management system involves depicting the various states that objects in the system can be in, as well as the transitions between these states.



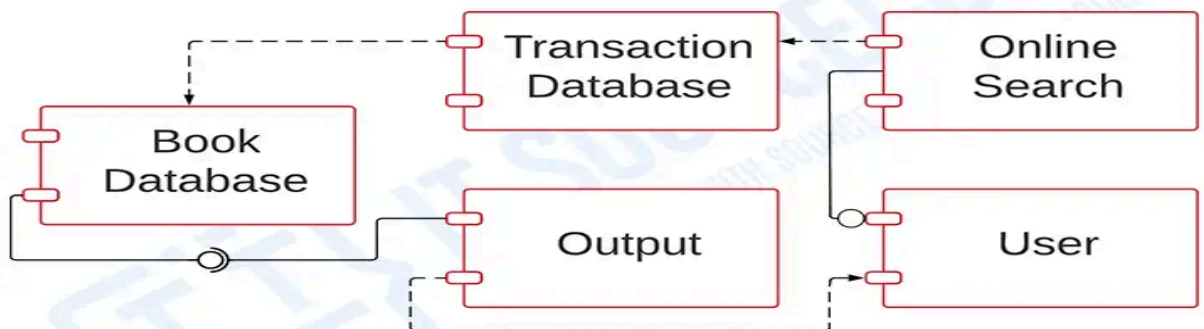
- **Initial State:** The starting point before any interaction has occurred.
- **Idle State:** The system is running but no user is logged in.
- **Login State:** A user is attempting to log in.
- **Success Transition:** Leads to either the User or Admin state, depending on credentials.
- **Failure Transition:** Returns to the Idle State.

- **User State:** A standard user is logged in, with options to search for books, borrow books, and return books.
- **Admin State:** An admin user is logged in, with additional options to add or remove books, manage user accounts, and view reports.
- **Logout State:** The user/admin logs out, transitioning back to the Idle State.
- **Final State:** The endpoint of the system's activity.

UML COMPONENT DIAGRAM:-

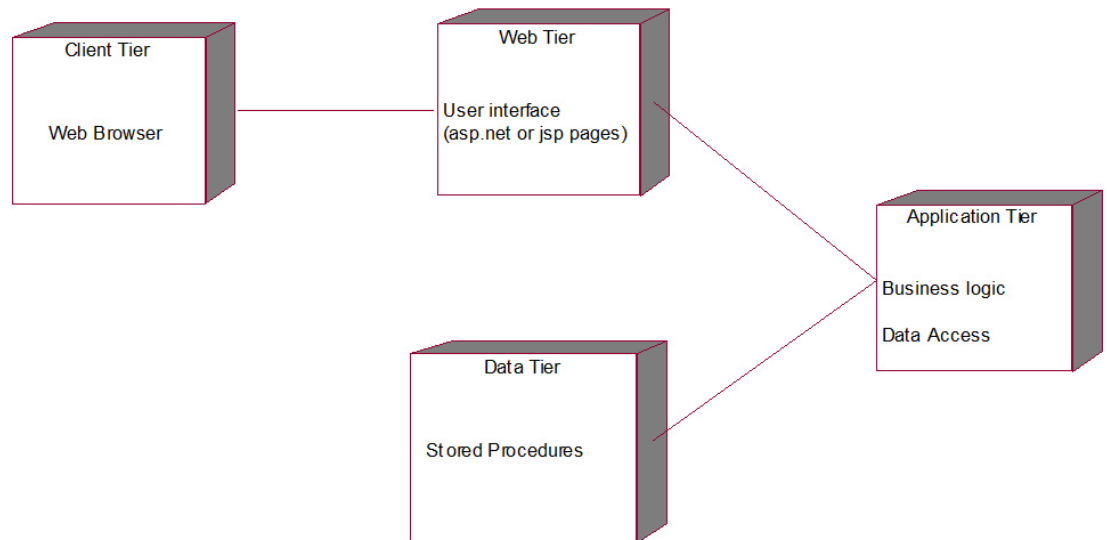
A UML component diagram for a library management system is a structural diagram that shows how the system is divided into components and how those components interact with each other.

LIBRARY MANAGEMENT SYSTEM



COMPONENT DIAGRAM

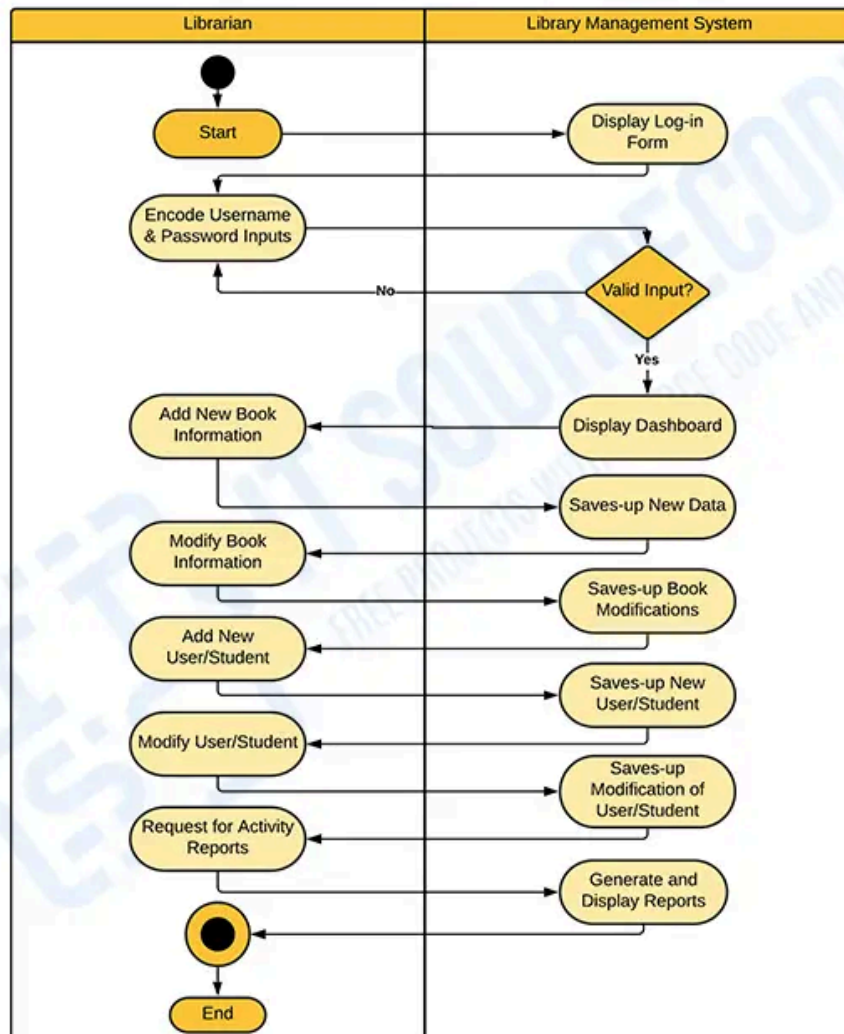
UML DEPLOYMENT DIAGRAM:-



UML ACTIVITY DIAGRAM:-

An activity diagram for a library management system would visualize the flow of activities or processes involved in managing the library resources, handling user requests, and maintaining the system's functionality.

LIBRARY MANAGEMENT SYSTEM ACTIVITY DIAGRAM



Sample Code:-

(HTML)index.html:

```

<!DOCTYPE html>
<html>
<head>
    <title>
        Online Library Management System
    </title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

<style type="text/css">
    nav
    
```

```

        {
            float: right;
            word-spacing: 30px;
            padding: 20px;
        }
        nav li
        {
            display: inline-block;
            line-height: 80px;
        }
    </style>
</head>

<body>
    <div class="wrapper">
        <header>
            <div class="logo">
                
                <h1 style="color: white;">ONLINE LIBRARY MANAGEMENT
SYSTEM</h1>
            </div>
            <nav>
                <ul>
                    <li><a href="index.html">HOME</a></li>
                    <li><a href="books.html">BOOKS</a></li>
                    <li><a
href="student_login.html">STUDENT-LOGIN</a></li>
                    <li><a href="admin_login.html">ADMIN-LOGIN</a></li>
                    <li><a href="feedback.php">FEEDBACK</a></li>
                </ul>
            </nav>
        </header>
        <section>
            <div class="sec_img">
                <br><br><br>
                <div class="box">
                    <br><br><br><br>
                    <h1 style="text-align: center; font-size: 35px;">Welcom to
library</h1><br><br>
                    <h1 style="text-align: center;font-size: 25px;">Opens at: 09:00
</h1><br>
                    <h1 style="text-align: center;font-size: 25px;">Closes at: 15:00
</h1><br>
                </div>
            </div>
        </section>
        <footer>

```

```

                <p style="color:white; text-align: center;">
                    <br><br>
                    Email: Online.library@gmail.com <br>
                    Mobile: +88018*****
                </p>
            </footer>
        </div>
    </body>

</html>

```

CSS(Style.css):-

```

.wrapper
{
    height: 660px;
    width: 1350px;
    /*background-color: red;*/
}
header
{
    height: 130px;
    width: 1340px;
    background-color: black;
    padding: 10px;
}
section
{
    height: 550px;

    width: 1361px;
    background-color: grey;
}
footer
{
    height: 82px;
    width: 1361px;
    background-color: black;
}
.logo
{
    float :left;
    padding-left: 20px;

}
.logo img
{

```

```

        padding-left: 80px;
    }

    li a
    {
        color: white;
        text-decoration: none;
    }
    nav
    {
        float: right;
        word-spacing: 30px;
        padding: 20px;
    }
    nav li
    {
        display: inline-block;
        line-height: 80px;
    }

    section .sec_img
    {
        height: 550px;
        margin-top: 0px;
        background-image: url("images/1.jpg");
    }
    .box
    {
        height: 300px;
        width: 450px;
        background-color: #030002;
        margin: 70px auto;
        opacity: .6;
        color: white;
    }

    /*-----st_login-----*/

    .log_img
    {
        height: 650px;
        margin-top: 0px;
        background-image: url("images/3.jpg");
    }
    .box1
    {
        height: 350px;
        width: 400px;

```



```

        background-color: black;
        margin: 70px auto;
        opacity: .7;
        color: white;
        padding: 20px;
    }
    form .login
    {
        margin: auto 50px;
    }
    input
    {
        height: 25px;
        width: 300px;
    }

/*-----registration-----*/
.reg_img
{
    height: 630px;
    margin-top: 0px;
    background-image: url("images/4.png");
}
.box2
{
    height: 589px;
    width: 400px;
    background-color: black;
    margin: 0px auto;
    opacity: .7;
    color: white;
    padding: 20px;
}

```

Student_login.html:-

```

<!DOCTYPE html>
<html>
<head>

    <title>Student Login</title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

</head>

```

```

<body>
<header style="height: 90px;">

<div class="logo">
    <h1 style="color: white; font-size: 25px;word-spacing: 10px; line-height: 80px;margin-top:
20px;">ONLINE LIBRARY MANAGEMENT SYSTEM</h1>
</div>

    <nav>
        <ul>
            <li><a href="index.html">HOME</a></li>
            <li><a href="">BOOKS</a></li>
            <li><a href="student_login.html">STUDENT-LOGIN</a></li>
            <li><a href="">ADMIN_LOGIN</a></li>
            <li><a href="">FEEDBACK</a></li>
        </ul>
    </nav>
</header>
<section>
    <div class="log_img">
        <br> <br><br>
        <div class="box1">
            <h1 style="text-align: center; font-size: 35px;font-family: Lucida Console;">Library
Management System</h1><br>
            <h1 style="text-align: center; font-size: 25px;">User Login Form</h1><br>
            <form name="login" action="" method="">
                <br><br>
                <div class="login">
                    <input type="text" name="username" placeholder="Username" required=""> <br><br>
                    <input type="password" name="password" placeholder="Password" required=""> <br><br>
                    <button>Login</button></div>
                </form>
                <p style="color: white; padding-left: 15px;">
                    <br><br>
                    <a style="color:white;" href="">Forgot password?</a> &nbsp; &nbsp; &nbsp; &nbsp; &nbsp; &nbsp; &nbsp; &nbsp; &nbsp;
&nbsp; &nbsp; &nbsp; &nbsp;
                    New to this website?<a style="color: white;" href="registration.html">Sign Up</a>
                </p>
            </div>
        </div>
    </section>

</body>
</html>

```

Registration.html:-

```
<!DOCTYPE html>
```

```

<html>
<head>

<title>Student Registration</title>
<link rel="stylesheet" type="text/css" href="style.css">
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">

</head>
<body>
<header style="height: 90px;">

<div class="logo">
    <h1 style="color: white; font-size: 25px;word-spacing: 10px; line-height: 80px;margin-top: 20px;">ONLINE LIBRARY MANAGEMENT SYSTEM</h1>
</div>

    <nav>
        <ul>
            <li><a href="index.html">HOME</a></li>
            <li><a href="">BOOKS</a></li>
            <li><a href="student_login.html">STUDENT-LOGIN</a></li>
            <li><a href="registration.html">REGISTRATION</a></li>
            <li><a href="">FEEDBACK</a></li>
        </ul>
    </nav>
</header>

<section>
    <div class="reg_img">

        <div class="box2">
            <h1 style="text-align: center; font-size: 35px;font-family: Lucida Console;">Library Management System</h1><br>
            <h1 style="text-align: center; font-size: 25px;">User Registration Form</h1><br>
            <form name="Registration" action="" method="">
                <br><br>
                <div class="login">
                    <input type="text" name="first" placeholder="First Name" required=""> <br><br>
                    <input type="text" name="last" placeholder="Last Name" required=""> <br><br>
                    <input type="text" name="username" placeholder="Username" required=""> <br><br>
                    <input type="password" name="password" placeholder="Password" required=""> <br><br>
                    <input type="text" name="roll" placeholder="Roll No" required=""><br><br>

                    <input type="text" name="email" placeholder="Email" required=""><br><br>

                    <button>Sign Up</button></div>

```

```

        </form>
    </div>
</div>
</section>
</body>

```

Registration.php:-

```

<?php
    include "connection.php";
    include "navbar.php";
?>

<!DOCTYPE html>
<html>
<head>

    <title>Student Registration</title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min
.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js">
</script>

    <style type="text/css">
        section
        {
            margin-top: -20px;
        }
    </style>
</head>
<body>

<section>
    <div class="reg_img">

        <div class="box2">
            <h1 style="text-align: center; font-size: 35px;font-family:
Lucida Console;"> &nbsp; &nbsp; &nbsp; Library Management System</h1>
            <h1 style="text-align: center; font-size: 25px;">User
Registration Form</h1>

```

```

<form name="Registration" action="" method="post">

    <div class="login">
        <input class="form-control" type="text" name="first"
placeholder="First Name" required=""> <br>
        <input class="form-control" type="text" name="last"
placeholder="Last Name" required=""> <br>
        <input class="form-control" type="text" name="username"
placeholder="Username" required=""> <br>
        <input class="form-control" type="password" name="password"
placeholder="Password" required=""> <br>
        <input class="form-control" type="text" name="roll"
placeholder="Roll No" required=""><br>

        <input class="form-control" type="text" name="email"
placeholder="Email" required=""><br>
        <input class="form-control" type="text" name="contact"
placeholder="Phone No" required=""><br>

        <input class="btn btn-default" type="submit" name="submit"
value="Sign Up" style="color: black; width: 70px; height: 30px"> </div>
    </form>

</div>
</div>
</section>

```

```

<?php

if(isset($_POST['submit']))
{
    $count=0;
    $sql="SELECT username from `student`";
    $res=mysqli_query($db,$sql);

    while($row=mysqli_fetch_assoc($res))
    {
        if($row['username']==$_POST['username'])
        {
            $count=$count+1;
        }
    }
    if($count==0)
    {
        mysqli_query($db,"INSERT INTO `STUDENT`
VALUES('$_POST[first]', '$_POST[last]', '$_POST[username]',
'$_POST[password]', '$_POST[roll]', '$_POST[email]',
'$_POST[contact]');");
    }
    ?>
    <script type="text/javascript">
        alert("Registration successful");
    </script>

```

```

        </script>
    <?php
    }
    else
    {

        ?>
        <script type="text/javascript">
            alert("The username already exist.");
        </script>
        <?php

    }

}

?>

</body>
</html>

```

Student_login.php:-

```

<?php
    include "connection.php";
    include "navbar.php";
?>

<!DOCTYPE html>
<html>
<head>

    <title>Student Login</title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min
.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js">
</script>

    <style type="text/css">
        section
        {
            margin-top: -20px;

```

```

    }
</style>
</head>
<body>

<section>
    <div class="log_img">
        <br>
        <div class="box1">
            <h1 style="text-align: center; font-size: 35px;font-family:
Lucida Console;">Library Management System</h1>
            <h1 style="text-align: center; font-size: 25px;">User Login
Form</h1><br>
            <form name="login" action="" method="post">

                <div class="login">
                    <input class="form-control" type="text" name="username"
placeholder="Username" required=""> <br>
                    <input class="form-control" type="password" name="password"
placeholder="Password" required=""> <br>
                    <input class="btn btn-default" type="submit" name="submit"
value="Login" style="color: black; width: 70px; height: 30px">
                </div>

                <p style="color: white; padding-left: 15px;">
                    <br><br>
                    <a style="color:white;" href="">Forgot password?</a> &nbsp;
&nbsp; &nbsp; &nbsp; &nbsp; &nbsp;
                    New to this website?<a style="color: white;"
href="registration.html">Sign Up</a>
                </p>
            </form>
        </div>
    </div>
</section>

<?php

    if(isset($_POST['submit']))
    {
        $count=0;
        $res=mysqli_query($db,"SELECT * FROM `student` WHERE
username='".$_POST[username]'" && password='".$_POST[password]'"");
        $count=mysqli_num_rows($res);

        if($count==0)
        {
            ?>

            <!--
            <script type="text/javascript">
                alert("The username and password doesn't match.");

```

```

        </script>
        -->
        <div class="alert alert-danger" style="width: 600px;
margin-left: 370px; background-color: #de1313; color: white">
        <strong>The username and password doesn't match</strong>
    </div>
    <?php
    }
    else
    {
        ?>
        <script type="text/javascript">
            window.location="index.php"
        </script>
        <?php
    }
}

?>

</body>
</html>

```

a.php:-

```

<?php
    include "connection.php";
    include "navbar.php";
?>
<!DOCTYPE html>
<html>
<head>
    <title>Books</title>
</head>
<body>
    <h2>List Of Books</h2>
    <?php

        $res=mysqli_query($db,"SELECT * FROM `books` ORDER BY
`books`.`name` ASC");

        echo "<table class='table table-bordered table-hover' >";
        echo "<tr style='background-color: white;'>";
            //Table header
            echo "<th>"; echo "ID";      echo "</th>";
            echo "<th>"; echo "Book-Name"; echo "</th>";
            echo "<th>"; echo "Authors Name"; echo "</th>";
            echo "<th>"; echo "Edition"; echo "</th>";
            echo "<th>"; echo "Status"; echo "</th>";

```



```

        echo "<th>"; echo "Quantity"; echo "</th>";
        echo "<th>"; echo "Department"; echo "</th>";
echo "</tr>";

while($row=mysqli_fetch_assoc($res))
{
    echo "<tr>";
    echo "<td>"; echo $row['bid']; echo "</td>";
    echo "<td>"; echo $row['name']; echo "</td>";
    echo "<td>"; echo $row['authors']; echo "</td>";
    echo "<td>"; echo $row['edition']; echo "</td>";
    echo "<td>"; echo $row['status']; echo "</td>";
    echo "<td>"; echo $row['quantity']; echo
"</td>";

    echo "<td>"; echo $row['department']; echo
"</td>";

    echo "</tr>";
}
echo "</table>"
;    ?>
</body>
</html>

```

Connection.php:-

```

<?php

$db=mysqli_connect("localhost","root","","library");
/* server name, username, password, database
name */

?>

```

Books.php:-

```

<?php
    include "connection.php";
    include "navbar.php";
?>
<!DOCTYPE html>
<html>
<head>
    <title>Books</title>
</head>
<body>
    <h2>List Of Books</h2>
    <?php

```

```

        $res=mysqli_query($db,"SELECT * FROM `books` ORDER BY
`books`.`name` ASC;");

        echo "<table class='table table-bordered table-hover' >";
        echo "<tr style='background-color: white;'>";
            //Table header
            echo "<th>"; echo "ID";          echo "</th>";
            echo "<th>"; echo "Book-Name";  echo "</th>";
            echo "<th>"; echo "Authors Name"; echo
"</th>";

            echo "<th>"; echo "Edition";  echo "</th>";
            echo "<th>"; echo "Status";  echo "</th>";
            echo "<th>"; echo "Quantity"; echo "</th>";
            echo "<th>"; echo "Department"; echo "</th>";
        echo "</tr>";

        while($row=mysqli_fetch_assoc($res))
        {
            echo "<tr>";
            echo "<td>"; echo $row['bid']; echo "</td>";
            echo "<td>"; echo $row['name']; echo "</td>";
            echo "<td>"; echo $row['authors']; echo
"</td>";

            echo "<td>"; echo $row['edition']; echo
"</td>";

            echo "<td>"; echo $row['status']; echo "</td>";
            echo "<td>"; echo $row['quantity']; echo
"</td>";

            echo "<td>"; echo $row['department']; echo
"</td>";

            echo "</tr>";
        }
        echo "</table>"
;    ?>
</body>
</html>

<?php
    include "navbar.php";
    include "connection.php";
?>

```

Feedback.php:-

```

<!DOCTYPE html>
<html>
<head>
    <title>Feedback</title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">

```

```

<meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.mi
n.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"
></script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.
js"></script>
    <style type="text/css">
        body
        {
            background-image: url("images/66.jpg");
        }
        .wrapper
        {
            padding: 10px;
            margin: -20px auto;
            width: 900px;
            height: 600px;
            background-color: black;
            opacity: .8;
            color: white;
        }
        .form-control
        {
            height: 70px;
            width: 60%;
        }
        .scroll
        {
            width: 100%;
            height: 300px;
            overflow: auto;
        }

    </style>
</head>
<body>
    <div class="wrapper">
        <h4>If you have any suggesions or questions please comment
below.</h4>
        <form style="" action="" method="post">
            <input class="form-control" type="text"
name="comment" placeholder="Write something..."><br>
            <input class="btn btn-default" type="submit"
name="submit" value="Comment" style="width: 100px; height: 35px;">

        </form>

```

```

<br><br>
    <div class="scroll">
        <?php
            if(isset($_POST['submit']))
            {
                $sql="INSERT INTO `comments`
VALUES('','$_POST[comment]');";
                if(mysqli_query($db,$sql))
                {
                    $q="SELECT * FROM `comments` ORDER BY
`comments`.`id` DESC";
                    $res=mysqli_query($db,$q);

                    echo "<table class='table
table-bordered'>";

                    while ($row=mysqli_fetch_assoc($res))
                    {
                        echo "<tr>";
                        echo "<td>"; echo
$row['comment']; echo "</td>";

                        echo "</tr>";
                    }
                }

            }
            else
            {
                $q="SELECT * FROM `comments` ORDER BY
`comments`.`id` DESC";
                $res=mysqli_query($db,$q);

                echo "<table class='table
table-bordered'>";

                while ($row=mysqli_fetch_assoc($res))
                {
                    echo "<tr>";
                    echo "<td>"; echo
$row['comment']; echo "</td>";

                    echo "</tr>";
                }
            }
        ?>
    </div>
</div>
</body>
</html>

```

Footer.html:-

```

<!DOCTYPE html>
<html>
<head>
    <title></title>

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/fo
nt-awesome.min.css">

    <style type="text/css">
    footer
    {
        height: 200px;
        width: 1361px;
        background-color: black;
    }

    .fa
    {
        margin: 0px 5px;
        padding: 5px;
        font-size: 20px;
        width: 20px;
        height: 20px;
        text-align: center;
        text-decoration: none;
        border-radius: 50%;
    }
    .fa:hover
    {
        opacity: .7;
    }
    .fa-facebook
    {
        background: #3B5998;
        color: white;
    }
    .fa-twitter
    {
        background: #55ACEE;
        color: white;
    }
    .fa-google
    {
        background: #dd4b39;
        color: white;
    }
    .fa-instagram
    {

```

```

        background: #125688;
        color: white;
    }
    .fa-yahoo
    {
        background: #400297;
        color: white;
    }
</style>

</head>
<body>
<footer style="background-color: black; ">
    <br>
    <h3 style="color:white;text-align: center;">Contact us through
social media</h3><br>

    <div style="margin:0px 570px;">

        <a href="#" class="fa fa-facebook"></a>
        <a href="#" class="fa fa-twitter"></a>
        <a href="#" class="fa fa-google"></a>
        <a href="#" class="fa fa-instagram"></a>
        <a href="#" class="fa fa-yahoo"></a>
    </div>

    <br>
    <p style="color:white;text-align: center;">
        <br>
        Email:&nbsp; Online.library@gmail.com <br><br>
        Mobile:&nbsp; &nbsp; +880171*****
    </p>
</footer>
</body>
</html>

```

navbar.html:-

```

<!DOCTYPE html>
<html>
<head>
    <title>
</title>

    <link rel="stylesheet" type="text/css" href="style.css">
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1">

```

```

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"
></script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>

</head>
<body>

    <nav class="navbar navbar-inverse">
    <div class="container-fluid">
        <div class="navbar-header">
            <a class="navbar-brand active">ONLINE LIBRARY MANAGEMENT
SYSTEM</a>
        </div>
        <ul class="nav navbar-nav">
            <li><a href="index.php">HOME</a></li>
            <li><a href="books.php">BOOKS</a></li>
            <li><a href="feedback.php">FEEDBACK</a></li>
        </ul>

        <ul class="nav navbar-nav navbar-right">

            <li><a href="student_login.php"><span class="glyphicon
glyphicon-log-in"> LOGIN</span></a></li>
            <li><a href="student_login.php"><span class="glyphicon
glyphicon-log-out"> LOGOUT</span></a></li>
            <li><a href="registration.php"><span class="glyphicon
glyphicon-user"> SIGN UP</span></a></li>
        </ul>

    </div>
    </nav>

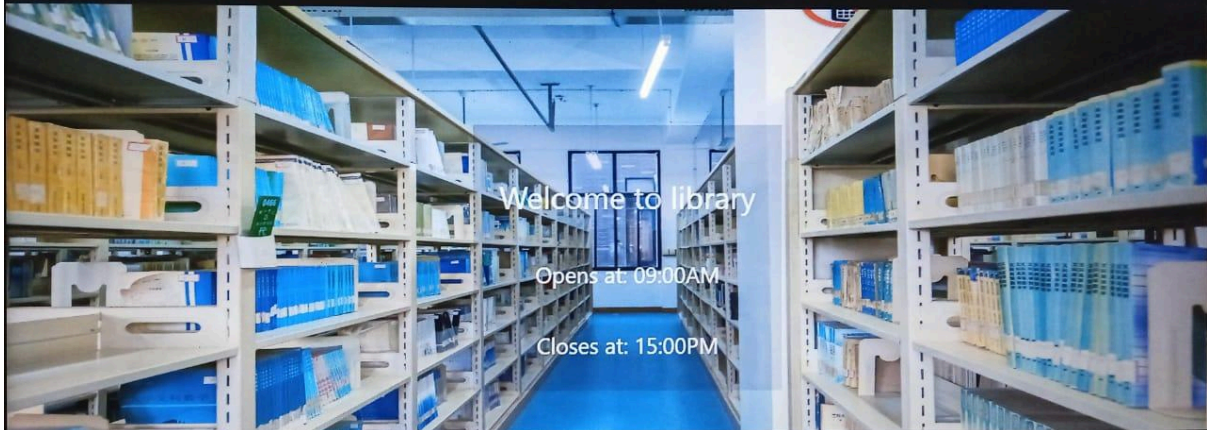
</body>
</html>

```

USER INTERFACE LAYER:-

ONLINE LIBRARY MANAGEMENT SYSTEM

[HOME](#) [BOOKS](#) [STUDENT-LOGIN](#) [ADMIN-LOGIN](#) [FEEDBACK](#)



Library Management System

User Registration Form

First Name	<input type="text"/>
Last Name	<input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>
Roll No	<input type="text"/>
Email	<input type="text"/>

A screenshot of a user registration form overlaid on a background image of a desk with stationery items like a clipboard, pens, and paper clips. The form includes fields for First Name, Last Name, Username, Password, Roll No, and Email, followed by a Sign Up button.

Library Management System

User Login Form

Username	<input type="text"/>
Password	<input type="password"/>

[Forgot Password?](#) [New to this website? Sign Up](#)

ONLINE LIBRARY MANAGEMENT SYSTEM [HOME](#) [BOOKS](#) [FEEDBACK](#) [LOGIN](#) [LOGOUT](#) [SIGNUP](#)

A screenshot of a user login form overlaid on a background image of a library bookshelf. The form includes fields for Username and Password, followed by a Login button. Below the login button are links for 'Forgot Password?' and 'New to this website? Sign Up'. The top navigation bar includes links for HOME, BOOKS, FEEDBACK, LOGIN, LOGOUT, and SIGNUP.

RESULT:-

Thus the library management system was designed using the relevant framework, UI design, and database.