

# **Software Engineering Report**



**Title: Online Library Management System**

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# **Table of Contents**

## **Introduction**

1. Detailed analysis of problem
  - 1.1 Project Overview
  - 1.2 Identification of project scope
  - 1.3 Objectives
  - 1.4 Infrastructure
2. Software requirements and analysis
  - 2.1 Description of Individual Phase/module
    - 2.1.1 User Characteristics
    - 2.1.2 General constraints
    - 2.1.3 Assumptions
    - 2.1.4 Functional requirements
  - 2.2 Identify individual module deliverables
3. Data Modeling
  - 3.1 System Architecture Diagram
  - 3.2 Use case Diagram
  - 3.3 Activity Diagram
  - 3.4 DFD Diagram
  - 3.5 Class Diagram
  - 3.6 Sequence Diagram

## 4. Development

### 4.1 Database Structure

### 4.2 Coding and Implementation

#### 4.2.1 Sample Codes

## 5. Software Testing

## 6. Project Demo

### 6.1 Screenshot

# **Library Management System**

## **Description:**

A Library Management System is one of the important software that is used to keep up the task of a library. It helps the librarian by maintaining the data base of new books and the books that are borrowed by the authorized users along with the due dates. It also helps the users to know about the desired books that are available in the library. The main sight of our project, library management system is to provide instant and accurate data regarding any type of book according to the student needs, thereby saving a lot of time and effort.

## **Proposed idea:**

In this design we are going have two integral parts i.e., Admin login for librarians and User login for Users. In the Admin login after the admin has logged into his account using his login details, he can add/drop/delete the books/authors/category according to the requirements. He can also issue the book to the user and update the details depending on the status of the user (i.e., weather he has returned the book or not). Now in the User login the user has to register himself/herself in the portal if he hasn't had any account in it. Once the registration is done, he/she will get a user Id. Using the user id he/she can login into the portal and can access their details (i.e., when to return the book, no of books issued etc.).

## **Key Features:**

- **For user:** Create an Account, update their profile, issuing book, change their password, Return book.
- **For Admin:** view user details, change own password, adding book, updating details, deleting, search the user.
- **Programming languages:**
  1. HTML, CSS, Java Script for designing app
  2. PHP, MySQL for back-end
- **Platform used:** Xampp Server

# Library Management System

## 1. Detailed analysis of Problem:

### 1.1 Project Overview:

A Library Management System is one of the important software that is used to keep up the task of a library. The main sight of our project, library management system is to provide instant and accurate data regarding any type of book according to the student needs, thereby saving a lot of time and effort. In this design we are going have two integral parts i.e., Admin login for librarians and User login for Users. In the Admin login after the admin has logged into his account using his login details, he can add/drop/delete books/authors/category according to the requirements. He can also issue the book to the user and update the details depending on the status of the user (i.e., weather he has returned the book or not). Now in the User login the user has to register himself/herself in the portal if he hasn't had any account in it. Once the registration is done, he/she will get a user Id. Using the user id, he/she can login into the portal and can access their details (i.e. when to return the book, no of books issued etc.).

### Why Computerized?

Since it very difficult for the librarian and the user to keep the track of books, return date, issued date etc. manually which may lead to some of the disadvantages like Time Constraint, Human error, Updating the counts etc. so in order to reduce these disadvantages and make this work much simpler we are developing this software to keep the records of the book and the user details like due date, issued date etc. computerized.

### 1.2 Identification of project scope:

- ✓ It is a providential interface
- ✓ All the users can access their user interface at the same time the admin team can also access the admin portal for updating and managing the user data and book records with ease.

### Tasks Involved:

## 1. User Interface:

- ✓ Firstly, the user needs to create an account in the software.
- ✓ After creation of account, he/she need to use the user id provided and need to login to the user interface.
- ✓ Once user login he/she can see the dashboard and the number of books that he/she had issued and number of books that are need to be returned with the due date.

## 2. Admin Interface:

- ✓ The admin needs to login into his portal with the credentials provided to him/her.
- ✓ After his login he can see the details of the users like books that are issued by the user and that are need to be returned by the user before the dead line.
- ✓ He/she can also update/search the user details depending on the status of the user and even they can add/drop/update the books/categories.

## 1.3 Objectives:

The main sight of our project “library management System” is to provide user-friendly application where a user can login with the credentials and can check how many books has been issued, books not yet returned and, in the books, issued section user can also view the details of the book date of issued deadline to return the book. Along with the user/Student in this web application a admin can also login where he can add/update/delete the categories, author of the books and also can edit the book details. Being an admin, they can view the details of the student’s books they issued.

## 1.4 Infrastructure:

Software used in the project are:

Front End: HTML, CSS, JavaScript

Back End: PHP, MySQL

Editor: Visual Studio Code and Server: XAMPP

# **Library Management System**

## **2. Software requirements and Analysis:**

### **2.1 Description of Individual Phase/module:**

#### **2.1.1 User Characteristics:**

##### User:

- User need to create an account in the application
- He/she gets a student id to login into the page
- User once logged in can update their profile and password.
- User will have the information regarding the books that they have issued and due dates on which they need to submit the books.

##### Admin:

- Admin can login directly with the credentials provide to them.
- Admin can update their profile and password if required.
- Admin can see the status of the user by using the user id that is provided to them.
- Admin can update the status of the user
- Admin can also add/update/delete the books/categories

#### **2.1.2 General Constraints:**

- User can change his/her password by going into profile section and click on change password.
- Only the user who have login details can access the web page.
- User cannot change the status (weather the book has been issued or returned) by his own, only the admin can update the details of the user.
- Admin can also update his profile or password by going into profile after his successful login.

### **2.1.3 Assumptions:**

- User should have his own personalized login details to login into the web portal.
- Admin also should have his own credentials to login into the web page.
- Admin need to be accurate and careful with student id while updating user status.

### **Dependency:**

- Users can see their details only when the login is successful.
- Admin can update/delete/add the books/ categories only after his successful login.
- Admin can update the details once the user has issued or submitted his/her book.

### **2.1.4 Functional requirements:**

#### **1.User Login:**

It allows the user to login into the student /faculty portal.

**Input:** Username, Password.

**Output:** Student/Faculty page

#### **2.User registration:**

It allows the user to register into the portal if the user doesn't have an account

**Input:** Full Name, Mobile Number, Email-id, password

**Output:** Registration Successful

#### **3.Librarian Login:**

It allows the librarian to login into the Librarian page

**Input:** username, Password.

**Output:** Librarian Dashboard.

### **2.2 Identify individual module deliverables:**

Librarian module:

- Can fetch the details of the students as well as faculty
- Can update the details of the customer.
- Can add books, Authors, categories and can delete them.
- Can issue a book to the student.



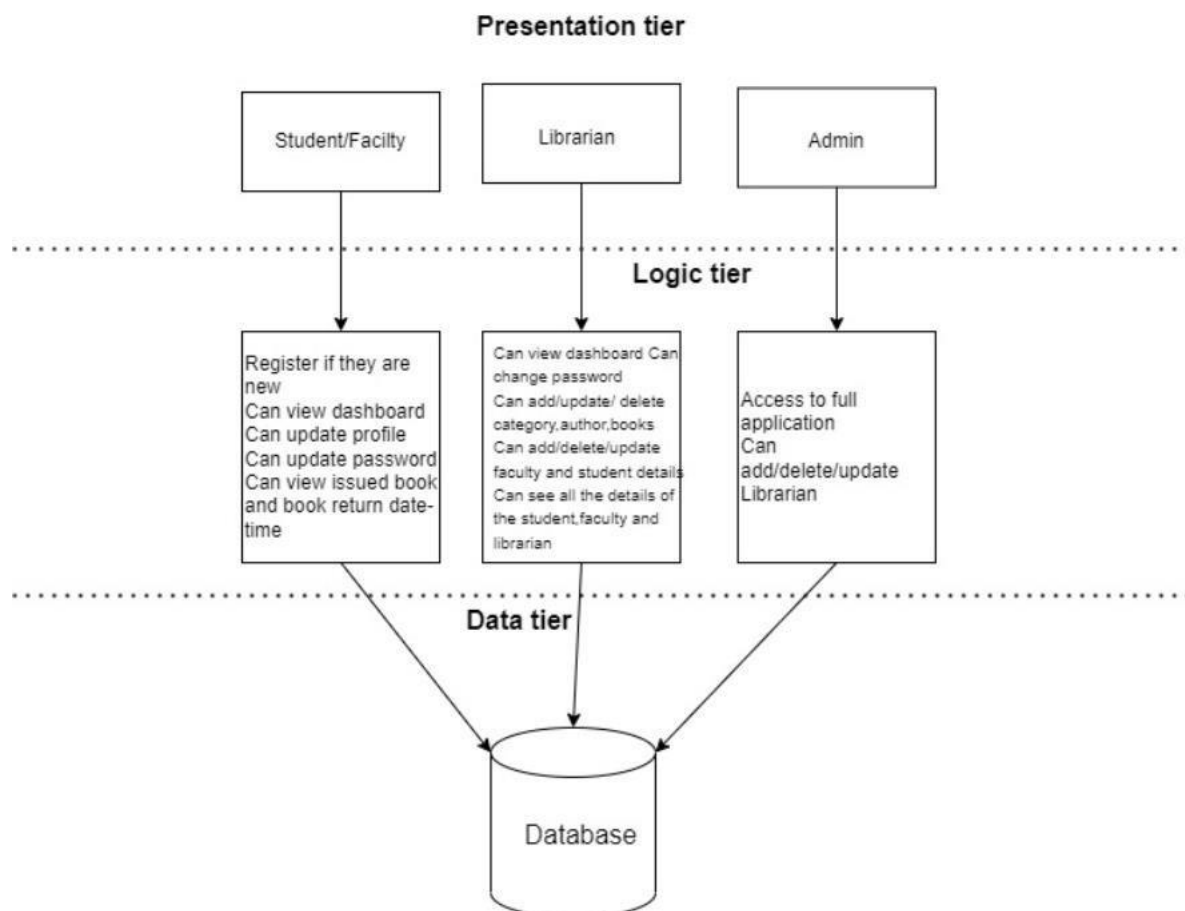
### User Module:

- Can update their profile and change their password.
- Can check their book status .

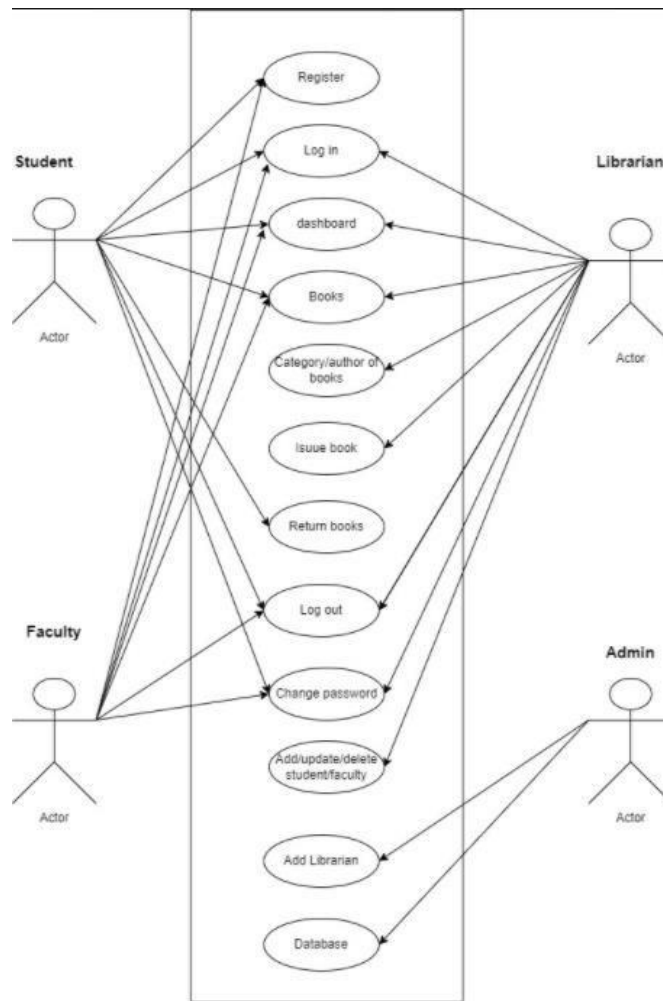
**Perform Design and Analysis of requirements for your chosen project with the required UML diagrams:**

### **3. DATA MODELING:**

#### **3.1 System Architecture Diagram:**



### 3.2 Use Case Diagram:

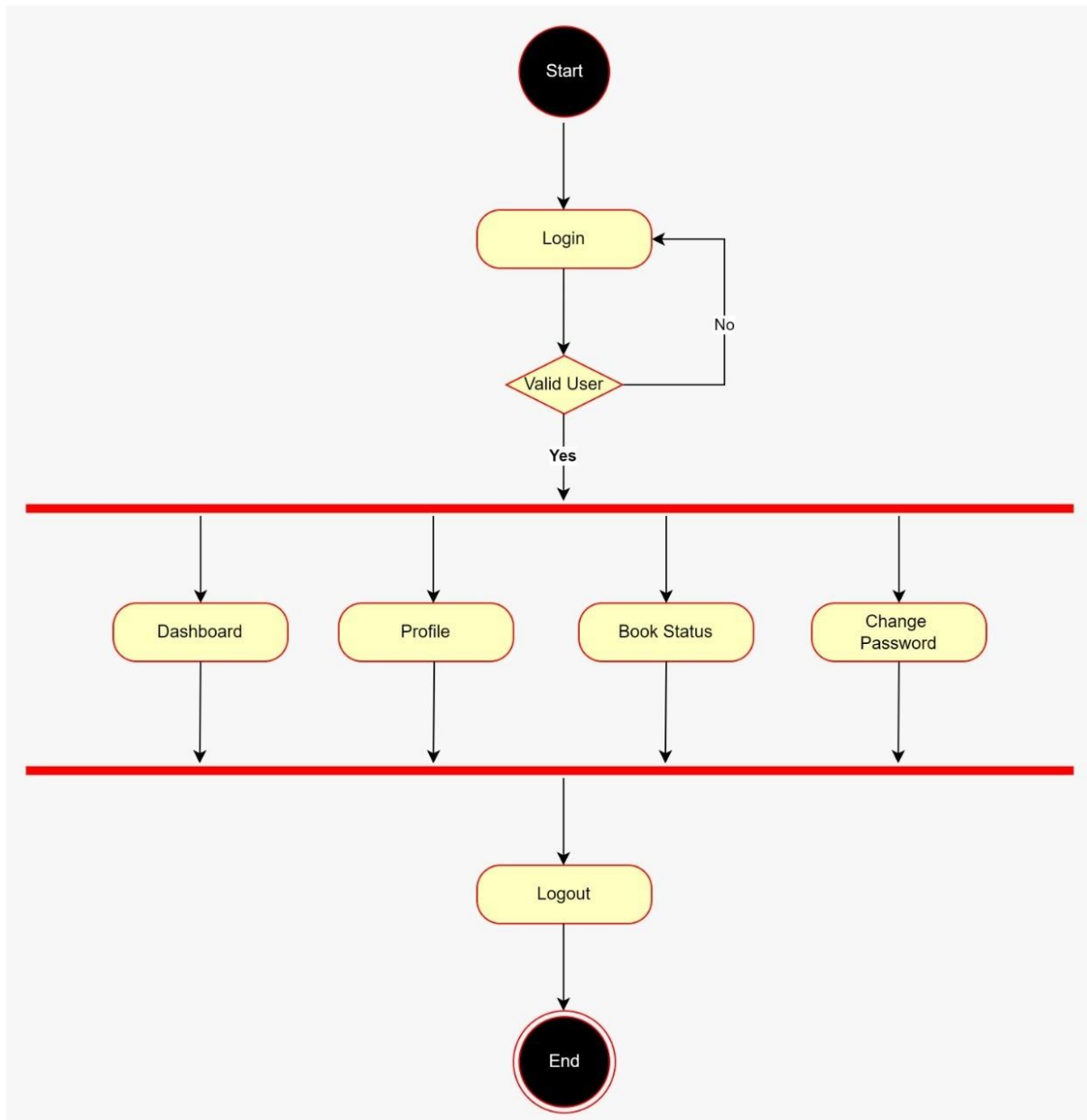


**Perform Design and Analysis of requirements for your chosen project with the required UML diagrams:**

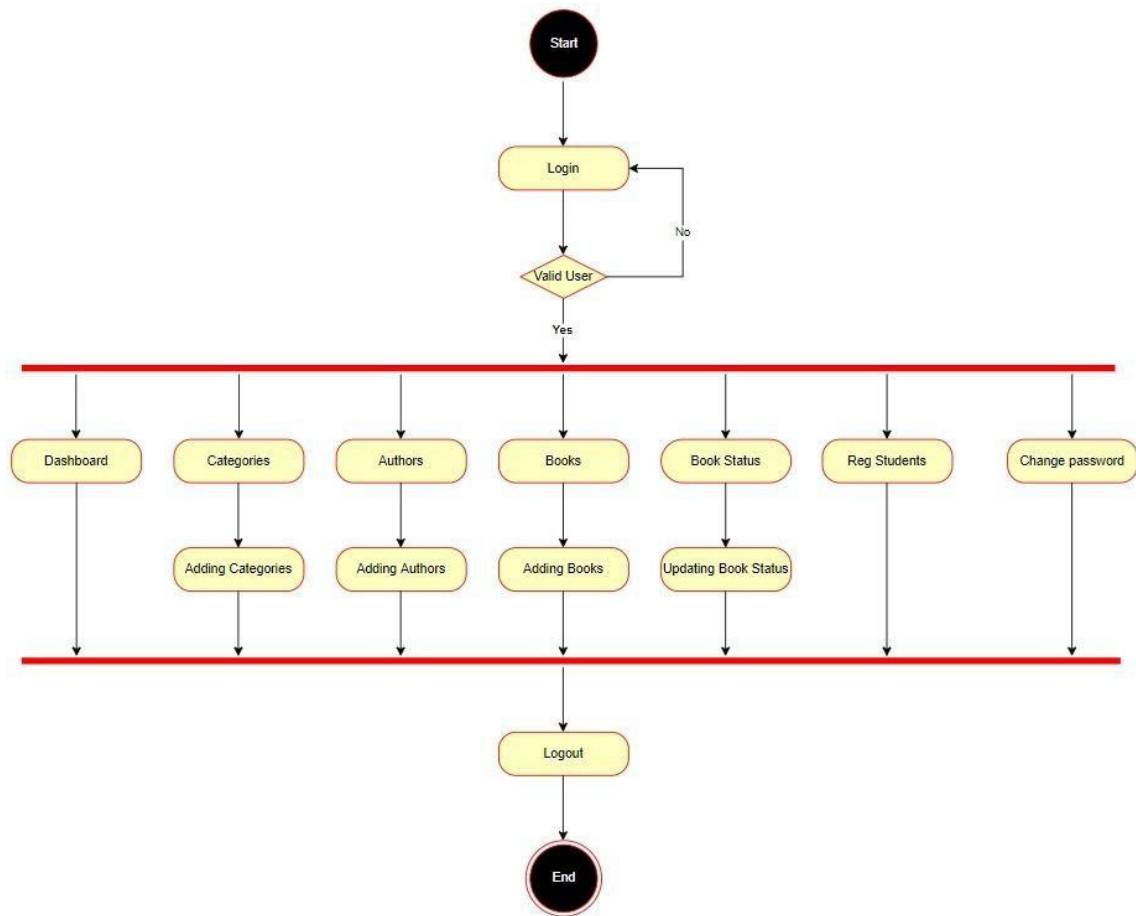
### **3. DATA MODELING:**

#### **3.3 Activity Diagram:**

**User Diagram:**



## Librarian Diagram:

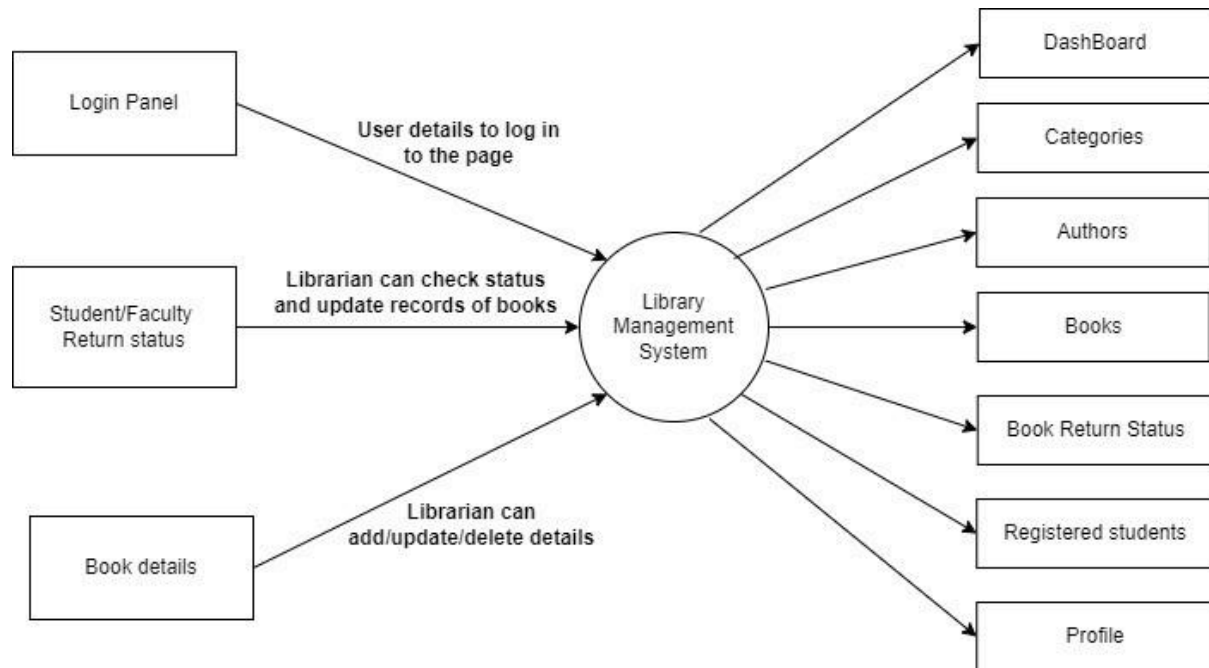


**Perform Design and Analysis of requirements for your chosen project with the required UML diagrams:**

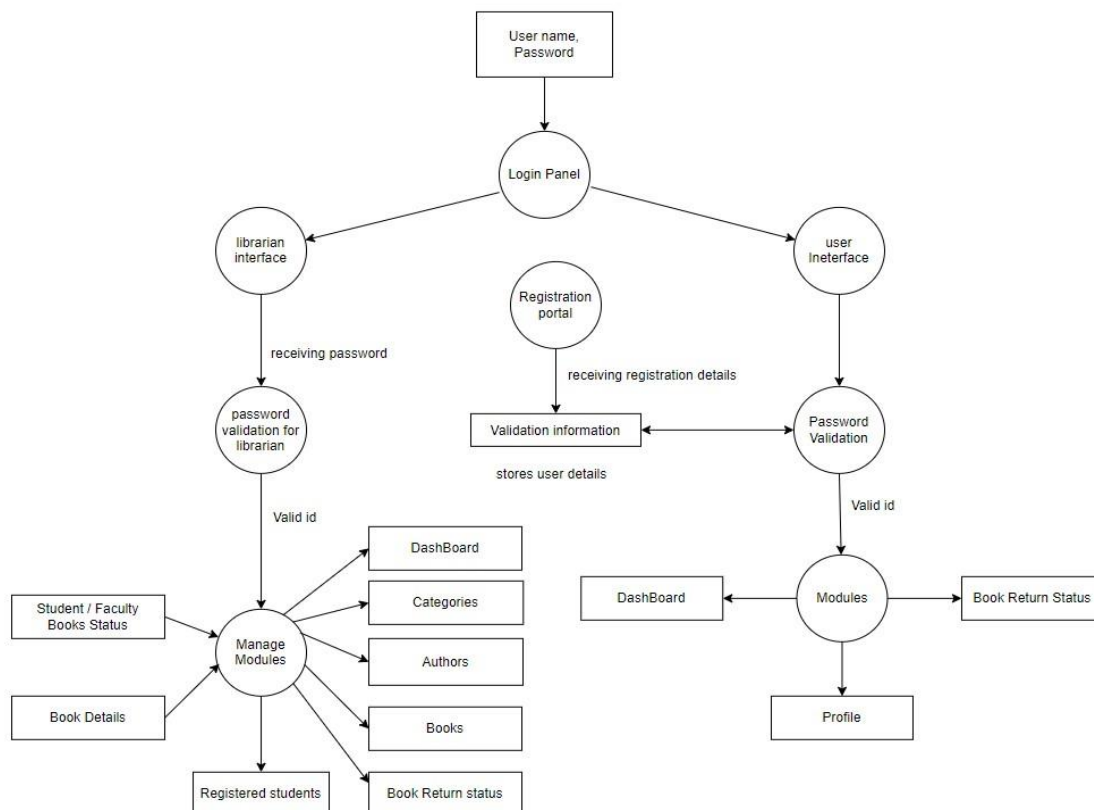
### 3. DATA MODELING:

#### 3.4 DFD Diagram:

**Level 0:**



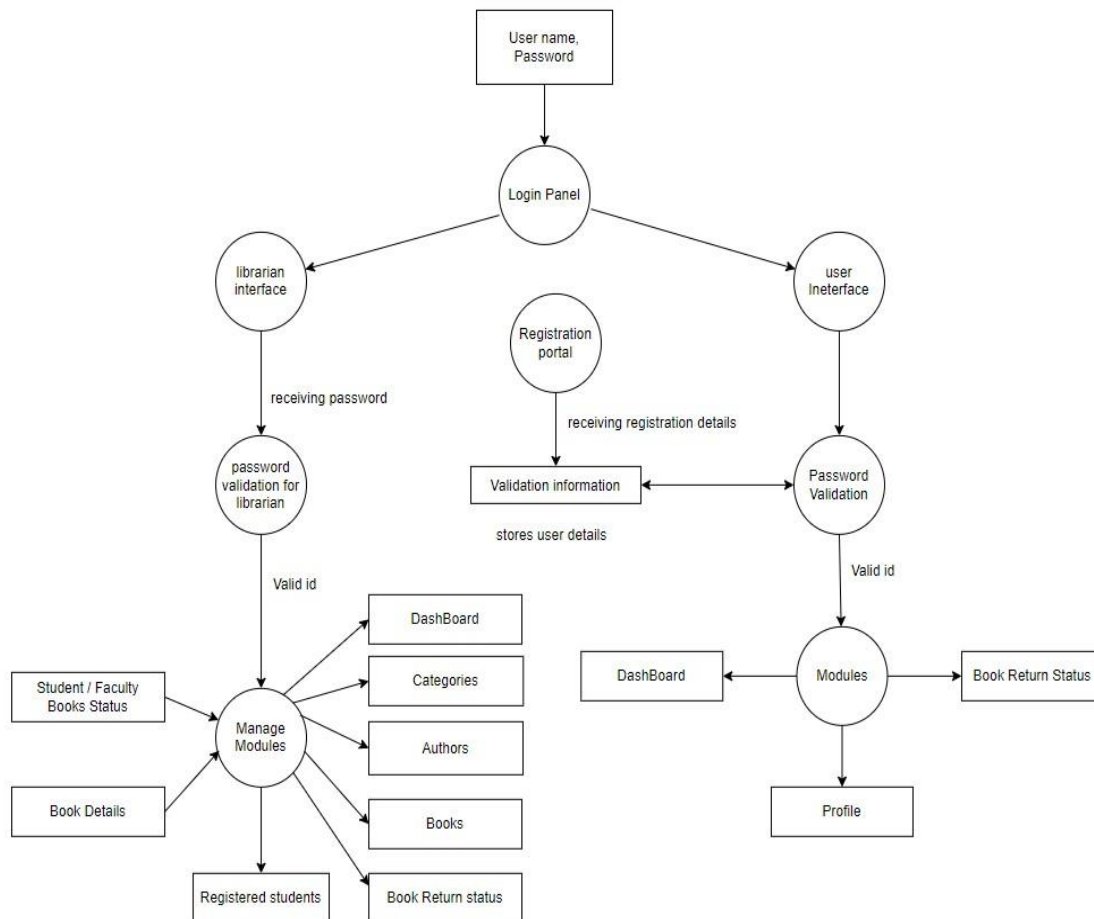
**Level-1:**



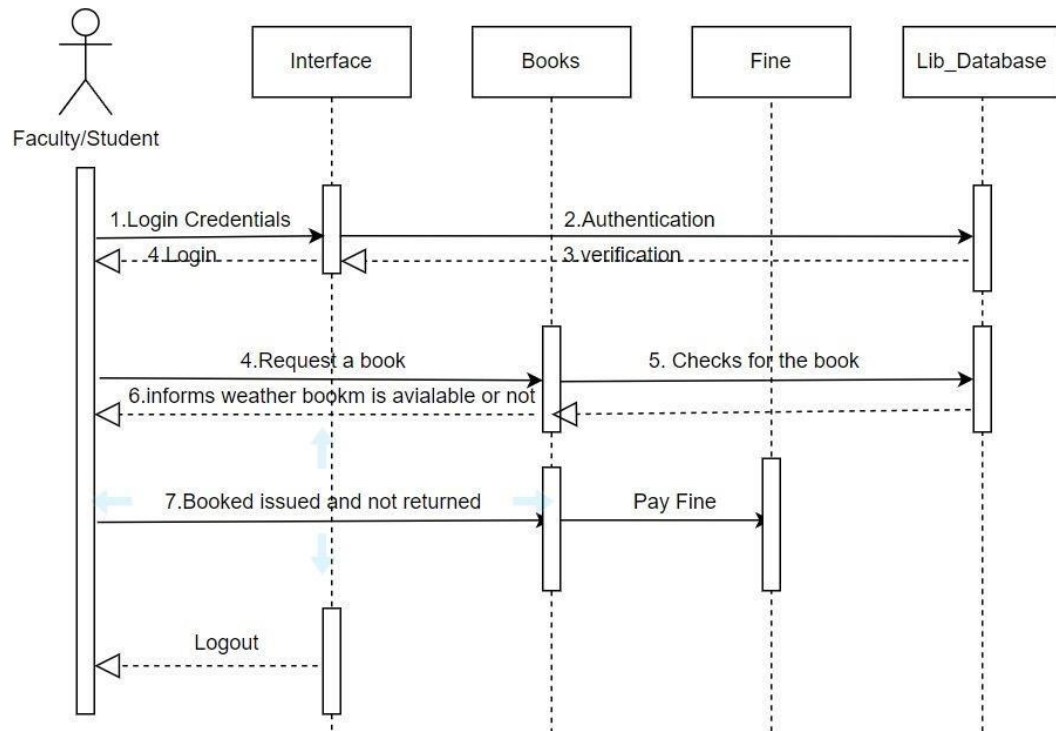
**Perform Design and Analysis of requirements for your chosen project with the required UML diagrams:**

### **3. DATA MODELING:**

#### **3.5 Class Diagram**



### 3.6 Sequence Diagram:





## Perform Design and Development of Database Structure for your chosen project.

### 4. DEVELOPMENT

#### 4.1 Database Structure

##### 1. Librarian table:

Field	Data Type	Size	Constraints	Description
id	int	11	Primary key	It gives the id to the librarian
Full Name	varchar	100	Default Null	It takes the name of the librarian
Librarian Email	varchar	100	Default Null	It takes the Email address of the librarian
Username	varchar	100	Not Null	It takes the UserName of the librarian
Password	varchar	100	Not Null	It takes the Password of the librarian
Updation date	timestamp	-	Not Null Default	It takes the Updationdate of the books/status of student/faculty

##### Authors table:

Field	Data Type	Size	Constraints	Description
id	int	11	Primary key	It takes the id of the author that was given to the respect author
Author Name	varchar	150	Default Null	It takes the name of the author
Creation Date	timestamp	-	Null Default	It takes the date of the author on

				which date it was added to the books list
UpdationDate	timestamp	-	Null Default	It takes the date of the author on which date it was updated the last in books list

**Books table:**

Field	Data Type	Size	Constraints	Description
id	Int	11	Primary key	It takes the id of the book
BookName	Varchar	200	Default Null	It takes the name of the book
CatId	Int	11	Default Null	It takes the category id of in the available categories
Authorid	Int	11	Default Null	It takes the Author id of in the available Authors list
ISBNNumber	Int	11	Default Null	It takes the ibs number of the book
BookPrice	Int	11	Default Null	It the details of the price of the book
RegDate	timestamp	-	Null Default	It takes the date on which the book has been registered
UpdationDate	timestamp	-	Null Default	It takes the date on which the book has been returned/issued

**Category table:**

Field	Data Type	Size	Constraints	Description
-------	-----------	------	-------------	-------------

id	Int	11	Primary key	It takes the id of the categories
Category Name	Varchar	150	Default Null	It takes the category name
Creation Date	timestamp	-	Null default	It takes the date on which the category is added
UpdationDate	timestamp	-	Null default	It takes the updationdate of the category
Status	int	11	Default Null	It takes the status of category

**Issued book details table:**

Field	Data Type	Size	Constraints	Description
id	Int	11	Primary key	It stores the id of the number of books issued
Bookid	Int	11	Default Null	It takes the id of the book issued
Studentid	Varchar	159	Default Null	It takes the id of the student
IssueDate	timestamp	-	Null Default	It takes the date on which the book is issued
Return Date	timestamp	-	Null Default	It takes the date on which the book is returned
Return Status	Int	1	Default Null	It stores the return status of the book
fine	int	11	Default Null	It takes the fine need to be paid if it was returned late

**Student/Faculty table:**

Field	Data Type	Size	Constraints	Description
Id	Int	11	Not Null	It stores the id's of both students and faculty by giving individual id to them.
Studentid/faculty id	Varchar	111	Default Null	It takes the studentid and faculty id
Fullname	Varchar	111	Default Null	It takes the full name of student as well as faculty
Emailid	Varchar	111	Default Null	It takes the Emailid of student as well as faculty
Mobile number	Char	111	Default Null	It takes the mobile number of student as well as faculty
Password	Varchar	111	Default Null	It takes the password of student as well as faculty
Status	Int	1	Default Null	It takes the status of the students
RegDate	timestamp	-	Null Default	It takes the date on which the students issued the book
UpdationDate	timestamp	-	Null Default	It takes the date on which the students returned the book and upadate

## 4.2 Coding and Implementation:

### 4.2.1 Sample Codes:

#### SQL file:

```
--
-- Database: `library`
--
-- -----
--
-- Table structure for table `librarian`
--

CREATE TABLE `librarian` (
  `id` int(11) NOT NULL,
  `FullName` varchar(100) DEFAULT NULL,
  `AdminEmail` varchar(120) DEFAULT NULL,
  `UserName` varchar(100) NOT NULL,
  `Password` varchar(100) NOT NULL,
  `updationDate` timestamp NOT NULL DEFAULT '0000-00-00 00:00:00' ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `librarian`
--

INSERT INTO `librarian` (`id`, `FullName`, `AdminEmail`, `UserName`, `Password`, `updationDate`) VALUES
(1, 'Kumar Pandule', 'kumarpandule@gmail.com', 'admin', 'e6e061838856bf47e1de730719fb2609', '2021-06-28 16:06:08');
```

```
--
-- Table structure for table `authors`
--

CREATE TABLE `authors` (
  `id` int(11) NOT NULL,
  `AuthorName` varchar(159) DEFAULT NULL,
  `creationDate` timestamp NULL DEFAULT current_timestamp(),
  `UpdationDate` timestamp NULL DEFAULT NULL ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `authors`
--

INSERT INTO `authors` (`id`, `AuthorName`, `creationDate`, `UpdationDate`) VALUES
(1, 'Kumar Pandule', '2017-07-08 12:49:09', '2021-06-28 16:03:28'),
(2, 'Kumar', '2017-07-08 14:30:23', '2021-06-28 16:03:35'),
(3, 'Rahul', '2017-07-08 14:35:08', '2021-06-28 16:03:43'),
(4, 'HC Verma', '2017-07-08 14:35:21', NULL),
(5, 'R.D. Sharma ', '2017-07-08 14:35:36', NULL),
(9, 'fwdfrwer', '2017-07-08 15:22:03', NULL);
```

```
--
-- Table structure for table `books`
--

CREATE TABLE `books` (
  `id` int(11) NOT NULL,
  `BookName` varchar(255) DEFAULT NULL,
  `CatId` int(11) DEFAULT NULL,
  `AuthorId` int(11) DEFAULT NULL,
  `ISBNNumber` int(11) DEFAULT NULL,
  `BookPrice` int(11) DEFAULT NULL,
  `RegDate` timestamp NULL DEFAULT current_timestamp(),
  `UpdationDate` timestamp NULL DEFAULT NULL ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `books`
--

INSERT INTO `books` (`id`, `BookName`, `CatId`, `AuthorId`, `ISBNNumber`, `BookPrice`, `RegDate`, `UpdationDate`) VALUES
(1, 'PHP And MySql programming', 5, 1, 222333, 20, '2017-07-08 20:04:55', '2017-07-15 05:54:41'),
(3, 'physics', 6, 4, 1111, 15, '2017-07-08 20:17:31', '2017-07-15 06:13:17');
```

```
--
-- Table structure for table `category`
--

CREATE TABLE `category` (
  `id` int(11) NOT NULL,
  `CategoryName` varchar(150) DEFAULT NULL,
  `Status` int(1) DEFAULT NULL,
  `CreationDate` timestamp NULL DEFAULT current_timestamp(),
  `UpdationDate` timestamp NULL DEFAULT '0000-00-00 00:00:00' ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `category`
--

INSERT INTO `category` (`id`, `CategoryName`, `Status`, `CreationDate`, `UpdationDate`) VALUES
(4, 'Romantic', 1, '2017-07-04 18:35:25', '2017-07-06 16:00:42'),
(5, 'Technology', 1, '2017-07-04 18:35:39', '2017-07-08 17:13:03'),
(6, 'Science', 1, '2017-07-04 18:35:55', '0000-00-00 00:00:00'),
(7, 'Management', 0, '2017-07-04 18:36:16', '0000-00-00 00:00:00');
```

```
--
-- Table structure for table `issuedbookdetails`
--

CREATE TABLE `issuedbookdetails` (
  `id` int(11) NOT NULL,
  `BookId` int(11) DEFAULT NULL,
  `StudentID` varchar(150) DEFAULT NULL,
  `IssuesDate` timestamp NULL DEFAULT current_timestamp(),
  `ReturnDate` timestamp NULL DEFAULT NULL ON UPDATE current_timestamp(),
  `RetrunStatus` int(1) DEFAULT NULL,
  `fine` int(11) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `issuedbookdetails`
--

INSERT INTO `issuedbookdetails` (`id`, `BookId`, `StudentID`, `IssuesDate`, `ReturnDate`, `RetrunStatus`, `fine`) VALUES
(1, 1, 'SID002', '2017-07-15 06:09:47', '2017-07-15 11:15:20', 1, 0),
(2, 1, 'SID002', '2017-07-15 06:12:27', '2017-07-15 11:15:23', 1, 5),
(3, 3, 'SID002', '2017-07-15 06:13:40', NULL, 0, NULL),
(4, 3, 'SID002', '2017-07-15 06:23:23', '2017-07-15 11:22:29', 1, 2),
(5, 1, 'SID009', '2017-07-15 10:59:26', NULL, 0, NULL),
(6, 3, 'SID011', '2017-07-15 18:02:55', NULL, 0, NULL);
```

```

CREATE TABLE `students/Faculty` (
  `id` int(11) NOT NULL,
  `StudentId` varchar(100) DEFAULT NULL,
  `FacultyId` varchar(100) DEFAULT NULL,
  `FullName` varchar(120) DEFAULT NULL,
  `EmailId` varchar(120) DEFAULT NULL,
  `MobileNumber` char(11) DEFAULT NULL,
  `Password` varchar(120) DEFAULT NULL,
  `Status` int(1) DEFAULT NULL,
  `RegDate` timestamp NULL DEFAULT current_timestamp(),
  `UpdationDate` timestamp NULL DEFAULT NULL ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `students/Faculty`
--

INSERT INTO `students/Faculty` (`id`, `StudentId`, `FullName`, `EmailId`, `MobileNumber`, `Password`, `Status`, `RegDate`, `UpdationDate`) VALUES
(1, 'SID002', 'Anuj kumar', 'anuj.lpu1@gmail.com', '9865472555', 'f925916e2754e5e03f75dd58a5733251', 1, '2017-07-11 15:37:05', '2017-07-15 18:26:21'),
(4, 'SID005', 'sdfsd', 'csfsd@dfsfsks.com', '8569710025', '92228410fc8b72914e023160cf4ae8f', 0, '2017-07-11 15:41:27', '2017-07-15 17:43:03'),
(8, 'SID009', 'test', 'test@gmail.com', '2359874527', 'f925916e2754e5e03f75dd58a5733251', 1, '2017-07-11 15:58:28', '2017-07-15 13:42:44'),
(9, 'SID010', 'Amit', 'amit@gmail.com', '8585856224', 'f925916e2754e5e03f75dd58a5733251', 1, '2017-07-15 13:40:30', NULL),
(10, 'SID011', 'Sarita Pandey', 'sarita@gmail.com', '4672423754', 'f925916e2754e5e03f75dd58a5733251', 1, '2017-07-15 18:00:59', NULL);

--
-- Indexes for dumped tables

```

```

-- Indexes for dumped tables
--

--
-- Indexes for table `librarian`
--
ALTER TABLE `librarian`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `authors`
--
ALTER TABLE `authors`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `books`
--
ALTER TABLE `books`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `category`
--
ALTER TABLE `category`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `issuedbookdetails`
--
ALTER TABLE `issuedbookdetails`
  ADD PRIMARY KEY (`id`);

```

**Librarian login page:**



```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
if($_SESSION['alogin']!=''){
$_SESSION['alogin']='';
}
if(isset($_POST['login']))
{
    //code for captach verification
    if ($_POST["vercode"] != $_SESSION["vercode"] OR $_SESSION["vercode"]=='') {
        echo "<script>alert('Incorrect verification code');</script>" ;
    }
    else {

$username=$_POST['username'];
$password=md5($_POST['password']);
$sql = "SELECT UserName,Password FROM librarian WHERE UserName=:username and Password=:password";
$query= $dbh -> prepare($sql);
$query-> bindParam(':username', $username, PDO::PARAM_STR);
$query-> bindParam(':password', $password, PDO::PARAM_STR);
$query-> execute();
$results=$query->fetchAll(PDO::FETCH_OBJ);
if($query->rowCount() > 0)
{
$_SESSION['alogin']=$_POST['username'];
echo "<script type='text/javascript'> document.location ='librarian/dashboard.php'; </script>";
} else{
echo "<script>alert('Invalid Details');</script>";
}
}
}
}
}
?>

```

```

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <title>Online Library Management System</title>
    <!-- BOOTSTRAP CORE STYLE -->
    <link href="assets/css/bootstrap.css" rel="stylesheet" />
    <!-- FONT AWESOME STYLE -->
    <link href="assets/css/font-awesome.css" rel="stylesheet" />
    <!-- CUSTOM STYLE -->
    <link href="assets/css/style.css" rel="stylesheet" />
    <!-- GOOGLE FONT -->
    <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />
</head>
<body>
    <!--MENU SECTION START-->
    <?php include('includes/header.php');?>
    <!-- MENU SECTION END-->
    <div class="content-wrapper">
    <div class="container">
    <div class="row pad-botm">
    <div class="col-md-12">
    <h4 class="header-line">Librarian LOGIN FORM</h4>
    </div>
    </div>

    <!--LOGIN PANEL START-->
    <div class="row">
    <div class="col-md-6 col-sm-6 col-xs-12 col-md-offset-3">

```



```

    LOGIN FORM
</div>
<div class="panel-body">
<form role="form" method="post">

<div class="form-group">
<label>Enter Username</label>
<input class="form-control" type="text" name="username" autocomplete="off" required />
</div>
<div class="form-group">
<label>Password</label>
<input class="form-control" type="password" name="password" autocomplete="off" required />
</div>
<div class="form-group">
<label>Verification code : </label>
<input type="text" name="vercode" maxlength="5" autocomplete="off" required style="width: 150px; height: 25px;" />&nbsp;  
</div>

<button type="submit" name="login" class="btn btn-info">LOGIN </button>
</form>
</div>
</div>
</div>
</div>
<!-- LOGIN PABNEL END-->

</div>
</div>
<!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
<!-- FOOTER SECTION END-->
<script src="assets/js/jquery-1.10.2.js"></script>
<!-- BOOTSTRAP SCRIPTS -->

```

```

<script src="assets/js/bootstrap.js"></script>
<!-- CUSTOM SCRIPTS -->
<script src="assets/js/custom.js"></script>
</script>
</body>
</html>

```

## Index page:

```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
if($_SESSION['login']!=''){
$_SESSION['login']='';
}
if(isset($_POST['login']))
{
//code for captach verification
if ($_POST["vercode"] != $_SESSION["vercode"] OR $_SESSION["vercode"]=="") {
echo "<script>alert('Incorrect verification code');</script>" ;
}
else {
$email=$_POST['emailid'];
$password=md5($_POST['password']);
$sql ="SELECT EmailId,Password,StudentId/FacultyId,Status FROM students WHERE EmailId=:email and Password=:password";
$query= $dbh -> prepare($sql);
$query-> bindParam(':email', $email, PDO::PARAM_STR);
$query-> bindParam(':password', $password, PDO::PARAM_STR);
$query-> execute();
$results=$query->fetchAll(PDO::FETCH_OBJ);

if($query->rowCount() > 0)
{
foreach ($results as $result) {
$_SESSION['stdid']=$result->StudentId/FacultyId;
if($result->Status==1)
{
$_SESSION['login']=$_POST['emailid'];
echo "<script type='text/javascript'> document.location ='dashboard.php'; </script>";
} else {
echo "<script>alert('Your Account Has been blocked .Please contact librarian');</script>";
}
}
}
}

```

```

    } else {
    echo "<script>alert('Your Account Has been blocked .Please contact librarian');</script>";

    }
    }

    }

    else{
    echo "<script>alert('Invalid Details');</script>";
    }
    }
    }
    ?>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <title>Online Library Management System | </title>
    <!-- BOOTSTRAP CORE STYLE -->
    <link href="assets/css/bootstrap.css" rel="stylesheet" />
    <!-- FONT AWESOME STYLE -->
    <link href="assets/css/font-awesome.css" rel="stylesheet" />
    <!-- CUSTOM STYLE -->
    <link href="assets/css/style.css" rel="stylesheet" />
    <!-- GOOGLE FONT -->
    <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />

</head>
<body>
    <!-------MENU SECTION START-->

```

```

<h4 class="header-line">USER LOGIN FORM</h4>
</div>
</div>

<!--LOGIN PANEL START-->
<div class="row">
<div class="col-md-6 col-sm-6 col-xs-12 col-md-offset-3">
<div class="panel panel-info">
<div class="panel-heading">
    LOGIN FORM
</div>
<div class="panel-body">
<form role="form" method="post">

<div class="form-group">
<label>Enter Email id</label>
<input class="form-control" type="text" name="emailid" required autocomplete="off" />
</div>
<div class="form-group">
<label>Password</label>
<input class="form-control" type="password" name="password" required autocomplete="off" />
<p class="help-block"><a href="user-forgot-password.php">Forgot Password</a></p>
</div>

<div class="form-group">
<label>Verification code : </label>
<input type="text" class="form-control" name="vercode" maxlength="5" autocomplete="off" required style="height:25px;" />&nbsp;&nbsp;&nbsp;
</div>

<button type="submit" name="login" class="btn btn-info">LOGIN </button> | <a href="signup.php">Not Register Yet</a>
</form>
</div>
</div>
</div>
</div>

```

```

    </div>
</div>
    <!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
    <!-- FOOTER SECTION END-->
    <script src="assets/js/jquery-1.10.2.js"></script>
    <!-- BOOTSTRAP SCRIPTS -->
    <script src="assets/js/bootstrap.js"></script>
    <!-- CUSTOM SCRIPTS -->
    <script src="assets/js/custom.js"></script>

</body>
</html>

```

## User signup Page:

```

<?php
session_start();
include('includes/config.php');
error_reporting(0);
if(isset($_POST['signup']))
{
    //code for captch verification
    if ($_POST["vercode"] != $_SESSION["vercode"] OR $_SESSION["vercode"]=='') {
        echo "<script>alert('Incorrect verification code');</script>";
    }
    else {
        //Code for student ID/Faculty ID
        $count_my_page = ("studentid.txt");
        $count_my_page = ("Facultyid.txt");
        $hits = file($count_my_page);
        $hits[0] ++;
        $fp = fopen($count_my_page , "w");
        fputs($fp , "$hits[0]");
        fclose($fp);
        $StudentId= $hits[0];
        $fname=$_POST['fullanme'];
        $mobilen=$_POST['mobilen'];
        $email=$_POST['email'];
        $password=md5($_POST['password']);
        $status=1;
        $sql="INSERT INTO tblstudents(StudentId,FacultyId,FullName,MobileNumber,EmailId>Password,Status) VALUES(:StudentId/FacultyId,:fname,:mobilen,:email,:pas";
        $query = $dbh->prepare($sql);
        $query->bindParam(':StudentId',$StudentId,PDO::PARAM_STR);
        $query->bindParam(':FacultyId',$FacultyId,PDO::PARAM_STR);
        $query->bindParam(':fname',$fname,PDO::PARAM_STR);
        $query->bindParam(':mobilen',$mobilen,PDO::PARAM_STR);
        $query->bindParam(':email',$email,PDO::PARAM_STR);

```

```

        $lastInsertId = $dbh->lastInsertId();
        if($lastInsertId)
        {
            echo "<script>alert('Your Registration successfull and your student id is '+'.$StudentId.'')</script>";
        }
        else
        {
            echo "<script>alert('Something went wrong. Please try again');</script>";
        }
    }
}
?>

```

```

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <!--[if IE]>
        <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1">
    <![endif]-->
    <title>Online Library Management System | Student Signup</title>
    <!-- BOOTSTRAP CORE STYLE -->
    <link href="assets/css/bootstrap.css" rel="stylesheet" />
    <!-- FONT AWESOME STYLE -->
    <link href="assets/css/font-awesome.css" rel="stylesheet" />
    <!-- CUSTOM STYLE -->
    <link href="assets/css/style.css" rel="stylesheet" />
    <!-- GOOGLE FONT -->
    <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />
    <script type="text/javascript">

```

```

<!-- GOOGLE FONT -->
<link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />
<script type="text/javascript">
function valid()
{
if(document.signup.password.value!= document.signup.confirmpassword.value)
{
alert("Password and Confirm Password Field do not match !!");
document.signup.confirmpassword.focus();
return false;
}
return true;
}
</script>
<script>
function checkAvailability() {
$("#loaderIcon").show();
jQuery.ajax({
url: "check_availability.php",
data:'emailid='+$("#emailid").val(),
type: "POST",
success:function(data){
$("#user-availability-status").html(data);
$("#loaderIcon").hide();
},
error:function (){}
});
}
</script>

</head>
<body>
<!-------MENU SECTION START-->

```

```

</head>
<body>
<!-------MENU SECTION START-->
<?php include('includes/header.php');?>
<!-- MENU SECTION END-->
<div class="content-wrapper">
<div class="container">
<div class="row pad-botm">
<div class="col-md-12">
<h4 class="header-line">User Signup</h4>

</div>

</div>
<div class="row">

<div class="col-md-9 col-md-offset-1">
<div class="panel panel-danger">
<div class="panel-heading">
SIGNUP FORM
</div>
<div class="panel-body">
<form name="signup" method="post" onSubmit="return valid();">

<div class="form-group">
<label>Enter Full Name</label>
<input class="form-control" type="text" name="fullanme" autocomplete="off" required />
</div>

<div class="form-group">
<label>Mobile Number :</label>
<input class="form-control" type="text" name="mobilenno" maxlength="10" autocomplete="off" required />

```





```

<?php
session_start();
error_reporting(0);
include('includes/config.php');
if(strlen($_SESSION['login'])==0)
{
header('location:index.php');
}
else{?>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />
    <meta name="description" content="" />
    <meta name="author" content="" />
    <title>Online Library Management System | User Dash Board</title>
    <!-- BOOTSTRAP CORE STYLE -->
    <link href="assets/css/bootstrap.css" rel="stylesheet" />
    <!-- FONT AWESOME STYLE -->
    <link href="assets/css/font-awesome.css" rel="stylesheet" />
    <!-- CUSTOM STYLE -->
    <link href="assets/css/style.css" rel="stylesheet" />
    <!-- GOOGLE FONT -->
    <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css' />

</head>
<body>
    <!-------MENU SECTION START-->
    <?php include('includes/header.php');?>
    <!-- MENU SECTION END-->
    <div class="content-wrapper">
        <div class="container">

```

```

            </div>

        </div>

        <div class="row">

            <div class="col-md-3 col-sm-3 col-xs-6">
                <div class="alert alert-info back-widget-set text-center">
                    <i class="fa fa-bars fa-5x"></i>
                </div>
                <?php
                $sid=$_SESSION['stdid'];
                $sql1="SELECT id from tblissuedbookdetails where StudentID=:sid";
                $query1 = $dbh -> prepare($sql1);
                $query1->bindParam(':sid',$sid,PDO::PARAM_STR);
                $query1->execute();
                $results1=$query1->fetchAll(PDO::FETCH_OBJ);
                $issuedbooks=$query1->rowCount();
                ?>

                <h3><?php echo htmlentities($issuedbooks);?> </h3>
                Book Issued
            </div>

            </div>

            <div class="col-md-3 col-sm-3 col-xs-6">
                <div class="alert alert-warning back-widget-set text-center">
                    <i class="fa fa-recycle fa-5x"></i>
                </div>
                <?php
                $rst=0;
                $sql2="SELECT id from tblissuedbookdetails where StudentID=:sid and RetrunStatus=:rst";

```

```

<?php
$rsts=0;
$sql2 ="SELECT id from tblissuedbookdetails where StudentID=:sid and RetrurnStatus=:rsts";
$query2 = $dbh -> prepare($sql2);
$query2->bindParam(':sid',$sid,PDO::PARAM_STR);
$query2->bindParam(':rsts',$rsts,PDO::PARAM_STR);
$query2->execute();
$results2=$query2->fetchAll(PDO::FETCH_OBJ);
$returnedbooks=$query2->rowCount();
?>

        <h3><?php echo htmlentities($returnedbooks);?></h3>
        Books Not Returned Yet
    </div>
</div>
</div>

</div>
</div>
<!-- CONTENT-WRAPPER SECTION END-->
<?php include('includes/footer.php');?>
<!-- FOOTER SECTION END-->
<!-- JAVASCRIPT FILES PLACED AT THE BOTTOM TO REDUCE THE LOADING TIME -->
<!-- CORE JQUERY -->
<script src="assets/js/jquery-1.10.2.js"></script>
<!-- BOOTSTRAP SCRIPTS -->
<script src="assets/js/bootstrap.js"></script>
<!-- CUSTOM SCRIPTS -->
<script src="assets/js/custom.js"></script>
</body>
</html>

```

**Perform Testing on the developed project to improve the quality.**

## **5. SOFTWARE TESTING**

### **1. Test plan:**

#### **1. Student/ Faculty Login:**

**Test case name:** student/faculty login

**Test Case id:** 1

**Unit to test:** student/faculty login

**Assumption:** Login

**Test data:** Username : { valid,invalid,empty,valid email,Invalid email }  
Password : { valid,invalid,empty }

**Steps to be executed:**

- Open login page
- Fill username, password and verification box
- Click on the login button

**Expected value:**

- Student/faculty portal should be displayed
- Further functionalities should be appeared

**Actual result:**

- Student/faculty portal displayed
- Further functionalities displayed

**Pass/Fail:**

Pass

**Comments:** No updation needed

#### **2. : Librarian Login:**

**Test case name:** librarian login

**Test Case id:** 2

**Unit to test:** librarian login

**Assumption:** Login

**Test data:** Username: { valid, invalid, empty }  
Password: { valid, invalid, empty }



**Steps to be executed:**

- Open librarian login page
- Fill username, password and verification box
- Click on the login button

**Expected value:**

- librarian portal should be displayed
- Further functionalities should be appeared

**Actual result:**

- librarian portal displayed
- Further functionalities displayed

**Pass/Fail:**

Pass

**Comments:** No updation needed

**3. Book Issue:**

**Test case name:** Book Issue

**Test Case id:** 3

**Unit to test:** Book Issue

**Assumption:** Book has to be issued

**Test data:** Book: {ISBN Number}  
Student : {Student id}

**Steps to be executed:**

- Open librarian login page
- Fill username, password and verification box
- Click on the login button
- Click on issue book functionality
- Fill ISBN number
- Also fill the student id to whom you are issuing the book
- Click on issue button

**Expected value:**

- Book Should be issued to the student with respective student id

**Actual result:**

- Book has been Successfully issued

**Pass/Fail:** Pass

**Comments:** No updation needed

4. **User Profile Creation:**

**Test case name:** User Profile

**Test Case id:** 4

**Unit to test:** Profile creation

**Assumption:** New user profile has to be created/ registered

**Test data:** User data: {Name, Mobile Number, Gmail}  
Password

**Steps to be executed:**

- Open User Signup page
- Fill name, password, Mobile Number, Gmail and verification box
- Click on create account

**Expected value:**

- “Invalid user details and please re-enter the details correctly” a pop should appear on the top.

**Actual result:**

- New user account has been created and a student id is displayed.

**Pass/Fail:** Fail

**Comments:** At the time of user registration every field should be checked and details should be entered clearly

Test case Id	Test Case Name	Pass/Fail	Comment
1	Student/Faculty login	Pass	-
2	Librarian login	Pass	-
3	Book issue	Pass	-
4	User Profile Creation	Fail	At the time of user registration every field should be checked and details should be entered clearly.

Perform a demonstration of your chosen and developed project.

## I. 6. PROJECT DEMO:

### 6.1 Screen shots:

#### Librarian Login page:

The image shows two screenshots of a web application. The top screenshot is the 'USER LOGIN FORM' page, and the bottom screenshot is the 'LIBRARIAN DASHBOARD' page.

**USER LOGIN FORM**

LIBRARIAN LOGIN | USER SIGNUP | USER LOGIN

USER LOGIN FORM

LOGIN FORM

Enter Email id

Password

[Forgot Password](#)

Verification code :  42094

[LOGIN](#) | [Not Register Yet](#)

**LIBRARIAN DASHBOARD**

Online Library Management System

[LOG ME OUT](#)

DASHBOARD | CATEGORIES | AUTHORS | BOOKS | ISSUE BOOKS | REG STUDENTS | CHANGE PASSWORD

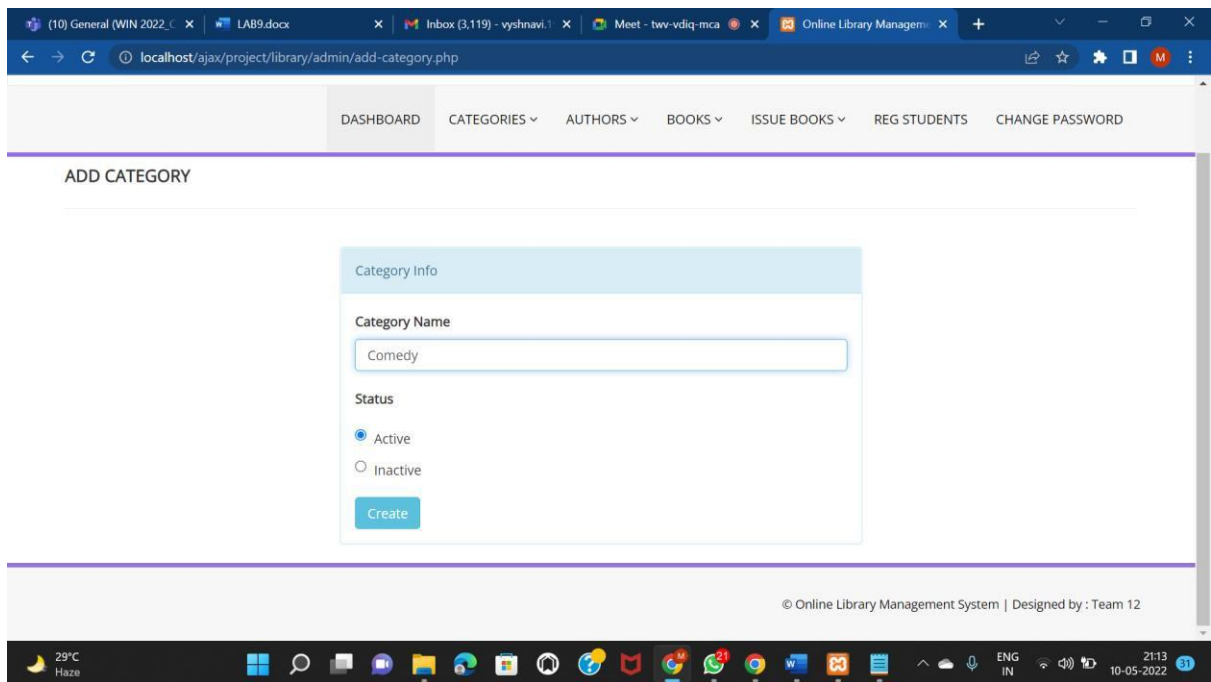
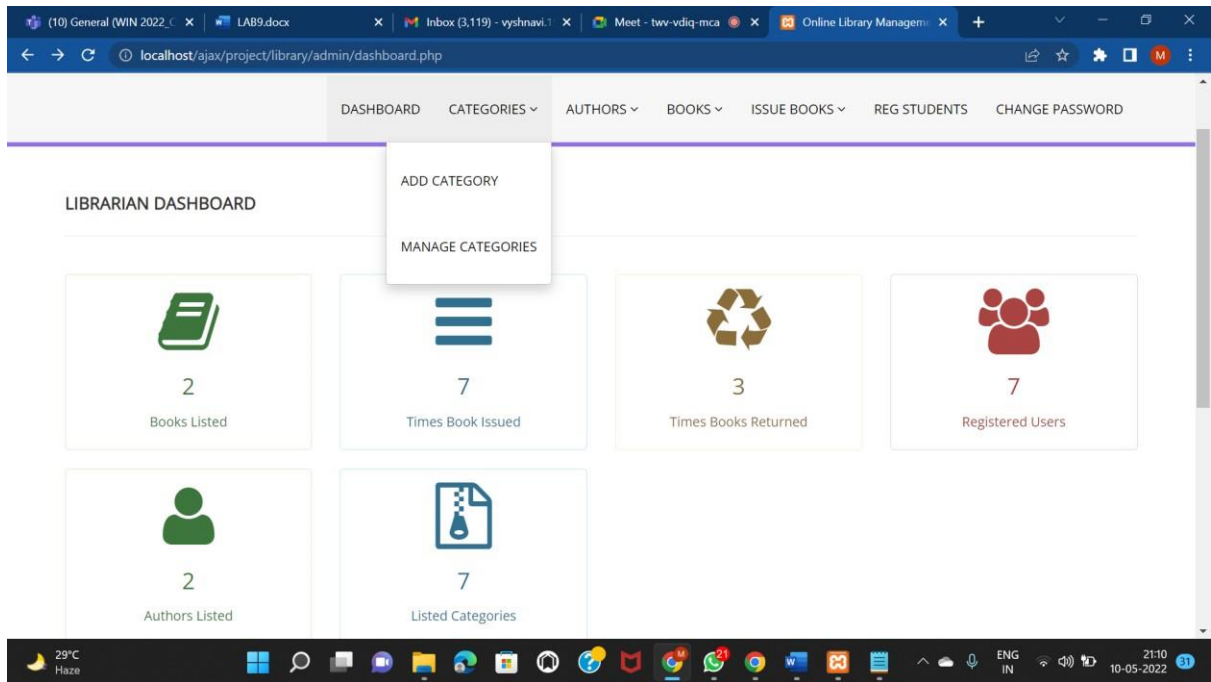
LIBRARIAN DASHBOARD

2 Books Listed

7 Times Book Issued

3 Times Books Returned

7 Registered Users



(10) General (WIN 2022\_C x LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem x +

localhost/ajax/project/library/admin/manage-categories.php

Success : Brand Listed successfully

Categories Listing

10 records per page Search:

#	Category	Status	Creation Date	Updation Date	Action
1	Romantic	Active	2017-07-05 00:05:25	2017-07-06 21:30:42	<a href="#">Edit</a> <a href="#">Delete</a>
2	Technology	Active	2017-07-05 00:05:39	2017-07-08 22:43:03	<a href="#">Edit</a> <a href="#">Delete</a>
3	Science	Active	2017-07-05 00:05:55	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>
4	Management	Inactive	2017-07-05 00:06:16	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>
5	Comedy	Active	2022-05-10 21:13:49	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 5 of 5 entries

Previous 1 Next

29°C Haze 21:13 10-05-2022

(10) General (WIN 2022\_C x LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem x +

localhost/ajax/project/library/admin/dashboard.php

DASHBOARD CATEGORIES v AUTHORS v BOOKS v ISSUE BOOKS v REG STUDENTS CHANGE PASSWORD

LIBRARIAN DASHBOARD

ADD CATEGORY

MANAGE CATEGORIES

2 Books Listed

7 Times Book Issued

3 Times Books Returned

7 Registered Users

2 Authors Listed

7 Listed Categories

localhost/ajax/project/library/admin/manage-categories.php

29°C Haze 21:14 10-05-2022

MANAGE CATEGORIES

Categories Listing

10 records per page

Search:

#	Category	Status	Creation Date	Update Date	Action
1	Romantic	Active	2017-07-05 00:05:25	2017-07-06 21:30:42	<a href="#">Edit</a> <a href="#">Delete</a>
2	Technology	Active	2017-07-05 00:05:39	2017-07-08 22:43:03	<a href="#">Edit</a> <a href="#">Delete</a>
3	Science	Active	2017-07-05 00:05:55	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>
4	Management	Inactive	2017-07-05 00:06:16	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>
5	Comedy	Active	2022-05-10 21:13:49	0000-00-00 00:00:00	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 5 of 5 entries

Previous 1 Next

localhost/ajax/project/library/admin/manage-categories.php?del=6

29°C Haze

21:14 10-05-2022

Online Library Management System

LOG ME OUT

DASHBOARD CATEGORIES AUTHORS BOOKS ISSUE BOOKS REG STUDENTS CHANGE PASSWORD

LIBRARIAN DASHBOARD

ISSUE NEW BOOK

MANAGE ISSUED BOOKS

2 Books Listed

7 Times Book Issued

3 Times Books Returned

7 Registered Users

localhost/ajax/project/library/admin/issue-book.php

29°C Haze

21:16 10-05-2022

(10) General (WIN 2022\_C x LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem... x +

localhost/ajax/project/library/admin/manage-issued-books.php

### MANAGE ISSUED BOOKS

Success : Book issued successfully

Issued Books

10 records per page Search:

#	Student Name	Book Name	ISBN	Issued Date	Return Date	Action
1	Anuj kumar	physics	1111	2022-05-10 21:19:05	Not Return Yet	<a href="#">Edit</a>
2	test	physics	1111	2022-05-09 20:46:25	Not Return Yet	<a href="#">Edit</a>
3	Sarita Pandey	physics	1111	2017-07-15 23:32:55	Not Return Yet	<a href="#">Edit</a>
4	test	PHP And MySql programming	222333	2017-07-15 16:29:26	Not Return Yet	<a href="#">Edit</a>
5	Anuj kumar	physics	1111	2017-07-15 11:53:23	2017-07-15 16:52:29	<a href="#">Edit</a>

29°C Haze 21:19 10-05-2022

## User Login (Student/Faculty Login):

(10) General (WIN 2022\_C x LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem... x +

localhost/ajax/project/library/index.php

### USER LOGIN FORM

LOGIN FORM

Enter Email id

Password

[Forgot Password](#)

Verification code :  73526

[LOGIN](#) | [Not Register Yet](#)

29°C Haze 21:20 10-05-2022

Browser tabs: (10) General (WIN 2022...), LAB9.docx, Inbox (3,119) - vyshnavi.1, Meet - twv-vdlq-mca, Online Library Management...


URL: localhost/ajax/project/library/dashboard.php


Online Library Management System

LOG ME OUT

DASHBOARD ACCOUNT ISSUED BOOKS

### LIBRARIAN DASHBOARD

  
2  
Book Issued

  
1  
Books Not Returned Yet

29°C Haze 21:21 10-05-2022

Browser tabs: (10) General (WIN 2022...), LAB9.docx, Inbox (3,119) - vyshnavi.1, Meet - twv-vdlq-mca, Online Library Management...

URL: localhost/ajax/project/library/issued-books.php

DASHBOARD ACCOUNT ISSUED BOOKS

MY PROFILE  
CHANGE PASSWORD

### MANAGE ISSUED BOOKS

Issued Books

10 records per page Search:

#	Book Name	ISBN	Issued Date	Return Date	Fine in(USD)
1	physics	1111	2022-05-09 20:46:25	Not Return Yet	
2	PHP And MySql programming	222333	2017-07-15 16:29:26	Not Return Yet	

Showing 1 to 2 of 2 entries Previous 1 Next

localhost/ajax/project/library/my-profile.php

29°C Haze 21:23 10-05-2022



(10) General (WIN 2022\_...LAB9.docxInbox (3,119) - vyshnavi.1Meet - twv-vdlq-mcaOnline Library Managem...+localhost/ajax/project/library/issued-books.php

DASHBOARDACCOUNTISSUED BOOKS

### MANAGE ISSUED BOOKS

Issued Books

10 records per pageSearch:

#	Book Name	ISBN	Issued Date	Return Date	Fine in(USD)
1	physics	1111	2022-05-09 20:46:25	Not Return Yet	
2	PHP And MySql programming	222333	2017-07-15 16:29:26	Not Return Yet	

Showing 1 to 2 of 2 entriesPrevious1Next

29°C  
Haze

ENG  
IN21:22  
10-05-2022

(10) General (WIN 2022\_...LAB9.docxInbox (3,119) - vyshnavi.1Meet - twv-vdlq-mcaOnline Library Managem...+localhost/ajax/project/library/my-profile.php

DASHBOARDACCOUNTMY PROFILE

### MY PROFILE

My Profile

Student ID : SID009

Reg Date : 2017-07-11 21:28:28

Last Updation Date : 2017-07-15 19:12:44

Profile Status : Active

Enter Full Name

test

Mobile Number :

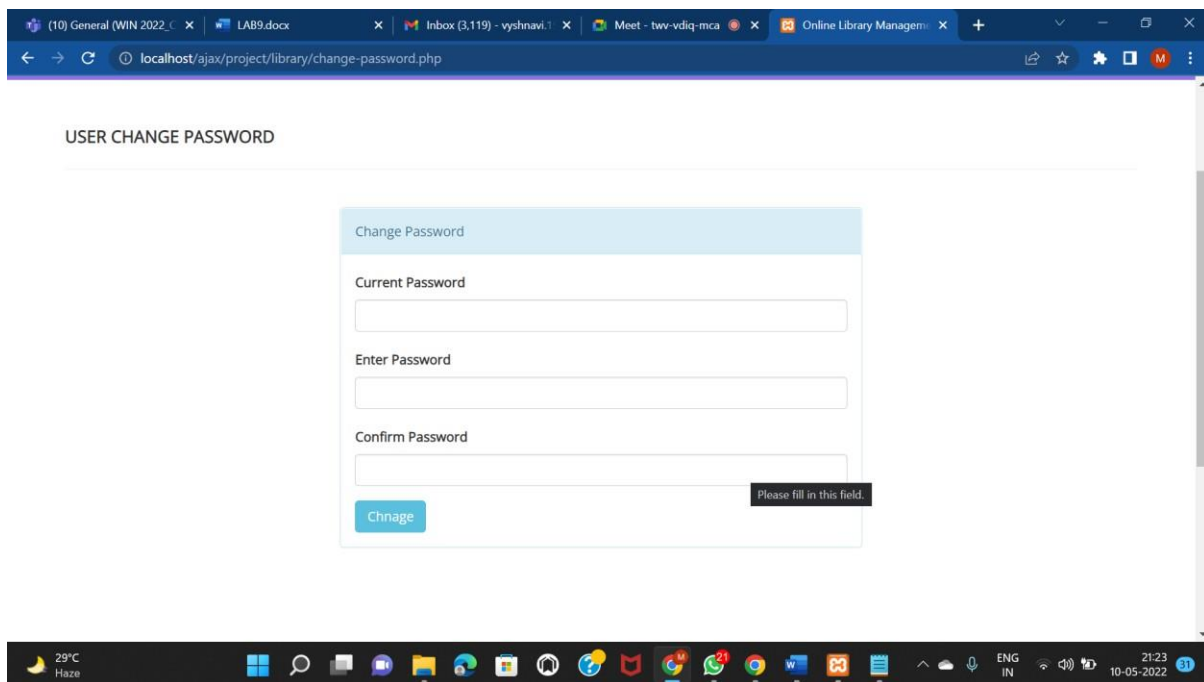
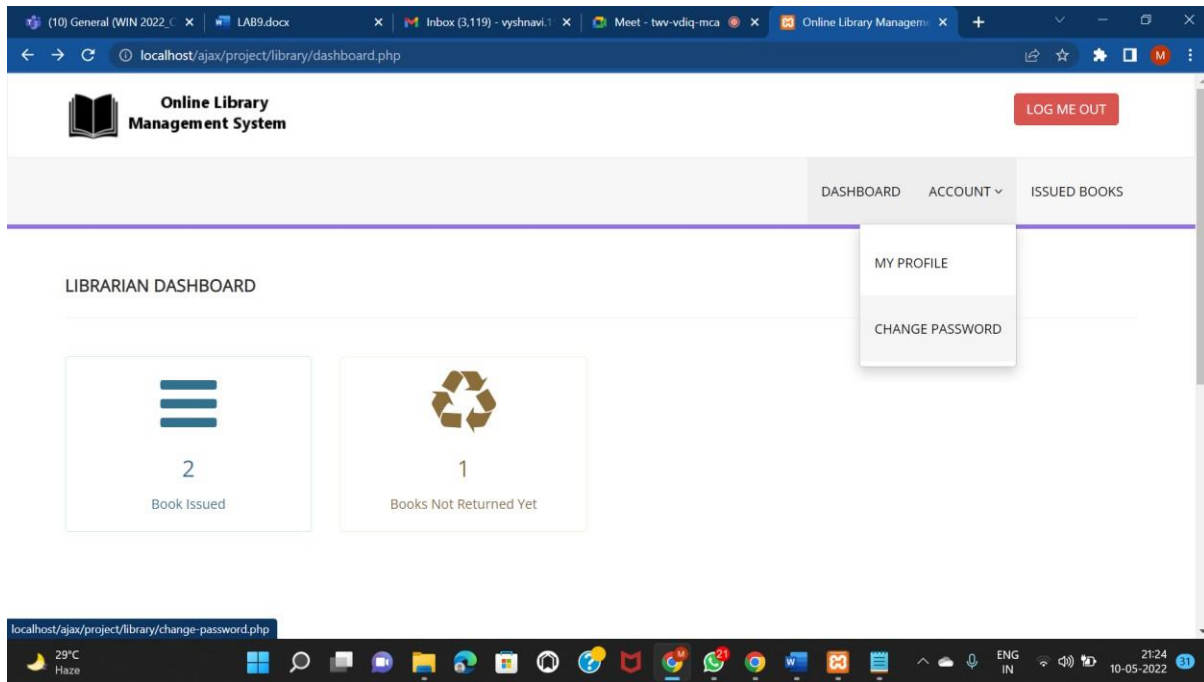
2359874527

Enter Email

test@gmail.com

29°C  
Haze

ENG  
IN21:23  
10-05-2022



**User Signup (Student/faculty Sign Up):**

(10) General (WIN 2022\_C x) LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem... x +

localhost/ajax/project/library/signup.php

### USER SIGNUP

SINGUP FORM

Enter Full Name

Mobile Number :

Enter Email

Enter Password

Confirm Password

Verification code :

(10) General (WIN 2022\_C x) LAB9.docx x Inbox (3,119) - vyshnavi.1 x Meet - twv-vdlq-mca x Online Library Managem... x +

localhost/ajax/project/library/signup.php

SINGUP FORM

Enter Full Name

Mobile Number :

Enter Email

Enter Password

Confirm Password

Verification code :

Register Now