INTRA-DISCIPLINARY PROJECT-II REPORT
"LIBRARY MANAGEMENT SYSTEM"

Submitted

by

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH

DEEMED TO BE UNIVERSITY

VADLAMUDI, GUNTUR DIST, ANDHRA PRADESH, INDIA, PIN-522 213

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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CERTIFICATE

This is to certify that the Intra-Disciplinary Project-II entitled **"LIBRARY MANAGEMENT SYSTEM"** that is being submitted by **J.Hamsini(201FA04443), D.Akhila(201FA04448),CH.Naga Alekhya(201FA04457)** for partial fulfillment of Intra-Disciplinary Project-II is a bonafide work carried out under the supervision of **Dr.B.Samatha, Assistant professor, Mrs.G.Keerthi, Assistant professor** from Department of Computer Science & Engineering.

Name of the Guide   HEAD OF THE DEPARTMENT

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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DECLARATION

We hereby declare that the Intra-Disciplinary Project-II entitled **"LIBRARY MANAGEMENT SYSTEM"** is being submitted by **J.Hamsini(201FA04443), D.Akhila(201FA04448),CH Naga Alekhya(201FA04457)** in partial fulfillment of Intra-Disciplinary Projects-II course work. This is our original work, and this project has not formed the basis for the award of any degree. We have worked under the supervision of **Dr.B.Samatha,***Assistant professor, Mrs.G.Keerthi, Assistant professor* from the Department of Computer Science & Engineering.

By

J.Hamsini(201FA04443)

D.Akhila(201FA04448)

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Date:

CONTENTS

1.INTRODUCTION

1.1 Introduction

- Library is a place where all kinds of books are available. The Library Management System is an application for assisting a librarian in managing a book library in university.

- The system would provide a basic set of features to add/update members, add/update books, and manage check-in specifications for the systems based on the reader's statement of need.

1.2 Objective

- The development of this new library management system contains the following activities, which try to automate the entire process.

- Automates information related to all book.

- Providing security.

- Maintaining database for all above include reservations of books.

- Time saving.

1.3 Project description

- Library Management System maintains the information about the books present in the library, their authors, the members of library to whom books are issued, library staff and all.

- This is very difficult to organize manually &maintenance of all this information is also a very complex task.

- So, our project would provide basic set of features to add/update members, add/update books, and manage check in specifications for the systems based on the client's statement of need.

- Student's can search books based on the subject name.

- They can send Remarks.

- They can check the availability of books.

- Admin can manage records very easily using this software.

- This software reduces time consumption ,space consumption and increases efficiency.

2.REQUIREMENTS AND SPECIFICATIONS
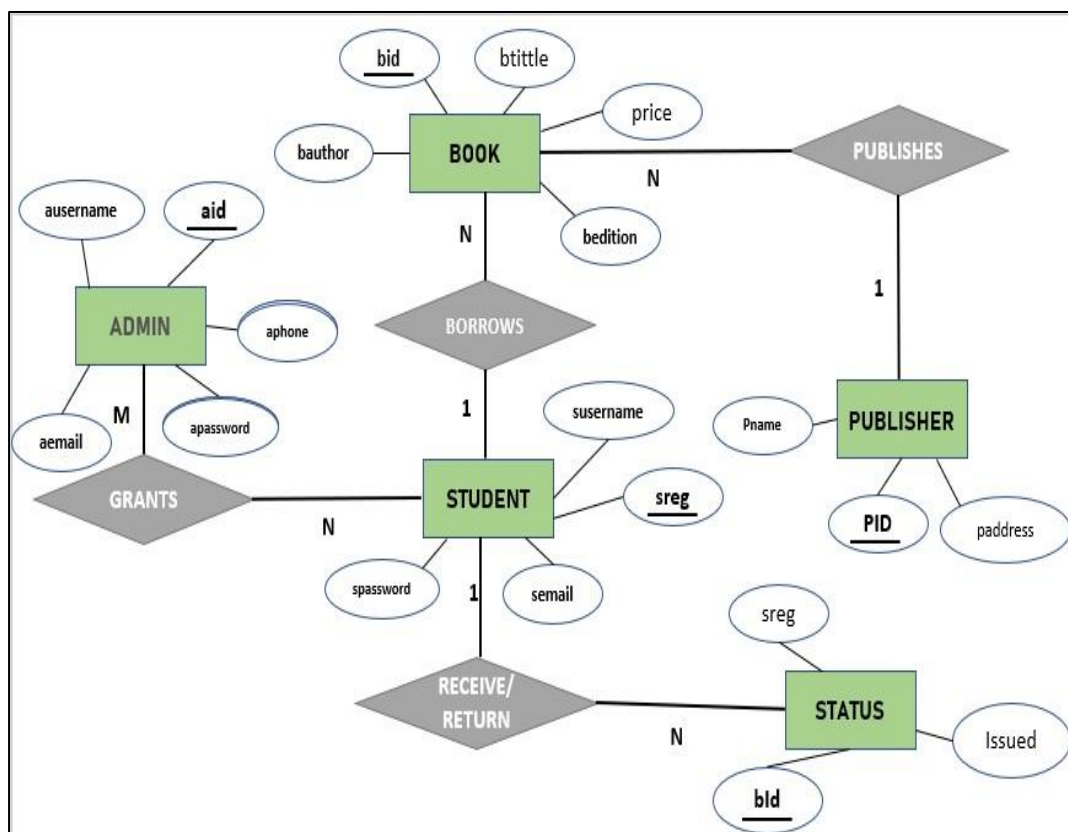
2.1Software Requirements

- MY SQL Workbench 8.0 CE

- MY SQL connector

- NetBeans IDE 8.2

- Front-End: JSP, Html, CSS, JS.
  Server-side: Servlet.
  Back-end: MYSQL.
  Server: Tomcat 10.0.21.

2.2Hardware Requirements

o Basic requirements of computer(No specific requirements are required to run this library management system.

3.DESIGN

3.1 ER diagram

3.2Database schema

studentregistration

Susername	spassword	sreg	semail

adminregistration

ausername	apassword	aphone	aid	aemail

publisher

pid	paddress	pname

book

Btittle	bid	bcategory	bprice	bauthor	bedition	pid

status

bid	sreg	issued

remarks

sreg	remark

4.IMPLEMENTATION

4.1Database

- o create database lms;
- o use lms;
- o create table studentregistration(susername varchar(40),spassword varchar(40),sreg varchar(40) primary key,semail varchar(40));
- o create table adminregistration(ausername varchar(40),apassword varchar(40),aphone varchar(40) ,aid varchar(40) primary key,aemail varchar(40));
- o create table publisher(pid varchar(40)primary key,paddress varchar(40),pname varchar(40));
- o create table book(btittle varchar(40),bid varchar(40) primary key,bcategory varchar(40) ,bprice varchar(40),bauthor varchar(40),bedition varchar(40),pid varchar(40),foreign key(pid) references publisher(pid));

- create table status(bid varchar(40),sreg varchar(40),issued varchar(40),dued varchar(40),foreign key (bid) references book(bid),foreign key (sreg) references studentregistration(sreg),primary key(bid,sreg));
- create table remarks(sreg varchar(40),remarks varchar(500),foreign key (sreg) references studentregistration(sreg));

4.2 Sample source code

HTML Code:

```
<!DOCTYPE html>
<html>
head>
<title>adminlogin</title>
<style>
body
  {
    background-image:url('adminregistration.jpg');
    background-repeat:no-repeat;
    background-attachment:fixed;
    background-size:100% 100%;
  }
table
{
  border:solid 5px;
  border-color:black;
}
</style>
</head>
<body>
<form name="adminlogin" action="adminlogin" method="">
<table cellpadding="10" style="position:relative;left:750px;top:50px;">
<tr>
<td>
a_id :<input type="text" name="aid" placeholder="ex:20A010" required> <br><br>
Password:<input type="password" name="apassword" placeholder="Password" required>
<br>
 <input type="reset"value="Reset">
<buttonon click=validate(); >Login </button>
</td>
</tr>
</pre>
</table>
</form>
</body>
</html>
```

Servlet Code:

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class Adminlogin extends HttpServlet {

    public void doGet(HttpServletRequest req, HttpServletResponse res)
            throws ServletException, IOException {
        res.setContentType("text/html;charset=UTF-8");
        PrintWriter out = res.getWriter();
        String admin=req.getParameter("aid");
        String pass=req.getParameter("apassword");
        try{
            Class.forName("com.mysql.cj.jdbc.Driver");
            Connection con = DriverManager.getConnection("jdbc:mysql://lo-
calhost/lms","root","29H072003*");
            PreparedStatement stmt=con.prepareStatement("select apassword from ad-
minregistration where aid='"+admin+"';");
            ResultSet rs=stmt.executeQuery();
            String dbpass=null;
            if( rs.next()){
            dbpass = rs.getString(1);
            }
            int l=1;
            if(pass.equals(dbpass))
            {
                l=0;
            }
            if(l==0)
            {
                RequestDispatcher rd=req.getRequestDispatcher("Adminnav.html");
                rd.forward(req, res);
            }
            else
            {
                out.println("<h1>"+"sorry.... invalid username or password"+"</h1>");
import java.io.IOException;
import java.io.PrintWriter;
            }
        }
        catch(ClassNotFoundException | SQLException e)
```

```
                {
                   out.println(e);
                }
            }
                }
            }
        catch(ClassNotFoundException | SQLException e)
            {
               out.println(e);
            }
        }
            }
```
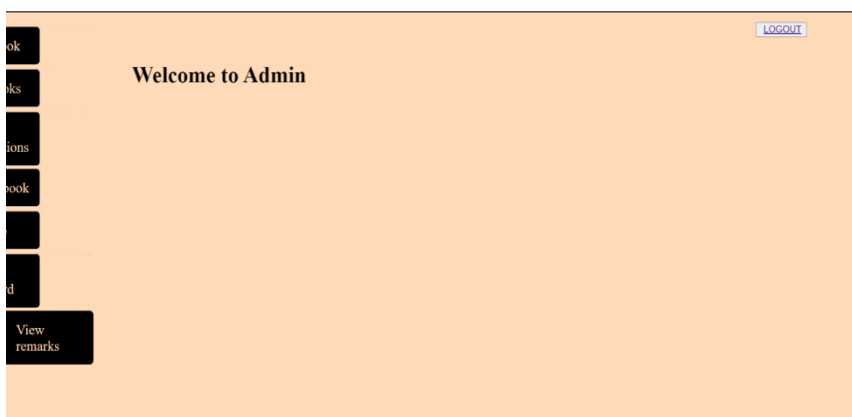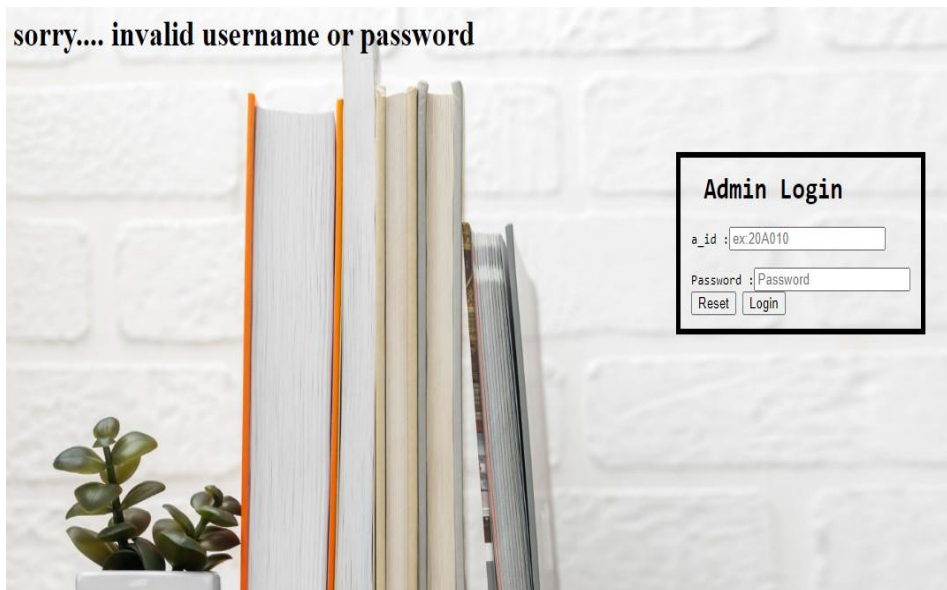
output:

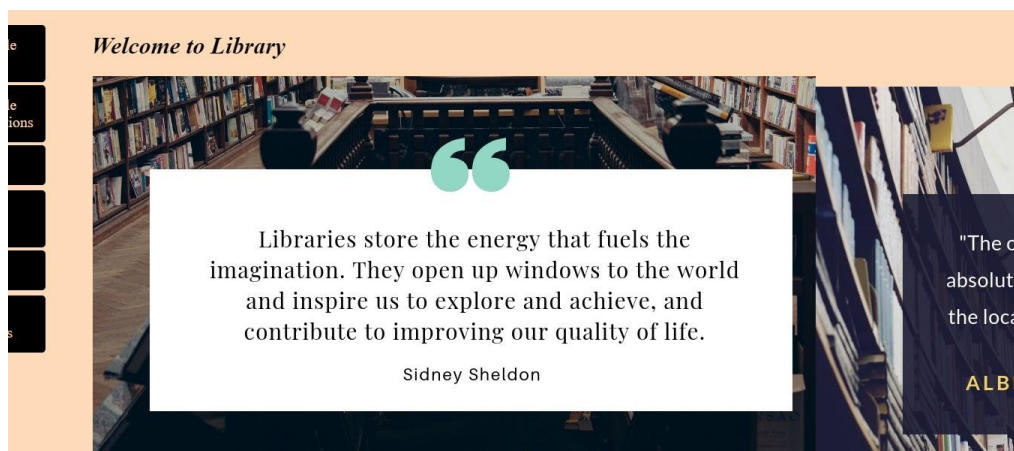**If valid credentials are entered it will redirect to admin page**
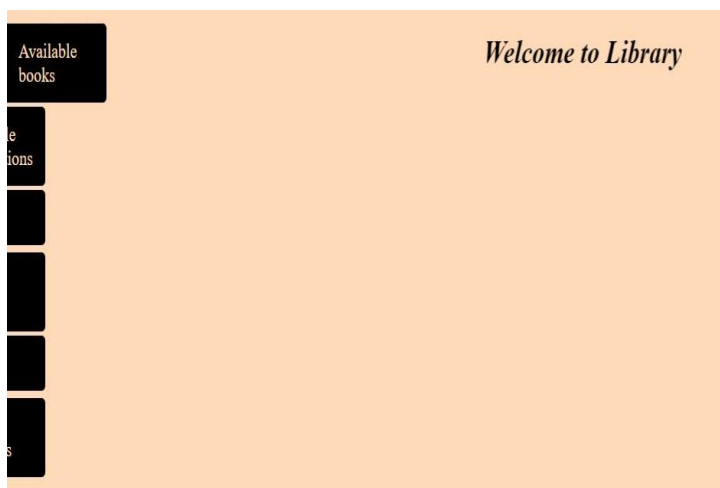
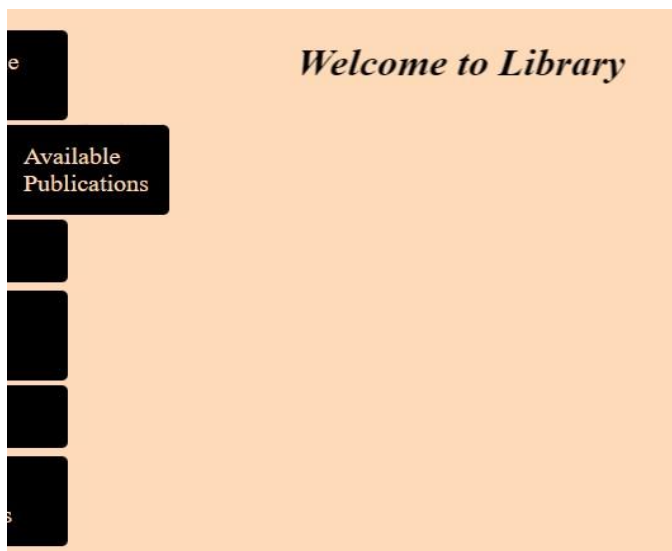**Otherwise ,it will display "Not Valid"**
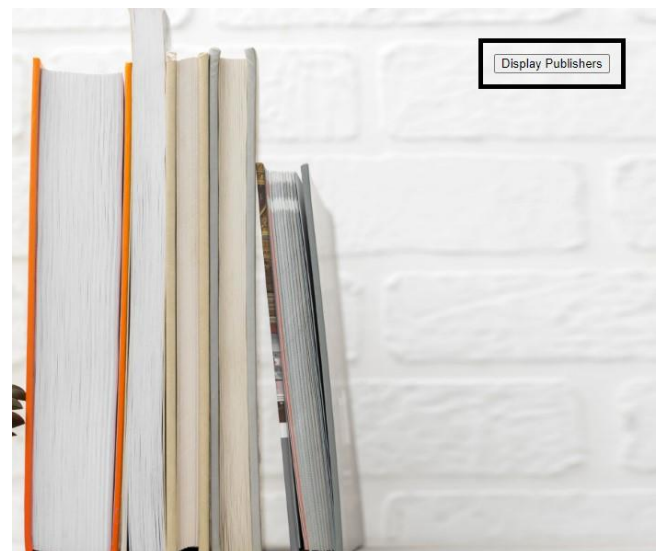

5.RESULTS

HOME PAGE

AVAILABLE BOOKS

All Books

Btittle	Bid	Bcategory	Bprice	Bauthor	Bedition	Pid
Intoduction to html	1	html	750	H.G.Wells	5	9
Software Engineering	10	Engineering	586	J.K.Gupta	15	2
Datastructures advanced	11	ds	1550	Adolf Hitler	10	19
Datastructures advanced	12	ds	1550	Adolf Hitler	10	19
Datastructures advanced	13	ds	1550	Adolf Hitler	10	19
Datastructures advanced	14	ds	1550	Adolf Hitler	10	19
Intoduction to python	15	python	899	Somerset Maughan	6	8
Intoduction to python	16	python	899	Somerset Maughan	6	8
Intoduction to python	17	python	899	Somerset Maughan	6	8
Intoduction to python	18	python	899	Somerset Maughan	6	8
Architecture of computer	19	coa	440	J.Kiron	3	15
Intoduction to html	2	html	750	H.G.Wells	5	9
Architecture of computer	20	coa	440	J.Kiron	3	15
Intoduction to html	3	html	750	H.G.Wells	5	9
Web Technologies	4	wt	1000	E.M.Forster	8	5
Web Technologies	5	wt	1000	E.M.Forster	8	5
Web Technologies	6	wt	1000	E.M.Forster	8	5
Software Engineering	7	Engineering	586	J.K.Gupta	15	2
Software Engineering	8	Engineering	586	J.K.Gupta	15	2
Software Engineering	9	Engineering	586	J.K.Gupta	15	2

AVAILABLE PUBLISHERS

Welcome to Library

Available Publications

Display Publishers

Publishers

Pid	Paddres	Pname
1	Gachibowli 6-1-10 Hyderabad	Arihant
10	Marispeta,8-5-6,Nambur	Prathiba
11	Ramalingeswara Peta,4-10-6,guntur	Devdutt
12	Frazer Town,5-1-6,Bangalore	Prashanth
13	Secunderabad,6-10-6,Hyderabad	Niranjan
14	Benzcircle,9-10-11,Vijayawada	Rishik
15	Autonagar,12-10-6,Vijayawada	Mahathi
16	Netaji Road,3-1-8,Nunna	Danish
17	Vikasroad,5-10-6,jaggayyapeta	Tony
18	Vidyanagar,4-4-6,Markapur	James
19	Mananthavady,9-10-6,Mysore	Lilly
2	Indira Nagar,6-1-10,Hyderabad	Vikram
20	Somajiguda,7-10-5,Hyderabad	Ron
3	Secunderabad,4-11-10,Vijayawada	Ivan
4	chowthra,7-8-10,Guntur	Sharma
5	Sultanabad,6-12-10,Tenali	Bob
6	NazerPet,9-11-10,Amaravathi	Arthur
7	Jaynagar,4-10-6,Bangalore	Anita
8	Gandhichowk,12-10-6,Tenali	Banish
9	Amaravathi road,12-10-6,Gorantla	Arudhathi

NEW STUDENT
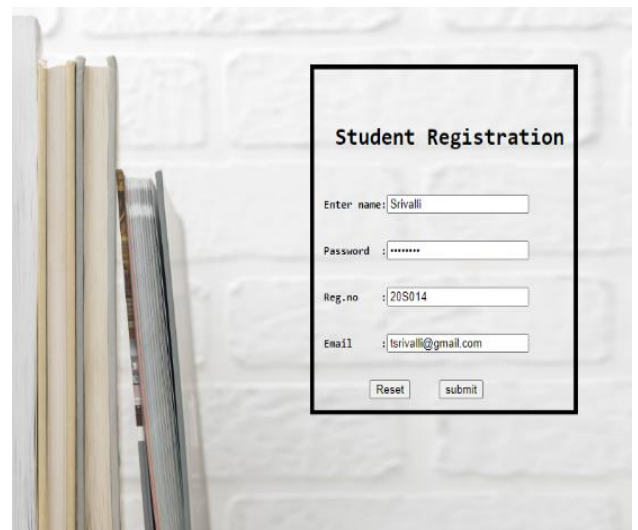
susername	Spassword	sreg	semail
Pravallika	Sony52	20S013	kpravallika@gmail.com
Srivalli	Shannu65	20S014	tsrivalli@gmail.com

SEARCH
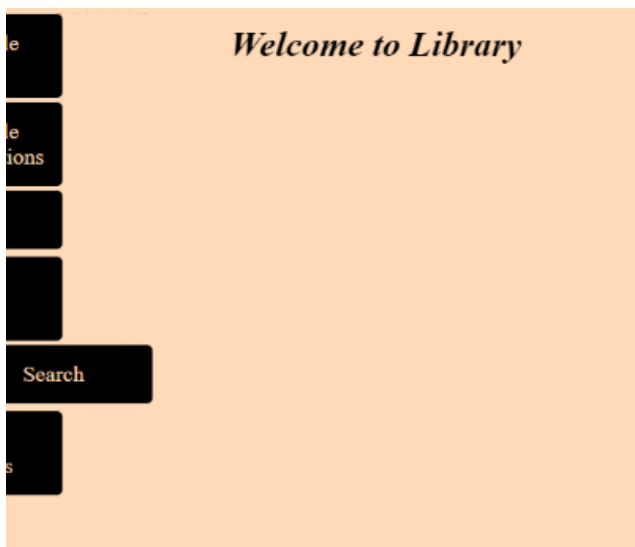
All Books

Btittle	Bid	Bcategory	Bprice	Bauthor	Bedition	Pid
Architecture of computer	19	coa	440	J.Kiron	3	15
Architecture of computer	20	coa	440	J.Kiron	3	15
Architecture of Computer	21	coa	440	Ron	5	20

SEND REMARKS

Welcome to Library

Enter regno 20S014

Your library is so helpful to our students.

send

sreg	remarks
20S014	your library is so helpful to our students.

ADMIN LOGIN

Welcome to Library

Admin

sorry.... invalid username or password

Admin Login

a_id : ex:20A010

Password : Password

Reset Login
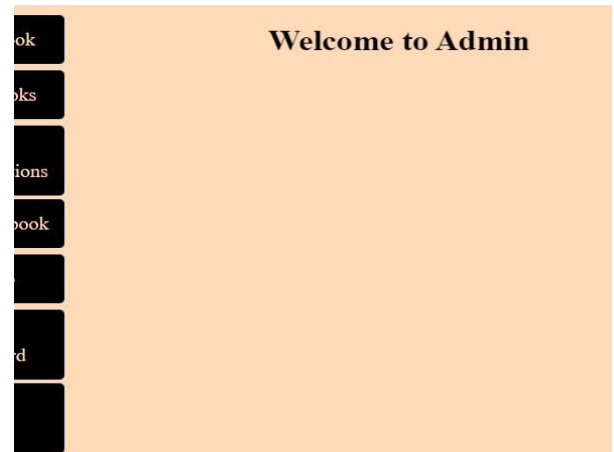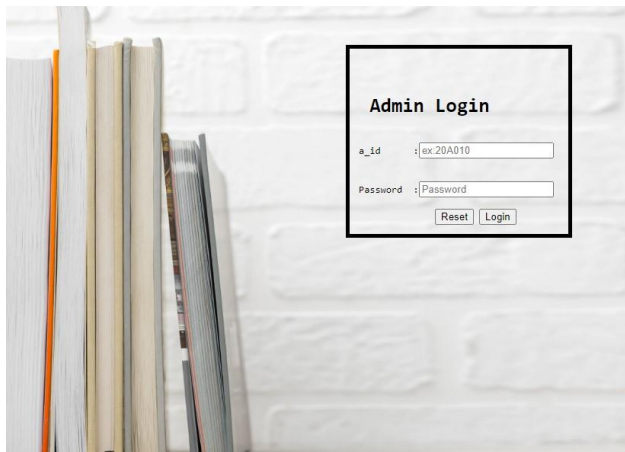
ISSUE BOOK
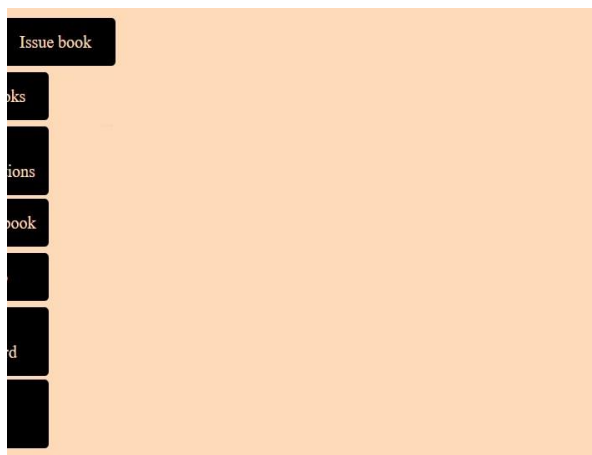
bid	sreg	issued
18	20S010	26-06-2022

ADD BOOK
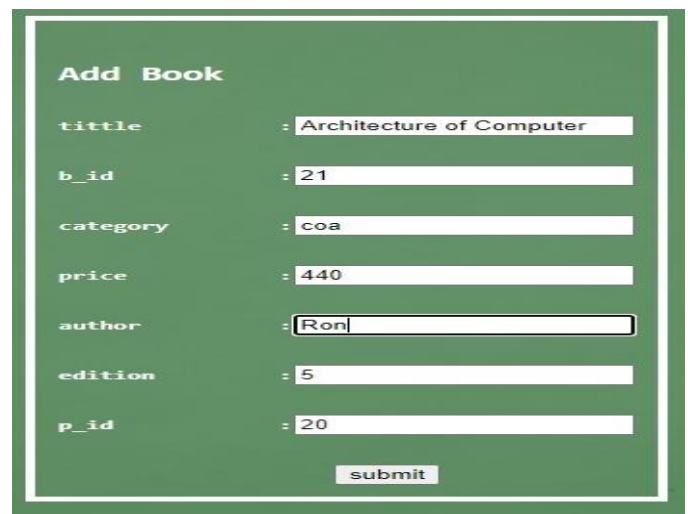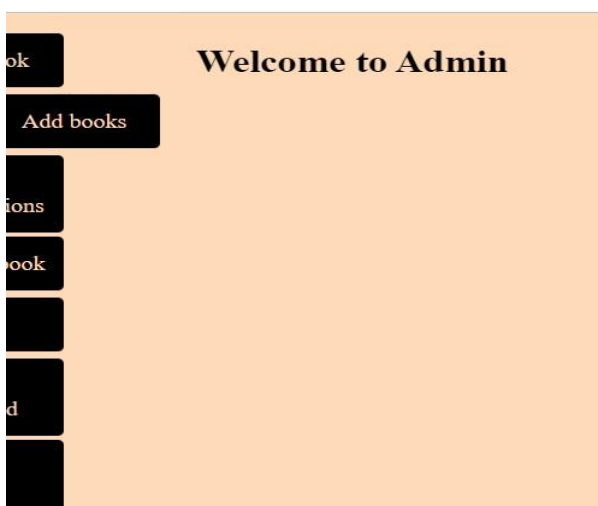
btittle	bid	bcategory	bprice	bauthor	bedition	pid
Architecture of Computer	21	coa	440	Ron	5	20

ADD PUBLISHER
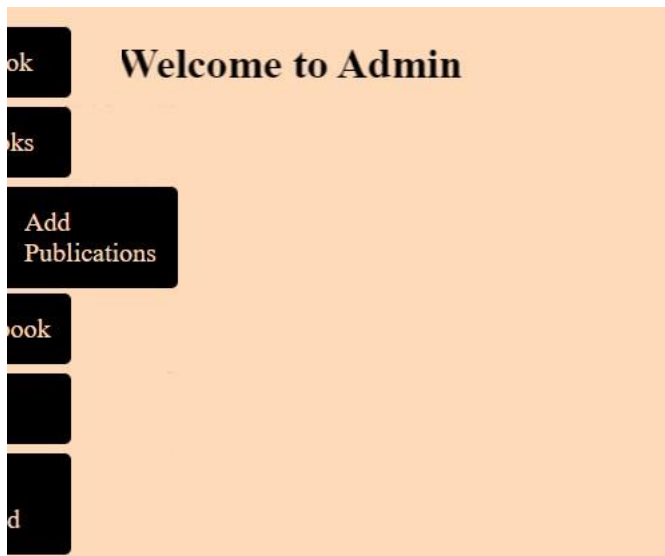
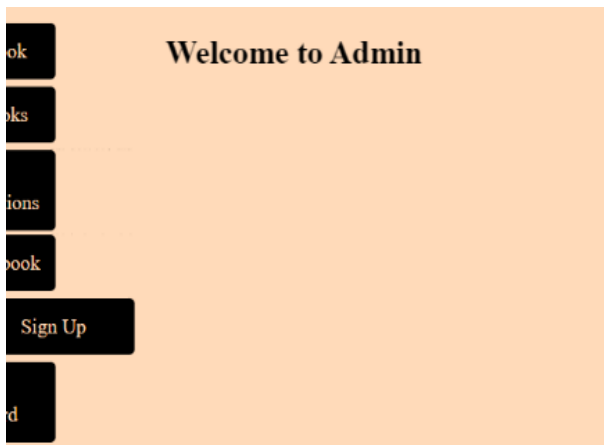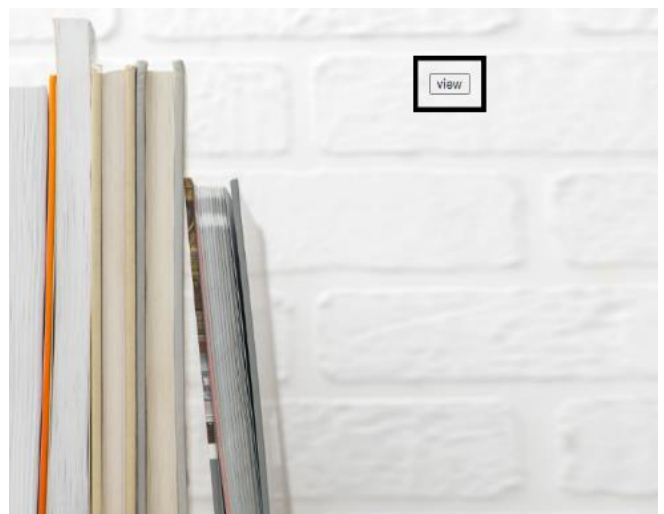| pid	paddress	pname
8	Gandhichowk,12-10-6,Tenali	Banish
21	delhi	lillyjones

RETURN BOOK

ADMIN REGISTRATION

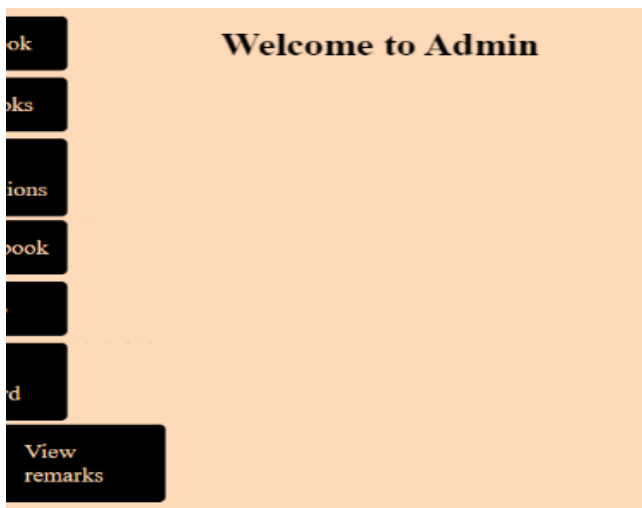| ausername	apassword	aphone	aid	aemail
Sowmya	Sow10	7854928138	20A10	lsowmya32@gmail.com

RESET PASSWORD

ausername	apassword	aphone	aid	aemail
Sowmya	Sow10	7854928138	20A10	lsowmya32@gmail.com

VIEW REMARKS

6.REFERENCES

JavaScript Introduction (w3schools.com)

SQL Tutorial (w3schools.com)

CSS Tutorial (w3schools.com)

HTML Basic (w3schools.com)

Learn Servlet Tutorial - javatpoint

Establishing JDBC Connection in Java - GeeksforGeeks

7.CONCLUSION

Library management system benefits the students as well as the staff of the library. Staff can search books , staff can generate reports and do book transactions. Implementation of this system will reduce data entry time and provide readily calculated reports.