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**LIBRARY MANAGEMENT SYSTEM**

**Done by**

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**1.ABSTRACT:**

Library management system is a project which aims in developing a computerized system to maintain all the daily work of library .This project has many features which are generally not available in normal library management systems like facility of user login and a facility of teachers login .It also has a facility of admin login through which the admin can monitor the whole system .It also has facility of an online notice board where teachers can student can put up information about workshops or seminars being held in our colleges or nearby colleges and librarian after proper verification from the concerned institution organizing the seminar can add it to the notice board . It has also a facility where student after logging in their accounts can see list of books issued and its issue date and return date and also the students can request the librarian to add new books by filling the book request form. The librarian after logging into his account i.e. admin account can generate various reports such as student report, issue report, teacher report and book report

Overall this project of ours is being developed to help the students as well as staff of library to maintain the library in the best way possible and also reduce the human efforts.

The main objective of the Library Management system is organizing and managing the library tasks. Library is place where all kind of books are available. This is a web base application and only a registered user can access the application. Library Management system is developed to automate the task of entering the records of new book and retrieving the details of book available in the library. This system contains list of all the books. Using this system user can issue book to the library member, maintain their records, and can checks how many book are issued and how many books are available in the library. This system provides separate interface and login for librarian, students and faculties. Librarian can modify database. Using the library management system, user can also maintain the late fine of library member who return the issued book after the due date.

Users can search for books and renewal books online. In the proposed system, we assume that each member will be having a identity card which can be used for the library book issue, fine payment etc. They can recommend for new books by just sending messages to the librarian from anywhere in the college. whenever library member wish to take a book, the book issued by the library authority will be check both the book details as well as the student details and store it in library database. They can view the issue and return dates of any book and due they have to pay

**2.INTRODUCTION:**

Library is regarded as the brain of any institute; many institutes understand the importance of the library to the growth of the institute and their esteem users (students). LMS support the general requirement of the library like acquisition, cataloguing, circulation.

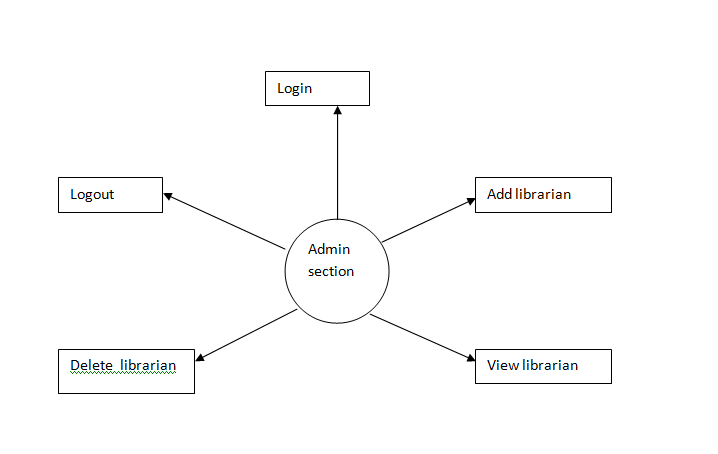
Library project system that offers many flexible and convenient features, allowing librarians and library users to maximize time and efficiency. Library System gives the all detailed information about students, staff and books. It will track on the how many books available in library and books issued to the students. It shows popular book among the students. It will provide book lost in library. It keeps the record of the suppliers and book binders. It generates MIS reports for management. Our software is customizable for any library requirement.

**3.HW/SW SPECIFICATION:**

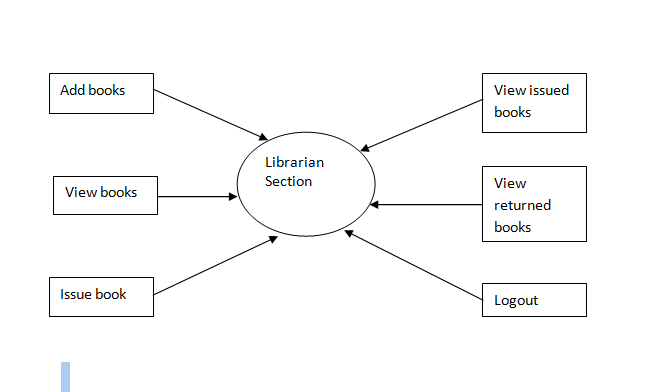
Hard disk drive 200 GBRam 2 GBKeyboard and mouseTechnology:DatabaseJava 8JDPC

**4.ARCHITECTURE:**

**ADMIN MODULE:**



**LIBRARIAN MODULE:**



**4.1MODULE:**

* ADMIN MODULE:
* ADD LIBRARIAN

In this module the admin can add the librarian by adding their names,password,callid which is unique id.

* VIEW LIBRARIAN

In this module the admin can see the librarian present

* DELETE LIBRARIAN

In this module the admin can delete the librarian from the table

* LIBRARIAN MODULE:
* ADD BOOKS

In this section the librarian can add the books by adding the quantity.

* VIEW BOOKS

In this section the librarian can see the books available in the library

* ISSUE BOOKS

In this section the librarian can issue the books to student by using the students id

* LOGOUT

**5.EXPERIMENT ANALYSIS:**

**5.1 CODE:**

**INTRO.JAVA**

import javax.swing.\*;

import javax.swing.border.EmptyBorder;

public class Intro extends javax.swing.JFrame {

JFrame f;

JPanel contentPane;

/\*\*

\* Creates new form NewJFrame

\*/

public Intro() {

initComponents();

}

/\*\*

\* This method is called from within the constructor to initialize the form.

\* WARNING: Do NOT modify this code. The content of this method is always

\* regenerated by the Form Editor.

\*/

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jPanel1 = new javax.swing.JPanel();

jLabel2 = new javax.swing.JLabel();

setBounds(100, 100, 516, 413);

this.contentPane = new JPanel();

this.contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

setBackground(new java.awt.Color(204, 255, 0));

addKeyListener(new java.awt.event.KeyAdapter() {

public void keyPressed(java.awt.event.KeyEvent evt) {

formKeyPressed(evt);

}

});

jLabel1.setBackground(new java.awt.Color(255, 102, 102));

jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N

jLabel1.setIcon(new javax.swing.ImageIcon("C:\\Users\\Harish\\Pictures\\images.jpg")); // NOI18N

jLabel1.setText("Library Management System");

jLabel3.setFont(new java.awt.Font("Tw Cen MT", 0, 11)); // NOI18N

jLabel3.setText("Created by Harish,Sudhanshu, Sanjay");

jLabel2.setText("Press any key to continue");

jLabel2.addKeyListener(new java.awt.event.KeyAdapter() {

public void keyPressed(java.awt.event.KeyEvent evt) {

jLabel2KeyPressed(evt);

}

});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);

jPanel1.setLayout(jPanel1Layout);

jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

.addContainerGap(135, Short.MAX\_VALUE)

.addComponent(jLabel2)

.addGap(114, 114, 114))

);

jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()

.addContainerGap(99, Short.MAX\_VALUE)

.addComponent(jLabel2)

.addGap(33, 33, 33))

);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

.addContainerGap(47, Short.MAX\_VALUE)

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 384, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(116, 116, 116)

.addComponent(jLabel3))

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGap(0, 0, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 128, Short.MAX\_VALUE)

.addComponent(jLabel3)

.addGap(24, 24, 24))

);

pack();

}// </editor-fold>

private void jLabel2KeyPressed(java.awt.event.KeyEvent evt) {

LibrarianSuccess.main(new String[]{});

f.dispose();

}

private void formKeyPressed(java.awt.event.KeyEvent evt) {

Library.main(new String[]{});

dispose();

}

/\*\*

\* @param args the command line arguments

\*/

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Intro.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Intro.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Intro.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Intro.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new Intro().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JPanel jPanel1;

// End of variables declaration

}

**ADMIN LOGIN.JAVA**

import javax.swing.\*;

import javax.swing.GroupLayout.Alignment;

import javax.swing.border.EmptyBorder;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class AdminLogin extends JFrame {

static AdminLogin frame;

private JPanel contentPane;

private JTextField textField;

private JPasswordField passwordField;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

frame = new AdminLogin();

frame.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the frame.

\*/

public AdminLogin() {

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setBounds(100, 100, 450, 300);

contentPane = new JPanel();

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

JLabel lblAdminLoginForm = new JLabel("Admin Login Form");

lblAdminLoginForm.setForeground(Color.GRAY);

lblAdminLoginForm.setFont(new Font("Tahoma", Font.PLAIN, 18));

JLabel lblEnterName = new JLabel("Enter Name:");

JLabel lblEnterPassword = new JLabel("Enter Password:");

textField = new JTextField();

textField.setColumns(10);

JButton btnLogin = new JButton("Login");

btnLogin.setBackground(Color.white);

btnLogin.setForeground(Color.black);

btnLogin.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

String name=textField.getText();

String password=String.valueOf(passwordField.getPassword());

if(name.equals("admin")&&password.equals("admin123")){

AdminSuccess.main(new String[]{});

frame.dispose();

}else{

JOptionPane.showMessageDialog(AdminLogin.this, "Sorry, Username or Password Error","Login Error!", JOptionPane.ERROR\_MESSAGE);

textField.setText("");

passwordField.setText("");

}

}

});

passwordField = new JPasswordField();

GroupLayout gl\_contentPane = new GroupLayout(contentPane);

gl\_contentPane.setHorizontalGroup(

gl\_contentPane.createParallelGroup(Alignment.TRAILING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(124)

.addComponent(lblAdminLoginForm))

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(19)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addComponent(lblEnterName)

.addComponent(lblEnterPassword))

.addGap(47)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING, false)

.addComponent(passwordField)

.addComponent(textField, GroupLayout.DEFAULT\_SIZE, 172, Short.MAX\_VALUE))))

.addContainerGap(107, Short.MAX\_VALUE))

.addGroup(gl\_contentPane.createSequentialGroup()

.addContainerGap(187, Short.MAX\_VALUE)

.addComponent(btnLogin, GroupLayout.PREFERRED\_SIZE, 86, GroupLayout.PREFERRED\_SIZE)

.addGap(151))

);

gl\_contentPane.setVerticalGroup(

gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addComponent(lblAdminLoginForm)

.addGap(26)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblEnterName)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(28)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblEnterPassword)

.addComponent(passwordField, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(18)

.addComponent(btnLogin, GroupLayout.PREFERRED\_SIZE, 37, GroupLayout.PREFERRED\_SIZE)

.addContainerGap(80, Short.MAX\_VALUE))

);

contentPane.setLayout(gl\_contentPane);

}

}

**ADMINSUCCESS.JAVA**

import javax.swing.\*;

import javax.swing.GroupLayout.Alignment;

import javax.swing.border.EmptyBorder;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class AdminSuccess extends JFrame {

static AdminSuccess frame;

private JPanel contentPane;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

frame = new AdminSuccess();

frame.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the frame.

\*/

public AdminSuccess() {

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setBounds(100, 100, 450, 371);

contentPane = new JPanel();

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

JLabel lblAdminSection = new JLabel("Admin Section");

lblAdminSection.setFont(new Font("Tahoma", Font.PLAIN, 22));

lblAdminSection.setForeground(Color.GRAY);

JButton btnNewButton = new JButton("Add Librarian");

Icon warnIcon33 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\addlibrarian.jpg");

btnNewButton.setIcon(warnIcon33);

btnNewButton.setBackground(Color.white);

btnNewButton.setForeground(Color.black);

btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 15));

btnNewButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

LibrarianForm.main(new String[]{});

frame.dispose();

}

});

JButton btnViewLibrarian = new JButton("View Librarian");

Icon warnIcon336 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\viewlibrarain.PNG");

btnViewLibrarian.setIcon(warnIcon336);

btnViewLibrarian.setBackground(Color.white);

btnViewLibrarian.setForeground(Color.black);

btnViewLibrarian.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent arg0) {

ViewLibrarian.main(new String[]{});

}

});

btnViewLibrarian.setFont(new Font("Tahoma", Font.PLAIN, 15));

JButton btnDeleteLibrarian = new JButton("Delete Librarian");

Icon warnIcon22 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\deletelibrarian.jpg");

btnDeleteLibrarian.setIcon(warnIcon22);

btnDeleteLibrarian.setBackground(Color.white);

btnDeleteLibrarian.setForeground(Color.black);

btnDeleteLibrarian.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

DeleteLibrarian.main(new String[]{});

frame.dispose();

}

});

btnDeleteLibrarian.setFont(new Font("Tahoma", Font.PLAIN, 15));

JButton btnLogout = new JButton("Logout");

Icon warnIcon4 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\logout.jpg");

btnLogout.setIcon(warnIcon4);

btnLogout.setBackground(Color.white);

btnLogout.setForeground(Color.black);

btnLogout.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent arg0) {

Library.main(new String[]{});

frame.dispose();

}

});

btnLogout.setFont(new Font("Tahoma", Font.PLAIN, 15));

GroupLayout gl\_contentPane = new GroupLayout(contentPane);

gl\_contentPane.setHorizontalGroup(

gl\_contentPane.createParallelGroup(Alignment.TRAILING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addContainerGap(150, Short.MAX\_VALUE)

.addComponent(lblAdminSection, GroupLayout.PREFERRED\_SIZE, 151, GroupLayout.PREFERRED\_SIZE)

.addGap(123))

.addGroup(Alignment.LEADING, gl\_contentPane.createSequentialGroup()

.addGap(134)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addComponent(btnLogout, GroupLayout.PREFERRED\_SIZE, 181, GroupLayout.PREFERRED\_SIZE)

.addComponent(btnDeleteLibrarian, GroupLayout.PREFERRED\_SIZE, 181, GroupLayout.PREFERRED\_SIZE)

.addComponent(btnViewLibrarian, GroupLayout.PREFERRED\_SIZE, 181, GroupLayout.PREFERRED\_SIZE)

.addComponent(btnNewButton, GroupLayout.PREFERRED\_SIZE, 181, GroupLayout.PREFERRED\_SIZE))

.addContainerGap(109, Short.MAX\_VALUE))

);

gl\_contentPane.setVerticalGroup(

gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addComponent(lblAdminSection, GroupLayout.PREFERRED\_SIZE, 40, GroupLayout.PREFERRED\_SIZE)

.addGap(11)

.addComponent(btnNewButton, GroupLayout.PREFERRED\_SIZE, 49, GroupLayout.PREFERRED\_SIZE)

.addGap(18)

.addComponent(btnViewLibrarian, GroupLayout.PREFERRED\_SIZE, 49, GroupLayout.PREFERRED\_SIZE)

.addGap(18)

.addComponent(btnDeleteLibrarian, GroupLayout.PREFERRED\_SIZE, 49, GroupLayout.PREFERRED\_SIZE)

.addGap(18)

.addComponent(btnLogout, GroupLayout.PREFERRED\_SIZE, 49, GroupLayout.PREFERRED\_SIZE)

.addContainerGap(21, Short.MAX\_VALUE))

);

contentPane.setLayout(gl\_contentPane);

}

}

**BOOKSDAO:**

import java.sql.Connection;

import java.sql.PreparedStatement;

public class BookDao {

public static int save(String callno,String name,String author,String publisher,int quantity){

int status=0;

try{

Connection con=DB.getConnection();

PreparedStatement ps=con.prepareStatement("insert into books(callno,name,author,publisher,quantity) values(?,?,?,?,?)");

ps.setString(1,callno);

ps.setString(2,name);

ps.setString(3,author);

ps.setString(4,publisher);

ps.setInt(5,quantity);

status=ps.executeUpdate();

con.close();

}catch(Exception e){System.out.println(e);}

return status;

}

}

**BOOKSFORM.JAVA**

import javax.swing.\*;

import javax.swing.GroupLayout.Alignment;

import javax.swing.LayoutStyle.ComponentPlacement;

import javax.swing.border.EmptyBorder;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class BooksForm extends JFrame {

static BooksForm frame;

private JPanel contentPane;

private JTextField textField\_5;

private JTextField textField;

private JTextField textField\_1;

private JTextField textField\_2;

private JTextField textField\_3;

private JTextField textField\_4;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

frame = new BooksForm();

frame.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the frame.

\*/

public BooksForm() {

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setBounds(100, 100, 450, 404);

contentPane = new JPanel();

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

JLabel lblAddBooks = new JLabel("Add Books");

lblAddBooks.setFont(new Font("Tahoma", Font.PLAIN, 18));

JLabel lblCallNo = new JLabel("Call No:");

JLabel lblName = new JLabel("Name:");

JLabel lblAuthor = new JLabel("Author:");

JLabel lblPublisher = new JLabel("Publisher:");

JLabel lblQuantity = new JLabel("Quantity:");

textField\_5 = new JTextField();

textField\_5.setColumns(10);

textField = new JTextField();

textField.setColumns(10);

textField\_1 = new JTextField();

textField\_1.setColumns(10);

textField\_2 = new JTextField();

textField\_2.setColumns(10);

textField\_3 = new JTextField();

textField\_3.setColumns(10);

textField\_4 = new JTextField();

textField\_4.setColumns(10);

JButton btnAddBooks = new JButton("Add Books");

Icon warnIcon4 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\addbooks.jpg");

lblAddBooks.setIcon(warnIcon4);

btnAddBooks.setBackground(Color.white);

btnAddBooks.setForeground(Color.black);

btnAddBooks.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

String id=textField.getText();

String callno=textField.getText();

String name=textField\_1.getText();

String author=textField\_2.getText();

String publisher=textField\_3.getText();

String squantity=textField\_4.getText();

int quantity=Integer.parseInt(squantity);

int i=BookDao.save(callno, name, author, publisher, quantity);

if(i>0){

JOptionPane.showMessageDialog(BooksForm.this,"Books added successfully!");

LibrarianSuccess.main(new String[]{});

frame.dispose();

}else{

JOptionPane.showMessageDialog(BooksForm.this,"Sorry, unable to save!");

}

}

});

JButton btnBack = new JButton("Back");

Icon warnIcon5 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\back.jpg");

btnBack.setIcon(warnIcon5);

btnBack.setBackground(Color.white);

btnBack.setForeground(Color.black);

btnBack.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

LibrarianSuccess.main(new String[]{});

frame.dispose();

}});

GroupLayout gl\_contentPane = new GroupLayout(contentPane);

gl\_contentPane.setHorizontalGroup(

gl\_contentPane.createParallelGroup(Alignment.TRAILING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(150)

.addComponent(lblAddBooks))

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING, false)

.addComponent(lblName, GroupLayout.PREFERRED\_SIZE, 37, GroupLayout.PREFERRED\_SIZE)

.addComponent(lblCallNo)

.addComponent(lblAuthor, GroupLayout.PREFERRED\_SIZE, 37, GroupLayout.PREFERRED\_SIZE)

.addComponent(lblPublisher, GroupLayout.DEFAULT\_SIZE, 67, Short.MAX\_VALUE)

.addComponent(lblQuantity, GroupLayout.PREFERRED\_SIZE, 55, GroupLayout.PREFERRED\_SIZE))

.addGap(47)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addComponent(textField\_4, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE)

.addComponent(textField\_3, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE)

.addComponent(textField\_2, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE)

.addComponent(textField\_1, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, 167, GroupLayout.PREFERRED\_SIZE))))

.addContainerGap(125, Short.MAX\_VALUE))

.addGroup(Alignment.LEADING, gl\_contentPane.createSequentialGroup()

.addGap(161)

.addComponent(btnAddBooks, GroupLayout.PREFERRED\_SIZE, 101, GroupLayout.PREFERRED\_SIZE)

.addContainerGap(162, Short.MAX\_VALUE))

.addGroup(gl\_contentPane.createSequentialGroup()

.addContainerGap(359, Short.MAX\_VALUE)

.addComponent(btnBack)

.addContainerGap())

);

gl\_contentPane.setVerticalGroup(

gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addComponent(lblAddBooks)

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblCallNo)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblName)

.addComponent(textField\_1, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblAuthor)

.addComponent(textField\_2, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblPublisher)

.addComponent(textField\_3, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(18)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.BASELINE)

.addComponent(lblQuantity)

.addComponent(textField\_4, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE))

.addGap(30)

.addComponent(btnAddBooks, GroupLayout.PREFERRED\_SIZE, 31, GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(ComponentPlacement.RELATED)

.addComponent(btnBack)

.addContainerGap(53, Short.MAX\_VALUE))

);

contentPane.setLayout(gl\_contentPane);

}

}

**DB.JAVA**

import java.sql.Connection;

import java.sql.DriverManager;

public class DB {

public static Connection getConnection(){

Connection con=null;

try{

Class.forName("com.mysql.jdbc.Driver");

con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","1234");

}catch(Exception e){System.out.println(e);}

return con;

}

}

**DELETELIBRARIAN.JAVA**

import javax.swing.\*;

import javax.swing.GroupLayout.Alignment;

import javax.swing.border.EmptyBorder;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class DeleteLibrarian extends JFrame {

static DeleteLibrarian frame;

private JPanel contentPane;

private JTextField textField;

/\*\*

\* Launch the application.

\*/

public static void main(String[] args) {

EventQueue.invokeLater(new Runnable() {

public void run() {

try {

frame = new DeleteLibrarian();

frame.setVisible(true);

} catch (Exception e) {

e.printStackTrace();

}

}

});

}

/\*\*

\* Create the frame.

\*/

public DeleteLibrarian() {

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setBounds(100, 100, 450, 300);

contentPane = new JPanel();

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));

setContentPane(contentPane);

JLabel lblEnterId = new JLabel("Enter Id:");

textField = new JTextField();

textField.setColumns(10);

JButton btnDelete = new JButton("Delete");

Icon warnIcon = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\deletebooks.jpg");

btnDelete.setIcon(warnIcon);

btnDelete.setBackground(Color.white);

btnDelete.setForeground(Color.black);

btnDelete.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

String sid=textField.getText();

if(sid==null||sid.trim().equals("")){

JOptionPane.showMessageDialog(DeleteLibrarian.this,"Id can't be blank");

}else{

int id=Integer.parseInt(sid);

int i=LibrarianDao.delete(id);

if(i>0){

JOptionPane.showMessageDialog(DeleteLibrarian.this,"Record deleted successfully!");

}else{

JOptionPane.showMessageDialog(DeleteLibrarian.this,"Unable to delete given id!");

}

}

}

});

btnDelete.setFont(new Font("Tahoma", Font.PLAIN, 13));

JButton btnNewButton = new JButton("Back");

//Icon warnIcon1 = new ImageIcon("F:\\STUDY MATERIALS\\Java\\Library\\icon\\back.jpg");

//btnNewButton.setIcon(warnIcon1);

btnNewButton.setBackground(Color.white);

btnNewButton.setForeground(Color.black);

btnNewButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

AdminSuccess.main(new String[]{});

frame.dispose();

}

});

btnNewButton.setFont(new Font("Tahoma", Font.PLAIN, 13));

GroupLayout gl\_contentPane = new GroupLayout(contentPane);

gl\_contentPane.setHorizontalGroup(

gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(39)

.addComponent(lblEnterId)

.addGap(57)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, 178, GroupLayout.PREFERRED\_SIZE)

.addContainerGap(107, Short.MAX\_VALUE))

.addGroup(Alignment.TRAILING, gl\_contentPane.createSequentialGroup()

.addContainerGap(175, Short.MAX\_VALUE)

.addComponent(btnDelete, GroupLayout.PREFERRED\_SIZE, 109, GroupLayout.PREFERRED\_SIZE)

.addGap(140))

.addGroup(Alignment.TRAILING, gl\_contentPane.createSequentialGroup()

.addContainerGap(322, Short.MAX\_VALUE)

.addComponent(btnNewButton, GroupLayout.PREFERRED\_SIZE, 92, GroupLayout.PREFERRED\_SIZE)

.addContainerGap())

);

gl\_contentPane.setVerticalGroup(

gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addGroup(gl\_contentPane.createSequentialGroup()

.addGap(19)

.addGroup(gl\_contentPane.createParallelGroup(Alignment.LEADING)

.addComponent(textField, GroupLayout.PREFERRED\_SIZE, GroupLayout.DEFAULT\_SIZE, GroupLayout.PREFERRED\_SIZE)

.addComponent(lblEnterId))

.addGap(33)

.addComponent(btnDelete, GroupLayout.PREFERRED\_SIZE, 33, GroupLayout.PREFERRED\_SIZE)

.addGap(43)

.addComponent(btnNewButton)

.addContainerGap(78, Short.MAX\_VALUE))

);

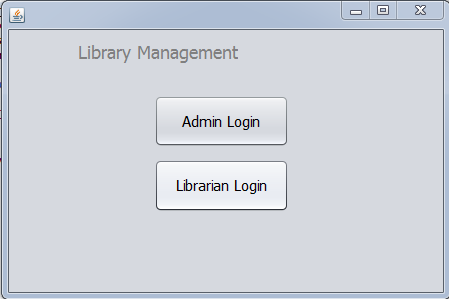
contentPane.setLayout(gl\_contentPane);

}

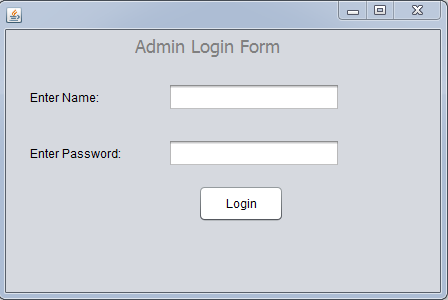
}

**5.2 RESULT SNAPCHAT OF THE PROJECT:**

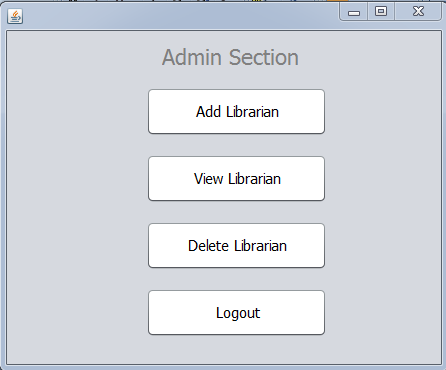
**MAIN FRAME**

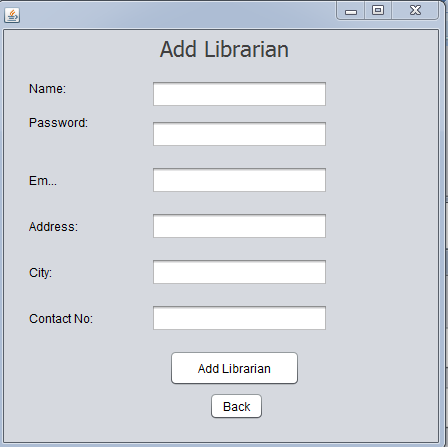


**ADMIN** **LOGIN MODULE:**

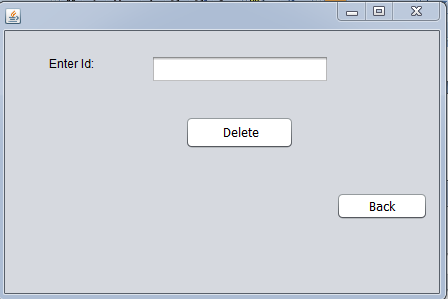


**ADMIN SECTION:**

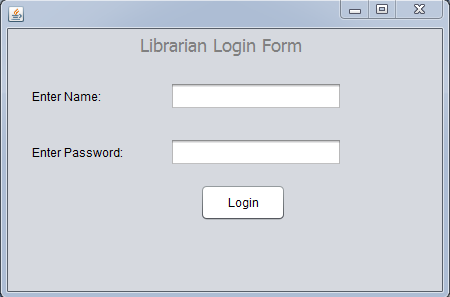


**ADD LIBRARIAN MODULE:** 

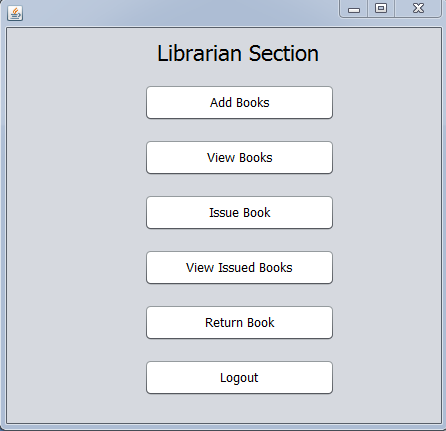
**DELETE LIBRARIAN:**



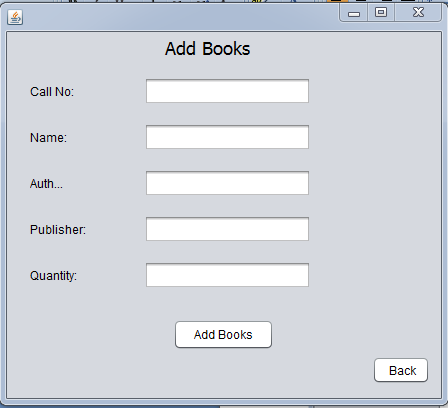
**LIBRARIAN MODULE:**



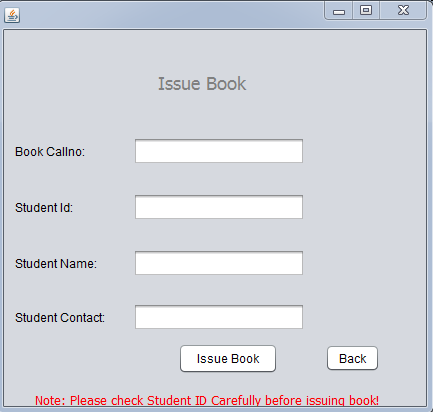
**LIBRARIAN SECTION:**



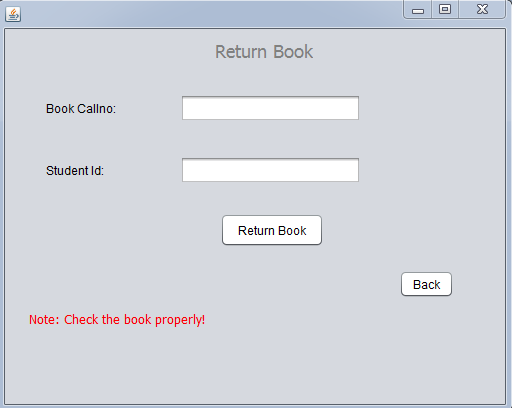
**ADD BOOKS:**



**ISSUE BOOK:**



**RERURN BOOK:**



**6. RESULT AND DISCUSSION:**

Using Eclipse we have designed the library management modules and the librarian can enter into the modules and can get the details of the book. The results snap shots are inserted.