

Library Management System
Introduction to Software Engineering
Final Report

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R582V262

Introduction

The main objective of this document is to illustrate the functional and non functional requirements of the library management system. This is a desktop application developed to maintain the day to day transactions of a library such as add, delete, search and update book and member details and report generation. This system is designed to help the user to maintain and organize the books in a library. This system has two main users' admin and the librarian. The admin and the librarian can manage the book details and the user details of the library.

Requirement Analysis

The library database is designed to manage the transactions of the books and to manage the user details. This system keeps track of the books and users of the library. The books will be identified by a book id. And the system stores attributes such as title, author, edition and the rack id which is the location, where the book is stored. The admin and the librarian can store and maintain the member details such as name, contact details and a member id will be assigned to uniquely identify each member.

Functions of the Administrator

Login

Add books

Search books

Update Books

Add member details

Delete member details

Update member details

Search member details

Report Generation

Functional requirements of the librarian.

Login

Add member details

View member details

Search member details

Add book details

Search books

Non functional requirements

Efficiency

The librarian should be able to process the transactions of the library faster with the library management system. This eliminates the need to use papers and manually entering the data which is time consuming and inefficient. Moreover when the librarian wants to track a book , they can use the system to locate the book using the rack id rather than locating the book manually.

Reliability

The system stores data and retrieves them when required by the user. And it make

Usability

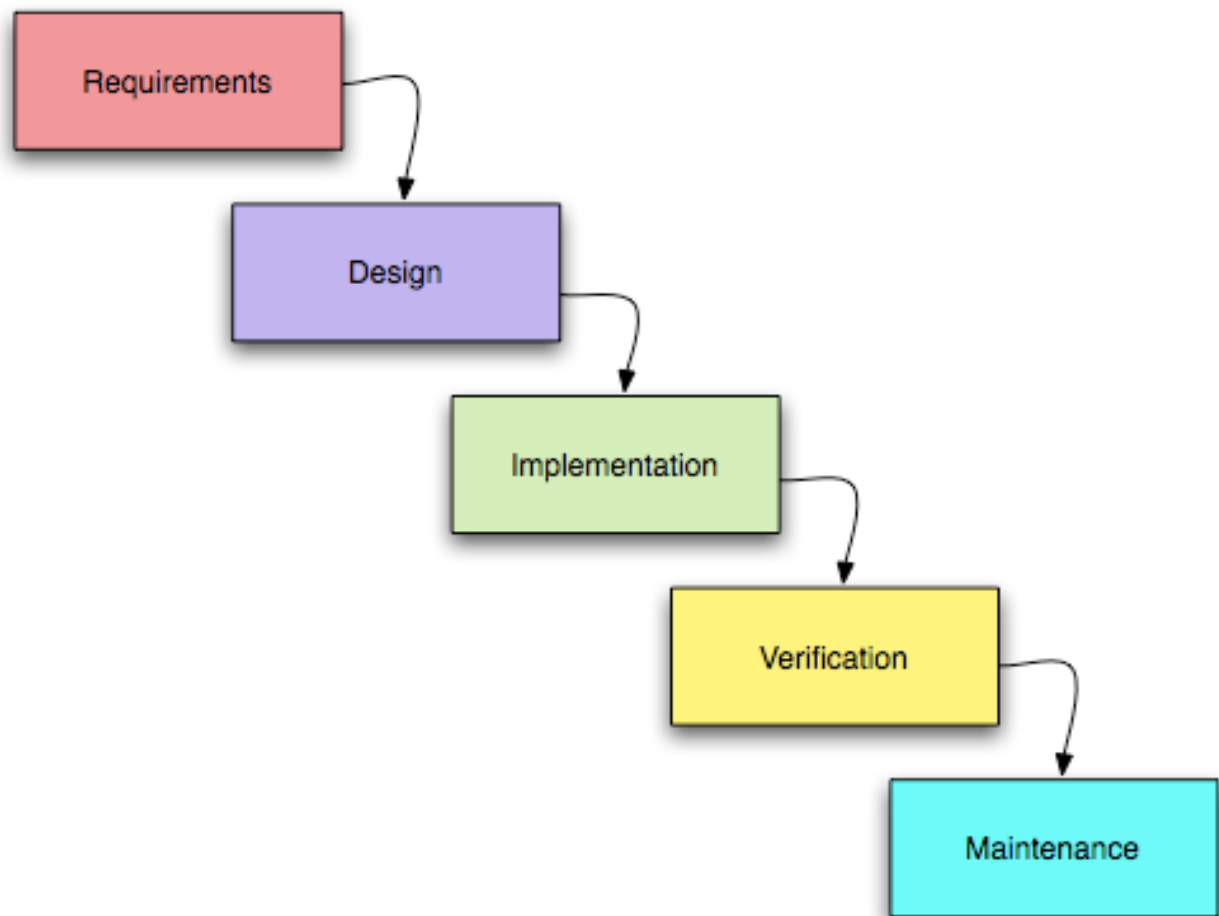
The system provides user friendly interfaces.

Security

Provides better security to the system by assigning user levels and privileges.

Software Development Process model.

The software development process model that I have used , when developing the system is the waterfall model.



User Stories

<p>Title: Add books</p> <p>Description: The administrator and the librarian should be able to add book details into the system.</p>	<p>Title: Delete books</p> <p>Description: The administrator and the librarian should be able to delete book details in the system.</p>
<p>Title: Search books</p> <p>Description: The administrator and the librarian should be able to search book details using the details such as ISBN, Author or the Title.</p>	<p>Title: Generate reports</p> <p>Description: The administrator and the librarian should be able to generate reports to obtain the transactions of the library that indicates details about the borrowed books and returned books.</p>
<p>Title: Issue (Checkout and Check in) and Return books and view the transactions.</p> <p>Description: The librarian should be able to update the system when checking out the books and when they are checked back in and view the transaction history.</p>	<p>Title: Reserve books</p> <p>Description: The librarian can reserve the books according to a customer request.</p>

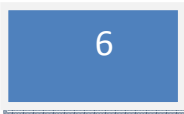
<p>Title: Update books</p> <p>Description: The administrator should be able to update the book details in the system.</p>	<p>Title: Add user details</p> <p>Description: The administrator should be able to add user details into the system.</p>
<p>Title: View user details</p> <p>Description: The administrator and the librarian should be able to add book details into the system.</p>	<p>Title: Remove a user</p> <p>Description: The administrator should be able to remove user details from the system.</p>
<p>Title: User Login</p> <p>Description: Administrator and the Librarian have separate logins.</p>	<p>Title: Change Password</p> <p>Description: The administrator and the librarian should be able to change the passwords of their accounts.</p>
<p>Title: View Book details</p> <p>Description: The administrator and the librarian should be able to view the book details in the system.</p>	<p>Title: Add Member</p> <p>Description: The librarian or the admin should be able to add new member details to the system.</p>

<p>Title: Delete Member</p> <p>Description: The administrator and the librarian should be able to remove the member details from the system.</p>	<p>Title: View and Update Member</p> <p>Description: The librarian or the admin should be able view and update the member details.</p>
--	--

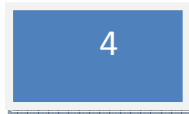
Iteration Plan

Iteration 1

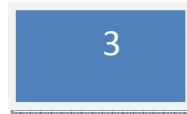
Add Books



Delete Books



View book details



$6+4+3=13\text{days}$

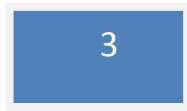
$13\text{ days}/0.8= 17\text{ days}$

Iteration 2

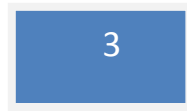
Search books



Update Books

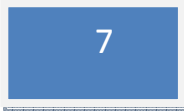
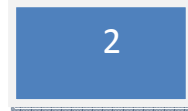
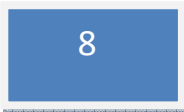
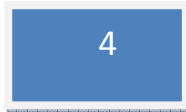
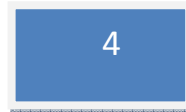
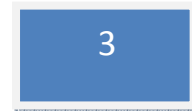


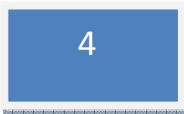
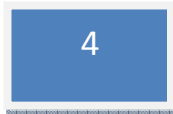
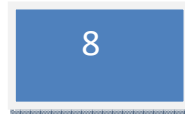
Reserve books



$11+3+3=17\text{days}$

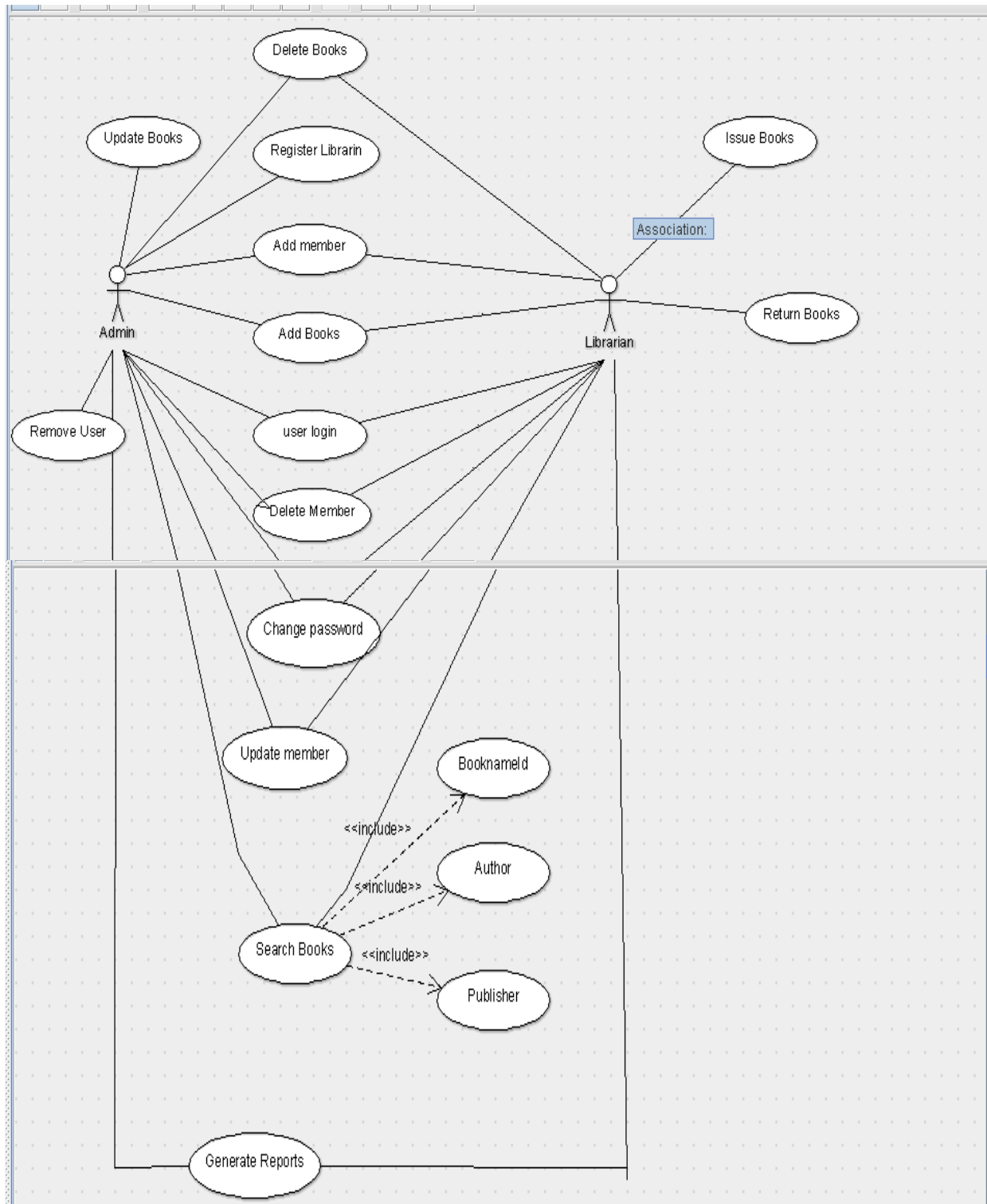
$17\text{ days}/0.8= 21\text{ days}$

Iteration 3**Check out Books****Check in Books****View Transactions** **$7+7+2=16$ days** **$16 \text{ days}/0.8= 20$ days****Iteration 4****Add user details****View User details****Remove User** **$8+4+4=16$ days** **$16 \text{ days}/0.8= 20$ days****Iteration 5****User Login****Generate reports****Change Password** **$4+10+3= 17$ days** **$17 \text{ days}/0.8= 21$ days**

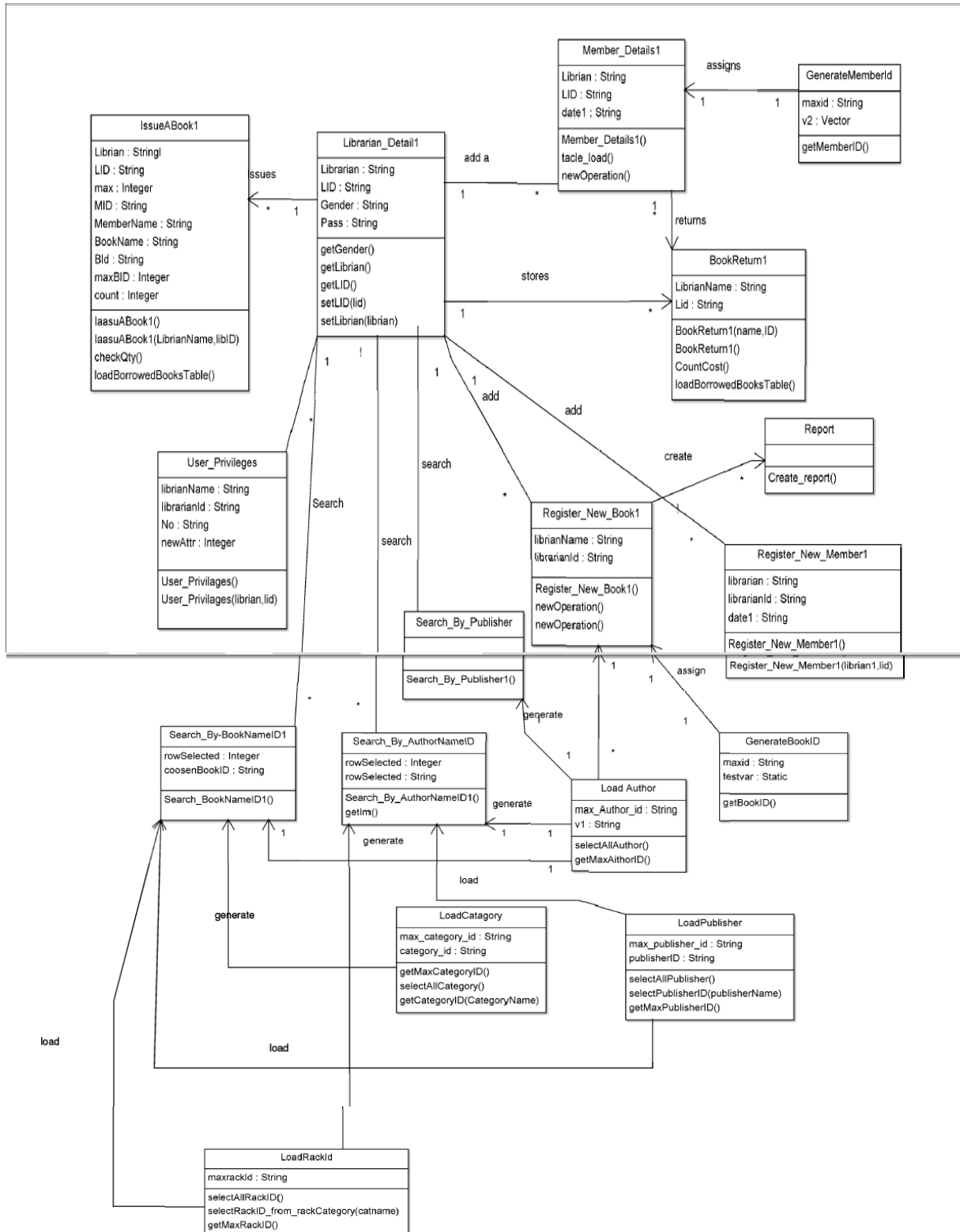
Iteration 6**Add Member****Delete Member****View and Update Member** **$4+4+8= 16$ days** **$16 \text{ days}/0.8= 20$ days****System Specifications and tools and software utilized.**

- NetBeans IDE 7.4 using Java.
- Microsoft SQL Server Management Studio 2012 to implement the database.
- Version Control System using Subversion (git).
- Argo UML to create the class diagrams.

Use case Diagrams



Class Diagram



Source Code

GenerateBookId.java

```
package se.wsu.lmw.Controls;
import se.wsu.lmw.Database.DB;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.swing.JOptionPane;

/**
 *
 * @author imashi
 */
// method to generate the next bookid
public class GenerateBookID {
    private static String maxid;
    static String testvar;
    public static String getBookID(){
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(BookID) from book");
            while(rs.next()){
                int ongoingId=(rs.getInt(1));
                int nextId=ongoingId+1;
                maxid=Integer.toString(nextId);
            }

        }catch (NullPointerException exception1) {
            JOptionPane.showMessageDialog(null, "Error @ GenerateBookID Nullpointer exception ");
            return maxid="1";
        }
        catch (ClassNotFoundException eexception2) {
            JOptionPane.showMessageDialog(null, "Error @ GenerateBookID class not found exception");
        }catch(SQLException exception3){
            JOptionPane.showMessageDialog(null, "Error @ GenerateBookID SQL exception");
        }
        return maxid;
    }
}
```

GenerateMemberId.java

```
}
package se.wsu.lmw.Controls;

import se.wsu.lmw.Database.DB;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;
import javax.swing.JOptionPane;
/**
 *
 * @author imashi
 */

public class GenerateMemberID {
    private static String maxid;
    private static Vector v2;
    public static String getMemberID(){
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(MemberID) from members");
            while(rs.next()){
                maxid=Integer.toString(rs.getInt(1)+1);
            }
        }
    }
}
```

```

    } catch (ClassNotFoundException exception2) {
        JOptionPane.showMessageDialog(null, "Error @ GenerateMemberID class not found exception ");
    } catch (SQLException exception3) {
        JOptionPane.showMessageDialog(null, "Error @ GenerateMemberID SQL exception ");
    }
    return maxid;
}
}

```

GetBookDetails.java

```

/*
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 * and open the template in the editor.
 */

package se.wsu.lmw.Controls;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import se.wsu.lmw.Database.DB;

/**
 *
 * @author imashi
 */
public class GetBookDetails {

    ResultSet resultSet=null;
    public ResultSet getBook() throws ClassNotFoundException
    {
        try {
            try {
                resultSet = DB.myConnection().createStatement().executeQuery("SELECT * FROM book");
            } catch (SQLException ex) {
                Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
            }
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
        }

        return resultSet;
    }

    public ResultSet getBorrowed() throws ClassNotFoundException
    {
        try {
            try {
                resultSet = DB.myConnection().createStatement().executeQuery("SELECT * FROM borrowedbooks");
            } catch (SQLException ex) {
                Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
            }
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
        }

        return resultSet;
    }
}

```

```

}
LoadCombo.java

/*
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 * and open the template in the editor.
 */

package se.wsu.lmw.Controls;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import se.wsu.lmw.Database.DB;

/**
 *
 * @author imashi
 */
public class Load_combo {
    ResultSet resultSet=null;
    public ResultSet getCat() throws ClassNotFoundException
    {
        try {
            try {
                resultSet = DB.myConnection().createStatement().executeQuery("SELECT CategoryName FROM category");
            } catch (SQLException ex) {
                Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
            }
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    return resultSet;
}

public ResultSet getrackno() throws ClassNotFoundException
{
    try {
        try {
            resultSet = DB.myConnection().createStatement().executeQuery("SELECT RackID FROM rack");
        } catch (SQLException ex) {
            Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
        }
    } catch (ClassNotFoundException ex) {
        Logger.getLogger(Load_combo.class.getName()).log(Level.SEVERE, null, ex);
    }
}

return resultSet;
}

```

PanallLoad1.java

```

package se.wsu.lmw.Controls;

import javax.swing.GroupLayout;
import javax.swing.JPanel;

/**
 *
 * @author imashi

```

```

*/
public class PanelLoad1 {

    //method to load the jpanel
    public static void LoadPanel(JPanel bg, JPanel pName) {
        pName.removeAll();
        GroupLayout layout = new GroupLayout(pName);
        pName.setLayout(layout);
        layout.setHorizontalGroup(layout.createParallelGroup(GroupLayout.Alignment.LEADING).addComponent(bg,
        GroupLayout.Alignment.LEADING, GroupLayout.PREFERRED_SIZE, GroupLayout.PREFERRED_SIZE, Short.MAX_VALUE));
        layout.setVerticalGroup(layout.createParallelGroup(GroupLayout.Alignment.LEADING).addComponent(bg,
        javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE,
        Short.MAX_VALUE));

    }
}

```

Report.java

```

/*
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 * and open the template in the editor.
 */

package se.wsu.lmw.Controls;

import com.itextpdf.text.BaseColor;
import com.itextpdf.text.Document;
import com.itextpdf.text.FontFactory;
import com.itextpdf.text.Paragraph;
import com.itextpdf.text.pdf.PdfPTable;
import com.itextpdf.text.pdf.PdfWriter;
//import static com.sun.corba.se.impl.util.Utility.printStackTrace;
import java.awt.Desktop;
import java.awt.Font;
import java.io.File;
import java.io.FileOutputStream;
import java.sql.ResultSet;
import java.util.Date;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @imashi
 */
public class Report {
    public void Create_report(){
        try{
            Document document=new Document();
            PdfWriter.getInstance(document, new FileOutputStream("Booklist_Report.pdf"));
            document.open();
            document.add(new Paragraph("-----Library-----",
            FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD, BaseColor.BLACK)));
            document.add(new Paragraph(new Date().toString()));
            document.add(new Paragraph("-----"));

            document.add(new
            Paragraph("-----",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
            BaseColor.WHITE)));
            PdfPTable table=new PdfPTable(new float[]{ 35, 45, 35,45,45,45,45 });
            table.addCell("Book ID");
            table.addCell("Book name");

```

```

        table.addCell("Total Qty");
        table.addCell("Available Qty");
        table.addCell("Librarian ID");
        table.addCell("Rack ID");
        table.addCell("Category ID");
        table.addCell("Publisher ID");

        ResultSet result=new GetBookDetails().getBook();

        while(result.next()){

            table.addCell(result.getString(1));
            table.addCell(result.getString(2));
            table.addCell(result.getString(3));
            table.addCell(result.getString(4));
            table.addCell(result.getString(5));
            table.addCell(result.getString(6));
            table.addCell(result.getString(7));
            table.addCell(result.getString(9));

        }

        document.add(table);
        document.add(new
Paragraph("_____ ",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
BaseColor.WHITE)));

        document.add(new
Paragraph("_____ ",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
BaseColor.WHITE)));
        document.close();

        Runtime.getRuntime().exec("rundll32 url.dll,FileProtocolHandler " + "Booklist_Report.pdf");
    }
    catch(Exception e)
    {
        System.out.println(e);
        JOptionPane.showMessageDialog(null, "report not created", "Error", 3);
    }
}

public void Create_report2(){
try{
    Document document=new Document();
    PdfWriter.getInstance(document, new FileOutputStream("Borrowed_Booklist.pdf"));
    document.open();
    document.add(new Paragraph("-----Library-----",
FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD, BaseColor.BLACK)));
    document.add(new Paragraph(new Date().toString()));
    document.add(new Paragraph("-----"));

    document.add(new
Paragraph("_____ ",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
BaseColor.WHITE)));
    PdfPTable table=new PdfPTable(6);

    table.addCell("Member ID");

```



```

        table.addCell("Book ID");
        table.addCell("Librarian ID");
        table.addCell("Borrowed date");
        table.addCell("Returned date");
        table.addCell("Borrowed ID");

        ResultSet result=new GetBookDetails().getBorrowed();

        while(result.next()){

            table.addCell(result.getString(1));
            table.addCell(result.getString(2));
            table.addCell(result.getString(3));
            table.addCell(result.getString(4));
            table.addCell(result.getString(5));
            table.addCell(result.getString(6));

        }

        document.add(table);
        document.add(new
Paragraph("_____ ",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
BaseColor.WHITE)));

        document.add(new
Paragraph("_____ ",FontFactory.getFont(FontFactory.TIMES_BOLD,18,Font.BOLD,
BaseColor.WHITE)));
        document.close();

        Runtime.getRuntime().exec("rundll32 url.dll,FileProtocolHandler " + "Borrowed_Booklist.pdf");
    }
    catch(Exception e)
    {
        System.out.println(e);
        JOptionPane.showMessageDialog(null, "report not created", "Error", 3);
    }
}
}

```

VerifyUser.java

```

package se.wsu.Imw.Controls;

import se.wsu.Imw.Database.DB;
import java.sql.ResultSet;

public class VerifyUser {

    private static boolean status1 = false;
    private static boolean status2 = false;

    /**
     *
     * @author imashi

```

```

    */
    //method to verify the user
    public static boolean verifyUser(String user, String pass) {
        status1 = false;
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from login where UserName='" + user + "' AND Password='"
+ pass + "'");
            while (rs.next()) {
                status1 = true;
            }

        } catch (Exception e) {
            System.out.println("Error @ Verify user ");
        }
        return status1;
    }
}

```

Delete.java

```

/*
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 * and open the template in the editor.
 */

package se.wsu.lmw.Controls;

import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import se.wsu.lmw.Database.DB;

/**
 *
 * @author imashi
 */
public class delete {

    public void delete_book(String mid) throws SQLException
    {
        try {

            String ask="Successfully deleted";
            DB.myConnection().createStatement().executeUpdate("delete from members where MemberID = '" + mid+ "'");
            JOptionPane.showMessageDialog(null, ask, "Successful", 1);

        } catch (ClassNotFoundException ex) {
            Logger.getLogger(delete.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    public void delete_librarian(String lib) throws SQLException
    {
        try {
            String ask="Successfully deleted";

            DB.myConnection().createStatement().executeUpdate("delete from librian where LibrianID = '" + lib+ "'");
            JOptionPane.showMessageDialog(null, ask, "Successful", 1);

        } catch (ClassNotFoundException ex) {
            Logger.getLogger(delete.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
}

```

```

    }
}

```

SaveAuthorBook.java

```

package se.wsu.lmw.Controls;

import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.load_data.LoadAuthor;
import java.util.Iterator;
import java.util.Vector;

/**
 *
 * @author imashi
 */
public class save_AuthorBook {

    // method to insert book author
    public static void save_AuthorBook(Vector v, String bookID) {
        String auname;
        Iterator ite = v.iterator();
        while (ite.hasNext()) {
            auname = ite.next().toString();
            try {

                DB.myConnection().createStatement().executeUpdate("insert into author_book values ('" + LoadAuthor.selectAllAuthorID(auname) +
                "','" + bookID + "')");

            } catch (Exception e) {
            }
        }
    }
}

```

Data1.java

```

package se.wsu.lmw.Controls.Date;

import java.text.SimpleDateFormat;
import java.util.Calendar;

/**
 *
 * @author imashi
 */
public class Date1 {
    private static int num_of_days=0;
    public static String myDate(){
        String today;
        Calendar calendar = Calendar.getInstance();
        SimpleDateFormat dateFormat = new SimpleDateFormat("MM-dd-yyyy");
        today = dateFormat.format(calendar.getTime()).toString();
        return today;
    }
    //method for calculate the time period
    public static int getDatePeriod(String getDate,String returnDate){
        num_of_days=0;
        String date1[]=getDate.split("-");
        String date2[]=returnDate.split("-");
        int year= (Integer.parseInt(date1[0])-Integer.parseInt(date2[0]));
        int month=(Integer.parseInt(date1[1])-Integer.parseInt(date2[1]));
        int days=(Integer.parseInt(date1[2])-Integer.parseInt(date2[2]));
        num_of_days=(year*365)+(month*30)+(days*1);
    }
}

```

```

        return num_of_days;
    }
}

```

LoadAuthor.java

```
package se.wsu.lmw.Controls.load_data;
```

```
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;
import javax.swing.JOptionPane;
import se.wsu.lmw.Database.DB;
```

```
/**
 *
 * @author imashi
 */
public class LoadAuthor {
    private static String max_Author_id;
    private static String v1;
    public static Vector selectAllAuthor(){
        Vector v=new Vector();
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from author");
            while(rs.next()){
                v.add(rs.getString(2));
            }

        } catch (Exception e) {
        }
        return v;
    }
    public static String selectAllAuthorID(String authorname){
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from author where AuthorName='"+authorname+"'");
            while(rs.next()){
                v1=(rs.getString(1));
            }

        } catch (Exception e) {
        }
        return v1;
    }
    public static String getMaxAithorID(){
        try {
            ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(AuthorID) from author");
            while(rs.next()){
                max_Author_id=Integer.toString(rs.getInt(1)+1);
            }

        } catch (ClassNotFoundException exception1) {
            JOptionPane.showMessageDialog(null, "Error @ LoadAuthor class not found exception");
        } catch (SQLException exception2){
            JOptionPane.showMessageDialog(null, "Error @ LoadAuthor SQL exception");
        }
        return max_Author_id;
    }
}

```

LoadCatagory.java

```
package se.wsu.lmw.Controls.load_data;
```

```

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;
import javax.swing.JOptionPane;
import se.wsu.lmw.Database.DB;

/**
 *
 * @author imashi
 */
public class LoadCategory {
    private static String max_category_id;
    private static String category_id;
    public static Vector selectAllCategory(){
        Vector v=new Vector();
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from category");
            while(rs.next()){
                v.add(rs.getString(3));
            }
        } catch (Exception e) {
        }
        return v;
    }

    public static String getMaxCategoryID(){
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(CategoryID) from category");

            while(rs.next()){
                max_category_id=Integer.toString(rs.getInt(1)+1);
            }

        } catch (ClassNotFoundException e) {
            JOptionPane.showMessageDialog(null, "Error @ LoadCategoryID class not found exception");
        } catch (SQLException e2) {
            JOptionPane.showMessageDialog(null, "Error @ LoadCategoryID SQL exception");
        }
        return max_category_id;
    }
    public static String getCategoryID(String CategoryName){
        try {

            ResultSet rs=DB.myConnection().createStatement().executeQuery("select* from category where CategoryName='"+CategoryName+"'");
            while(rs.next()){
                category_id=rs.getString(1);
            }

        } catch (ClassNotFoundException e) {
            JOptionPane.showMessageDialog(null, "Error @ LoadCategoryID class not found exception");
        } catch (SQLException e2) {
            JOptionPane.showMessageDialog(null, "Error @ LoadCategoryID SQL exception");
        }
        return category_id;
    }
}

```

LoadLibrarian.java

```

package se.wsu.lmw.Controls.load_data;

import java.sql.ResultSet;
import se.wsu.lmw.Database.DB;

```

```

public class LoadLibrianData {
private static String maxLID;
private static String librianName="Librian";

/**
 *
 * @author imashi
 */

// method to select the next librarian Id
public static String LoadMaxLID(){
    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("Select * from librian order by LibrianID ASC");
        while(rs.next()){
            maxLID=rs.getString("LibrianID");

            maxLID=Integer.toString(Integer.parseInt(maxLID)+1);
        }
        } catch (Exception e) {
        }
        return maxLID;
    }

// method to load get the librarian name
public static String LoadLibrianName(String libID){
    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("Select * from librian where LibrianID='"+libID+"'");
        while(rs.next()){
            librianName=rs.getString("LibrianName");
        }

        } catch (Exception e) {
        }
        return librianName;
    }
}

```

LoadPublisher.java

```

package se.wsu.Imw.Controls.load_data;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;
import javax.swing.JOptionPane;
import se.wsu.Imw.Database.DB;
/**
 *
 * @author imashi
 */

public class LoadPublisher {
private static String max_publisher_id;
private static String publisherID;

// method to select the all publishers
public static Vector selectAllPublisher(){
    Vector v=new Vector();
    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from publisher");
        while(rs.next()){
            v.add(rs.getString(2));

```

```

    }
    } catch (Exception e) {
    }
    return v;
}

//method to select the publisher id
public static String selectPublisherID(String publisherName){

    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from publisher where
PublisherName='"+publisherName+"'");
        while(rs.next()){
            publisherID=rs.getString(1);
        }
    } catch (Exception e) {
    }
    return publisherID;
}

//method to select the next publisher
public static String getMaxPublisherID(){
    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(PublisherID) from publisher");
        String x="x";
        while(rs.next()){
            x="y";

            int publisherId=Integer.parseInt(rs.getString(1))+1;
            max_publisher_id=Integer.toString(publisherId);

        }

    } catch (ClassNotFoundException e) {
        JOptionPane.showMessageDialog(null, "Error @ Loadpublisher 63 class not found exception");
    } catch (SQLException exception2){
        JOptionPane.showMessageDialog(null, "Error @ Loadpublisher 65 SQL exception");
    }
    return max_publisher_id;
}
}

```

LoadRackId.java

```

package se.wsu.lmw.Controls.load_data;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Vector;
import javax.swing.JOptionPane;
import se.wsu.lmw.Database.DB;
/**
 *
 * @author imashi
 */
public class LoadRackID {

    private static String maxrackId;

    //method to select the all rack ids
    public static Vector selectAllRackID(){
        Vector v=new Vector();
        try {

```

```

        ResultSet rs=DB.myConnection().createStatement().executeQuery("select * from rack");
        while(rs.next()){
            v.add(rs.getString(1));
        }
    } catch (Exception e) {
    }
    return v;
}

// method to select the rackId from the rackcategory
public static Vector selectRackID_from_rackCategory(String catname){

    Vector v=new Vector();
    try {

        ResultSet rs1=DB.myConnection().createStatement().executeQuery("select * from category where CategoryName='"+catname+"'");
        while(rs1.next()){
            String catID=rs1.getString(1);

            ResultSet rs2=DB.myConnection().createStatement().executeQuery("select * from rack_category where CategoryID='"+catID+"'");
            while(rs2.next()){
                v.add(rs2.getString(1));
            }
        }

    } catch (Exception e) {
    }
    return v;
}

// method to get the next rack id
public static String getMaxRackID(){
    try {

        ResultSet rs=DB.myConnection().createStatement().executeQuery("select max(RackID) from rack");
        while(rs.next()){
            maxrackId=Integer.toString(rs.getInt(1)+1);
        }

    } catch (ClassNotFoundException e) {
        JOptionPane.showMessageDialog(null, "Error @ LoadRack class not found exception");
    } catch (SQLException e2){
        JOptionPane.showMessageDialog(null, "Error @ LoadRack SQL exception");
    }
    return maxrackId;
}
}

```

LoadKappam.java

```
package se.wsu.lmw.Controls.load_data;
```

```
import java.sql.ResultSet;
```

```
import se.wsu.lmw.Database.DB;
```

```
public class Load_Kappam {
```

```
    private static String kappam = "0";
```

```
    /**
```

```
    *
```

```
    * @author imashi
```

```
    */
```

```
//method to load the kappam
```

```
public static String Load_Kappam() {
```



```

try {

    ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from kappam ");
    while (rs.next()) {
        kappam = rs.getString("kappamValue");
    }

} catch (Exception e) {
    System.out.println("Exception @ Settings 110");
}
return kappam;
}
}

```

DB.java

```

package se.wsu.lmw.Database;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

/**
 *
 * @author imashi
 */
public class DB {

    private static Connection con;

    public static Connection myConnection() throws ClassNotFoundException, SQLException {

        Class.forName("net.sourceforge.jtds.jdbc.Driver");
        con = DriverManager.getConnection("jdbc:jtds:sqlserver://IMASHI-PC/LMS_DB;instance=MSSQLSERVER;user=Imashi;password=imashi");

        return con;
    }
}

```

Aboutme.java

```

package se.wsu.lmw.LMS;

import se.wsu.lmw.Controls.PanelLoad1;
import se.wsu.lmw.LMS.view.home.Home;
import se.wsu.lmw.LMS.view.home.Hp1;

/**
 *
 * @author imashi
 */
public class About_Me extends javax.swing.JPanel {
    String librian_name;
    String LID;
    String No;
    /** Creates new form Settings */
    public About_Me(){
        initComponents();
    }
    public About_Me(String librian, String lid) {
        librian_name = librian;
        LID = lid;
        initComponents();
        jLabel6.setText(librian_name);
    }
}

```

```
}
```

BookReturn1.java

```
package se.wsu.Imw.LMS;
```

```
import se.wsu.Imw.Database.DB;
import se.wsu.Imw.Controls.Date.Date1;
import se.wsu.Imw.Controls.load_data.Load_Kappam;
import java.sql.ResultSet;
import java.util.Vector;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
```

```
/**
```

```
*
```

```
* @author imashi
```

```
*/
```

```
public class BookReturn1 extends javax.swing.JPanel {
```

```
    int row = (-1);
    String LibrianName;
    String LID;
```

```
/**
```

```
* Creates new form BookReturn
```

```
*/
```

```
public BookReturn1(String name, String ID) {
```

```
    initComponents();
    LibrianName = name;
    LID = ID;
    jLabel2.setText(LID);
    jLabel4.setText(LibrianName);
    jLabel6.setText(Date1.myDate());
```

```
    loadBorrowedBooksTable();
    CountCost();
    jTable1.setRowHeight(25);
}
```

```
public BookReturn1() {
```

```
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    jTable1.setRowHeight(25);
    System.out.println("rows = " + dft.getRowCount());
    if (dft.getRowCount() == 0) {
        jButton1.setEnabled(false);
    } else {
        jButton1.setEnabled(true);
    }
}
```

```
    initComponents();
```

```
}
```

```
private int cost = 0;
```

```
private int CountCost() {
```

```
    cost = 0;
    if (jTable1.getRowCount() > (-1)) {
        for (int i = 0; i < jTable1.getRowCount(); i++) {
            if (Date1.getDatePeriod(jLabel6.getText(), jTable1.getValueAt(i, 6).toString()) > 0) {
```

```
                jTable1.setValueAt(Integer.toString(Integer.parseInt(Integer.toString(Date1.getDatePeriod(jLabel6.getText(), jTable1.getValueAt(i, 6).toString())) * (Integer.parseInt(Load_Kappam.Load_Kappam()))), i, 8);
            } else {
                jTable1.setValueAt("0", i, 8);
            }
        }
    }
}
```

```

    }
    }
    }
    return cost;
}

//load borrowed books
private void loadBorrowedBooksTable() {
    DefaultTableModel model = (DefaultTableModel) jTable1.getModel();
    model.setRowCount(0);
    jTable1.setRowHeight(25);
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks order by BorrowedID ASC");
        while (rs.next()) {
            Vector vector_items = new Vector();
            vector_items.add(rs.getString("BorrowedID"));

            String memID = rs.getString("MemberID");
            int mm = Integer.parseInt(memID);
            vector_items.add(memID);

            ResultSet rs1 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID='" + mm + "'");

            while (rs1.next()) {

                String FName = (rs1.getString("MemberFirstName"));
                String Mname = (rs1.getString("MemberMiddleName"));
                String Sname = rs1.getString("MemberSurname");
                String full = FName + " " + Mname + " " + Sname;
                vector_items.add(full);

            }

            String bookID = rs.getString("BookID");

            int bID = Integer.parseInt(bookID);
            vector_items.add(bookID);
            ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from book where BookID='" + bID + "'");
            while (rs2.next()) {
                vector_items.add(rs2.getString("BookName"));
            }

            vector_items.add(rs.getString("BorrowedDate"));
            vector_items.add(rs.getString("ReturningDate"));
            vector_items.add(rs.getString("LibrianID"));
            model.addRow(vector_items);
        }
    } catch (Exception e) {
    }
}

//Adding borrowed books in to table
private void loadBorrowedBooksTable(int bookID) {
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    dft.setRowCount(0);
    jTable1.setRowHeight(25);
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks where BookID like '" + bookID + "%'
order by BorrowedID ASC");
        while (rs.next()) {
            Vector vector_books = new Vector();
            vector_books.add(rs.getString("BorrowedID"));

```

```

String memID = rs.getString("MemberID");
int mm = Integer.parseInt(memID);
vector_books.add(memID);
ResultSet rs1 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID='" + mm + "'");

while (rs1.next()) {

    String FName = (rs1.getString("MemberFirstName"));
    String Mname = (rs1.getString("MemberMiddleName"));
    String Sname = rs1.getString("MemberSurname");
    String full = FName + " " + Mname + " " + Sname;
    vector_books.add(full);

}

String Book_id = rs.getString("BookID");

int bID = Integer.parseInt(Book_id);
vector_books.add(Book_id);
ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from book where BookID='" + bID + "'");
while (rs2.next()) {
    vector_books.add(rs2.getString("BookName"));
}

vector_books.add(rs.getString("BorrowedDate"));
vector_books.add(rs.getString("ReturningDate"));
vector_books.add(rs.getString("LibrianID"));
dft.addRow(vector_books);
}
} catch (Exception e) {
}
}

//Adding borrowed books in to table.This is a overloaded method
private void loadBorrowedBooksTable(int memberID, int x) {
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    dft.setRowCount(0);
    jTable1.setRowHeight(25);
    try {
        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks where MemberID like '" + memberID
+ "%' order by MemberID ASC");
        while (rs.next()) {
            Vector vector_book = new Vector();
            vector_book.add(rs.getString("BorrowedID"));

            String memID = rs.getString("MemberID");
            int mm = Integer.parseInt(memID);
            vector_book.add(memID);

            ResultSet rs1 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID='" + mm + "'");

            while (rs1.next()) {

                String FName = (rs1.getString("MemberFirstName"));
                String Mname = (rs1.getString("MemberMiddleName"));
                String Sname = rs1.getString("MemberSurname");
                String full = FName + " " + Mname + " " + Sname;
                vector_book.add(full);

            }

            String BB = rs.getString("BookID");

            int bID = Integer.parseInt(BB);
            vector_book.add(BB);
            ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from book where BookID='" + bID + "'");

```

```

        while (rs2.next()) {
            vector_book.add(rs2.getString("BookName"));
        }

        vector_book.add(rs.getString("BorrowedDate"));
        vector_book.add(rs.getString("ReturningDate"));
        vector_book.add(rs.getString("LibrarianID"));

        dft.addRow(vector_book);
    }
} catch (Exception e) {
}
}

```

IssueABook.java

```

package se.wsu.lmw.LMS;

import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.Date.Date1;
import java.sql.ResultSet;
import java.util.Date;
import java.util.Vector;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author imashi
 */
public class laasuABook1 extends javax.swing.JPanel {

    String Librian;
    String LID;
    int max;
    int id;
    String MID = "no";
    String MemberName;
    String BookName;
    String BID = "no";
    int MaxBID;
    int MaxMID;
    int count = 0;

    /**
     * Creates new form laasuABook
     */
    public laasuABook1() {
        initComponents();
    }

    //setting Issue book id
    public laasuABook1(String LibrianName, String libID) {

        initComponents();

        Librian = LibrianName;
        LID = libID;
        jLabel6.setText(Librian);
        jLabel8.setText(LID);
        jLabel10.setText(Date1.myDate());
        jDateChooser1.setMinSelectableDate(new Date());

        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select max(BID) from borrowewdid");

```

```

        while (rs.next()) {
            max = rs.getInt(1);
            id = max + 1;
            jTextField1.setText(Integer.toString(id));

        }

        loadBorrowedBooksTable();
        jTable1.setRowHeight(25);

    } catch (Exception e) {
    }
}

/**
 * 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() {

    jLabel18 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    jTextField2 = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    jTextField3 = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jDateChooser1 = new com.toedter.calendar.JDateChooser();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jButton1 = new javax.swing.JButton();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jLabel10 = new javax.swing.JLabel();

    setOpaque(false);

    jLabel18.setBackground(new java.awt.Color(255, 255, 204));
    jLabel18.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
    jLabel18.setText("Issue a Book");
    jLabel18.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
    jLabel18.setOpaque(true);

    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(""));

    jLabel1.setText("Issue ID :");

    jTextField1.setEditable(false);

    jLabel2.setText("Member ID :");

    jTextField2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jTextField2ActionPerformed(evt);
        }
    });

    jLabel4.setText("Book ID :");

```

```

jLabel3.setText("Due date :");

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addComponent(jLabel1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, 85, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(jLabel2)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jTextField2, javax.swing.GroupLayout.DEFAULT_SIZE, 125, Short.MAX_VALUE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel4)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE, 116, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 68, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(139, 139, 139))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()
            .addGap(0, 0, Short.MAX_VALUE)
            .addComponent(jDateChooser1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(53, 53, 53))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jDateChooser1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel1)
                    .addComponent(jLabel3)
                    .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel2)
                    .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel4)
                    .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(139, 139, 139))
);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Issue ID", "Member ID", "Member Name", "Book ID", "Book Name", "Issued Date", "Due Date"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jScrollPane1.setViewportView(jTable1);

jButton1.setText("Add");

```

```

jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jLabel5.setText("Librarian Name :");

jLabel7.setText("Librarian ID :");

jLabel9.setText("Date :");

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addComponent(jLabel18, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 382,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 731, Short.MAX_VALUE)
                    .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
                        .addComponent(jLabel5)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 167, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel7)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 98, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel9)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 170, javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addComponent(jButton1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.PREFERRED_SIZE, 110,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jPanel1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
            .addContainerGap()
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 33, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(30, 30, 30)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jButton1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 288, Short.MAX_VALUE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel5)
                    .addComponent(jLabel7)
                    .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 21, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 21, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel9)
                    .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 23, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap()
        );
}

```



```

//check book quantity

public boolean checkQty() {
    int qty = 0;
    boolean quantity = false;
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from book where BookID='" + jTextField3.getText() + "'");
        while (rs.next()) {
            qty = Integer.parseInt(rs.getString("AvailableQuantity"));
        }

    } catch (Exception e) {
        System.out.println("Exception @ Issue a book 260 ");
    }
    if (qty > 0) {
        quantity = true;
    }
    return quantity;
}

//load borrowed book info in to table
private void loadBorrowedBooksTable() {
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    dft.setRowCount(0);

    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks order by BorrowedID ASC");
        while (rs.next()) {
            Vector borrow_book = new Vector();
            borrow_book.add(rs.getString("BorrowedID"));

            String memID = rs.getString("MemberID");
            int mm = Integer.parseInt(memID);
            borrow_book.add(memID);

            ResultSet rs1 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID='" + mm + "'");

            while (rs1.next()) {

                String FName = (rs1.getString("MemberFirstName"));
                String Mname = (rs1.getString("MemberMiddleName"));
                String Sname = rs1.getString("MemberSurname");
                String full = FName + " " + Mname + " " + Sname;
                borrow_book.add(full);

            }

            String bookid = rs.getString("BookID");

            int bID = Integer.parseInt(bookid);
            borrow_book.add(bookid);

            ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from book where BookID='" + bID + "'");
            while (rs2.next()) {
                borrow_book.add(rs2.getString("BookName"));
            }

            borrow_book.add(rs.getString("BorrowedDate"));
            borrow_book.add(rs.getString("ReturningDate"));

            dft.addRow(borrow_book);
        }
    } catch (Exception e) {
    }
}

```

```

    }
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
        DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
        if (jTextField2.getText().equals("")) {
            JOptionPane.showMessageDialog(null, "You Must Enter Member ID");
        } else {
            if (jTextField3.getText().equals("")) {
                JOptionPane.showMessageDialog(null, "You Must Enter Book ID");
            } else {

                try {
                    if (jDateChooser1.getDate().equals("")) {
                        JOptionPane.showMessageDialog(null, "You Must choose Return Date");
                    } else {

                        try {

                            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from members where MemberID=" +
jTextField2.getText() + "");
                            while (rs.next()) {
                                MID = rs.getString("MemberID");
                                MemberName = rs.getString("MemberFirstName") + " " + rs.getString("MemberMiddleName") + " " +
rs.getString("MemberSurname");
                                System.out.println(MID);
                            }

                        } catch (Exception e) {
                        }
                        if (MID.equals("no")) {
                            JOptionPane.showMessageDialog(null, "No such Member ID");
                            jTextField2.setText("");
                            jTextField2.grabFocus();
                        } else {
                            try {

                                ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from book where BookID=" + jTextField3.getText()
+ "");
                                while (rs.next()) {
                                    BID = rs.getString("BookID");
                                    System.out.println("BookID " + BID + "@ line 309");
                                    BookName = rs.getString("BookName");
                                }

                            } catch (Exception e) {
                                System.out.println("exception 291 Issue a book");
                            }
                            if (BID.equals("no")) {
                                JOptionPane.showMessageDialog(null, "No such Book ID");
                                jTextField3.setText("");
                                jTextField3.grabFocus();
                            } else {
                                //-----Check Book limit-----
                                String b = "0";
                                int a = 0;
                                try {

                                    ResultSet brs = DB.myConnection().createStatement().executeQuery("select * from main");
                                    while (brs.next()) {
                                        b = brs.getString("No");
                                    }

                                } catch (Exception e) {
                                    System.out.println("exception @ Issue a book 332");
                                }
                            }
                        }
                    }
                }
            }
        }
    }

```

```

//-----
for (int n = 0; n < jTable1.getRowCount(); n++) {
    System.out.println("jTable1.getValueAt(n, 1).toString() = " + jTable1.getValueAt(n, 1).toString());
    if (MID.equals(jTable1.getValueAt(n, 1).toString())) {
        a++;
    }
}
System.out.println("a= " + a + " b= " + b);
if (a > Integer.parseInt(b)) {
    JOptionPane.showMessageDialog(this, "You can't Issue this book \nStudent Book limit Exceeded.", "Integrity error",
JOptionPane.ERROR_MESSAGE);
    return;
}
if (checkQty()) {

    Vector member = new Vector();

    member.add(jTextField1.getText());
    member.add(MID);
    member.add(MemberName);
    member.add(BID);
    member.add(BookName);
    member.add(jLabel10.getText());
    String date[] = jDateChooser1.getDate().toString().split(" ");

    if (date[1].equals("Jan")) {
        date[1] = "01";
    } else if (date[1].equals("Feb")) {
        date[1] = "02";
    } else if (date[1].equals("Mar")) {
        date[1] = "03";
    } else if (date[1].equals("Apr")) {
        date[1] = "04";
    } else if (date[1].equals("May")) {
        date[1] = "05";
    } else if (date[1].equals("Jun")) {
        date[1] = "06";
    } else if (date[1].equals("Jul")) {
        date[1] = "07";
    } else if (date[1].equals("Aug")) {
        date[1] = "08";
    } else if (date[1].equals("Sep")) {
        date[1] = "09";
    } else if (date[1].equals("Oct")) {
        date[1] = "10";
    } else if (date[1].equals("Nov")) {
        date[1] = "11";
    } else if (date[1].equals("Dec")) {
        date[1] = "12";
    }
    String ddate = date[5] + "-" + date[1] + "-" + date[2];
    member.add(ddate);
    dft.addRow(member);
    try {

        DB.myConnection().createStatement().executeUpdate("insert into borrowedbooks values('" + MID + "','" + BID + "','" +
jLabel8.getText() + "','" + jLabel10.getText() + "','" + ddate + "','" + jTextField1.getText() + "')");
    } catch (Exception e) {
    }
    try {

        DB.myConnection().createStatement().executeUpdate("Update book set AvailableQuantity=AvailableQuantity-1 where
BookID='" + jTextField3.getText() + "'");

    } catch (Exception e) {
    }
}

```

```

        jTextField2.setText("");
        jTextField3.setText("");
        jDateChooser1.cleanup();
        jTextField2.requestFocus();
    } else {
        JOptionPane.showMessageDialog(null, "Stock doesn't have enough books\n to provide this request ");
    }
}

}

}
} catch (NullPointerException e) {
    JOptionPane.showMessageDialog(null, "You Must choose Return Date");
}
}
}
try {

    DB.myConnection().createStatement().executeUpdate("update borroewdid set BID=BID+1");
    ResultSet rs = DB.myConnection().createStatement().executeQuery("select max(BID) from borroewdid");
    while (rs.next()) {
        max = rs.getInt(1);
        id = ++max;
        jTextField1.setText(Integer.toString(id));

        System.out.println("Max = " + max + " ID = " + id);
    }
} catch (Exception e) {
}
}
MID = "no";
BID = "no";

```

LMS.java

```

package se.wsu.lmw.LMS;

/**
 *
 * @author imashi
 */
public class LMS {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // TODO code application logic here
        Login1 h=new Login1();
        h.setVisible(true);
        ///System.out.println(java.lang.System.getProperty('java.library.path'));
    }

}

```

Librarian_Details.java

```

package se.wsu.lmw.LMS;

```

```

import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.Date.Date1;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import se.wsu.lmw.Controls.delete;
/**
 *
 * @author imashi
 */
public class Librian_Details1 extends javax.swing.JPanel {

    private String Librian;
    private String LID;
    private String Gender;
    private String pass;

    public Librian_Details1() {
        initComponents();
    }

    public Librian_Details1(String librian, String lid) {
        initComponents();
        setLID(lid);
        setLibrian(librian);
        jLabel16.setText(getLibrian());

        jLabel14.setText(Date1.myDate());
    }

```

Login1.java

```

package se.wsu.lmw.LMS;

import se.wsu.lmw.LMS.view.home.Home;
import se.wsu.lmw.Database.DB;
import java.awt.Frame;
import java.awt.Toolkit;
import java.awt.event.KeyEvent;
import java.sql.ResultSet;
import java.util.Vector;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JOptionPane;

/**
 *
 * @author imashi
 */
public class Login1 extends javax.swing.JFrame {

    boolean check = true;

    /**
     * Creates new form Login
     */
    //constructor
    public Login1() {

        Runnable obt_run = new Runnable() {

            //check Caps Lock is On

```

```

public void run() {

    while (check) {

        if (Toolkit.getDefaultToolkit().getLockingKeyState(KeyEvent.VK_CAPS_LOCK)) {

            JOptionPane.showMessageDialog(null, "Caps Lock is On");
            Toolkit.getDefaultToolkit().beep();
            try {

                Thread.sleep(6000);

            } catch (InterruptedException ex) {
                Logger.getLogger(Login1.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    }
};
Thread thread_log = new Thread(obt_run);
thread_log.start();
initComponents();

Vector users = new Vector();
try {

    DB.myConnection().createStatement().executeUpdate("delete from currentloggers where LibrianID>='000'");

} catch (Exception ex) {
    JOptionPane.showMessageDialog(this, "Error @ LOGIn1 ==  "+ex.getMessage(), "err", JOptionPane.OK_OPTION);
}

try {

    ResultSet rs = DB.myConnection().createStatement().executeQuery("select UserName from login");
    while (rs.next()) {
        users.add(rs.getString("UserName"));
        jComboBox1.setModel(new DefaultComboBoxModel(users));
    }

} catch (Exception ex) {
    JOptionPane.showMessageDialog(this, "Error @ LOGIn 1ggg06=  "+ex, "err", JOptionPane.OK_OPTION);
}
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    buttonGroup1 = new javax.swing.ButtonGroup();
    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jComboBox1 = new javax.swing.JComboBox();
    jPasswordField1 = new javax.swing.JPasswordField();
    jPanel1 = new javax.swing.JPanel();
    jRadioButton1 = new javax.swing.JRadioButton();
    jRadioButton2 = new javax.swing.JRadioButton();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jSeparator1 = new javax.swing.JSeparator();
    jLabel4 = new javax.swing.JLabel();

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("EasyWay 1.1 LMS Login");
setResizable(false);
getContentPane().setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jPanel2.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel2.setOpaque(false);

jLabel1.setText("User Name : ");

jComboBox1.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Item 1", "Item 2", "Item 3", "Item 4" }));

jPasswordField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jPasswordField1ActionPerformed(evt);
    }
});
jPasswordField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jPasswordField1KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jPasswordField1KeyTyped(evt);
    }
});

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Select Login User Type"));

buttonGroup1.add(jRadioButton1);
jRadioButton1.setSelected(true);
jRadioButton1.setText("Librarian");
jRadioButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton1ActionPerformed(evt);
    }
});

buttonGroup1.add(jRadioButton2);
jRadioButton2.setText("Guest User");
jRadioButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(27, 27, 27)
            .addComponent(jRadioButton1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jRadioButton2)
            .addContainerGap(119, Short.MAX_VALUE))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(27, 27, 27)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jRadioButton1)
                .addComponent(jRadioButton2))
            .addContainerGap(119, Short.MAX_VALUE))
);

jButton1.setText("Login");

```

```
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
jButton1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jButton1KeyReleased(evt);
    }
});

jButton2.setText("Exit");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jButton2KeyReleased(evt);
    }
});

jLabel.setText("Password : ");

jLabel3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel3.setForeground(new java.awt.Color(51, 51, 51));
jLabel3.setText("Type Your usernameand Password ");

jLabel7.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Images/Logout.png"))); // NOI18N
jLabel7.setText("Lock Windows");
jLabel7.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel7MouseClicked(evt);
    }
});

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(37, 37, 37)
            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 273, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 100, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 94, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 94, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap())

```



```

        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addGap(25, 25, 25))
    );
    jPanel2Layout.setVerticalGroup(
        jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 21, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 19, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jComboBox1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 51, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jButton2)
                .addComponent(jButton1)
                .addComponent(jLabel7))
            .addGap(10, 10, 10))
    );

    getContentPane().add(jPanel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(80, 270, 360, 200));

    jLabel5.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
    jLabel5.setForeground(new java.awt.Color(51, 51, 51));
    jLabel5.setText("Easy Way 1.1 Library Management System");
    getContentPane().add(jLabel5, new org.netbeans.lib.awtextra.AbsoluteConstraints(70, 20, 400, 21));
    getContentPane().add(jSeparator1, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 510, 470, 10));

    jLabel4.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Images/Login2.png"))); // NOI18N
    getContentPane().add(jLabel4, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 500, -1));

    setSize(new java.awt.Dimension(514, 639));
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String valid_pw = "n";
    if (jComboBox1.getSelectedItem().toString() != "" && jPasswordField1.getPassword().toString() != "") {
        String pass = new String(jPasswordField1.getPassword());

        if (jRadioButton1.isSelected()) {
            try {
                ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from login where (UserName='" +
jComboBox1.getSelectedItem().toString() + "' AND Password ='" + pass + "')"); //And ( pass ="+jPasswordField1.getPassword().toString()+")");

                valid_pw = "n";
                while (rs.next()) {
                    valid_pw = "y";
                }

                ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from librian where UserName='" +
jComboBox1.getSelectedItem().toString() + "'");
                while (rs2.next()) {
                    String lid = rs2.getString("LibrianID");
                    String libname = rs2.getString("LibrianName");
                    DB.myConnection().createStatement().executeUpdate("insert into currentloggers values ('" + lid.toString() + "')");
                }
            } catch (SQLException ex) {
                Logger.getLogger(Login.class.getName()).log(Level.SEVERE, null, ex);
            }
        }
    }
}

```

```

        Home h = new Home(libname, lid);
        check = false;
        h.setVisible(true);

        this.dispose();
    }

    }
    } catch (Exception e) {
    }
    } else {
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from login where (UserName='" +
jComboBox1.getSelectedItem().toString() + "' AND Password='" + pass + "')");

        valid_pw = "n";
        while (rs.next()) {
            valid_pw = "y";
            ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from members where UserName='" +
jComboBox1.getSelectedItem().toString() + "'");
            while (rs2.next()) {
                String lid = "";
                int mid = rs2.getInt("MemberID");
                lid = Integer.toString(mid);
                String libname = rs2.getString("MemberFirstName");
                DB.myConnection().createStatement().executeUpdate("insert into currentloggers values ('" + lid.toString() + "')");
                this.dispose();
                Home homeObject = new Home(libname, lid);
                check = false;
                homeObject.setVisible(true);
            }
        }

    } catch (Exception e) {
    }
    }

    } else {
        JOptionPane.showMessageDialog(null, "ok", "Please Enter Password and User Name", JOptionPane.OK_OPTION);
    }

    if (valid_pw.equals("n")) {
        JOptionPane.showMessageDialog(this, "Please Enter valid Password");
    }
}

```

Member_Details.java

```

package se.wsu.Imw.LMS;

import se.wsu.Imw.Database.DB;
import se.wsu.Imw.Controls.load_data.LoadLibrianData;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Vector;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
import se.wsu.Imw.Controls.delete;
import se.wsu.Imw.Controls.load_data.LoadAuthor;

```

```

/**
 *
 * @author imashi
 */
public class Member_Details1 extends javax.swing.JPanel {

    String Librian;
    String LID;
    String date1;

    /**
     * Creates new form Register_New_Member
     */
    public Member_Details1() {

        initComponents();
        btnEdit.setEnabled(false);
        btnUpdate.setEnabled(false);
        tackle_load();
    }

    public void tackle_load()
    {
        DefaultTableModel dftt1 = (DefaultTableModel) jTable1.getModel();
        dftt1.setRowCount(0);
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from members ");

            while (rs.next()) {
                Vector v2 = new Vector();
                v2.add(rs.getInt(1));
                v2.add(rs.getString("MemberFirstName"));
                v2.add(rs.getString("MemberMiddleName"));
                v2.add(rs.getString("MemberSurname"));
                dftt1.addRow(v2);
            }

        } catch (ClassNotFoundException e) {
            JOptionPane.showMessageDialog(null, "Error @ MemberDetails class not found exception 51");
        } catch (SQLException e2) {
            JOptionPane.showMessageDialog(null, "Error @ MemberDetails SQL exception 53");
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        txtMember_First_Name = new javax.swing.JTextField();
        txtMember_Middle_Name = new javax.swing.JTextField();
        txtMember_sur_Name1 = new javax.swing.JTextField();
        txtAddress = new javax.swing.JTextField();
        txtMember_Mobile_Number = new javax.swing.JTextField();
        txtMember_Father_Name = new javax.swing.JTextField();
        txtMemberID = new javax.swing.JTextField();
        txtHome_telephone_Number = new javax.swing.JTextField();
    }

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jLabel10 = new javax.swing.JLabel();
txtSchool_Admission_Number = new javax.swing.JTextField();
jLabel11 = new javax.swing.JLabel();
txtMother_Name = new javax.swing.JTextField();
jSeparator1 = new javax.swing.JSeparator();
jLabel12 = new javax.swing.JLabel();
lblRegisterLibrianName = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
lblDate = new javax.swing.JLabel();
jSeparator2 = new javax.swing.JSeparator();
btnUpdate = new javax.swing.JButton();
btnClear = new javax.swing.JButton();
jLabel13 = new javax.swing.JLabel();
jButton1 = new javax.swing.JButton();
btnEdit = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jButton2 = new javax.swing.JButton();

setNextFocusableComponent(txtMemberID);
setOpaque(false);

jLabel1.setText("Member ID :");

jLabel2.setText("Member First Name :");

jLabel3.setText("Address :");

jLabel4.setText("Member Middle Name :");

jLabel5.setText("Member SurName :");

jLabel6.setText("Mobile Number :");

jLabel7.setText("Home Telephone Number :");

jLabel8.setText("Father Name :");

jLabel9.setBackground(new java.awt.Color(255, 255, 204));
jLabel9.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel9.setText("Search Members Details");
jLabel9.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel9.setNextFocusableComponent(txtMemberID);
jLabel9.setOpaque(true);

txtMember_First_Name.setEditable(false);
txtMember_First_Name.setNextFocusableComponent(txtMember_Middle_Name);

txtMember_Middle_Name.setEditable(false);
txtMember_Middle_Name.setNextFocusableComponent(txtMember_sur_Name1);

txtMember_sur_Name1.setEditable(false);
txtMember_sur_Name1.setNextFocusableComponent(txtSchool_Admission_Number);

txtAddress.setEditable(false);
txtAddress.setNextFocusableComponent(txtMember_Mobile_Number);

txtMember_Mobile_Number.setEditable(false);
txtMember_Mobile_Number.setNextFocusableComponent(txtHome_telephone_Number);
txtMember_Mobile_Number.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        txtMember_Mobile_NumberKeyTyped(evt);
    }
});

txtMember_Father_Name.setEditable(false);

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txtMember_Father_Name.setNextFocusableComponent(txtMother_Name);

txtMemberID.setNextFocusableComponent(txtSchool_Admission_Number);
txtMemberID.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtMemberIDActionPerformed(evt);
    }
});

txtHome_telephone_Number.setEditable(false);
txtHome_telephone_Number.setNextFocusableComponent(txtMember_Father_Name);
txtHome_telephone_Number.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        txtHome_telephone_NumberKeyTyped(evt);
    }
});

jLabel10.setText("School Admission Number :");

txtSchool_Admission_Number.setEditable(false);
txtSchool_Admission_Number.setNextFocusableComponent(txtAddress);

jLabel11.setText("Mother Name :");

txtMother_Name.setEditable(false);
txtMother_Name.setNextFocusableComponent(btnUpdate);

jLabel12.setText("Registered Librarian : ");

jLabel14.setText("Registered Date : ");

btnUpdate.setText("Update");
btnUpdate.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnUpdateActionPerformed(evt);
    }
});

btnClear.setText("Clear");
btnClear.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnClearActionPerformed(evt);
    }
});

jLabel13.setForeground(new java.awt.Color(255, 102, 51));
jLabel13.setText("Insert Member ID and click Search button or press Enter to View member details");
jLabel13.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 51, 51)));

jButton1.setText("Search");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

btnEdit.setText("Edit");
btnEdit.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnEditActionPerformed(evt);
    }
});

JTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

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    },
    new String [] {
        "Member ID", "First Name", "Middle Name", "Surname"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jScrollPane1.setViewportView(jTable1);

jButton2.setText("Delete");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 729,
Short.MAX_VALUE)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel9)
                    .addGap(18, 18, 18)
                    .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 407, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel8, javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 110, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(btnEdit, javax.swing.GroupLayout.PREFERRED_SIZE, 115, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(btnUpdate, javax.swing.GroupLayout.PREFERRED_SIZE, 113, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(btnClear, javax.swing.GroupLayout.PREFERRED_SIZE, 107, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 98, javax.swing.GroupLayout.PREFERRED_SIZE)
                    )
                    .addComponent(jSeparator2, javax.swing.GroupLayout.Alignment.LEADING)
                )
            .addContainerGap()
        )
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel12)
            .addGap(18, 18, 18)
            .addComponent(lblRegisterLibrarianName, javax.swing.GroupLayout.PREFERRED_SIZE, 241,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 105, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 76, Short.MAX_VALUE)
            .addComponent(lblDate, javax.swing.GroupLayout.PREFERRED_SIZE, 173, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jSeparator1, javax.swing.GroupLayout.Alignment.LEADING)
            .addContainerGap()
        )
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel4)
            .addComponent(jLabel5)
            .addComponent(jLabel3)
            .addComponent(jLabel2)
            .addComponent(jLabel6)
        )
    )
    .addGap(18, 18, 18)
);

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        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup())
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                    .addComponent(txtMember_sur_Name1, javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(txtMember_Middle_Name, javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(txtMember_Mobile_Number)
                    .addComponent(txtMember_Father_Name, javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(txtMember_First_Name, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 197, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addGroup(layout.createSequentialGroup())
                        .addGap(14, 14, 14)
                        .addComponent(jLabel11)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtMother_Name))
                    .addGroup(layout.createSequentialGroup())
                        .addGap(14, 14, 14)
                        .addComponent(jLabel7)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtHome_telephone_Number))
                .addGroup(layout.createSequentialGroup())
                    .addGap(13, 13, 13)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup())
                            .addComponent(jLabel10)
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addComponent(txtSchool_Admission_Number))
                        .addGroup(layout.createSequentialGroup())
                            .addComponent(jLabel1)
                            .addGap(18, 18, 18)
                            .addComponent(txtMemberID, javax.swing.GroupLayout.DEFAULT_SIZE, 330, Short.MAX_VALUE))))))
                    .addComponent(txtAddress))))
        .addContainerGap())
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel13, javax.swing.GroupLayout.PREFERRED_SIZE, 19, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(jLabel1)
                .addComponent(txtMember_First_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(txtMemberID, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(txtMember_Middle_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel10)
                .addComponent(txtSchool_Admission_Number, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(txtMember_sur_Name1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)

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        .addComponent(txtAddress, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel6)
        .addComponent(txtMember_Mobile_Number, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel7)
        .addComponent(txtHome_telephone_Number, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel8)
        .addComponent(txtMember_Father_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel11)
        .addComponent(txtMother_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addComponent(jSeparator1, javax.swing.GroupLayout.PREFERRED_SIZE, 10, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jLabel12)
        .addComponent(lblRegisterLibrianName, javax.swing.GroupLayout.PREFERRED_SIZE, 14, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel14)
        .addComponent(lblDate, javax.swing.GroupLayout.PREFERRED_SIZE, 14, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addComponent(jSeparator2, javax.swing.GroupLayout.PREFERRED_SIZE, 10, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jButton1)
        .addComponent(btnEdit)
        .addComponent(btnUpdate)
        .addComponent(btnClear)
        .addComponent(jButton2))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 163, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
} // </editor-fold>

```

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private void btnUpdateActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
try {

    boolean check1 = txtMember_First_Name.getText().equals("") || txtMember_sur_Name1.getText().equals("") ||
txtMember_Mobile_Number.getText().equals("") || txtHome_telephone_Number.getText().equals("") || txtAddress.getText().equals("");
    System.out.println("X= " + check1);
    if (!check1) {
        if (txtHome_telephone_Number.getText().length() != 10) {
            JOptionPane.showMessageDialog(null, "Home Telephone number must have 10 digits");
        } else if (txtMember_Mobile_Number.getText().length() != 10) {
            JOptionPane.showMessageDialog(null, "Mobile Telephone number must have 10 digits");
        } else {
            DB.myConnection().createStatement().executeUpdate("update members set MemberSurname='" + txtMember_sur_Name1.getText()
+ "',MemberMiddleName='" + txtMember_Middle_Name.getText() + "',MemberFirstName='" + txtMember_First_Name.getText() +
"',MemberAddress='" + txtAddress.getText() + "',MemberMobileNumber='" + txtMember_Mobile_Number.getText() +
"',MemberHomeTelephone='" + txtHome_telephone_Number.getText() + "',MemberMotherName='" + txtMother_Name.getText() +
"',MemberFatherName='" + txtMember_Father_Name.getText() + "',RegisteredDate='" + lblDate.getText() + "',SchoolAdmissionNumber='" +
txtSchool_Admission_Number.getText() + "',LibrianID='" + LID + "' where MemberID='" + txtMemberID.getText() + "'");
            txtAddress.setText("");
            txtHome_telephone_Number.setText("");
            txtMemberID.setText("");
            txtMember_Father_Name.setText("");
            txtMember_First_Name.setText("");
            txtMember_Middle_Name.setText("");

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        txtMember_Mobile_Number.setText("");
        txtMember_sur_Name1.setText("");
        txtMother_Name.setText("");
        txtSchool_Admission_Number.setText("");
        lblDate.setText("");
        lblRegisterLibrianName.setText("");
        btnEdit.setEnabled(false);
        btnEdit.setText("Edit");
        btnUpdate.setEnabled(false);
        jButton1.setEnabled(true);
        txtAddress.setEditable(false);
        txtHome_telephone_Number.setEditable(false);
        txtMember_Father_Name.setEditable(false);
        txtMember_First_Name.setEditable(false);
        txtMember_Middle_Name.setEditable(false);
        txtMember_Mobile_Number.setEditable(false);
        txtMember_sur_Name1.setEditable(false);
        txtMother_Name.setEditable(false);
        txtSchool_Admission_Number.setEditable(false);
        txtMemberID.setEditable(true);
        txtMemberID.grabFocus();
    }
} else {
    JOptionPane.showMessageDialog(null, "Members must have First Name,Surname, mobile and home telephone numbers and Member Address");
}

} catch (Exception e) {
    JOptionPane.showMessageDialog(null, "Error @ member Register exception");
}

}

private void btnClearActionPerformed(java.awt.event.ActionEvent evt) {
    btnEdit.setEnabled(false);
    btnUpdate.setEnabled(false);
    jButton1.setEnabled(true);
    btnEdit.setText("Edit");
    txtAddress.setText("");
    txtHome_telephone_Number.setText("");
    txtMemberID.setText("");
    txtMemberID.setEditable(true);
    txtMember_Father_Name.setText("");
    txtMember_First_Name.setText("");
    txtMember_Middle_Name.setText("");
    txtMember_Mobile_Number.setText("");
    txtMember_sur_Name1.setText("");
    txtMother_Name.setText("");
    txtSchool_Admission_Number.setText("");
    lblDate.setText("");
    lblRegisterLibrianName.setText("");
    txtAddress.setEditable(false);
    txtHome_telephone_Number.setEditable(false);
    txtMember_Father_Name.setEditable(false);
    txtMember_First_Name.setEditable(false);
    txtMember_Middle_Name.setEditable(false);
    txtMember_Mobile_Number.setEditable(false);
    txtMember_sur_Name1.setEditable(false);
    txtMother_Name.setEditable(false);
    txtSchool_Admission_Number.setEditable(false);
    txtMemberID.grabFocus();
}

private void txtMember_Mobile_NumberKeyTyped(java.awt.event.KeyEvent evt) {
    if (!Character.isDigit(evt.getKeyChar()) || txtMember_Mobile_Number.getText().length() >= 10) {
        evt.consume();
    }
}

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    }
}

private void txtHome_telephone_NumberKeyTyped(java.awt.event.KeyEvent evt) {
    if (!Character.isDigit(evt.getKeyChar()) || txtHome_telephone_Number.getText().length() >= 10) {
        evt.consume();
    }
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    if (txtMemberID.getText() != "") {

        btnEdit.setEnabled(true);
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from members where MemberID='" +
Integer.parseInt(txtMemberID.getText()) + "'");
            while (rs.next()) {
                txtAddress.setText(rs.getString("MemberAddress"));
                txtHome_telephone_Number.setText(rs.getString("MemberHomeTelephone"));
                txtMember_Father_Name.setText(rs.getString("MemberFatherName"));
                txtMember_First_Name.setText(rs.getString("MemberFirstName"));
                txtMember_Middle_Name.setText(rs.getString("MemberMiddleName"));
                txtMember_Mobile_Number.setText(rs.getString("MemberMobileNumber"));
                txtMember_sur_Name1.setText(rs.getString("MemberSurname"));
                txtMother_Name.setText(rs.getString("MemberMotherName"));
                txtSchool_Admission_Number.setText(rs.getString("SchoolAdmissionNumber"));
                lblRegisterLibrianName.setText(LoadLibrianData.LoadLibrianName(rs.getString("LibrianID")));
                lblDate.setText(rs.getDate("RegisteredDate").toString());
            }
        } catch (SQLException e1) {
            JOptionPane.showMessageDialog(this, "Sql Exception @ MemberDetails 433");
        } catch (NumberFormatException e2) {
            JOptionPane.showMessageDialog(this, "Please enter valid Member ID");
            txtMemberID.grabFocus();
        } catch (Exception e) {
            JOptionPane.showMessageDialog(this, "Exception @ MemberDetails 440 please contact \ndeveloper team ");
            e.printStackTrace();
        }
    } else {
        JOptionPane.showMessageDialog(this, "Please Enter valid Member ID");
        txtMemberID.grabFocus();
    }
}

private void btnEditActionPerformed(java.awt.event.ActionEvent evt) {
    if (btnEdit.getText() == "Edit") {
        btnUpdate.setEnabled(true);

        btnEdit.setText("Cancel Edit");

        jButton1.setEnabled(false);
        txtAddress.setEditable(true);
        txtHome_telephone_Number.setEditable(true);

        txtMemberID.setEditable(false);

        txtMember_Mobile_Number.setEditable(true);
    } else {
        jButton1.setEnabled(true);
        btnUpdate.setEnabled(false);
        btnEdit.setText("Edit");
        txtMemberID.setEditable(true);
    }
}

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txtAddress.setEditable(false);
txtHome_telephone_Number.setEditable(false);
txtMemberID.setEditable(true);
txtMember_Mobile_Number.setEditable(false);
}

```

Settings1.java

```

package se.wsu.lmw.LMS;

import se.wsu.lmw.LMS.view.home.Hp1;
import se.wsu.lmw.LMS.view.home.Home;
import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.load_data.LoadAuthor;
import se.wsu.lmw.Controls.load_data.LoadCategory;
import se.wsu.lmw.Controls.load_data.LoadPublisher;
import se.wsu.lmw.Controls.load_data.LoadRackID;
import se.wsu.lmw.Controls.PanelLoad1;
import java.awt.Color;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.Vector;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JOptionPane;
import javax.swing.SpinnerNumberModel;

/**
 *
 * @author imashi
 */
public class Settings1 extends javax.swing.JPanel {

    String librian_name;
    String librarianId;
    String no;
    String newKappamId;
    Vector v1 = new Vector();
    Vector v2 = new Vector();

    public Settings1() {
        initComponents();
    }
    // method frohandling the settings
    public Settings1(String librian, String lid) {
        initComponents();
        librian_name = librian;
        librarianId = lid;
        jLabel2.setForeground(Color.BLACK);
        jLabel4.setForeground(Color.BLACK);
        jLabel5.setForeground(Color.BLACK);

        jLabel20.setText(LoadCategory.getMaxCategoryID());
        jLabel17.setText(LoadRackID.getMaxRackID());
        jLabel14.setText(LoadAuthor.getMaxAithorID());
        try {

            jLabel25.setText(LoadPublisher.getMaxPublisherID());
        } catch (Exception e) {
            jLabel25.setText("1");
        }

        try {

```

```

ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from main");
while (rs.next()) {
    no = rs.getString("No");
}

Integer c = new Integer(1);
Integer d = new Integer(10);
Integer e = new Integer(1);
int f = Integer.parseInt(no);
Integer g = new Integer(f);
SpinnerNumberModel spm = new SpinnerNumberModel(g, c, d, e);
jSpinner1.setValue(spm.getValue());

} catch (Exception e) {
}
try {

    ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from kappam");
    while (rs.next()) {
        newKappamId = rs.getString("kappamValue");
    }
    Integer c = new Integer(1);
    Integer d = new Integer(1000);
    Integer e = new Integer(1);
    int f = Integer.parseInt(newKappamId);
    Integer g = new Integer(f);
    SpinnerNumberModel spm2 = new SpinnerNumberModel(g, c, d, e);
    jSpinner2.setValue(spm2.getValue());

} catch (Exception e) {
}
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jSpinner1 = new javax.swing.JSpinner();
    jButton1 = new javax.swing.JButton();
    jLabel9 = new javax.swing.JLabel();
    jPanel10 = new javax.swing.JPanel();
    jLabel13 = new javax.swing.JLabel();
    jLabel14 = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jTextField5 = new javax.swing.JTextField();
    jButton4 = new javax.swing.JButton();
    jComboBox2 = new javax.swing.JComboBox();
    jPanel9 = new javax.swing.JPanel();
    jLabel24 = new javax.swing.JLabel();
    jLabel25 = new javax.swing.JLabel();
    jLabel26 = new javax.swing.JLabel();
    jTextField8 = new javax.swing.JTextField();
    jButton7 = new javax.swing.JButton();
    comboPublisher = new javax.swing.JComboBox();
    jPanel7 = new javax.swing.JPanel();
    jLabel19 = new javax.swing.JLabel();
    jLabel20 = new javax.swing.JLabel();
    jLabel21 = new javax.swing.JLabel();
    jTextField7 = new javax.swing.JTextField();
    jButton3 = new javax.swing.JButton();
    jComboBox1 = new javax.swing.JComboBox();
    jPanel6 = new javax.swing.JPanel();
    jLabel16 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();

```

```

jButton2 = new javax.swing.JButton();
jLabel3 = new javax.swing.JLabel();
jPanel2 = new javax.swing.JPanel();
jLabel6 = new javax.swing.JLabel();
jButton5 = new javax.swing.JButton();
jSpinner2 = new javax.swing.JSpinner();
jTaskPaneGroup1 = new com.l2fprod.common.swing.JTaskPaneGroup();
jLabel2 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();

setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Student Book Borrowing Limit"));
jPanel1.setOpaque(false);

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel1.setText("<html>Select Maximum number of books <br>one student can borrow </html>");

jSpinner1.setModel(new javax.swing.SpinnerNumberModel(Integer.valueOf(2), Integer.valueOf(1), null, Integer.valueOf(1)));

jButton1.setText("Save");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 104, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jSpinner1, javax.swing.GroupLayout.PREFERRED_SIZE, 122, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(10, 10, 10))
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jSpinner1, javax.swing.GroupLayout.PREFERRED_SIZE, 28, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(18, 18, 18)
                    .addComponent(jButton1)
                    .addGap(24, 24, 24)))
            .addGap(10, 10, 10))
    );

add(jPanel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(610, 200, 350, 120));

jLabel9.setBackground(new java.awt.Color(102, 102, 255));
jLabel9.setFont(new java.awt.Font("Arial", 1, 18)); // NOI18N
jLabel9.setText("Settings and Information");
add(jLabel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 20, 220, 30));

jPanel10.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Author"));
jPanel10.setOpaque(false);
jPanel10.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

```

```

jLabel13.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel13.setText("Author ID :");
jPanel10.add(jLabel13, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 20, -1, -1));

jLabel14.setText("jLabel14");
jLabel14.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel10.add(jLabel14, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 20, 260, -1));

jLabel15.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel15.setText("Author Name :");
jPanel10.add(jLabel15, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 50, -1, -1));

jTextField5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField5ActionPerformed(evt);
    }
});
jTextField5.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField5KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField5KeyReleased(evt);
    }
});
jPanel10.add(jTextField5, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 50, 240, 20));

jButton4.setText("Add new Author");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});
jPanel10.add(jButton4, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

jComboBox2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jComboBox2ActionPerformed(evt);
    }
});
jPanel10.add(jComboBox2, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 50, 260, 20));

add(jPanel10, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 330, 370, 120));

jPanel9.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Publisher"));
jPanel9.setOpaque(false);
jPanel9.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jLabel24.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel24.setText("Publisher ID :");
jPanel9.add(jLabel24, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 22, -1, -1));

jLabel25.setText("jLabel14");
jLabel25.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel9.add(jLabel25, new org.netbeans.lib.awtextra.AbsoluteConstraints(122, 22, 230, -1));

jLabel26.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel26.setText("Publisher Name :");
jPanel9.add(jLabel26, new org.netbeans.lib.awtextra.AbsoluteConstraints(20, 50, -1, -1));

jTextField8.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField8KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {

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        jTextField8KeyReleased(evt);
    }
});
jPanel9.add(jTextField8, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 210, -1));

jButton7.setText("Add new publisher");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});
jButton7.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton7KeyPressed(evt);
    }
});
jPanel9.add(jButton7, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

comboPublisher.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        comboPublisherActionPerformed(evt);
    }
});
jPanel9.add(comboPublisher, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 230, 20));

add(jPanel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 200, 370, 120));

jPanel7.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Category"));
jPanel7.setOpaque(false);
jPanel7.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jLabel19.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel19.setText("Category ID :");
jPanel7.add(jLabel19, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 22, -1, -1));

jLabel20.setText("jLabel14");
jLabel20.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel7.add(jLabel20, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 20, 230, -1));

jLabel21.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel21.setText("Categoryr Name :");
jPanel7.add(jLabel21, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 50, -1, -1));

jTextField7.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField7KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField7KeyReleased(evt);
    }
});
jPanel7.add(jTextField7, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 210, -1));

jButton3.setText("Add new category");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton3.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton3KeyPressed(evt);
    }
});
jPanel7.add(jButton3, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

```

```

jComboBox1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jComboBox1ActionPerformed(evt);
    }
});
jPanel7.add(jComboBox1, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 230, 20));

add(jPanel7, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 70, 370, 120));

jPanel6.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Rack"));
jPanel6.setOpaque(false);

jLabel16.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel16.setText("New Rack ID :");

jLabel17.setText("jLabel14");
jLabel17.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jButton2.setText("New Rack");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton2KeyPressed(evt);
    }
});

javax.swing.GroupLayout jPanel6Layout = new javax.swing.GroupLayout(jPanel6);
jPanel6.setLayout(jPanel6Layout);
jPanel6Layout.setHorizontalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel16)
                .addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE, 236, Short.MAX_VALUE)
                .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 98, javax.swing.GroupLayout.PREFERRED_SIZE)
            )
            .addGap(18, 18, 18))
        );
jPanel6Layout.setVerticalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGap(18, 18, 18)
            .addComponent(jLabel16)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel17)
            .addGap(18, 18, 18)
            .addComponent(jButton2)
            .addGap(18, 18, 18)
        )
        );

add(jPanel6, new org.netbeans.lib.awtextra.AbsoluteConstraints(610, 70, 350, 120));

jLabel3.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Images/Toolbox-128x128.png"))); // NOI18N
add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(40, 60, -1, -1));

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Late Submit Cost"));
jPanel2.setOpaque(false);

jLabel6.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N

```



```

jLabel6.setText("<html>Submit Cost<br>Submit Cost(Due Amount) </html>");

jButton5.setText("Save");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});

jSpinner2.setModel(new javax.swing.SpinnerNumberModel(Integer.valueOf(2), Integer.valueOf(1), null, Integer.valueOf(1)));

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .add(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .add(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .add(jSpinner2, javax.swing.GroupLayout.PREFERRED_SIZE, 122, javax.swing.GroupLayout.PREFERRED_SIZE)
                    )
                    .add(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 104, javax.swing.GroupLayout.PREFERRED_SIZE)
                )
            )
        )
);
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .add(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .add(jSpinner2, javax.swing.GroupLayout.PREFERRED_SIZE, 35, javax.swing.GroupLayout.PREFERRED_SIZE)
            .add(jButton5)
        )
);

add(jPanel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(610, 330, 350, 120));

jTaskPaneGroup1.setTitle("Other Options");

jLabel2.setText("Go to Home");
jLabel2.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel2MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel2MouseEntered(evt);
    }
    public void mouseExited(java.awt.event.MouseEvent evt) {
        jLabel2MouseExited(evt);
    }
});
jTaskPaneGroup1.getContentPane().add(jLabel2);

jLabel4.setText("User Privileges");
jLabel4.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jLabel4MouseClicked(evt);
    }
    public void mouseEntered(java.awt.event.MouseEvent evt) {
        jLabel4MouseEntered(evt);
    }
})

```

```

        public void mouseExited(java.awt.event.MouseEvent evt) {
            jLabel4MouseExited(evt);
        }
    });
    jTaskPaneGroup1.getContentPane().add(jLabel4);

    jLabel5.setText("About Us");
    jLabel5.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jLabel5MouseClicked(evt);
        }
        public void mouseEntered(java.awt.event.MouseEvent evt) {
            jLabel5MouseEntered(evt);
        }
        public void mouseExited(java.awt.event.MouseEvent evt) {
            jLabel5MouseExited(evt);
        }
    });
    jTaskPaneGroup1.getContentPane().add(jLabel5);

    add(jTaskPaneGroup1, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 210, 190, -1));

    jLabel7.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Images/Settings222.png"))); // NOI18N
    add(jLabel7, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1010, -1));
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try {

        DB.myConnection().createStatement().executeUpdate("update main set No=" + jSpinner1.getValue().toString() + "");
        JOptionPane.showMessageDialog(this, "Data Saved successfully");

    } catch (Exception e) {
        System.out.println("Exception @ Settings 110");
    }
}

```

User_Privileges.java

```

package se.wsu.lmw.LMS;

import se.wsu.lmw.LMS.view.home.Hp1;
import se.wsu.lmw.LMS.view.home.Home;
import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.load_data.LoadAuthor;
import se.wsu.lmw.Controls.load_data.LoadCategory;
import se.wsu.lmw.Controls.load_data.LoadPublisher;
import se.wsu.lmw.Controls.load_data.LoadRackID;
import se.wsu.lmw.Controls.PanelLoad1;
import java.awt.Color;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.Vector;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JOptionPane;
import javax.swing.SpinnerNumberModel;

/**
 *
 * @author imashi
 */
public class Settings1 extends javax.swing.JPanel {

    String librian_name;

```

```

String librarianId;
String no;
String newKappamId;
Vector v1 = new Vector();
Vector v2 = new Vector();

public Settings1() {
    initComponents();
}
// method frohandling the settings
public Settings1(String librian, String lid) {
    initComponents();
    librian_name = librian;
    librarianId = lid;
    jLabel2.setForeground(Color.BLACK);
    jLabel4.setForeground(Color.BLACK);
    jLabel5.setForeground(Color.BLACK);

    jLabel20.setText(LoadCategory.getMaxCategoryID());
    jLabel17.setText(LoadRackID.getMaxRackID());
    jLabel14.setText(LoadAuthor.getMaxAithorID());
    try {

        jLabel25.setText(LoadPublisher.getMaxPublisherID());
    } catch (Exception e) {
        jLabel25.setText("1");
    }

    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from main");
        while (rs.next()) {
            no = rs.getString("No");
        }

        Integer c = new Integer(1);
        Integer d = new Integer(10);
        Integer e = new Integer(1);
        int f = Integer.parseInt(no);
        Integer g = new Integer(f);
        SpinnerNumberModel spm = new SpinnerNumberModel(g, c, d, e);
        jSpinner1.setValue(spm.getValue());

    } catch (Exception e) {
    }
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from kappam");
        while (rs.next()) {
            newKappamId = rs.getString("kappamValue");
        }
        Integer c = new Integer(1);
        Integer d = new Integer(1000);
        Integer e = new Integer(1);
        int f = Integer.parseInt(newKappamId);
        Integer g = new Integer(f);
        SpinnerNumberModel spm2 = new SpinnerNumberModel(g, c, d, e);
        jSpinner2.setValue(spm2.getValue());

    } catch (Exception e) {
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">

```

```

private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jSpinner1 = new javax.swing.JSpinner();
    jButton1 = new javax.swing.JButton();
    jLabel9 = new javax.swing.JLabel();
    jPanel10 = new javax.swing.JPanel();
    jLabel13 = new javax.swing.JLabel();
    jLabel14 = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jTextField5 = new javax.swing.JTextField();
    jButton4 = new javax.swing.JButton();
    jComboBox2 = new javax.swing.JComboBox();
    jPanel9 = new javax.swing.JPanel();
    jLabel24 = new javax.swing.JLabel();
    jLabel25 = new javax.swing.JLabel();
    jLabel26 = new javax.swing.JLabel();
    jTextField8 = new javax.swing.JTextField();
    jButton7 = new javax.swing.JButton();
    comboPublisher = new javax.swing.JComboBox();
    jPanel7 = new javax.swing.JPanel();
    jLabel19 = new javax.swing.JLabel();
    jLabel20 = new javax.swing.JLabel();
    jLabel21 = new javax.swing.JLabel();
    jTextField7 = new javax.swing.JTextField();
    jButton3 = new javax.swing.JButton();
    jComboBox1 = new javax.swing.JComboBox();
    jPanel6 = new javax.swing.JPanel();
    jLabel16 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    jButton2 = new javax.swing.JButton();
    jLabel3 = new javax.swing.JLabel();
    jPanel2 = new javax.swing.JPanel();
    jLabel6 = new javax.swing.JLabel();
    jButton5 = new javax.swing.JButton();
    jSpinner2 = new javax.swing.JSpinner();
    JTaskPaneGroup1 = new com.l2fprod.common.swing.JTaskPaneGroup();
    jLabel2 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();

    setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Student Book Borrowing Limit"));
    jPanel1.setOpaque(false);

    jLabel1.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
    jLabel1.setText("<html>Select Maximum number of books <br>one student can borrow </html>");

    jSpinner1.setModel(new javax.swing.SpinnerNumberModel(Integer.valueOf(2), Integer.valueOf(1), null, Integer.valueOf(1)));

    jButton1.setText("Save");
    jButton1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1)
                    .addComponent(jSpinner1)
                    .addComponent(jButton1)
                )
            )
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jSpinner1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jButton1)
            )
    );
}

```

```

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 104, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING, jPanel1Layout.createSequentialGroup()
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jSpinner1, javax.swing.GroupLayout.PREFERRED_SIZE, 122, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
    jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()
    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
    .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 32,
Short.MAX_VALUE)
    .addComponent(jSpinner1, javax.swing.GroupLayout.DEFAULT_SIZE, 28, Short.MAX_VALUE))
    .addGap(18, 18, 18)
    .addComponent(jButton1)
    .addGap(24, 24, 24))
    );

    add(jPanel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(610, 200, 350, 120));

    jLabel9.setBackground(new java.awt.Color(102, 102, 255));
    jLabel9.setFont(new java.awt.Font("Arial", 1, 18)); // NOI18N
    jLabel9.setText("Settings and Information");
    add(jLabel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 20, 220, 30));

    jPanel10.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Author"));
    jPanel10.setOpaque(false);
    jPanel10.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

    jLabel13.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
    jLabel13.setText("Author ID :");
    jPanel10.add(jLabel13, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 20, -1, -1));

    jLabel14.setText("jLabel14");
    jLabel14.setBorder(javax.swing.BorderFactory.createEtchedBorder());
    jPanel10.add(jLabel14, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 20, 260, -1));

    jLabel15.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
    jLabel15.setText("Author Name :");
    jPanel10.add(jLabel15, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 50, -1, -1));

    jTextField5.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jTextField5ActionPerformed(evt);
        }
    });
    jTextField5.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            jTextField5KeyPressed(evt);
        }
        public void keyReleased(java.awt.event.KeyEvent evt) {
            jTextField5KeyReleased(evt);
        }
    });
    jPanel10.add(jTextField5, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 50, 240, 20));

    jButton4.setText("Add new Author");
    jButton4.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });
    jPanel10.add(jButton4, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

```

```

jComboBox2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jComboBox2ActionPerformed(evt);
    }
});
jPanel10.add(jComboBox2, new org.netbeans.lib.awtextra.AbsoluteConstraints(90, 50, 260, 20));

add(jPanel10, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 330, 370, 120));

jPanel9.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Publisher"));
jPanel9.setOpaque(false);
jPanel9.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jLabel24.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel24.setText("Publisher ID :");
jPanel9.add(jLabel24, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 22, -1, -1));

jLabel25.setText("jLabel14");
jLabel25.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel9.add(jLabel25, new org.netbeans.lib.awtextra.AbsoluteConstraints(122, 22, 230, -1));

jLabel26.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel26.setText("Publisher Name :");
jPanel9.add(jLabel26, new org.netbeans.lib.awtextra.AbsoluteConstraints(20, 50, -1, -1));

jTextField8.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField8KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField8KeyReleased(evt);
    }
});
jPanel9.add(jTextField8, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 210, -1));

jButton7.setText("Add new publisher");
jButton7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton7ActionPerformed(evt);
    }
});
jButton7.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton7KeyPressed(evt);
    }
});
jPanel9.add(jButton7, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

comboPublisher.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        comboPublisherActionPerformed(evt);
    }
});
jPanel9.add(comboPublisher, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 230, 20));

add(jPanel9, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 200, 370, 120));

jPanel7.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Category"));
jPanel7.setOpaque(false);
jPanel7.setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());

jLabel19.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel19.setText("Category ID :");
jPanel7.add(jLabel19, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 22, -1, -1));

```

```

jLabel20.setText("jLabel14");
jLabel20.setBorder(javax.swing.BorderFactory.createEtchedBorder());
jPanel7.add(jLabel20, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 20, 230, -1));

jLabel21.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel21.setText("Categoryr Name :");
jPanel7.add(jLabel21, new org.netbeans.lib.awtextra.AbsoluteConstraints(18, 50, -1, -1));

jTextField7.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField7KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField7KeyReleased(evt);
    }
});
jPanel7.add(jTextField7, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 210, -1));

jButton3.setText("Add new category");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});
jButton3.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton3KeyPressed(evt);
    }
});
jPanel7.add(jButton3, new org.netbeans.lib.awtextra.AbsoluteConstraints(210, 80, 140, -1));

jComboBox1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jComboBox1ActionPerformed(evt);
    }
});
jPanel7.add(jComboBox1, new org.netbeans.lib.awtextra.AbsoluteConstraints(120, 50, 230, 20));

add(jPanel7, new org.netbeans.lib.awtextra.AbsoluteConstraints(230, 70, 370, 120));

jPanel6.setBorder(javax.swing.BorderFactory.createTitledBorder("Add new Rack"));
jPanel6.setOpaque(false);

jLabel16.setFont(new java.awt.Font("Tahoma", 1, 11)); // NOI18N
jLabel16.setText("New Rack ID :");

jLabel17.setText("jLabel14");
jLabel17.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jButton2.setText("New Rack");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton2KeyPressed(evt);
    }
});

javax.swing.GroupLayout jPanel6Layout = new javax.swing.GroupLayout(jPanel6);
jPanel6.setLayout(jPanel6Layout);
jPanel6Layout.setHorizontalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .add(jLabel16)
                .add(jLabel17)
                .add(jButton2)
            )
            .addContainerGap(18, Short.MAX_VALUE))
        .addGroup(jPanel6Layout.createSequentialGroup()
            .add(jComboBox1)
            .addContainerGap(18, Short.MAX_VALUE))
        .addGroup(jPanel6Layout.createSequentialGroup()
            .add(jTextField7)
            .addContainerGap(18, Short.MAX_VALUE))
);

```



```

        .addGap(18, 18, 18)
        .addComponent(jButton5)
        .addContainerGap(21, Short.MAX_VALUE)
    );

    add(jPanel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(610, 330, 350, 120));

    jTaskPaneGroup1.setTitle("Other Options");

    jLabel2.setText("Go to Home");
    jLabel2.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jLabel2MouseClicked(evt);
        }
        public void mouseEntered(java.awt.event.MouseEvent evt) {
            jLabel2MouseEntered(evt);
        }
        public void mouseExited(java.awt.event.MouseEvent evt) {
            jLabel2MouseExited(evt);
        }
    });
    jTaskPaneGroup1.getContentPane().add(jLabel2);

    jLabel4.setText("User Privileges");
    jLabel4.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jLabel4MouseClicked(evt);
        }
        public void mouseEntered(java.awt.event.MouseEvent evt) {
            jLabel4MouseEntered(evt);
        }
        public void mouseExited(java.awt.event.MouseEvent evt) {
            jLabel4MouseExited(evt);
        }
    });
    jTaskPaneGroup1.getContentPane().add(jLabel4);

    jLabel5.setText("About Us");
    jLabel5.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jLabel5MouseClicked(evt);
        }
        public void mouseEntered(java.awt.event.MouseEvent evt) {
            jLabel5MouseEntered(evt);
        }
        public void mouseExited(java.awt.event.MouseEvent evt) {
            jLabel5MouseExited(evt);
        }
    });
    jTaskPaneGroup1.getContentPane().add(jLabel5);

    add(jTaskPaneGroup1, new org.netbeans.lib.awtextra.AbsoluteConstraints(10, 210, 190, -1));

    jLabel7.setIcon(new javax.swing.ImageIcon(getClass().getResource("/Images/Settings222.png"))); // NOI18N
    add(jLabel7, new org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 1010, -1));
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try {

        DB.myConnection().createStatement().executeUpdate("update main set No=" + jSpinner1.getValue().toString() + "");
        JOptionPane.showMessageDialog(this, "Data Saved successfully");

    } catch (Exception e) {
        System.out.println("Exception @ Settings 110");
    }
}

```

```
}
```

Register_New_Book.java

```
package se.wsu.lmw.LMS.view.Register;

import se.wsu.lmw.Database.DB;
import se.wsu.lmw.Controls.Date.Date1;
import se.wsu.lmw.Controls.GenerateBookID;
import se.wsu.lmw.Controls.load_data.LoadAuthor;
import se.wsu.lmw.Controls.load_data.LoadCategory;
import se.wsu.lmw.Controls.load_data.LoadPublisher;
import se.wsu.lmw.Controls.load_data.LoadRackID;
import se.wsu.lmw.Controls.save_AuthorBook;
import java.io.File;
import java.util.Vector;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JOptionPane;
import javax.swing.filechooser.FileNameExtensionFilter;

/**
 *
 * @author imashi
 */
public class Register_New_Book1 extends javax.swing.JPanel {

    String librianName;
    String librarianId;
    Vector v1 = new Vector();
    Vector v2 = new Vector();

    public Register_New_Book1() {
        initComponents();
    }

    public Register_New_Book1(String librian, String lid) {
        initComponents();

        librianName = librian;
        librarianId = lid;

        btnRemove.setEnabled(false);
        jLabel12.setText(Date1.myDate());
        jLabel10.setText(librianName);
        jTextField1.setText(GenerateBookID.getBookID());
        jTextField6.setEditable(false);
        cmbCategory.setModel(new DefaultComboBoxModel(LoadCategory.selectAllCategory()));
        cmbRackID.setModel(new DefaultComboBoxModel(LoadRackID.selectAllRackID()));
        cmbPublisher.setModel(new DefaultComboBoxModel(LoadPublisher.selectAllPublisher()));
        v2 = LoadAuthor.selectAllAuthor();
        jList1.setListData(v2);
        jList1.setSelectedIndex(0);
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jFileChooser1 = new javax.swing.JFileChooser();
        jPopupMenu1 = new javax.swing.JPopupMenu();
        jPanel8 = new javax.swing.JPanel();
        jLabel22 = new javax.swing.JLabel();
        jFrame2 = new javax.swing.JFrame();
        jLabel23 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
    }
}
```

```

jLabel9 = new javax.swing.JLabel();
jPanel5 = new javax.swing.JPanel();
jLabel18 = new javax.swing.JLabel();
jTextField6 = new javax.swing.JTextField();
jButton5 = new javax.swing.JButton();
jButton6 = new javax.swing.JButton();
jPanel1 = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jTextField1 = new javax.swing.JTextField();
jTextField2 = new javax.swing.JTextField();
jTextField3 = new javax.swing.JTextField();
jTextField4 = new javax.swing.JTextField();
jPanel2 = new javax.swing.JPanel();
jScrollPane1 = new javax.swing.JScrollPane();
jList1 = new javax.swing.JList();
jButton1 = new javax.swing.JButton();
btnRemove = new javax.swing.JButton();
jScrollPane3 = new javax.swing.JScrollPane();
jList3 = new javax.swing.JList();
jPanel3 = new javax.swing.JPanel();
jLabel6 = new javax.swing.JLabel();
jLabel7 = new javax.swing.JLabel();
cmbPublisher = new javax.swing.JComboBox();
cmbRackID = new javax.swing.JComboBox();
cmbCategory = new javax.swing.JComboBox();
jPanel4 = new javax.swing.JPanel();
btnSave = new javax.swing.JButton();
btnClear = new javax.swing.JButton();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();

jFileChooser1.setCurrentDirectory(new java.io.File("C:\\Documents and Settings\\test\\My Documents\\LibraryBookImages"));
jFileChooser1.setDragEnabled(true);

jLabel22.setText("jLabel22");

javax.swing.GroupLayout jPanel8Layout = new javax.swing.GroupLayout(jPanel8);
jPanel8.setLayout(jPanel8Layout);
jPanel8Layout.setHorizontalGroup(
    jPanel8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel22, javax.swing.GroupLayout.DEFAULT_SIZE, 234, Short.MAX_VALUE)
);
jPanel8Layout.setVerticalGroup(
    jPanel8Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel22, javax.swing.GroupLayout.DEFAULT_SIZE, 220, Short.MAX_VALUE)
);

jFrame2.setAlwaysOnTop(true);
jFrame2.setResizable(false);
jFrame2.setUndecorated(true);

jLabel23.setText("jLabel23");

javax.swing.GroupLayout jFrame2Layout = new javax.swing.GroupLayout(jFrame2.getContentPane());
jFrame2.getContentPane().setLayout(jFrame2Layout);
jFrame2Layout.setHorizontalGroup(
    jFrame2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel23, javax.swing.GroupLayout.DEFAULT_SIZE, 270, Short.MAX_VALUE)
);
jFrame2Layout.setVerticalGroup(
    jFrame2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel23, javax.swing.GroupLayout.DEFAULT_SIZE, 211, Short.MAX_VALUE)
);

```

```

);

jLabel5.setText("Book Category :");

setOpaque(false);
addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        formMouseClicked(evt);
    }
});

jLabel9.setBackground(new java.awt.Color(255, 255, 204));
jLabel9.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel9.setText("Register New Books ");
jLabel9.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel9.setOpaque(true);

jPanel5.setBorder(javax.swing.BorderFactory.createTitledBorder("Book Image"));

jLabel18.setText("Book Image :");

jTextField6.setText("Select Book Image");

jButton5.setText("Browse");
jButton5.setNextFocusableComponent(btnSave);
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});
jButton5.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton5KeyPressed(evt);
    }
});

jButton6.setText("Remove");
jButton6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton6ActionPerformed(evt);
    }
});
jButton6.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton6KeyPressed(evt);
    }
});

javax.swing.GroupLayout jPanel5Layout = new javax.swing.GroupLayout(jPanel5);
jPanel5.setLayout(jPanel5Layout);
jPanel5Layout.setHorizontalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup()
            .add(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .add(jButton5)
                .add(jButton6))
            .add(jLabel18)
            .add(jTextField6)
            .addContainerGap())
        .addGroup(jPanel5Layout.createSequentialGroup()
            .add(jLabel18)
            .add(jTextField6)
            .addContainerGap())
);
jPanel5Layout.setVerticalGroup(

```

```

jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGroup(jPanel5Layout.createSequentialGroup()
.addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
.addComponent(jLabel18)
.addComponent(jTextField6, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
.addGroup(jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
.addComponent(jButton6)
.addComponent(jButton5))
.addContainerGap())
);

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Enter Book Details"));
jPanel1.setOpaque(false);

jLabel1.setText("Book ID :");

jLabel2.setText("Book Name :");

jLabel3.setText("Total Quantity :");

jLabel4.setText("Available Quantity :");

jTextField1.setEditable(false);
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField1KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField1KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField1KeyTyped(evt);
    }
});

jTextField2.setNextFocusableComponent(jTextField3);
jTextField2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField2KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField2KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField2KeyTyped(evt);
    }
});

jTextField3.setNextFocusableComponent(jTextField4);
jTextField3.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField3KeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField3KeyTyped(evt);
    }
});

jTextField4.setNextFocusableComponent(cmbCategory);
jTextField4.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField4KeyPressed(evt);
    }
}

```

```

        public void keyTyped(java.awt.event.KeyEvent evt) {
            jTextField4KeyTyped(evt);
        }
    });

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(jLabel1)
                        .addComponent(jLabel2))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(46, 46, 46)
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jTextField2, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)
                            .addComponent(jTextField1, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(jLabel3)
                        .addComponent(jLabel4))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(10, 10, 10)
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jTextField4, javax.swing.GroupLayout.DEFAULT_SIZE, 225, Short.MAX_VALUE)
                            .addComponent(jTextField3, javax.swing.GroupLayout.DEFAULT_SIZE, 225, Short.MAX_VALUE))))
                .addContainerGap())
            .addGap(46, 46, 46)
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addComponent(jLabel1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel2)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel3)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jTextField4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap())
    );

    jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Select Book Authors"));
    jPanel2.setOpaque(false);

    jList1.setNextFocusableComponent(jButton1);
    jList1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jList1MouseClicked(evt);
        }
    });
    jScrollPane1.setViewportView(jList1);

    jButton1.setText(">>");

```

```

jButton1.setNextFocusableComponent(jButton5);
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
jButton1.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusGained(java.awt.event.FocusEvent evt) {
        jButton1FocusGained(evt);
    }
});
jButton1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jButton1KeyPressed(evt);
    }
});

btnRemove.setText("<<");
btnRemove.setNextFocusableComponent(jButton1);
btnRemove.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnRemoveActionPerformed(evt);
    }
});
btnRemove.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        btnRemoveKeyPressed(evt);
    }
});

jScrollPane3.setViewportView(jList3);

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 284, Short.MAX_VALUE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(btnRemove, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE, 78, Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT_SIZE, 284, Short.MAX_VALUE)
            .addContainerGap())
);
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 284, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(btnRemove, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE, 78, Short.MAX_VALUE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT_SIZE, 284, Short.MAX_VALUE))
                .addGap(10, 10, 10))
            .addContainerGap())
);

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder("Select Book Details"));
jPanel3.setOpaque(false);

jLabel6.setText("Rack ID :");

```

```

jLabel7.setText("Publisher : ");

cmbPublisher.setNextFocusableComponent(jList1);
cmbPublisher.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        cmbPublisherKeyPressed(evt);
    }
});

cmbRackID.setNextFocusableComponent(cmbPublisher);
cmbRackID.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        cmbRackIDActionPerformed(evt);
    }
});
cmbRackID.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        cmbRackIDKeyPressed(evt);
    }
});

cmbCategory.setNextFocusableComponent(cmbRackID);
cmbCategory.addItemListener(new java.awt.event.ItemListener() {
    public void itemStateChanged(java.awt.event.ItemEvent evt) {
        cmbCategoryItemStateChanged(evt);
    }
});
cmbCategory.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        cmbCategoryKeyPressed(evt);
    }
});

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(29, 29, 29)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(cmbCategory, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(cmbRackID, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(cmbPublisher, 0, 207, Short.MAX_VALUE))
            .addContainerGap(15, true))
);
jPanel3Layout.setVerticalGroup(
    jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel3Layout.createSequentialGroup()
            .addGap(29, 29, 29)
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(cmbCategory, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(cmbRackID, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(cmbPublisher, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(15, true))
);

```



```

);

jPanel4.setOpaque(false);

btnSave.setText("Save");
btnSave.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnSaveActionPerformed(evt);
    }
});
btnSave.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        btnSaveKeyPressed(evt);
    }
});

btnClear.setText("Clear");
btnClear.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnClearActionPerformed(evt);
    }
});
btnClear.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        btnClearKeyPressed(evt);
    }
});

jLabel11.setText("Register Date :");

jLabel12.setText("jLabel12");

jLabel10.setText("jLabel10");

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel4Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(btnSave)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(btnClear)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 200, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addComponent(jLabel11)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel12, javax.swing.GroupLayout.PREFERRED_SIZE, 183, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(295, true))
);
jPanel4Layout.setVerticalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(btnSave, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(btnClear, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 200, javax.swing.GroupLayout.PREFERRED_SIZE)
            )
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel11)
                .addComponent(jLabel12)
            )
            .addContainerGap(18, true))
        .addGroup(jPanel4Layout.createSequentialGroup()
            .addComponent(jLabel11)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel12)
            .addContainerGap(18, true))
);

```

```

        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel10)
            .addComponent(btnClear))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 214, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(btnClear)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jPanel5, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                .addComponent(jPanel4, 0, 684, Short.MAX_VALUE))))
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
            .addContainerGap())
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                        .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
            .addContainerGap())
);
} // </editor-fold>

private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
}

private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        int a = jList1.getSelectedIndex();
        int b = jList1.getLastVisibleIndex();
        int c = jList1.getFirstVisibleIndex();

        btnRemove.setEnabled(true);
        v1.add(jList1.getSelectedValue());
        v2.remove(jList1.getSelectedValue());

        jList3.setListData(v1);
        jList1.setListData(v2);
    }
}

```

```

        if (v2.isEmpty()) {
            jButton1.setEnabled(false);
        } else if (a == c) {
            jList1.setSelectedIndex(c);
        } else if (a > c && a < b) {
            jList1.setSelectedIndex(a);
        } else if (a == b) {
            jList1.setSelectedIndex(b - 1);
        }
        jList3.setSelectedIndex(0);
    } catch (NullPointerException e) {
        System.out.println("Null pointer exception");
    }
}

private void btnRemoveActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
    try {
        int d = jList3.getSelectedIndex();
        int e = jList3.getLastVisibleIndex();
        int f = jList3.getFirstVisibleIndex();

        int i = jList3.getSelectedIndex();

        v2.add(jList3.getSelectedValue().toString());
        v1.remove(jList3.getSelectedValue().toString());

        jList3.setListData(v1);
        jList1.setListData(v2);
        jList1.setSelectedIndex(0);
        if (v1.isEmpty()) {
            btnRemove.setEnabled(false);
        } else if (d == f) {
            jList3.setSelectedIndex(f);
        } else if (d > f && d < e) {
            jList3.setSelectedIndex(d);
        } else if (d == e) {
            jList3.setSelectedIndex(e - 1);
        }
        if (!v2.isEmpty()) {
            jButton1.setEnabled(true);
        }
    } catch (NullPointerException e) {
    }
}

```

Register_New_Librarian.java

```

package se.wsu.Imw.LMS.view.Register;

import se.wsu.Imw.Database.DB;
import se.wsu.Imw.Controls.Date.Date1;
import se.wsu.Imw.Controls.load_data.LoadLibrianData;
import se.wsu.Imw.Controls.VerifyUser;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;
import javax.swing.JOptionPane;

/**
 *
 * @author imashi
 */
public class Register_New_Librarian extends javax.swing.JPanel {

```

```

private String librian;
private String librarianId;
private String gender;
private String marr = "";
private String pass;

/**
 * Creates new form Register_New_Librian
 */
public Register_New_Librian() {
    initComponents();
}

public Register_New_Librian(String librian, String lid) {
    initComponents();
    setLID(lid);
    setLibrian(librian);
    jLabel16.setText(getLibrian());
    jLabel15.setText(getLID());
    jLabel14.setText(Date1.myDate());
    jTextField1.setText(LoadLibrianData.LoadMaxLID());
    jTextField1.setEditable(false);
    jTextField2.grabFocus();
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    GenderbuttonGroup1 = new javax.swing.ButtonGroup();
    buttonGroup1 = new javax.swing.ButtonGroup();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField3 = new javax.swing.JTextField();
    jTextField4 = new javax.swing.JTextField();
    jTextField5 = new javax.swing.JTextField();
    jTextField6 = new javax.swing.JTextField();
    jTextField7 = new javax.swing.JTextField();
    jTextField8 = new javax.swing.JTextField();
    jTextField9 = new javax.swing.JTextField();
    jLabel10 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    jLabel12 = new javax.swing.JLabel();
    jLabel13 = new javax.swing.JLabel();
    jLabel14 = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jLabel16 = new javax.swing.JLabel();
    jLabel17 = new javax.swing.JLabel();
    jTextField10 = new javax.swing.JTextField();
    jLabel18 = new javax.swing.JLabel();
    jPasswordField1 = new javax.swing.JPasswordField();
    jButton3 = new javax.swing.JButton();
    jButton4 = new javax.swing.JButton();
    jCheckBox1 = new javax.swing.JCheckBox();

```

```

setOpaque(false);

jLabel1.setText("Librarian First Name :");

jLabel2.setText("Librarian ID :");

jLabel3.setText("Librarian Middle Name :");

jLabel4.setText("Librarian Surname :");

jLabel5.setText("Librarian Age :");

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Gender"));

GenderbuttonGroup1.add(jRadioButton1);
jRadioButton1.setSelected(true);
jRadioButton1.setText("Male");
jRadioButton1.setNextFocusableComponent(jRadioButton2);
jRadioButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton1ActionPerformed(evt);
    }
});
jRadioButton1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jRadioButton1KeyPressed(evt);
    }
});

GenderbuttonGroup1.add(jRadioButton2);
jRadioButton2.setText("Female");
jRadioButton2.setNextFocusableComponent(jButton1);
jRadioButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton2ActionPerformed(evt);
    }
});
jRadioButton2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jRadioButton2KeyPressed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jRadioButton1, javax.swing.GroupLayout.DEFAULT_SIZE, 92, Short.MAX_VALUE)
                .addComponent(jRadioButton2))
            .addContainerGap(10, Short.MAX_VALUE))
);
jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jRadioButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 20, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jRadioButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 20, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap(10, Short.MAX_VALUE))
);

jLabel6.setText("Home Address :");

```

```

jLabel7.setText("Temporary Address :");

jLabel8.setText("Mobile Phone Number :");

jLabel9.setText("Home Telephone Number :");

jTextField1.setNextFocusableComponent(jTextField2);
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField1KeyTyped(evt);
    }
});

jTextField2.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 0, 51)));
jTextField2.setNextFocusableComponent(jTextField3);
jTextField2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField2ActionPerformed(evt);
    }
});
jTextField2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField2KeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField2KeyTyped(evt);
    }
});

jTextField3.setNextFocusableComponent(jTextField6);
jTextField3.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField3KeyPressed(evt);
    }
});

jTextField4.setNextFocusableComponent(jTextField7);
jTextField4.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField4KeyPressed(evt);
    }
});

jTextField5.setNextFocusableComponent(jTextField4);
jTextField5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField5ActionPerformed(evt);
    }
});
jTextField5.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField5KeyPressed(evt);
    }
});

jTextField6.setNextFocusableComponent(jTextField5);
jTextField6.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField6KeyPressed(evt);
    }
});

jTextField7.setNextFocusableComponent(jTextField9);
jTextField7.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField7KeyPressed(evt);
    }
});

```

```

    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField7KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField7KeyTyped(evt);
    }
    });

jTextField8.setNextFocusableComponent(jTextField10);
jTextField8.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField8KeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField8KeyTyped(evt);
    }
});

jTextField9.setNextFocusableComponent(jTextField8);
jTextField9.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField9KeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField9KeyTyped(evt);
    }
});

jLabel10.setBackground(new java.awt.Color(255, 255, 204));
jLabel10.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel10.setText("Register New Librarian");
jLabel10.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel10.setOpaque(true);

jLabel11.setText("Registering Librarian : ");

jLabel12.setText("Librarian ID :");

jLabel13.setText("Date :");

jLabel14.setText("jLabel14");

jLabel15.setText("jLabel15");

jLabel16.setText("jLabel16");

jLabel17.setText("User Name :");

jTextField10.setNextFocusableComponent(jPasswordField1);
jTextField10.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField10KeyPressed(evt);
    }
});

jLabel18.setText("Password :");

jPasswordField1.setNextFocusableComponent(jRadioButton1);
jPasswordField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jPasswordField1ActionPerformed(evt);
    }
});

jButton1.setText("Save");

```

```

jButton1.setNextFocusableComponent(jButton2);
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
jButton1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jButton1KeyReleased(evt);
    }
});

jButton2.setText("Clear");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jButton2.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jButton2KeyReleased(evt);
    }
});

jCheckBox1.setText("Set as Admin");
jCheckBox1.setNextFocusableComponent(jTextField3);
jCheckBox1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jCheckBox1ActionPerformed(evt);
    }
});
jCheckBox1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jCheckBox1KeyPressed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel9)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel8)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel1)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel3)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel4)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel6)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel7)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 127, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jTextField6, javax.swing.GroupLayout.DEFAULT_SIZE, 451, Short.MAX_VALUE)
            .addComponent(jTextField3, javax.swing.GroupLayout.DEFAULT_SIZE, 451, Short.MAX_VALUE)
            .addComponent(jTextField5, javax.swing.GroupLayout.DEFAULT_SIZE, 451, Short.MAX_VALUE)
            .addComponent(jTextField4, javax.swing.GroupLayout.DEFAULT_SIZE, 451, Short.MAX_VALUE)
            .addComponent(jTextField1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 451, Short.MAX_VALUE)
            .addComponent(jTextField8, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 329, Short.MAX_VALUE)
        )
);

```



```

        .addComponent(jTextField9, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 329,
Short.MAX_VALUE)
        .addComponent(jTextField7, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 329,
Short.MAX_VALUE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jPasswordField1, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 451,
Short.MAX_VALUE)
        .addComponent(jTextField10, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE, 451,
Short.MAX_VALUE)
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup())
        .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE, 332, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jCheckBox1, javax.swing.GroupLayout.DEFAULT_SIZE, 113, Short.MAX_VALUE)))
        .addGap(46, 46, 46))
    .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 214, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGroup(layout.createSequentialGroup())
                .addContainerGap()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup())
                        .addComponent(jButton1)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jButton2))
                    .addGroup(layout.createSequentialGroup())
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                            .addComponent(jLabel17, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addComponent(jLabel11, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel16, javax.swing.GroupLayout.PREFERRED_SIZE, 154, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel12)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel15, javax.swing.GroupLayout.PREFERRED_SIZE, 93, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel13)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel14, javax.swing.GroupLayout.PREFERRED_SIZE, 125, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 85, javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup())
                .addComponent(jLabel10, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(30, 30, 30)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
                    .addComponent(jLabel2)
                    .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel1)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jCheckBox1)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
                    .addComponent(jLabel3)
                    .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

        .addGap(7, 7)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
            .addComponent(jLabel4)
            .addComponent(jTextField6, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
            .addComponent(jLabel6)
            .addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
            .addComponent(jLabel7)
            .addComponent(jTextField4, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addGroup(layout.createSequentialGroup())
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
                    .addComponent(jLabel8)
                    .addComponent(jTextField7, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
                    .addComponent(jLabel9)
                    .addComponent(jTextField9, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE, false)
                    .addComponent(jLabel5)
                    .addComponent(jTextField8, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addComponent(jPanel1, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGap(11, 11, 11)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jTextField10, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel17))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 26, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel11)
                .addComponent(jLabel16))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel12)
                .addComponent(jLabel15))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel13)
                .addComponent(jLabel14)))
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jButton1)
            .addComponent(jButton2))
        .addContainerGap()
    );
} // </editor-fold>

public String getGender() {
    return gender;
}

```

```

public void setGender() {
    if (jRadioButton1.isSelected()) {
        gender = "Male";
    } else {
        gender = "Female";
    }
}

public String getLibrian() {
    return librian;
}

public String getLID() {
    return librarianId;
}

public void setLID(String lid) {
    librarianId = lid;
}

public void setLibrian(String librian) {
    this.librian = librian;
}

private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
}

private void jTextField5ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    pass = new String(jPasswordField1.getPassword());
    if (jTextField2.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty First Name", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField6.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Surname", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField5.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Address", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField4.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Temperary Address", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField7.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Mobile Number", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField7.getText().length() != 10) {
        JOptionPane.showMessageDialog(this, "Mobile Number must have 10 Digits", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField9.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Home telephone Number", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField9.getText().length() != 10) {
        JOptionPane.showMessageDialog(this, "Telephone Number must have 10 Digits", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (jTextField10.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty User Name", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (pass.equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Password", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (VerifyUser.verifyUser(jTextField10.getText(), pass) == true) {
        JOptionPane.showMessageDialog(this, "Please try with different Username and password", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (VerifyUser.verifyUser(jTextField10.getText(), pass) == false) {

        try {
        } catch (Exception e) {
        }

        setGender();
        try {

```

```

String userFirstName = jTextField2.getText();
if (jCheckBox1.isSelected() == true) {
    userFirstName = jTextField2.getText() + "_Admin";
}
DB.myConnection().createStatement().executeUpdate("insert into librian values ('" + jTextField1.getText() + "','" + userFirstName + "','" +
jTextField3.getText() + "','" + jTextField6.getText() + "','" + jTextField5.getText() + "','" + jTextField4.getText() + "','" + jTextField7.getText() + "','" +
+ jTextField9.getText() + "','" + jTextField8.getText() + "','" + getGender() + "','" + marr + "','" + jTextField10.getText() + "','" + jLabel16.getText() +
"',"' + jLabel15.getText() + "','" + jLabel14.getText() + "')");

DB.myConnection().createStatement().executeUpdate("insert into login values ('" + jTextField10.getText() + "','" + pass + "')");

jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField4.setText("");
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jPasswordField1.setText("");
jTextField1.setText(LoadLibrianData.LoadMaxLID());
jTextField2.grabFocus();
pass = "";
} catch (Exception e) {
    System.out.print("exception reg librian 475");
}
}

}

private void jPasswordField1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

int i = 0;
private void jButton1KeyReleased(java.awt.event.KeyEvent evt) {
    if (evt.getKeyChar() == evt.VK_ENTER) {
        i++;
        if (i == 1) {
            jButton1.doClick();
        } else if (i == 2) {
            i = 0;
        }
    }
}

private void jButton2KeyReleased(java.awt.event.KeyEvent evt) {
    if (evt.getKeyChar() == evt.VK_ENTER) {
        i++;
        if (i == 1) {
            jButton2.doClick();
        } else if (i == 2) {
            i = 0;
        }
    }
}
}

```

Register_New_Member1.java

```

public class Register_New_Member1 extends javax.swing.JPanel {

    String librarian;
    String librarianId;

```

```

String date1 = Date1.myDate();

/**
 * Creates new form Register_New_Member
 */
public Register_New_Member1() {
    initComponents();
}

public Register_New_Member1(String librian1, String lid) {

    initComponents();
    librarianId = lid;
    librarian = librian1;

    lblRegisterLibrianName.setText(librian1);
    lblDate.setText(date1);
    txtMemberID.setText(GenerateMemberID.getMemberID());
    txtMemberID.setEditable(false);
    txtMember_First_Name.grabFocus();
    DefaultTableModel dftt1 = (DefaultTableModel) jTable1.getModel();
    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from members ");

        while (rs.next()) {
            Vector v2 = new Vector();
            v2.add(rs.getInt(1));
            v2.add(rs.getString("MemberFirstName"));
            v2.add(rs.getString("MemberMiddleName"));
            v2.add(rs.getString("MemberSurname"));
            dftt1.addRow(v2);
        }

    } catch (ClassNotFoundException e) {
        JOptionPane.showMessageDialog(null, "Error @ MemberRegister class not found exception 65");
    } catch (SQLException e2) {
        JOptionPane.showMessageDialog(null, "Error @ MemberRegister SQL exception 67");
    }
}

@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    txtMember_First_Name = new javax.swing.JTextField();
    txtMember_Middle_Name = new javax.swing.JTextField();
    txtMember_sur_Name1 = new javax.swing.JTextField();
    txtAddress = new javax.swing.JTextField();
    txtMember_Mobile_Number = new javax.swing.JTextField();
    txtMember_Father_Name = new javax.swing.JTextField();
    txtMemberID = new javax.swing.JTextField();
    txtHome_telephone_Number = new javax.swing.JTextField();
    jLabel10 = new javax.swing.JLabel();
    txtSchool_Admission_Number = new javax.swing.JTextField();
    jLabel11 = new javax.swing.JLabel();

```

```

txtMother_Name = new javax.swing.JTextField();
jSeparator1 = new javax.swing.JSeparator();
jLabel12 = new javax.swing.JLabel();
lblRegisterLibrianName = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
lblDate = new javax.swing.JLabel();
jSeparator2 = new javax.swing.JSeparator();
btnSave = new javax.swing.JButton();
btnClear = new javax.swing.JButton();
jPanel1 = new javax.swing.JPanel();
jCheckBox1 = new javax.swing.JCheckBox();
jLabel13 = new javax.swing.JLabel();
jTextField1 = new javax.swing.JTextField();
jLabel15 = new javax.swing.JLabel();
jPasswordField1 = new javax.swing.JPasswordField();
jScrollPane1 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();

setNextFocusableComponent(txtMemberID);
setOpaque(false);

jLabel1.setText("Member ID :");

jLabel2.setText("Member First Name :");

jLabel3.setText("Address :");

jLabel4.setText("Member Middle Name :");

jLabel5.setText("Member Last Name :");

jLabel6.setText("Mobile Number :");

jLabel7.setText("Home Telephone Number :");

jLabel8.setText("Father Name :");

jLabel9.setBackground(new java.awt.Color(255, 255, 204));
jLabel9.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel9.setText("Register New Members ");
jLabel9.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel9.setNextFocusableComponent(txtMemberID);
jLabel9.setOpaque(true);

txtMember_First_Name.setNextFocusableComponent(txtMember_Middle_Name);
txtMember_First_Name.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMember_First_NameKeyPressed(evt);
    }
});

txtMember_Middle_Name.setNextFocusableComponent(txtMember_sur_Name1);
txtMember_Middle_Name.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMember_Middle_NameKeyPressed(evt);
    }
});

txtMember_sur_Name1.setNextFocusableComponent(txtSchool_Admission_Number);
txtMember_sur_Name1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMember_sur_Name1KeyPressed(evt);
    }
});

txtAddress.setNextFocusableComponent(txtMember_Mobile_Number);

```

```

txtAddress.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtAddressKeyPressed(evt);
    }
});

txtMember_Mobile_Number.setNextFocusableComponent(txtHome_telephone_Number);
txtMember_Mobile_Number.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMember_Mobile_NumberKeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        txtMember_Mobile_NumberKeyTyped(evt);
    }
});

txtMember_Father_Name.setNextFocusableComponent(txtMother_Name);
txtMember_Father_Name.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMember_Father_NameKeyPressed(evt);
    }
});

txtMemberID.setNextFocusableComponent(txtSchool_Admission_Number);

txtHome_telephone_Number.setNextFocusableComponent(txtMember_Father_Name);
txtHome_telephone_Number.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtHome_telephone_NumberKeyPressed(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        txtHome_telephone_NumberKeyTyped(evt);
    }
});

jLabel10.setText("School Admission Number :");

txtSchool_Admission_Number.setNextFocusableComponent(txtAddress);
txtSchool_Admission_Number.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtSchool_Admission_NumberKeyPressed(evt);
    }
});

jLabel11.setText("Mother Name :");

txtMother_Name.setNextFocusableComponent(btnSave);
txtMother_Name.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        txtMother_NameKeyPressed(evt);
    }
});

jLabel12.setText("Registered by : ");

jLabel14.setText("Date : ");

btnSave.setText("Save ");
btnSave.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnSaveActionPerformed(evt);
    }
});
btnSave.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        btnSaveKeyPressed(evt);
    }
});

```

```

    }
    });

    btnClear.setText("Clear");
    btnClear.setNextFocusableComponent(txtMember_First_Name);
    btnClear.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            btnClearActionPerformed(evt);
        }
    });
    btnClear.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            btnClearKeyPressed(evt);
        }
    });

    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Guest Login Details"));

    jCheckBox1.setText("Make a guest login");
    jCheckBox1.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            jCheckBox1KeyPressed(evt);
        }
    });

    jLabel13.setText("Username :");

    jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            jTextField1KeyPressed(evt);
        }
    });

    jLabel15.setText("Password :");

    jPasswordField1.addKeyListener(new java.awt.event.KeyAdapter() {
        public void keyPressed(java.awt.event.KeyEvent evt) {
            jPasswordField1KeyPressed(evt);
        }
    });

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel13)
                    .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, 244, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel15)
                    .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, 222, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jCheckBox1))
                .addContainerGap(39, Short.MAX_VALUE))
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jCheckBox1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel13)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel15)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(39, Short.MAX_VALUE))
    );

```



```

        .addComponent(jLabel15)
        .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jPasswordField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

        },
        new String [] {
            "Member ID", "First Name", "Middle Name", "Surname"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false, false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jScrollPane1.setViewportView(jTable1);

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
    this.setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jScrollPane1)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel9, javax.swing.GroupLayout.Alignment.LEADING)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(btnSave)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(btnClear)
                        .addContainerGap())
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel8, javax.swing.GroupLayout.Alignment.LEADING)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel4)
                            .addComponent(jLabel5)
                            .addComponent(jLabel3)
                            .addComponent(jLabel2)
                            .addComponent(jLabel6))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtMember_sur_Name1, javax.swing.GroupLayout.Alignment.LEADING)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtMember_Middle_Name, javax.swing.GroupLayout.Alignment.LEADING)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtMember_Mobile_Number)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(txtMember_First_Name, javax.swing.GroupLayout.Alignment.LEADING)
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                )
            )
    );

```

```

        .addComponent(txtMember_Father_Name, javax.swing.GroupLayout.Alignment.LEADING))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel10)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtSchool_Admission_Number, javax.swing.GroupLayout.DEFAULT_SIZE, 179,
Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel11)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtMother_Name, javax.swing.GroupLayout.DEFAULT_SIZE, 231, Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel7)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtHome_telephone_Number, javax.swing.GroupLayout.DEFAULT_SIZE, 169, Short.MAX_VALUE))))
    .addComponent(txtAddress, javax.swing.GroupLayout.DEFAULT_SIZE, 564, Short.MAX_VALUE))))
    .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
        .addContainerGap()
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jSeparator2, javax.swing.GroupLayout.DEFAULT_SIZE, 680, Short.MAX_VALUE)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel12)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(lblRegisterLibrianName, javax.swing.GroupLayout.PREFERRED_SIZE, 175,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(36, 36, 36)
                .addComponent(jLabel14)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(lblDate, javax.swing.GroupLayout.PREFERRED_SIZE, 270, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 77, Short.MAX_VALUE))))
        .addContainerGap())
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(jLabel1)
                .addComponent(txtMember_First_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(txtMemberID, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel4)
                .addComponent(txtMember_Middle_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jLabel10)
                .addComponent(txtSchool_Admission_Number, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel5)
                .addComponent(txtMember_sur_Name1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel3)
            .addComponent(txtAddress, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel6)
            .addComponent(jLabel7)
            .addComponent(txtMember_Mobile_Number, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(txtHome_telephone_Number, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel8)
            .addComponent(jLabel11)
            .addComponent(txtMother_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(txtMember_Father_Name, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .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)
        .addComponent(jSeparator1, javax.swing.GroupLayout.PREFERRED_SIZE, 10, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel12)
                .addComponent(lblRegisterLibrianName, javax.swing.GroupLayout.PREFERRED_SIZE, 14,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel14)
                .addComponent(lblDate, javax.swing.GroupLayout.PREFERRED_SIZE, 14, javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jSeparator2, javax.swing.GroupLayout.PREFERRED_SIZE, 10, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(btnSave)
            .addComponent(btnClear))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 125, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
} // </editor-fold>

```

```

private void btnSaveActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
try {

    boolean check = txtMember_First_Name.getText().equals("") || txtMember_sur_Name1.getText().equals("") ||
txtMember_Mobile_Number.getText().equals("") || txtHome_telephone_Number.getText().equals("") || txtAddress.getText().equals("");
    System.out.println("X= " + check);
    if (!check) {
        if (txtHome_telephone_Number.getText().length() != 10) {
            JOptionPane.showMessageDialog(null, "Home Telephone number must have 10 digits");
        } else if (txtMember_Mobile_Number.getText().length() != 10) {
            JOptionPane.showMessageDialog(null, "Mobile Telephone number must have 10 digits");
        } else {

            String MemFirst = txtMember_First_Name.getText();
            if (jCheckBox1.isSelected()) {
                String pass = "";
                try {
                    pass = new String(jPasswordField1.getPassword());
                } catch (Exception e) {

```

```

        JOptionPane.showMessageDialog(null, "Please Enter member password");
    }
    if (jTextField1.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty User Name", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (pass.equals("")) {
        JOptionPane.showMessageDialog(this, "Can't save data with \n Empty Password", "info..", JOptionPane.ERROR_MESSAGE);
    } else if (VerifyUser.verifyUser(jTextField1.getText(), pass) == true) {
        JOptionPane.showMessageDialog(this, "Please try with different Username and password", "info..",
JOptionPane.ERROR_MESSAGE);
    } else if (VerifyUser.verifyUser(jTextField1.getText(), pass) == false) {
        DB.myConnection().createStatement().executeUpdate("insert into login values ('" + jTextField1.getText() + "','" + pass + "')");
        MemFirst = MemFirst + "_Guest";
        DB.myConnection().createStatement().executeUpdate("INSERT INTO members values('" + txtMemberID.getText() + "','" +
txtMember_sur_Name1.getText() + "','" + txtMember_Middle_Name.getText() + "','" + MemFirst + "','" + txtAddress.getText() + "','" +
txtMember_Mobile_Number.getText() + "','" + txtHome_telephone_Number.getText() + "','" + txtMother_Name.getText() + "','" +
txtMember_Father_Name.getText() + "','" + lblDate.getText() + "','" + txtSchool_Admission_Number.getText() + "','" + jTextField1.getText() +
 "','" + librarianId + "')");

        Vector memberRow = new Vector();
        memberRow.add(txtMemberID.getText());
        memberRow.add(txtMember_First_Name.getText());
        memberRow.add(txtMember_Middle_Name.getText());
        memberRow.add(txtMember_sur_Name1.getText());
        DefaultTableModel dftt1 = (DefaultTableModel) jTable1.getModel();
        dftt1.addRow(memberRow);

        txtAddress.setText("");
        txtHome_telephone_Number.setText("");
        txtMemberID.setText(GenerateMemberID.getMemberID());
        txtMember_Father_Name.setText("");
        txtMember_First_Name.setText("");
        txtMember_Middle_Name.setText("");
        txtMember_Mobile_Number.setText("");
        txtMember_sur_Name1.setText("");
        txtMother_Name.setText("");
        txtSchool_Admission_Number.setText("");
        jTextField1.setText("");
        jPasswordField1.setText("");
        txtMember_First_Name.requestFocus();
    }
} else {
    String d = "not a guest";
    DB.myConnection().createStatement().executeUpdate("INSERT INTO members values('" + txtMemberID.getText() + "','" +
txtMember_sur_Name1.getText() + "','" + txtMember_Middle_Name.getText() + "','" + MemFirst + "','" + txtAddress.getText() + "','" +
txtMember_Mobile_Number.getText() + "','" + txtHome_telephone_Number.getText() + "','" + txtMother_Name.getText() + "','" +
txtMember_Father_Name.getText() + "','" + lblDate.getText() + "','" + txtSchool_Admission_Number.getText() + "','" + d + "','" + librarianId +
 "')");

    Vector memberRow = new Vector();
    memberRow.add(txtMemberID.getText());
    memberRow.add(txtMember_First_Name.getText());
    memberRow.add(txtMember_Middle_Name.getText());
    memberRow.add(txtMember_sur_Name1.getText());
    DefaultTableModel dftt1 = (DefaultTableModel) jTable1.getModel();
    dftt1.addRow(memberRow);

    txtAddress.setText("");
    txtHome_telephone_Number.setText("");
    txtMemberID.setText(GenerateMemberID.getMemberID());
    txtMember_Father_Name.setText("");
    txtMember_First_Name.setText("");
    txtMember_Middle_Name.setText("");
    txtMember_Mobile_Number.setText("");
    txtMember_sur_Name1.setText("");
    txtMother_Name.setText("");
    txtSchool_Admission_Number.setText("");

```

```

        jTextField1.setText("");
        jPasswordField1.setText("");
        txtMember_First_Name.grabFocus();
    }

}
} else {
    JOptionPane.showMessageDialog(null, "Members must have First Name,Surname, mobile and home telephone numbers and Member Address");
}

} catch (Exception e) {
    JOptionPane.showMessageDialog(null, "Error @ member Register exception");
}

}

```

Home.Java

```

/*
 * Home.java
 *
 */
package se.wsu.lmw.LMS.view.home;

import se.wsu.lmw.Controls.PanelLoad1;
import java.awt.AWTException;
import java.awt.Frame;
import java.awt.Image;
import java.awt.SystemTray;
import java.awt.Toolkit;
import java.awt.TrayIcon;

/**
 *
 * @author Imashi
 */
public class Home extends javax.swing.JFrame {

    String Lib_Name;
    String LID;

    /**
     * Creates new form Home
     */
    public Home() {
        initComponents();
    }

    //constructor overload
    public Home(String librian, String LibID) {

        //setting frame location and image.
        initComponents();
        int x = (int) ((Toolkit.getDefaultToolkit().getScreenSize().getWidth() - getWidth()) / 2);
        int y = (int) ((Toolkit.getDefaultToolkit().getScreenSize().getHeight() - getHeight()) / 2);
        setLocation(x, y);

        Lib_Name = librian;
        LID = LibID;
        Hp1 hp = new Hp1(Lib_Name, LID);
        PanelLoad1.LoadPanel(hp, Home.jPanel2);
        TrayIcon trayIcon;
    }
}

```

```

SystemTray traу = SystemTray.getSystemTray();

Image image = Toolkit.getDefaultToolkit().getImage("LMSpng.png");

trayIcon = new TrayIcon(image, "Easy Way 1.1 LMS ");
trayIcon.setImageAutoSize(true);

try {
    traу.add(trayIcon);

} catch (AWTException ex) {

}

trayIcon.sendMessage("Easy Way LMS 1.1 ", "Welcome To Easy Way Library Management System 1.1 \n Easy Way LMS 1.1 just Active
the Features You need Making your Experience quicker and cleaner", TrayIcon.MessageType.INFO);

}

/**
 * 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() {

    jPanel2 = new javax.swing.JPanel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setTitle("EasyWay 1.1 Library Management System");
    setResizable(false);

    jPanel2.setOpaque(false);

    javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
    jPanel2.setLayout(jPanel2Layout);
    jPanel2Layout.setHorizontalGroup(
        jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(0, 1000, Short.MAX_VALUE)
            )
    );
    jPanel2Layout.setVerticalGroup(
        jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(0, 700, Short.MAX_VALUE)
            )
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .add(layout.createSequentialGroup()
                            .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                            .addContainerGap())
                        .add(layout.createSequentialGroup()
                            .add(layout.createSequentialGroup()
                                .add(layout.createSequentialGroup()
                                    .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                                )
                            )
                        )
                    )
                )
            )
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .add(layout.createSequentialGroup()
                    .add(layout.createSequentialGroup()
                        .add(layout.createSequentialGroup()
                            .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        )
                    )
                )
            )
    );

    pack();
} // </editor-fold>

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {

```

```

        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new Home().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    public static javax.swing.JPanel jPanel2;
    // End of variables declaration

}

```

HomePanel.java

```

public class HomePanel extends javax.swing.JPanel {

    String lid;
    String librian;

    Register_New_Member1 rnm;
    Register_New_Book1 rnb;
    Register_New_Librian rnl;
    Search_BookNameID1 sbnid;
    Search_By_AuthorNameID1 sba;
    laasuABook1 issue;
    Search_By_Publisher1 sbp;
    BookReturn1 br;
    Librian_Details1 sel;
    Member_Details1 md;
    //Settings settings;

    /**
     * Creates new form HomePanel
     */
    public HomePanel() {
        initComponents();
    }
    //constructor overload

    public HomePanel(String librianName, String LID) {
        librian = librianName;
        lid = LID;
        initComponents();
        if (librian.contains("_Guest")) {
            jLabel6.setText("Guest Name :");
        }

        lblLibrian_on_Duty.setText(librian);
        lblLibrian_ID.setText(LID);
        //-----date-----
        jLabel10.setText(Date1.myDate());
        //-----

        jLabel1.setForeground(Color.BLACK);
        jLabel2.setForeground(Color.BLACK);
        jLabel3.setForeground(Color.BLACK);
        jLabel4.setForeground(Color.BLACK);
        jLabel12.setForeground(Color.BLACK);
        jLabel13.setForeground(Color.BLACK);
        jLabel14.setForeground(Color.BLACK);
        jLabel5.setForeground(Color.BLACK);
        jLabel7.setForeground(Color.BLACK);
        jLabel15.setForeground(Color.BLACK);
        jLabel18.setForeground(Color.BLACK);
        jLabel19.setForeground(Color.BLACK);
    }
}

```

```

jLabel14.setVisible(false);
jTaskPaneGroup6_Profile.setVisible(false);
jTaskPaneGroup3.setVisible(false);
if (lblLibrian_on_Duty.getText().contains("Admin")) {

    jLabel14.setVisible(true);
    jTaskPaneGroup6_Profile.setVisible(true);
} else if (lblLibrian_on_Duty.getText().contains("Guest")) {
    jTaskPaneGroup2.setVisible(false);
    jTaskPaneGroup3.setVisible(false);
    jTaskPaneGroup4.setVisible(false);

    jTaskPaneGroup6_Profile.setVisible(false);
}
new Thread(new Runnable() {

    public void run() {
        while (true) {
            Date d = new Date();

            String date = d.toString();
            String arr1[] = date.split(" ");
            jLabel20.setText(arr1[3]);
            try {
                Thread.sleep(1000);
                System.gc();
            } catch (InterruptedException ex) {
                System.out.println("Home time thread err");
            }

        }
    }
}).start();
jLabel21.setVisible(false);
jLabel25.setVisible(false);
jLabel26.setVisible(false);
jLabel27.setVisible(false);
jLabel28.setVisible(false);
}

```

Hp1.java

```

public class Hp1 extends javax.swing.JPanel {

    String Lib_Name;
    String LID;

    /**
     * Creates new form Hp1
     */
    public Hp1() {
        initComponents();
    }

    public Hp1(String librian, String LibID) {
        initComponents();
        Lib_Name = librian;
        LID = LibID;
        jLabel12.setText(Lib_Name);
        jLabel13.setText(LID);
        jLabel2.setVisible(false);
        jLabel4.setVisible(false);
        jLabel7.setVisible(false);
        jLabel8.setVisible(false);
        jLabel10.setVisible(false);
    }
}

```



```
//-----date-----  
jLabel18.setText(Date1.myDate());  
//-----  
  
}
```

SearchBookNameId.java

```

public class Search_BookNameID1 extends javax.swing.JPanel {

    int rowSelected;
    String coosenBookID;
    private java.awt.Image im;

    /**
     * Creates new form Search_BookNameID
     */
    public Search_BookNameID1() throws SQLException {
        try {
            initComponents();
            lblBookName.setText(" ");
            jLabel3.setText(" ");
            jLabel6.setText(" ");
            jLabel8.setText(" ");
            jLabel10.setText(" ");
            jLabel12.setText(" ");
            jLabel14.setText(" ");
            jLabel16.setText(" ");
            jTable3.setRowHeight(20);
            jTable2.setRowHeight(20);
            jButton2.setEnabled(false);
            ResultSet rs,rs2;
            String s1,s2;

            rs = new Load_combo().getCat();
            rs2=new Load_combo().gettrackno();
            /*add items to combobox*/
            while (rs.next()) {
                s1 = rs.getString(1);
                jComboBox1.addItem(s1);
            }
            while (rs2.next()) {
                s2 = rs2.getString(1);
                jComboBox2.addItem(s2);
            }

        } catch (ClassNotFoundException ex) {
            Logger.getLogger(Search_BookNameID1.class.getName()).log(Level.SEVERE, null, ex);
        }

    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        buttonGroup1 = new javax.swing.ButtonGroup();
        jScrollPane2 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jButton1 = new javax.swing.JButton();
        jButton2 = new javax.swing.JButton();
        jTextField1 = new javax.swing.JTextField();
        lblBookName = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jList1 = new javax.swing.JList();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
    }

```

```

jLabel7 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
jLabel13 = new javax.swing.JLabel();
jLabel14 = new javax.swing.JLabel();
jScrollPane3 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
jPanel1 = new javax.swing.JPanel();
jLabel17 = new javax.swing.JLabel();
jScrollPane4 = new javax.swing.JScrollPane();
jTable3 = new javax.swing.JTable();
jLabel15 = new javax.swing.JLabel();
jLabel16 = new javax.swing.JLabel();
jLabel18 = new javax.swing.JLabel();
jButton1 = new javax.swing.JButton();
jComboBox1 = new javax.swing.JComboBox();
jComboBox2 = new javax.swing.JComboBox();
jButton2 = new javax.swing.JButton();

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane2.setViewportView(jTable1);

setOpaque(false);

buttonGroup1.add(jRadioButton1);
jRadioButton1.setText("Search Book by Book Name");
jRadioButton1.setOpaque(false);
jRadioButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton1ActionPerformed(evt);
    }
});

buttonGroup1.add(jRadioButton2);
jRadioButton2.setSelected(true);
jRadioButton2.setText("Search Book by Book ID");
jRadioButton2.setOpaque(false);
jRadioButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton2ActionPerformed(evt);
    }
});

jTextField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1ActionPerformed(evt);
    }
});
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField1KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {

```

```

        jTextField1KeyReleased(evt);
    }
    public void keyTyped(java.awt.event.KeyEvent evt) {
        jTextField1KeyTyped(evt);
    }
    });

lblBookName.setText("jLabel2");
lblBookName.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel2.setText("Book ID : ");

jLabel3.setText("jLabel3");
jLabel3.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel4.setText("Book Author :");

jScrollPane1.setViewportViewView(jList1);

jLabel5.setText("Total number of books registered :");

jLabel6.setText("jLabel6");
jLabel6.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel7.setText("Currently available quantity :");

jLabel8.setText("jLabel8");
jLabel8.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel9.setText(" Registered Librarian Name :");

jLabel10.setText("jLabel10");
jLabel10.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel11.setText("Book Category :");

jLabel12.setText("jLabel12");
jLabel12.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel13.setText("Book Publisher :");

jLabel14.setText("jLabel14");
jLabel14.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Book Name", "Member ID", "Member Name", "Issued Date", "Return Date"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jScrollPane3.setViewportViewView(jTable2);

jPanel1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

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

```

```

jPanel1Layout.setHorizontalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGroup(jPanel1Layout.createSequentialGroup()
.addContainerGap()
.addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE, 87, Short.MAX_VALUE)
.addContainerGap())
);
jPanel1Layout.setVerticalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
.addGroup(jPanel1Layout.createSequentialGroup()
.addContainerGap()
.addComponent(jLabel17, javax.swing.GroupLayout.DEFAULT_SIZE, 96, Short.MAX_VALUE)
.addContainerGap())
);

jTable3.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
        new String [] {
            "Book ID", "Book Name"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
jTable3.setColumnSelectionAllowed(true);
jTable3.getTableHeader().setReorderingAllowed(false);
jTable3.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable3MouseClicked(evt);
    }
});
jTable3.addPropertyChangeListener(new java.beans.PropertyChangeListener() {
    public void propertyChange(java.beans.PropertyChangeEvent evt) {
        jTable3PropertyChange(evt);
    }
});
jScrollPane4.setViewportView(jTable3);
jTable3.getColumnModel().getSelectionModel().setSelectionMode(javax.swing.ListSelectionModel.SINGLE_SELECTION);
if (jTable3.getColumnModel().getColumnCount() > 0) {
    jTable3.getColumnModel().getColumn(0).setResizable(false);
    jTable3.getColumnModel().getColumn(0).setPreferredWidth(150);
    jTable3.getColumnModel().getColumn(1).setResizable(false);
    jTable3.getColumnModel().getColumn(1).setPreferredWidth(500);
}

jLabel15.setText("Book Rack ID :");

jLabel16.setText("jLabel14");
jLabel16.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel18.setBackground(new java.awt.Color(255, 255, 204));
jLabel18.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel18.setText("Search a Book with Book Name or Book ID");
jLabel18.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel18.setOpaque(true);

jButton1.setText("Search");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```

[illegible]

```

        .addGap(18, 18, 18)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 88,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(14, 14, 14)))
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup())
        .addComponent(jLabel5)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addComponent(jLabel11)
        .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel15)
            .addComponent(jLabel7)
            .addComponent(jLabel9)
            .addComponent(jLabel13))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 32, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
            .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE, 212, Short.MAX_VALUE)
            .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
                .addComponent(jLabel12, javax.swing.GroupLayout.PREFERRED_SIZE, 95,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addComponent(jComboBox1, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()
                .addComponent(jLabel16, javax.swing.GroupLayout.PREFERRED_SIZE, 94,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 91,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jComboBox2, 0, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))))
        .addGap(0, 0, Short.MAX_VALUE))))
        .addGap(19, 19, 19))
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jScrollPane4, javax.swing.GroupLayout.PREFERRED_SIZE, 459, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addContainerGap(18, Short.MAX_VALUE))
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jRadioButton1)
                        .addComponent(jRadioButton2))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jButton1))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addComponent(lblBookName)
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

```

```

        .addComponent(jLabel2)
        .addComponent(jLabel3))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 46, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel4)))
    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel5)
        .addComponent(jLabel6))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel7)
        .addComponent(jLabel8))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel9)
        .addComponent(jLabel10))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel11)
        .addComponent(jLabel12)
        .addComponent(jComboBox1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel13)
        .addComponent(jLabel14))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel15)
        .addComponent(jLabel16, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addComponent(jComboBox2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    .addComponent(jButton2)
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 125, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addGap(5, 5, 5)))
);
} // </editor-fold>

public java.awt.Image getIm() {
    return im;
}

public void setIm(java.awt.Image im) {
    this.im = im;
}

private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

}

private void jTextField1KeyPressed(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

}

private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

```



```

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
jRadioButton2.setSelected(false);
jRadioButton1.setSelected(true);
DefaultTableModel dft = (DefaultTableModel) jTable3.getModel();
dft.setRowCount(0);
DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
dft2.setRowCount(0);
jTextField1.setText("");
lblBookName.setText(" ");
jLabel3.setText(" ");
jLabel6.setText(" ");
jLabel8.setText(" ");
jLabel10.setText(" ");
jLabel12.setText(" ");
jLabel14.setText(" ");
jLabel16.setText(" ");
jLabel17.setIcon(null);
Vector v = new Vector();
jList1.setListData(v);
jTextField1.grabFocus();
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
jRadioButton1.setSelected(false);
jRadioButton2.setSelected(true);
DefaultTableModel dft = (DefaultTableModel) jTable3.getModel();
dft.setRowCount(0);
DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
dft2.setRowCount(0);
jTextField1.setText("");
lblBookName.setText(" ");
jLabel3.setText(" ");
jLabel6.setText(" ");
jLabel8.setText(" ");
jLabel10.setText(" ");
jLabel12.setText(" ");
jLabel14.setText(" ");
jLabel16.setText(" ");
jLabel17.setIcon(null);
Vector v = new Vector();
jList1.setListData(v);
jTextField1.grabFocus();
}

private void jTable3MouseClicked(java.awt.event.MouseEvent evt) {
// TODO add your handling code here:
if(!jLabel3.getText().equals(""))
{
jButton2.setEnabled(true);
}
if (jTable3.getRowCount() > 0) {
rowSelected = jTable3.getSelectedRow();
coosenBookID = (String) jTable3.getValueAt(rowSelected, 0);
System.out.println("row = " + rowSelected);

try {

ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from book where BookID = " + coosenBookID + " ");
while (rs.next()) {

lblBookName.setText(rs.getString("BookName"));

```

```

jLabel3.setText(rs.getString("BookID"));
jLabel6.setText(rs.getString("TotalQuantity"));
jLabel8.setText(rs.getString("AvailableQuantity"));
String librianID = rs.getString("LibrianID");
String categoryID = rs.getString("CategoryID");
String rackID = rs.getString("RackID");
jLabel16.setText(rackID);
String publisherID = rs.getString("PublisherID");

ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from librian where LibrianID = '" + librianID + "'");
while (rs2.next()) {
    jLabel10.setText(rs2.getString("LibrianName"));
}

ResultSet rs3 = DB.myConnection().createStatement().executeQuery("select * from category where CategoryID = '" + categoryID + "'");
while (rs3.next()) {
    jLabel12.setText(rs3.getString("CategoryName"));
}

ResultSet rs4 = DB.myConnection().createStatement().executeQuery("select * from publisher where PublisherID = '" + publisherID + "'");
while (rs4.next()) {
    jLabel14.setText(rs4.getString("PublisherName"));
}

Vector v2 = new Vector();

ResultSet rs5 = DB.myConnection().createStatement().executeQuery("select * from author_book where BookID='" + coosenBookID + "'");
while (rs5.next()) {
    String aulD = rs5.getString("AuthorID");

    ResultSet rs6 = DB.myConnection().createStatement().executeQuery("select * from author where AuthorID = '" + aulD + "'");
    while (rs6.next()) {
        v2.add(rs6.getString("AuthorName"));
    }
}
jList1.setListData(v2);

DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
dft2.setRowCount(0);
Vector v3 = new Vector();

ResultSet rs7 = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks where BookID = '" + coosenBookID + "'");
while (rs7.next()) {
    String MID = rs7.getString("MemberID");

    v3.add(jTable3.getValueAt(rowSelected, 1));
    v3.add(MID);
    ResultSet rs8 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID = '" + MID + "'");
    while (rs8.next()) {
        String first = rs8.getString("MemberFirstName");
        String second = rs8.getString("MemberMiddleName");
        String sur = rs8.getString("MemberSurname");
        String full = first + second + sur;
        v3.add(full);
    }
    v3.add(rs7.getString("BorrowedDate"));
    v3.add(rs7.getString("ReturningDate"));
    dft2.addRow(v3);
}

String aa = "/src/error.gif";
String imagepath = rs.getString("Image");

```



```

jScrollPane2 = new javax.swing.JScrollPane();
jTable1 = new javax.swing.JTable();
jLabel18 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
lblBookName = new javax.swing.JLabel();
jLabel16 = new javax.swing.JLabel();
jLabel15 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jScrollPane1 = new javax.swing.JScrollPane();
jList1 = new javax.swing.JList();
jScrollPane3 = new javax.swing.JScrollPane();
jTable2 = new javax.swing.JTable();
jLabel14 = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
jLabel6aaa = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jLabel8aaa = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
jLabel17 = new javax.swing.JLabel();
jPanel5 = new javax.swing.JPanel();
jLabel23 = new javax.swing.JLabel();

setOpaque(false);

jLabel1.setText("Author Name / ID :");

jTextField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1ActionPerformed(evt);
    }
});
jTextField1.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyPressed(java.awt.event.KeyEvent evt) {
        jTextField1KeyPressed(evt);
    }
    public void keyReleased(java.awt.event.KeyEvent evt) {
        jTextField1KeyReleased(evt);
    }
});
jLayeredPane1.add(jTextField1);
jTextField1.setBounds(0, 10, 170, 20);

jComboBox1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jComboBox1ActionPerformed(evt);
    }
});
jComboBox1.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusGained(java.awt.event.FocusEvent evt) {
        jComboBox1FocusGained(evt);
    }
});
jLayeredPane2.add(jComboBox1);
jComboBox1.setBounds(0, 0, 170, 20);

jLayeredPane1.add(jLayeredPane2);
jLayeredPane2.setBounds(0, 10, 170, 20);

buttonGroup1.add(jRadioButton1);
jRadioButton1.setSelected(true);
jRadioButton1.setText("Search by Author Name");

```

```

jRadioButton1.setOpaque(false);
jRadioButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton1ActionPerformed(evt);
    }
});
jLayeredPane1.add(jRadioButton1);
jRadioButton1.setBounds(180, 10, 160, 20);

buttonGroup1.add(jRadioButton2);
jRadioButton2.setText("Search by Author ID");
jRadioButton2.setOpaque(false);
jRadioButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jRadioButton2ActionPerformed(evt);
    }
});
jLayeredPane1.add(jRadioButton2);
jRadioButton2.setBounds(350, 10, 130, 20);

jButton2.setText("Search");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
jLayeredPane1.add(jButton2);
jButton2.setBounds(490, 0, 90, 23);

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Book ID", "Book name"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane2.setViewportView(jTable1);
if (jTable1.getColumnModel().getColumnCount() > 0) {
    jTable1.getColumnModel().getColumn(0).setResizable(false);
    jTable1.getColumnModel().getColumn(0).setPreferredWidth(150);
    jTable1.getColumnModel().getColumn(1).setResizable(false);
    jTable1.getColumnModel().getColumn(1).setPreferredWidth(500);
}

jLabel18.setBackground(new java.awt.Color(255, 255, 204));
jLabel18.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
jLabel18.setText("Search a Book with Author Name or Autor ID");
jLabel18.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
jLabel18.setOpaque(true);

jLabel2.setText("Book ID : ");

```

```

jLabel3.setText("jLabel3");
jLabel3.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel4.setText("Book Name :");

lblBookName.setText("jLabel2");
lblBookName.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel16.setText("jLabel14");
jLabel16.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel15.setText("Book Rack ID :");

jLabel5.setText("Book Author :");

jScrollPane1.setViewportViewView(jList1);

jTable2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

        },
    new String [] {
        "Book Name", "Member ID", "Member Name", "Issued Date", "Due Date"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, false, false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jScrollPane3.setViewportViewView(jTable2);

jLabel14.setText("jLabel14");
jLabel14.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel9.setText("Book Registered Librian Name :");

jLabel10.setText("jLabel10");
jLabel10.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel11.setText("Book Category :");

jLabel12.setText("jLabel12");
jLabel12.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel6aaa.setText("Total number of books registered :");

jLabel6.setText("jLabel6");
jLabel6.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel8aaa.setText("Currently available quantity :");

jLabel8.setText("jLabel8");
jLabel8.setBorder(javax.swing.BorderFactory.createEtchedBorder());

jLabel17.setText("Book Publisher :");

jPanel5.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

javax.swing.GroupLayout jPanel5Layout = new javax.swing.GroupLayout(jPanel5);
jPanel5.setLayout(jPanel5Layout);
jPanel5Layout.setHorizontalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

.addGroup(jPanel5Layout.createSequentialGroup())
    .addContainerGap()
    .addComponent(jLabel23, javax.swing.GroupLayout.DEFAULT_SIZE, 113, Short.MAX_VALUE)
    .addContainerGap()
);
jPanel5Layout.setVerticalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel5Layout.createSequentialGroup())
    .addContainerGap()
    .addComponent(jLabel23, javax.swing.GroupLayout.DEFAULT_SIZE, 112, Short.MAX_VALUE)
    .addContainerGap()
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup())
    .addContainerGap()
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 119, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jLayeredPane1))
    .addGroup(layout.createSequentialGroup())
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 423, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(layout.createSequentialGroup())
        .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 307, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jLabel11)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup())
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel15)
                .addComponent(jLabel6aaa)
                .addComponent(jLabel8aaa)
                .addComponent(jLabel9)
                .addComponent(jLabel17))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT_SIZE, 216, Short.MAX_VALUE)
            .addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)
            .addComponent(jLabel12, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)
            .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)
            .addComponent(jLabel16, javax.swing.GroupLayout.DEFAULT_SIZE, 224, Short.MAX_VALUE)))
    .addGroup(layout.createSequentialGroup())
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 53, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel5, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent(jLabel4))
    .addGap(9, 9, 9)
    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jScrollPane1, 0, 0, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(lblBookName, javax.swing.GroupLayout.DEFAULT_SIZE, 176, Short.MAX_VALUE)))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
    .addComponent(jPanel5, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    .addComponent(jScrollPane3, javax.swing.GroupLayout.DEFAULT_SIZE, 396, Short.MAX_VALUE))))
.addGap(0, 0, Short.MAX_VALUE))

```

```

        .addContainerGap()
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)
                .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jLayeredPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 31, Short.MAX_VALUE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel4)
                                .addComponent(lblBookName))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel2)
                                .addComponent(jLabel3))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 88, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel5)))
                        .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel6aaa)
                                .addComponent(jLabel6))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel8aaa)
                                .addComponent(jLabel8))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel9)
                                .addComponent(jLabel10))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel11)
                                .addComponent(jLabel12))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel17)
                                .addComponent(jLabel14))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                .addComponent(jLabel15)
                                .addComponent(jLabel16, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                                .addComponent(jScrollPane3, javax.swing.GroupLayout.PREFERRED_SIZE, 116, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE))
                        .addContainerGap()
                    );
                }
            }
        }
    }
}
// </editor-fold>

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    if (jTable1.getRowCount() > 0) {
        rowSelected = jTable1.getSelectedRow();
    }
}

```



```

coosenBookID = (String) jTable1.getValueAt(rowSelected, 0);
System.out.println("row = " + rowSelected);
;
try {

    ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from book where BookID = '" + coosenBookID + "' ");
    while (rs.next()) {

        lblBookName.setText(rs.getString("BookName"));
        jLabel3.setText(rs.getString("BookID"));
        jLabel6.setText(rs.getString("TotalQuantity"));
        jLabel8.setText(rs.getString("AvailableQuantity"));
        String librianID = rs.getString("LibrianID");
        String categoryID = rs.getString("CategoryID");
        String rackID = rs.getString("RackID");
        jLabel16.setText(rackID);
        String publisherID = rs.getString("PublisherID");

        ResultSet rs2 = DB.myConnection().createStatement().executeQuery("select * from librian where LibrianID = '" + librianID + "' ");
        while (rs2.next()) {
            jLabel10.setText(rs2.getString("LibrianName"));
        }

        ResultSet rs3 = DB.myConnection().createStatement().executeQuery("select * from category where CategoryID = '" + categoryID + "' ");
        while (rs3.next()) {
            jLabel12.setText(rs3.getString("CategoryName"));
        }

        ResultSet rs4 = DB.myConnection().createStatement().executeQuery("select * from publisher where PublisherID = '" + publisherID + "' ");
        while (rs4.next()) {
            jLabel14.setText(rs4.getString("PublisherName"));
        }

        Vector v2 = new Vector();

        ResultSet rs5 = DB.myConnection().createStatement().executeQuery("select * from author_book where BookID='" + coosenBookID + "' ");
        while (rs5.next()) {
            String auID = rs5.getString("AuthorID");

            ResultSet rs6 = DB.myConnection().createStatement().executeQuery("select * from author where AuthorID = '" + auID + "' ");
            while (rs6.next()) {
                v2.add(rs6.getString("AuthorName"));
            }
        }
        jList1.setListData(v2);

        DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
        dft2.setRowCount(0);

        ResultSet rs7 = DB.myConnection().createStatement().executeQuery("select * from borrowedbooks where BookID = '" + coosenBookID + "' ");
        while (rs7.next()) {
            Vector v3 = new Vector();
            String MID = rs7.getString("MemberID");

            v3.add(jTable1.getValueAt(rowSelected, 1));
            v3.add(MID);
            ResultSet rs8 = DB.myConnection().createStatement().executeQuery("select * from members where MemberID = '" + MID + "' ");
            while (rs8.next()) {
                String first = rs8.getString("MemberFirstName");
                String second = rs8.getString("MemberMiddleName");
                String sur = rs8.getString("MemberSurname");
            }
        }
    }
}

```

```

        String full = first + second + sur;
        v3.add(full);
    }
    v3.add(rs7.getString("BurrowedDate"));
    v3.add(rs7.getString("ReturningDate"));
    dft2.addRow(v3);
}

String imageLocation = "/src/error.gif";
String imagepath = rs.getString("Image");
if (imagepath.equals("Select Book Image")) {
    jLabel23.setIcon(new ImageIcon(imageLocation));
    jLabel23.setText(" No Image");

} else {
    jLabel23.setText("");
    File fis = new File(imagepath);
    setIm(ImageIO.read(fis));
    jLabel23.setIcon(new ImageIcon(getIm().getScaledInstance(jLabel23.getWidth(), jLabel23.getHeight(),
java.awt.Image.SCALE_SMOOTH)));
}
}

} catch (Exception e) {

}
}
System.gc();
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    jButton1.setSelected(false);
    jButton2.setSelected(true);
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    dft.setRowCount(0);
    DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
    dft2.setRowCount(0);
    jTextField1.setText("");
    lblBookName.setText(" ");
    jLabel3.setText(" ");
    jLabel6.setText(" ");
    jLabel8.setText(" ");
    jLabel10.setText(" ");
    jLabel12.setText(" ");
    jLabel14.setText(" ");
    jLabel16.setText(" ");
    jLabel23.setIcon(null);
    Vector v = new Vector();
    jList1.setListData(v);
    jTextField1.grabFocus();
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    jButton2.setSelected(false);
    jButton1.setSelected(true);
    DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
    dft.setRowCount(0);
    DefaultTableModel dft2 = (DefaultTableModel) jTable2.getModel();
    dft2.setRowCount(0);
    jTextField1.setText("");
    lblBookName.setText(" ");
    jLabel3.setText(" ");
    jLabel6.setText(" ");
    jLabel8.setText(" ");
    jLabel10.setText(" ");

```

```

jLabel12.setText(" ");
jLabel14.setText(" ");
jLabel16.setText(" ");
jLabel23.setIcon(null);
Vector v = new Vector();
jList1.setListData(v);
jTextField1.grabFocus();
}

private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {
    // TODO add your handling code here:

    if (jRadioButton1.isSelected()) {
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from author where AuthorName like '" +
jTextField1.getText() + "%' order by AuthorName ASC");
            Vector v = new Vector();
            while (rs.next()) {
                v.add(rs.getString("AuthorName"));
            }
            jComboBox1.setModel(new DefaultComboBoxModel(v));
        } catch (Exception e) {
        }
    } else if (jRadioButton2.isSelected()) {
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from author where AuthorID like '" + jTextField1.getText()
+ "%' order by AuthorID ASC");
            Vector v = new Vector();
            while (rs.next()) {
                v.add(rs.getString("AuthorID"));
            }
            jComboBox1.setModel(new DefaultComboBoxModel(v));
        } catch (Exception e) {
        }
    }
    jComboBox1.showPopup();
}

```

SearchByPublisher.java

```

public class Search_By_Publisher1 extends javax.swing.JPanel {

    public Search_By_Publisher1() {
        initComponents();
        DefaultTableModel dft = (DefaultTableModel) jTable1.getModel();
        jTable1.setRowHeight(25);
        jTable5.setRowHeight(25);
        try {

            ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from publisher");
            while (rs.next()) {
                Vector v = new Vector();
                v.add(rs.getString("PublisherID"));
                v.add(rs.getString("PublisherName"));
                dft.addRow(v);
            }
        } catch (Exception e) {
        }
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">

```

```

private void initComponents() {

    jLabel18 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    jPanel5 = new javax.swing.JPanel();
    jScrollPane5 = new javax.swing.JScrollPane();
    jTable5 = new javax.swing.JTable();
    jButton1 = new javax.swing.JButton();

    setOpaque(false);

    jLabel18.setBackground(new java.awt.Color(255, 255, 204));
    jLabel18.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
    jLabel18.setText("Search a Book with Publishe Name or Publisher ID");
    jLabel18.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(255, 102, 0)));
    jLabel18.setOpaque(true);

    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
    jPanel1.setOpaque(false);

    jTable1.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

            },
        new String [] {
            "Publisher ID", "Publisher Name"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, false
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
        public void mouseClicked(java.awt.event.MouseEvent evt) {
            jTable1MouseClicked(evt);
        }
    });
    jScrollPane1.setViewportView(jTable1);
    if (jTable1.getColumnModel().getColumnCount() > 0) {
        jTable1.getColumnModel().getColumn(0).setPreferredWidth(200);
        jTable1.getColumnModel().getColumn(1).setPreferredWidth(500);
    }

    javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(10, 10, 10)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 319, Short.MAX_VALUE)
                .addGap(10, 10, 10)
            )
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(10, 10, 10)
                .addComponent(jTable1, javax.swing.GroupLayout.DEFAULT_SIZE, 500, Short.MAX_VALUE)
                .addGap(10, 10, 10)
            )
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(10, 10, 10)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 319, Short.MAX_VALUE)
                .addGap(10, 10, 10)
            )
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(10, 10, 10)
                .addComponent(jTable1, javax.swing.GroupLayout.DEFAULT_SIZE, 500, Short.MAX_VALUE)
                .addGap(10, 10, 10)
            )
    );
}

```

```

jPanel5.setBorder(javax.swing.BorderFactory.createTitledBorder(""));
jPanel5.setOpaque(false);

jTable5.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "Book ID", "Book Name"
    }
){
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
jScrollPane5.setViewportView(jTable5);
if (jTable5.getColumnModel().getColumnCount() > 0) {
    jTable5.getColumnModel().getColumn(0).setPreferredWidth(200);
    jTable5.getColumnModel().getColumn(1).setPreferredWidth(500);
}

javax.swing.GroupLayout jPanel5Layout = new javax.swing.GroupLayout(jPanel5);
jPanel5.setLayout(jPanel5Layout);
jPanel5Layout.setHorizontalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jScrollPane5, javax.swing.GroupLayout.DEFAULT_SIZE, 375, Short.MAX_VALUE)
            .addContainerGap())
);
jPanel5Layout.setVerticalGroup(
    jPanel5Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel5Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jScrollPane5, javax.swing.GroupLayout.DEFAULT_SIZE, 395, Short.MAX_VALUE)
            .addContainerGap())
);

jButton1.setText("Print Book List");
jButton1.setEnabled(false);
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 469, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(10, 10, 10)
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(10, 10, 10)
                    .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 150, javax.swing.GroupLayout.PREFERRED_SIZE)
                )
                .addGroup(layout.createSequentialGroup()
                    .addComponent(jLabel19, javax.swing.GroupLayout.PREFERRED_SIZE, 469, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(10, 10, 10)
                    .addComponent(jPanel5, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                )
            )
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
);

```

```

        .addComponent(jButton1))))
        .addContainerGap()
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel18, javax.swing.GroupLayout.PREFERRED_SIZE, 32, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jPanel5, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            )
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jButton1)
            .addContainerGap()
        );
} // </editor-fold>

private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
    DefaultTableModel dft1 = (DefaultTableModel) jTable1.getModel();
    DefaultTableModel dft2 = (DefaultTableModel) jTable5.getModel();
    dft2.setRowCount(0);
    int row;
    int col;

    row = jTable1.getSelectedRow();

    try {

        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from book where Book.PublisherID=" +
dft1.getValueAt(row, 0) + " ");
        while (rs.next()) {
            Vector v = new Vector();
            v.add(rs.getString("BookID"));
            v.add(rs.getString("BookName"));
            dft2.addRow(v);
        }
    } catch (Exception e) {
    }
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    DefaultTableModel dft2 = (DefaultTableModel) jTable5.getModel();
    try {

        DB.myConnection().createStatement().executeUpdate("delete from printpublisherbooklist ");
        for (int i = 0; i < dft2.getRowCount(); i++) {
            DB.myConnection().createStatement().executeUpdate("insert into printpublisherbooklist values(" + dft2.getValueAt(i, 0).toString() +
", " + dft2.getValueAt(i, 1).toString() + ")");
        }
        ResultSet rs = DB.myConnection().createStatement().executeQuery("select * from printpublisherbooklist");
        int check = 1;
        while (rs.next()) {
            check = 2;
            break;
        }
        if (check == 2) {
            //Reports.AllbookReport("C:/lib rep/PrintPublisherBookList.jrxml");
        } else {
            JOptionPane.showMessageDialog(null, "The Book List is Empty, Nothing to Print");
        }

    } catch (Exception e) {
        System.out.println("Exception @ Search_by_publisher line 239");
    }
}

```

```
}  
// Variables declaration - do not modify  
private javax.swing.JButton jButton1;  
private javax.swing.JLabel jLabel18;  
private javax.swing.JPanel jPanel1;  
private javax.swing.JPanel jPanel5;  
private javax.swing.JScrollPane jScrollPane1;  
private javax.swing.JScrollPane jScrollPane5;  
private javax.swing.JTable jTable1;  
private javax.swing.JTable jTable5;  
// End of variables declaration  
}
```