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| **Ex. No. 1b** | **DESIGNING AN ENTERPRISE DESKTOP APPLICATION – RAILWAY RESERVATION** | | |
| Date of Exercise |  | Date of Output Verification |  |

**Aim**

To develop and deploy the Enterprise Desktop Application for Railway Reservation using J2EE programming.

**Description**

Java Swing Tutorial Explaining the JFrame class. The components added to the frame are referred to as its contents; these are managed by the contentPane. To add a component to a JFrame, we must use its contentPane instead.JFrame is a Window with border, title and buttons. When JFrame is set visible, an event dispatching thread is started. JFrame objects store several objects including a Container object known as the content pane. To add a component to a JFrame, add it to the content pane.

JFrame Features

* It’s a window with title, border, (optional) menu bar and user-specified components.
* It can be moved, resized, iconified.
* It is not a subclass of JComponent.
* Delegates responsibility of managing user-specified components to a content pane, an instance of JPanel.

**Procedure**

* Open NetBeans IDE
* Create a new simple java project
* Go to design phase of the class which is next to the code
* Make use of the palette in the NetBeans ide, and drag and drop the required elements from the palette
* To rename the textbox or button press space upon selecting that element and the renaming
* Resize the size of the text boxes etc.
* Modify the font of the required labels etc.
* To change the name of the variable, that we have the button or desktop, right click on the element and go to change variable name and then give the required name
* Design the required jframe and link to each other by setting the visibility false ad setting the new frame visibility true
* Do the required code in the new jframe and design them appropriately

**Program**

Failed\_login.java

public class Failed\_login extends javax.swing.JFrame {

public Failed\_login() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

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

jLabel1.setText("Login Failed! Incorrect Username or Password...");

jButton1.setText("Create a New Account");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

jButton2.setText("Try Sign in Again");

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(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jLabel1)

.addGap(78, 78, 78))

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

.addGap(33, 33, 33)

.addComponent(jButton1)

.addGap(55, 55, 55)

.addComponent(jButton2)

.addGap(0, 58, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(63, 63, 63)

.addComponent(jLabel1)

.addGap(99, 99, 99)

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

.addComponent(jButton1)

.addComponent(jButton2))

.addContainerGap(101, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

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

this.setVisible(false);

new Signup().setVisible(true);

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new Login().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException ex) {

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

} catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

}

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

public void run() {

new Failed\_login().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JLabel jLabel1;

// End of variables declaration

}

Login.java

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

public class Login extends javax.swing.JFrame {

Connection con;

public Login() {

try {

initComponents();

Class.forName("org.apache.derby.jdbc.ClientDriver");

con = DriverManager.getConnection("jdbc:derby://localhost:1527/J2EE-Lab-Experiments", "ws", "6477");

} catch (ClassNotFoundException | SQLException ex) {

System.out.println(ex);

}

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

uname = new javax.swing.JTextField();

password = new javax.swing.JPasswordField();

login = new javax.swing.JButton();

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

jLabel1.setText("Username");

jLabel2.setText("Password");

uname.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

unameActionPerformed(evt);

}

});

login.setText("Login");

login.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

loginActionPerformed(evt);

}

});

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

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

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

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

.addGap(73, 73, 73)

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

.addComponent(jLabel1)

.addComponent(jLabel2))

.addGap(39, 39, 39)

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

.addComponent(uname, javax.swing.GroupLayout.DEFAULT\_SIZE, 111, Short.MAX\_VALUE)

.addComponent(password))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 20, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(login)))

.addGap(109, 109, 109))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(83, 83, 83)

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

.addComponent(jLabel1)

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

.addGap(24, 24, 24)

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

.addComponent(jLabel2)

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

.addGap(44, 44, 44)

.addComponent(login)

.addContainerGap(86, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

private void unameActionPerformed(java.awt.event.ActionEvent evt) {

}

private void loginActionPerformed(java.awt.event.ActionEvent evt) {

try {

String query = "select username from ws.Registered\_Users where username='" + uname.getText() + "' and password='" + password.getText().hashCode() + "'";

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(query);

if (rs.next() == true) {

this.setVisible(false);

new Sucessful\_login().setVisible(true);

} else {

System.out.println("failed");

this.setVisible(false);

new Failed\_login().setVisible(true);

}

} catch (Exception ex) {

System.out.println(ex);

}

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

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

@Override

public void run() {

new Login().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JButton login;

private javax.swing.JPasswordField password;

private javax.swing.JTextField uname;

// End of variables declaration

}

Signup.java

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.Statement;

public class Signup extends javax.swing.JFrame {

Connection con;

public Signup() {

try {

initComponents();

Class.forName("org.apache.derby.jdbc.ClientDriver");

con = DriverManager.getConnection("jdbc:derby://localhost:1527/J2EE-Lab-Experiments", "ws", "6477");

} catch (Exception ex) {

System.out.println(ex);

}

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jButton1 = new javax.swing.JButton();

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jLabel4 = new javax.swing.JLabel();

fullname = new javax.swing.JTextField();

email = new javax.swing.JTextField();

dob = new javax.swing.JTextField();

password = new javax.swing.JTextField();

jLabel6 = new javax.swing.JLabel();

jButton2 = new javax.swing.JButton();

jLabel5 = new javax.swing.JLabel();

username = new javax.swing.JTextField();

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

jButton1.setText("Signup");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

jLabel1.setText("Full Name");

jLabel2.setText("Email");

jLabel3.setText("Date of Birth");

jLabel4.setText("Password");

jLabel6.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jLabel6.setText("Signup");

jButton2.setText("Login");

jButton2.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton2ActionPerformed(evt);

}

});

jLabel5.setText("Username");

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()

.addGap(51, 51, 51)

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

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel1)

.addGap(99, 99, 99)

.addComponent(fullname, javax.swing.GroupLayout.PREFERRED\_SIZE, 139, javax.swing.GroupLayout.PREFERRED\_SIZE))

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

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

.addGap(13, 13, 13)

.addComponent(jButton2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton1)

.addGap(33, 33, 33))

.addGroup(layout.createSequentialGroup()

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

.addComponent(jLabel3)

.addComponent(jLabel4)

.addComponent(jLabel2)

.addComponent(jLabel5))

.addGap(84, 84, 84)

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

.addComponent(username, javax.swing.GroupLayout.DEFAULT\_SIZE, 139, Short.MAX\_VALUE)

.addComponent(dob)

.addComponent(password)

.addComponent(email))))))

.addGroup(layout.createSequentialGroup()

.addGap(165, 165, 165)

.addComponent(jLabel6)))

.addContainerGap(65, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

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

.addGap(19, 19, 19)

.addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 11, Short.MAX\_VALUE)

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

.addComponent(jLabel1)

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

.addGap(12, 12, 12)

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

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

.addComponent(jLabel5))

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

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

.addComponent(jLabel2)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel3)

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

.addGap(18, 18, 18)

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

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

.addComponent(jLabel4))

.addGap(34, 34, 34)

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

.addComponent(jButton1)

.addComponent(jButton2))

.addGap(37, 37, 37))

);

pack();

}// </editor-fold>

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

try {

// TODO add your handling code here: Class.forName("org.apache.derby.jdbc.ClientDriver");

if (fullname.getText().length() > 1 && password.getText().length() > 1) {

String query = "insert into ws.Registered\_users values('" + fullname.getText() + "', '" + username.getText() + "', '" + email.getText() + "', '" + dob.getText() + "', '" + password.getText().hashCode() + "')";

Statement st = con.createStatement();

int a = st.executeUpdate(query);

System.out.println(a);

if (a == 1) {

this.setVisible(false);

new Sucessfull\_signup().setVisible(true);

} else {

System.out.println("signup\_error");

}

}

} catch (Exception ex) {

System.out.println(ex);

}

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new Login().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new Signup().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JTextField dob;

private javax.swing.JTextField email;

private javax.swing.JTextField fullname;

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel5;

private javax.swing.JLabel jLabel6;

private javax.swing.JTextField password;

private javax.swing.JTextField username;

// End of variables declaration

}

Sucessful\_login.java

public class Sucessful\_login extends javax.swing.JFrame {

public Sucessful\_login() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jTabbedPane1 = new javax.swing.JTabbedPane();

jPanel3 = new javax.swing.JPanel();

jLabel9 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jLabel11 = new javax.swing.JLabel();

jRadioButton5 = new javax.swing.JRadioButton();

jLabel12 = new javax.swing.JLabel();

jPanel2 = new javax.swing.JPanel();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

jRadioButton4 = new javax.swing.JRadioButton();

jLabel8 = new javax.swing.JLabel();

jPanel1 = new javax.swing.JPanel();

jLabel4 = new javax.swing.JLabel();

jLabel15 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jRadioButton3 = new javax.swing.JRadioButton();

jLabel16 = new javax.swing.JLabel();

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

jLabel1.setText("Login Sucessful");

jLabel2.setText("Welcome");

jButton1.setText("Logout");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

jButton2.setText("Book Ticket");

jButton2.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton2ActionPerformed(evt);

}

});

jLabel9.setText("12hrs");

jLabel10.setText("CBE");

jLabel11.setText("06:00");

jRadioButton5.setText("Kearla");

jLabel12.setText("Chennai");

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);

jPanel3.setLayout(jPanel3Layout);

jPanel3Layout.setHorizontalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addComponent(jRadioButton5)

.addGap(18, 18, 18)

.addComponent(jLabel12)

.addGap(18, 18, 18)

.addComponent(jLabel10)

.addGap(28, 28, 28)

.addComponent(jLabel11)

.addGap(18, 18, 18)

.addComponent(jLabel9)

.addContainerGap())

);

jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton5)

.addComponent(jLabel12)

.addComponent(jLabel10)

.addComponent(jLabel11)

.addComponent(jLabel9))

.addContainerGap())

);

jTabbedPane1.addTab("Train 2", jPanel3);

jLabel5.setText("12hrs");

jLabel6.setText("CBE");

jLabel7.setText("06:00");

jRadioButton4.setText("Bokaro");

jLabel8.setText("Chennai");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);

jPanel2.setLayout(jPanel2Layout);

jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addComponent(jRadioButton4)

.addGap(18, 18, 18)

.addComponent(jLabel8)

.addGap(18, 18, 18)

.addComponent(jLabel6)

.addGap(28, 28, 28)

.addComponent(jLabel7)

.addGap(18, 18, 18)

.addComponent(jLabel5)

.addContainerGap())

);

jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton4)

.addComponent(jLabel8)

.addComponent(jLabel6)

.addComponent(jLabel7)

.addComponent(jLabel5))

.addContainerGap())

);

jTabbedPane1.addTab("Train 3", jPanel2);

jLabel4.setText("12hrs");

jLabel15.setText("CBE");

jLabel3.setText("06:00");

jRadioButton3.setText("Chennai Express");

jLabel16.setText("Chennai");

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(jRadioButton3)

.addGap(18, 18, 18)

.addComponent(jLabel16)

.addGap(18, 18, 18)

.addComponent(jLabel15)

.addGap(28, 28, 28)

.addComponent(jLabel3)

.addGap(18, 18, 18)

.addComponent(jLabel4)

.addContainerGap())

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton3)

.addComponent(jLabel16)

.addComponent(jLabel15)

.addComponent(jLabel3)

.addComponent(jLabel4))

.addContainerGap())

);

jTabbedPane1.addTab("Train 1", jPanel1);

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton2)

.addGap(60, 60, 60))

.addGroup(layout.createSequentialGroup()

.addGap(42, 42, 42)

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

.addGroup(layout.createSequentialGroup()

.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(37, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel1)

.addGap(66, 66, 66)

.addComponent(jLabel2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton1)

.addGap(20, 20, 20))))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(20, 20, 20)

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

.addComponent(jLabel1)

.addComponent(jLabel2)

.addComponent(jButton1))

.addGap(65, 65, 65)

.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(42, 42, 42)

.addComponent(jButton2)

.addContainerGap(62, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

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

this.setVisible(false);

new index().setVisible(true);

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new booking\_successful().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new Sucessful\_login().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

private javax.swing.JLabel jLabel11;

private javax.swing.JLabel jLabel12;

private javax.swing.JLabel jLabel15;

private javax.swing.JLabel jLabel16;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel5;

private javax.swing.JLabel jLabel6;

private javax.swing.JLabel jLabel7;

private javax.swing.JLabel jLabel8;

private javax.swing.JLabel jLabel9;

private javax.swing.JPanel jPanel1;

private javax.swing.JPanel jPanel2;

private javax.swing.JPanel jPanel3;

private javax.swing.JRadioButton jRadioButton3;

private javax.swing.JRadioButton jRadioButton4;

private javax.swing.JRadioButton jRadioButton5;

private javax.swing.JTabbedPane jTabbedPane1;

// End of variables declaration

}

Sucessful\_signup.java

public class Sucessfull\_signup extends javax.swing.JFrame {

public Sucessfull\_signup() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

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

jLabel1.setText("Signup Sucessfull");

jButton1.setText("Login");

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(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(148, 148, 148)

.addComponent(jLabel1)

.addContainerGap(170, Short.MAX\_VALUE))

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton1)

.addGap(92, 92, 92))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(62, 62, 62)

.addComponent(jLabel1)

.addGap(84, 84, 84)

.addComponent(jButton1)

.addContainerGap(117, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

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

this.setVisible(false);

new Login().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new Sucessfull\_signup().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

// End of variables declaration

}

Booking\_sucessful.java

public class booking\_successful extends javax.swing.JFrame {

public booking\_successful() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

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

jLabel1.setText("Booking Successfull");

jButton1.setText("Back");

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(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(148, 148, 148)

.addComponent(jLabel1)

.addContainerGap(160, Short.MAX\_VALUE))

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton1)

.addGap(45, 45, 45))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(42, 42, 42)

.addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 120, Short.MAX\_VALUE)

.addComponent(jButton1)

.addGap(101, 101, 101))

);

pack();

}// </editor-fold>

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

this.setVisible(false);

new Sucessful\_login().setVisible(true);// TODO add your handling code here:

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new booking\_successful().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

// End of variables declaration

}

Index.java

public class index extends javax.swing.JFrame {

public index() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

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

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

jLabel1.setText("Railway Reservation");

jButton1.setText("Signup");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

jButton2.setText("Login");

jButton2.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton2ActionPerformed(evt);

}

});

jButton3.setText("Check Running Trains");

jButton3.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton3ActionPerformed(evt);

}

});

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

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

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

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton2)

.addGap(18, 18, 18)

.addComponent(jButton1)

.addContainerGap())

.addGroup(layout.createSequentialGroup()

.addGap(80, 80, 80)

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

.addComponent(jButton3)

.addComponent(jLabel1))

.addContainerGap(84, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(30, 30, 30)

.addComponent(jLabel1)

.addGap(33, 33, 33)

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

.addComponent(jButton1)

.addComponent(jButton2))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 97, Short.MAX\_VALUE)

.addComponent(jButton3)

.addGap(80, 80, 80))

);

pack();

}// </editor-fold>

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new Login().setVisible(true);

}

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

this.setVisible(false);

new Signup().setVisible(true);

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new running\_trains().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new index().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JButton jButton3;

private javax.swing.JLabel jLabel1;

// End of variables declaration

}

Running\_trains.java

public class running\_trains extends javax.swing.JFrame {

public running\_trains() {

initComponents();

}

@SuppressWarnings("unchecked")

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

private void initComponents() {

jTabbedPane1 = new javax.swing.JTabbedPane();

jPanel1 = new javax.swing.JPanel();

jLabel4 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jRadioButton3 = new javax.swing.JRadioButton();

jLabel1 = new javax.swing.JLabel();

jPanel3 = new javax.swing.JPanel();

jLabel9 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jLabel11 = new javax.swing.JLabel();

jRadioButton5 = new javax.swing.JRadioButton();

jLabel12 = new javax.swing.JLabel();

jPanel2 = new javax.swing.JPanel();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

jRadioButton4 = new javax.swing.JRadioButton();

jLabel8 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

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

jLabel4.setText("12hrs");

jLabel2.setText("CBE");

jLabel3.setText("06:00");

jRadioButton3.setText("Chennai Express");

jLabel1.setText("Chennai");

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(jRadioButton3)

.addGap(18, 18, 18)

.addComponent(jLabel1)

.addGap(18, 18, 18)

.addComponent(jLabel2)

.addGap(28, 28, 28)

.addComponent(jLabel3)

.addGap(18, 18, 18)

.addComponent(jLabel4)

.addContainerGap())

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton3)

.addComponent(jLabel1)

.addComponent(jLabel2)

.addComponent(jLabel3)

.addComponent(jLabel4))

.addContainerGap())

);

jTabbedPane1.addTab("Train 1", jPanel1);

jLabel9.setText("12hrs");

jLabel10.setText("CBE");

jLabel11.setText("06:00");

jRadioButton5.setText("Kearla");

jLabel12.setText("Chennai");

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);

jPanel3.setLayout(jPanel3Layout);

jPanel3Layout.setHorizontalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addComponent(jRadioButton5)

.addGap(18, 18, 18)

.addComponent(jLabel12)

.addGap(18, 18, 18)

.addComponent(jLabel10)

.addGap(28, 28, 28)

.addComponent(jLabel11)

.addGap(18, 18, 18)

.addComponent(jLabel9)

.addContainerGap())

);

jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton5)

.addComponent(jLabel12)

.addComponent(jLabel10)

.addComponent(jLabel11)

.addComponent(jLabel9))

.addContainerGap())

);

jTabbedPane1.addTab("Train 2", jPanel3);

jLabel5.setText("12hrs");

jLabel6.setText("CBE");

jLabel7.setText("06:00");

jRadioButton4.setText("Bokaro");

jLabel8.setText("Chennai");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);

jPanel2.setLayout(jPanel2Layout);

jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addComponent(jRadioButton4)

.addGap(18, 18, 18)

.addComponent(jLabel8)

.addGap(18, 18, 18)

.addComponent(jLabel6)

.addGap(28, 28, 28)

.addComponent(jLabel7)

.addGap(18, 18, 18)

.addComponent(jLabel5)

.addContainerGap())

);

jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jRadioButton4)

.addComponent(jLabel8)

.addComponent(jLabel6)

.addComponent(jLabel7)

.addComponent(jLabel5))

.addContainerGap())

);

jTabbedPane1.addTab("Train 3", jPanel2);

jButton1.setText("Login");

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(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

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

.addGroup(layout.createSequentialGroup()

.addContainerGap(43, Short.MAX\_VALUE)

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

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

.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(36, 36, 36))

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

.addComponent(jButton1)

.addGap(60, 60, 60))))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(85, 85, 85)

.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(54, 54, 54)

.addComponent(jButton1)

.addContainerGap(73, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

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

this.setVisible(false);

new Login().setVisible(true);

}

public static void main(String args[]) {

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException | InstantiationException | IllegalAccessException | javax.swing.UnsupportedLookAndFeelException ex) {

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

}

java.awt.EventQueue.invokeLater(() -> {

new running\_trains().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

private javax.swing.JLabel jLabel11;

private javax.swing.JLabel jLabel12;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel5;

private javax.swing.JLabel jLabel6;

private javax.swing.JLabel jLabel7;

private javax.swing.JLabel jLabel8;

private javax.swing.JLabel jLabel9;

private javax.swing.JPanel jPanel1;

private javax.swing.JPanel jPanel2;

private javax.swing.JPanel jPanel3;

private javax.swing.JRadioButton jRadioButton3;

private javax.swing.JRadioButton jRadioButton4;

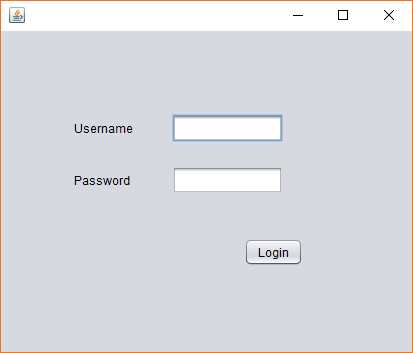
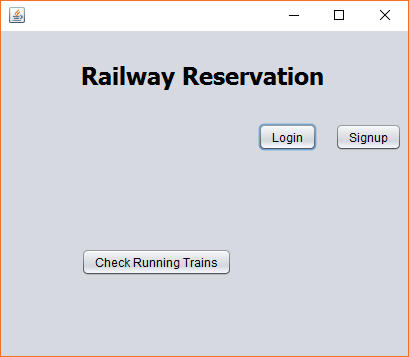
private javax.swing.JRadioButton jRadioButton5;

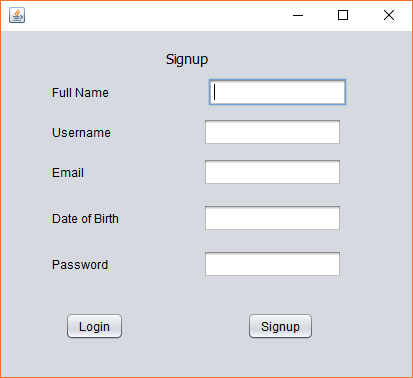
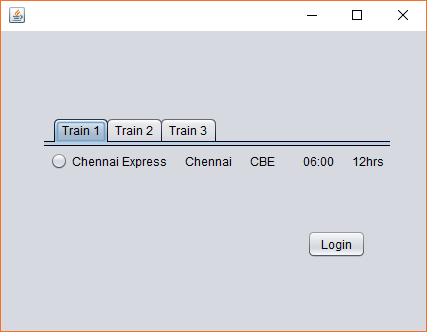
private javax.swing.JTabbedPane jTabbedPane1;

// End of variables declaration

}

**Output**





**Result**

Thus, the Enterprise Desktop Application for Railway Reservation was successfully developed and deployed

[Signature of the Staff In-charge]

[Name of the Staff In – charge]