**AIRLINE RESERVATION SYSTEM**



***Submitted by***

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**REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE MACHINE LEARNING & COMPUTER SCIENCE AND BUSINESS SYSTEMS) OF**

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**(ARTIFICIAL INTELLIGENCE MACHINE LEARNING & COMPUTER SCIENCE AND BUSINESS SYSTEMS)**

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*CERTIFICATE OF RECOMMENDATION*

We hereby recommend that the thesis prepared under our supervision by **Name of the Students SAIKAT MITRA, DEBDEEP BHOWMICK and SUBHAJOY MUKHERJEE.**

entitled ***AIRLINE RESERVATION SYSTEM***

be accepted in partial fulfillment of the requirements for the degree of **BACHELOR OF TECHNOLOGY IN “COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE MACHINE LEARNING & COMPUTER SCIENCE AND BUSINESS SYSTEMS)”.**

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***Head, CSE(AIML and CSBS)Department Project Guide***

***Institute of Engineering and Management, Kolkata***

**1.Introduction of the Project**

In this article, you will find the source code and explanation of the Airline Reservation System in Java. For this java project, we have also used the Swing module to implement some GUI along with the SQL database to store information on flights available. This project has a method to book tickets on a selected flight & get a boarding pass too.

**2. Objectives**

The two major objectives of this java project are:

1. To create a user interface for the user to look for available flights and then book his tickets accordingly.
2. To implement the tables that contain flight information and attach the functionality of booking tickets on the selected flight & get a boarding pass.

**3. Requirements**

* [**Swing**](https://www.section.io/engineering-education/introduction-to-java-swing/) (for creating the Graphical User Interface (GUI) of the project)
* IDE: Eclipse IDE for Java Developers
* Java version :Java SE 18.0. 2.1
* MySQL

## 4.Database Structure in MySQL

## This is the structure of the flights table from the databased in MySQL.

## 

## This is the structure of the registration table from the databased in MySQL.

## 

## 5.Source Code

### 5.1 Home page Module

Once we run the java application this home page module will be the first screen

Code:

## public class Main extends javax.swing.JFrame {

## public Main() {

## initComponents();

## }

## @SuppressWarnings("unchecked")

## // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents

## private void initComponents() {

## jMenuItem11 = new javax.swing.JMenuItem();

## jPanel1 = new javax.swing.JPanel();

## jLabel2 = new javax.swing.JLabel();

## jMenuBar1 = new javax.swing.JMenuBar();

## jMenu1 = new javax.swing.JMenu();

## jMenuItem1 = new javax.swing.JMenuItem();

## jMenuItem2 = new javax.swing.JMenuItem();

## jMenuItem3 = new javax.swing.JMenuItem();

## jMenu2 = new javax.swing.JMenu();

## jMenuItem6 = new javax.swing.JMenuItem();

## jMenuItem7 = new javax.swing.JMenuItem();

## jMenu3 = new javax.swing.JMenu();

## jMenuItem4 = new javax.swing.JMenuItem();

## jMenu5 = new javax.swing.JMenu();

## jMenu7 = new javax.swing.JMenu();

## jMenuItem8 = new javax.swing.JMenuItem();

## jMenu8 = new javax.swing.JMenu();

## jMenuItem9 = new javax.swing.JMenuItem();

## jMenu9 = new javax.swing.JMenu();

## jMenuItem12 = new javax.swing.JMenuItem();

## jMenu6 = new javax.swing.JMenu();

## jMenuItem10 = new javax.swing.JMenuItem();

## jMenu4 = new javax.swing.JMenu();

## jMenuItem5 = new javax.swing.JMenuItem();

## jMenuItem11.setText("jMenuItem11");

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

## jPanel1.setBackground(new java.awt.Color(52,122,235));

## jLabel2.setFont(new java.awt.Font("Impact", 1, 36)); // NOI18N

## jLabel2.setForeground(new java.awt.Color(255,255,255));

## jLabel2.setText("Airline Reservation System");

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

## jPanel1.setLayout(jPanel1Layout);

## jPanel1Layout.setHorizontalGroup(

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

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

## .addContainerGap(174, Short.MAX\_VALUE)

## .addComponent(jLabel2)

## .addGap(150, 150, 150))

## );

## jPanel1Layout.setVerticalGroup(

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

## .addGroup(jPanel1Layout.createSequentialGroup()

## .addGap(157, 157, 157)

## .addComponent(jLabel2)

## .addContainerGap(190, Short.MAX\_VALUE))

## );

## jMenu1.setText("Home");

## jMenu1.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N

## jMenu1.setPreferredSize(new java.awt.Dimension(60, 25));

## jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_N, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem1.setText("New User");

## jMenuItem1.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem1ActionPerformed(evt);

## }

## });

## jMenu1.add(jMenuItem1);

## jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_C, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem2.setText("Change Password");

## jMenuItem2.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem2ActionPerformed(evt);

## }

## });

## jMenu1.add(jMenuItem2);

## jMenuItem3.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_L, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem3.setText("Login details");

## jMenuItem3.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem3ActionPerformed(evt);

## }

## });

## jMenu1.add(jMenuItem3);

## jMenuBar1.add(jMenu1);

## jMenu2.setText("Register");

## jMenu2.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N

## jMenu2.setPreferredSize(new java.awt.Dimension(70, 25));

## jMenuItem6.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_R, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem6.setText("Registration");

## jMenuItem6.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem6ActionPerformed(evt);

## }

## });

## jMenu2.add(jMenuItem6);

## jMenuItem7.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_S, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem7.setText("Services");

## jMenuItem7.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem7ActionPerformed(evt);

## }

## });

## jMenu2.add(jMenuItem7);

## jMenuBar1.add(jMenu2);

## jMenu3.setText("Flights");

## jMenu3.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N

## jMenu3.setPreferredSize(new java.awt.Dimension(71, 25));

## jMenuItem4.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_E, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem4.setText("Entry");

## jMenuItem4.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem4ActionPerformed(evt);

## }

## });

## jMenu3.add(jMenuItem4);

## jMenuBar1.add(jMenu3)

## jMenu5.setText("Bookings");

## jMenu5.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N

## jMenuItem8.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem8ActionPerformed(evt);

## }

## });

## jMenu7.add(jMenuItem8)

## jMenu5.add(jMenu7);

## jMenu8.setText("Admit");

## jMenuItem9.setText("Booking");

## jMenuItem9.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem9ActionPerformed(evt);

## }

## });

## jMenu8.add(jMenuItem9);

## jMenu5.add(jMenu8);

## jMenuItem12.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem12ActionPerformed(evt);

## }

## });

## jMenuItem10.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem10ActionPerformed(evt);

## }

## });

## jMenu6.add(jMenuItem10);

## jMenu5.add(jMenu6);

## jMenuBar1.add(jMenu5);

## jMenu4.setText("Services");

## jMenu4.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N

## jMenu4.setPreferredSize(new java.awt.Dimension(75, 25))

## jMenuItem5.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK\_I, java.awt.event.InputEvent.CTRL\_MASK));

## jMenuItem5.setText("About");

## jMenuItem5.addActionListener(new java.awt.event.ActionListener() {

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

## jMenuItem5ActionPerformed(evt);

## }

## });

## jMenu4.add(jMenuItem5);

## jMenuBar1.add(jMenu4);

## setJMenuBar(jMenuBar1);

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

## getContentPane().setLayout(layout);

## layout.setHorizontalGroup(

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

## .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

## );

## layout.setVerticalGroup(

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

## .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

## );

## pack();

## }

## private javax.swing.JLabel jLabel2;

## private javax.swing.JMenu jMenu1;

## private javax.swing.JMenu jMenu2;

## private javax.swing.JMenu jMenu3;

## private javax.swing.JMenu jMenu4;

## private javax.swing.JMenu jMenu5;

## private javax.swing.JMenu jMenu6;

## private javax.swing.JMenu jMenu7;

## private javax.swing.JMenu jMenu8;

## private javax.swing.JMenu jMenu9;

## private javax.swing.JMenuBar jMenuBar1;

## private javax.swing.JMenuItem jMenuItem1;

## private javax.swing.JMenuItem jMenuItem10;

## private javax.swing.JMenuItem jMenuItem11;

## private javax.swing.JMenuItem jMenuItem12;

## private javax.swing.JMenuItem jMenuItem2;

## private javax.swing.JMenuItem jMenuItem3;

## private javax.swing.JMenuItem jMenuItem4;

## private javax.swing.JMenuItem jMenuItem5;

## private javax.swing.JMenuItem jMenuItem6;

## private javax.swing.JMenuItem jMenuItem7;

## private javax.swing.JMenuItem jMenuItem8;

## private javax.swing.JMenuItem jMenuItem9;

## private javax.swing.JPanel jPanel1;

## // End of variables declaration//GEN-END:variables

## }Home page Module

### 5.2 Registration Module

This module helps to add new passenger details in the airline ticket booking system project in java. Also, we can edit or delete the existing passenger records.

Code:

import java.awt.HeadlessException;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.swing.JOptionPane;

public class Registration extends javax.swing.JFrame {

Connection con=null;

ResultSet rs=null;

PreparedStatement pst=null;

public Registration() {

initComponents();

}

private void Reset()

{

txtId.setText("");

txtName.setText("");

txtFname.setText("");

txtContact.setText("");

txtAdd.setText("");

txtAge.setText("");

txtEmail.setText("");

txtInfo.setText("");

cmbBG.setSelectedIndex(-1);

cmbGender.setSelectedIndex(-1);

btnSave.setEnabled(true);

btnUpdate.setEnabled(false);

btnDelete.setEnabled(false);

txtId.requestDefaultFocus();

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents

private void initComponents() {

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();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

txtId = new javax.swing.JTextField();

txtName = new javax.swing.JTextField();

txtFname = new javax.swing.JTextField();

txtAdd = new javax.swing.JTextField();

txtContact = new javax.swing.JTextField();

txtEmail = new javax.swing.JTextField();

txtAge = new javax.swing.JTextField();

jLabel8 = new javax.swing.JLabel();

jLabel9 = new javax.swing.JLabel();

cmbGender = new javax.swing.JComboBox();

cmbBG = new javax.swing.JComboBox();

jLabel10 = new javax.swing.JLabel();

jScrollPane1 = new javax.swing.JScrollPane();

txtInfo = new javax.swing.JTextArea();

jPanel2 = new javax.swing.JPanel();

btnSave = new javax.swing.JButton();

btnNew = new javax.swing.JButton();

btnUpdate = new javax.swing.JButton();

btnDelete = new javax.swing.JButton();

btnGetData = new javax.swing.JButton();

addWindowListener(new java.awt.event.WindowAdapter() {

public void windowClosed(java.awt.event.WindowEvent evt) {

formWindowClosed(evt);

}

});

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Registration Detail's"));

jLabel1.setText("Passenger ID");

jLabel2.setText("First Name");

jLabel3.setText("Last Name");

jLabel4.setText("Address");

jLabel5.setText("Contact No.");

jLabel6.setText("Email-id");

jLabel7.setText("Age");

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

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

txtEmailActionPerformed(evt);

}

});

jLabel8.setText("Gender");

jLabel9.setText("City");

cmbGender.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "M", "F" }));

cmbBG.setModel(new javax.swing.DefaultComboBoxModel(new String[]

{ "Mumbai","Chennai","Bangalore","Delhi","Hyderabad" }));

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(jLabel2)

.addComponent(jLabel3)

.addComponent(jLabel4)

.addComponent(jLabel5)

.addComponent(jLabel6)

.addComponent(jLabel7)

.addComponent(jLabel8)

.addComponent(jLabel9)

.addComponent(jLabel10))

.addGap(52, 52, 52)

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

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

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

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

.addComponent(txtAge, javax.swing.GroupLayout.Alignment.LEADING, javax.swing.GroupLayout.DEFAULT\_SIZE, 147, Short.MAX\_VALUE)

.addComponent(txtEmail, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(txtContact, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(txtAdd, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(txtFname, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(txtName, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(txtId, 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(24, 24, 24)

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

.addComponent(jLabel1)

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

.addGap(14, 14, 14)

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

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

.addComponent(jLabel2))

.addGap(12, 12, 12)

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

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

.addComponent(jLabel3))

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

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

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

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

.addComponent(jLabel4)

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

.addGap(18, 18, 18)

.addComponent(jLabel5))

.addComponent(txtContact, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(18, 18, 18)

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

.addComponent(jLabel6)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel7)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel8)

.addComponent(cmbGender, 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.LEADING)

.addComponent(jLabel9)

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

.addGap(23, 23, 23)

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

.addComponent(jLabel10)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addContainerGap(60, Short.MAX\_VALUE))

);

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(""));

btnSave.setText("Save");

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

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

btnSaveActionPerformed(evt);

}

});

btnNew.setText("New");

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

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

btnNewActionPerformed(evt);

}

});

btnUpdate.setText("Update");

btnUpdate.setEnabled(false);

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

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

btnUpdateActionPerformed(evt);

}

});

btnDelete.setText("Delete");

btnDelete.setEnabled(false);

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

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

btnDeleteActionPerformed(evt);

}

});

btnGetData.setText("GetData");

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

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

btnGetDataActionPerformed(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(43, 43, 43)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

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

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

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

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

.addComponent(btnGetData, javax.swing.GroupLayout.DEFAULT\_SIZE, 104, Short.MAX\_VALUE))

.addContainerGap(18, Short.MAX\_VALUE))

);

jPanel2Layout.setVerticalGroup(

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

.addGroup(jPanel2Layout.createSequentialGroup()

.addGap(25, 25, 25)

.addComponent(btnSave)

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

.addComponent(btnNew)

.addGap(18, 18, 18)

.addComponent(btnUpdate)

.addGap(18, 18, 18)

.addComponent(btnDelete)

.addGap(18, 18, 18)

.addComponent(btnGetData)

.addContainerGap(34, 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()

.addContainerGap()

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

.addGap(18, 18, 18)

.addComponent(jPanel2, 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()

.addContainerGap()

.addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addContainerGap())

.addGroup(layout.createSequentialGroup()

.addGap(69, 69, 69)

.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

);

pack();

}

public javax.swing.JButton btnDelete;

public javax.swing.JButton btnGetData;

public javax.swing.JButton btnNew;

public javax.swing.JButton btnSave;

public javax.swing.JButton btnUpdate;

public javax.swing.JComboBox cmbBG;

public javax.swing.JComboBox cmbGender;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

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.JScrollPane jScrollPane1;

public javax.swing.JTextField txtAdd;

public javax.swing.JTextField txtAge;

public javax.swing.JTextField txtContact;

public javax.swing.JTextField txtEmail;

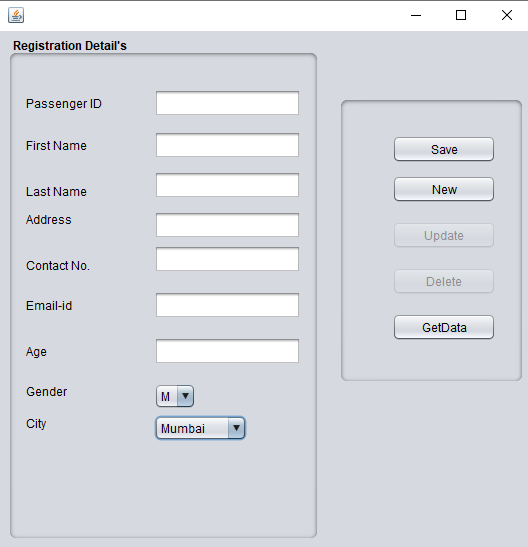
public javax.swing.JTextField txtFname;

public javax.swing.JTextField txtId;

public javax.swing.JTextArea txtInfo;

public javax.swing.JTextField txtName;

}



### 5.3 Flights Module

This module helps to view flight details in the simple airline reservation system project in java.

import java.awt.HeadlessException;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.text.SimpleDateFormat;

import javax.swing.JOptionPane;

import java.text.SimpleDateFormat;

public class Flights extends javax.swing.JFrame {

Connection con=null;

ResultSet rs=null;

PreparedStatement pst=null;

private void reset()

{

txtId.setText("");

txtName.setText("");

txtFname.setText("");

txtC.setText("");

txtAd.setText("");

txtQ.setText("");

txtE.setText("");

txtD.setText("");

cmbB.setSelectedIndex(-1);

cmbG.setSelectedIndex(-1);

btnSave.setEnabled(true);

btnUpdate.setEnabled(false);

btnDelete.setEnabled(false);

}

@SuppressWarnings("unchecked")

private void initComponents() {

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();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

jLabel9 = new javax.swing.JLabel();

jLabel10 = new javax.swing.JLabel();

jLabel11 = new javax.swing.JLabel();

txtId = new javax.swing.JTextField();

txtName = new javax.swing.JTextField();

txtFname = new javax.swing.JTextField();

txtE = new javax.swing.JTextField();

txtC = new javax.swing.JTextField();

txtAd = new javax.swing.JTextField();

txtQ = new javax.swing.JTextField();

txtD = new javax.swing.JTextField();

cmbG = new javax.swing.JComboBox();

cmbB = new javax.swing.JComboBox();

jLabel8 = new javax.swing.JLabel();

jPanel2 = new javax.swing.JPanel();

btnSave = new javax.swing.JButton();

btnUpdate = new javax.swing.JButton();

btnDelete = new javax.swing.JButton();

btnNew = new javax.swing.JButton();

btnGet = new javax.swing.JButton();

addWindowListener(new java.awt.event.WindowAdapter() {

public void windowClosing(java.awt.event.WindowEvent evt) {

formWindowClosing(evt);

}

});

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

jLabel1.setText("Flight ID");

jLabel2.setText("Flight Name");

jLabel3.setText("Date");

jLabel4.setText("Time");

jLabel5.setText("First class");

jLabel6.setText("Business class");

jLabel7.setText("Economic class");

jLabel9.setText("Seat count");

jLabel10.setText("Route Code");

jLabel11.setText("Comments");

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

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

txtDActionPerformed(evt);

}

});

cmbG.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "100", "150" }));

cmbB.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "001","002" }));

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, false)

.addGroup(jPanel1Layout.createSequentialGroup()

.addComponent(jLabel11)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 21, Short.MAX\_VALUE)

.addComponent(txtD, javax.swing.GroupLayout.PREFERRED\_SIZE, 111, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(jPanel1Layout.createSequentialGroup()

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

.addComponent(jLabel1)

.addComponent(jLabel2)

.addComponent(jLabel3)

.addComponent(jLabel4)

.addComponent(jLabel5)

.addComponent(jLabel6)

.addComponent(jLabel7))

.addGap(27, 27, 27)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addComponent(txtQ, javax.swing.GroupLayout.DEFAULT\_SIZE, 109, Short.MAX\_VALUE)

.addComponent(txtAd)

.addComponent(txtC)

.addComponent(txtE)

.addComponent(txtFname)

.addComponent(txtName)

.addComponent(txtId)))

.addGroup(jPanel1Layout.createSequentialGroup()

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

.addComponent(jLabel9)

.addComponent(jLabel10))

.addGap(36, 36, 36)

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

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

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

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

.addComponent(jLabel8)

.addContainerGap(63, Short.MAX\_VALUE))

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(20, 20, 20)

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

.addComponent(jLabel1)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel2)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel3)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel4)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel5)

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

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

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

.addComponent(jLabel6)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel7)

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

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(24, 24, 24)

.addComponent(jLabel9))

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(18, 18, 18)

.addComponent(cmbG, 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.LEADING)

.addComponent(jLabel10)

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

.addGap(17, 17, 17)

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

.addComponent(jLabel11)

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

.addComponent(jLabel8))

.addContainerGap(38, Short.MAX\_VALUE))

);

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(""));

btnSave.setText("Save");

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

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

btnSaveActionPerformed(evt);

}

});

btnUpdate.setText("Update");

btnUpdate.setEnabled(false);

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

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

btnUpdateActionPerformed(evt);

}

});

btnDelete.setText("Delete");

btnDelete.setEnabled(false);

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

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

btnDeleteActionPerformed(evt);

}

});

btnNew.setText("New");

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

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

btnNewActionPerformed(evt);

}

});

btnGet.setText("Get Data");

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

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

btnGetActionPerformed(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(42, 42, 42)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING, false)

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

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

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

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

.addComponent(btnGet, javax.swing.GroupLayout.DEFAULT\_SIZE, 91, Short.MAX\_VALUE))

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

);

jPanel2Layout.setVerticalGroup(

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

.addGroup(jPanel2Layout.createSequentialGroup()

.addGap(24, 24, 24)

.addComponent(btnSave)

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

.addComponent(btnUpdate)

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

.addComponent(btnDelete)

.addGap(18, 18, 18)

.addComponent(btnNew)

.addGap(18, 18, 18)

.addComponent(btnGet)

.addContainerGap(32, 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()

.addContainerGap()

.addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addGap(18, 18, 18)

.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(50, 50, 50)

.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addGap(41, 41, 41)

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

);

pack();

}

public javax.swing.JButton btnDelete;

public javax.swing.JButton btnGet;

public javax.swing.JButton btnNew;

public javax.swing.JButton btnSave;

public javax.swing.JButton btnUpdate;

public javax.swing.JComboBox cmbB;

public javax.swing.JComboBox cmbG;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel10;

private javax.swing.JLabel jLabel11;

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;

public javax.swing.JTextField txtAd;

public javax.swing.JTextField txtC;

public javax.swing.JTextField txtD;

public javax.swing.JTextField txtE;

public javax.swing.JTextField txtFname;

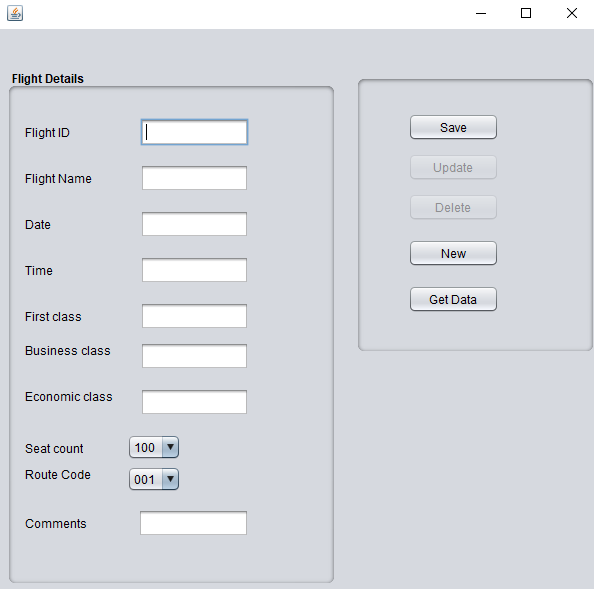
public javax.swing.JTextField txtId;

public javax.swing.JTextField txtName;

public javax.swing.JTextField txtQ;

// End of variables declaration//GEN-END:variables

}



### 5.4 Booking Module

This module helps to book tickets in the flight reservation system project in java.

import java.awt.HeadlessException;

import java.awt.event.KeyEvent;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.swing.JOptionPane;

import net.proteanit.sql.DbUtils;

public class Booking extends javax.swing.JFrame {

Connection con=null;

ResultSet rs=null;

PreparedStatement pst=null;

public Booking() {

initComponents();

con= Connect.ConnectDB();

Get\_Data();

setLocationRelativeTo(null);

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents

private void initComponents() {

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();

jPanel3 = new javax.swing.JPanel();

btnNew = new javax.swing.JButton();

btnSave = new javax.swing.JButton();

btnUpdate = new javax.swing.JButton();

btnDelete = new javax.swing.JButton();

btnGetData = new javax.swing.JButton();

jScrollPane1 = new javax.swing.JScrollPane();

Room\_table = new javax.swing.JTable();

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

jLabel1.setText("Flight ID");

jLabel2.setText("Booking Class");

jLabel3.setText("Ticket Fare");

cmbRoomType.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "First class", "Business class","Economic class" }));

cmbRoomType.setSelectedIndex(-1);

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

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

txtRoomChargesKeyTyped(evt);

}

});

//jLabel4.setText("(Per day)");

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(19, 19, 19)

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(10, 10, 10)

.addComponent(jLabel4))

.addGroup(jPanel1Layout.createSequentialGroup()

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

.addComponent(jLabel3)

.addComponent(jLabel1, javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel2, javax.swing.GroupLayout.Alignment.LEADING))

.addGap(41, 41, 41)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addContainerGap(31, Short.MAX\_VALUE))

);

jPanel1Layout.setVerticalGroup(

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

.addGroup(jPanel1Layout.createSequentialGroup()

.addGap(19, 19, 19)

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

.addComponent(jLabel1)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel2)

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

.addGap(18, 18, 18)

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

.addComponent(jLabel3)

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

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

.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 14, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

);

jPanel3.setBorder(javax.swing.BorderFactory.createTitledBorder(""));

btnNew.setFont(new java.awt.Font("Tahoma", 0, 10)); // NOI18N

btnNew.setText("Book");

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

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

btnNewActionPerformed(evt);

}

});

btnSave.setFont(new java.awt.Font("Tahoma", 0, 10)); // NOI18N

btnSave.setText("Save");

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

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

btnSaveActionPerformed(evt);

}

});

btnUpdate.setFont(new java.awt.Font("Tahoma", 0, 10)); // NOI18N

btnUpdate.setText("Update");

btnUpdate.setEnabled(false);

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

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

btnUpdateActionPerformed(evt);

}

});

btnDelete.setFont(new java.awt.Font("Tahoma", 0, 10)); // NOI18N

btnDelete.setText("Delete");

btnDelete.setEnabled(false);

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

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

btnDeleteActionPerformed(evt);

}

});

btnGetData.setFont(new java.awt.Font("Tahoma", 0, 10)); // NOI18N

btnGetData.setText("New");

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

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

btnGetDataActionPerformed(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()

.addContainerGap()

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

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

.addGroup(jPanel3Layout.createSequentialGroup()

.addComponent(btnGetData)

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

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

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

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

.addContainerGap())

);

jPanel3Layout.setVerticalGroup(

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

.addGroup(jPanel3Layout.createSequentialGroup()

.addContainerGap()

.addComponent(btnNew)

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

.addComponent(btnSave)

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

.addComponent(btnUpdate)

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

.addComponent(btnDelete)

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

.addComponent(btnGetData)

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

);

Room\_table.setFont(new java.awt.Font("Palatino Linotype", 1, 12)); // NOI18N

Room\_table.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

},

new String [] {

"Flight Id", "Booking Type", "Ticket Fare", "Booking Status"

}

) {

boolean[] canEdit = new boolean [] {

false, true, true, true

};

public boolean isCellEditable(int rowIndex, int columnIndex) {

return canEdit [columnIndex];

}

});

Room\_table.getTableHeader().setReorderingAllowed(false);

Room\_table.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseClicked(java.awt.event.MouseEvent evt) {

Room\_tableMouseClicked(evt);

}

});

jScrollPane1.setViewportView(Room\_table);

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()

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

.addGroup(layout.createSequentialGroup()

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 0, Short.MAX\_VALUE)

.addContainerGap())

.addGroup(layout.createSequentialGroup()

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

.addGap(31, 31, 31)

.addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(0, 53, Short.MAX\_VALUE))))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addContainerGap()

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

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

.addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

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

.addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT\_SIZE, 237, Short.MAX\_VALUE)

.addContainerGap())

);

pack();

}// </editor-fold>//GEN-END:initComponents

private void txtRoomChargesKeyTyped(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_txtRoomChargesKeyTyped

}//GEN-LAST:event\_txtRoomChargesKeyTyped

private void btnNewActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_btnNewActionPerformed

Reset();

}//GEN-LAST:event\_btnNewActionPerformed

private void Room\_tableMouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event\_Room\_tableMouseClicked

try{

con=Connect.ConnectDB();

int row= Room\_table.getSelectedRow();

String table\_click= Room\_table.getModel().getValueAt(row, 0).toString();

String sql= "select \* from Room where RoomNo = '" + table\_click + "'";

pst=con.prepareStatement(sql);

rs= pst.executeQuery();

if(rs.next()){

String add1=rs.getString("Flight Id");

txtRoomNo.setText(add1);

String add2=rs.getString("Booking Type");

cmbRoomType.setSelectedItem(add2);

int add3 = rs.getInt("Ticket Fare");

String add4= Integer.toString(add3);

txtRoomCharges.setText(add4);

btnUpdate.setEnabled(true);

btnDelete.setEnabled(true);

btnSave.setEnabled(false);

}

}catch(Exception ex){

JOptionPane.showMessageDialog(this,ex);

}

}//GEN-LAST:event\_Room\_tableMouseClicked

/\*\*

\* @param args the command line arguments

\*/

public static void main(String args[]) {

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

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

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

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

\*/

try {

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

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

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

break;

}

}

} catch (ClassNotFoundException ex) {

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

} catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

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

}

//</editor-fold>

/\* Create and display the form \*/

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

public void run() {

new Room().setVisible(true);

}

});

}

private javax.swing.JTable Room\_table;

private javax.swing.JButton btnDelete;

private javax.swing.JButton btnGetData;

private javax.swing.JButton btnNew;

private javax.swing.JButton btnSave;

private javax.swing.JButton btnUpdate;

private javax.swing.JComboBox cmbRoomType;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JPanel jPanel1;

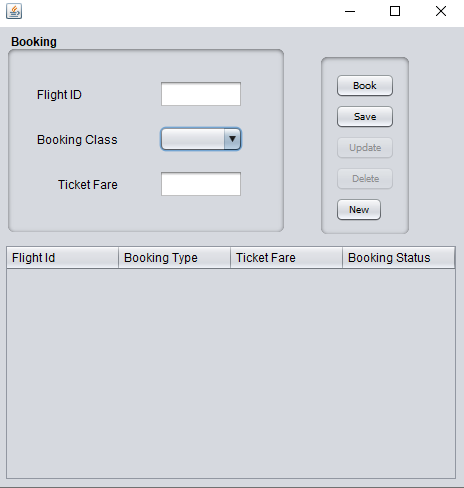
private javax.swing.JPanel jPanel3;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JTextField txtRoomCharges;

private javax.swing.JTextField txtRoomNo;

}



## ****6. Explanation of the Code****

The code consists of two parts, the first one involves creating the GUI for flight availability and booking, and the other is the retrieval of information from the SQL database so a user can book tickets on the selected flight and get a boarding pass.

**Let us look at the GUI first:**

1. The main screen consists of 3 buttons for searching for flights, booking tickets & resetting the screen, respectively.

2. It has five text fields & a JLabel that requires information on customer booking tickets.

3. It consists of a Jtable that displays the stored information in the database.

**Moving to the retrieval, we have applied:**

1. Build a connection first with the database using the Connection object.

2. Inject the query that stores table data in ResultSet.

3. Finally, send data to Jtable.

4. The Search button is for retrieving flights available from source to destination & displays in jtable & if not, then pops an error message.

5. The Book Tickets button is to book tickets for a selected flight from the table & then print details of the customer, flight & total amount in JtextArea beneath the table.

## 7. Conclusion

In this project, we developed a GUI-based project, an **Airline Reservation System Project in Java and MySQL**. We have developed this application so that users are able to perform the most important operations such as **Home Page, Registration, Flight details, and Booking** but we recommend you add more modules and functionalities to this airline reservation system project in java with source code to make it more useful and real-world working project.