I.P PROJECT

ON

FLIGHT BOOKING

Prepared by Submitted to:

Class

Roll no:

“THERE ARE TIMES WHEN SILENCE SPEAKS SO MUCH MORE LOUDLY THAN WORDS OF PRAISE TO ONLY AS GOOD AS BELITTLE A PERSON, WHOSE WORDS DO NOT EXPRESS, BUT ONLY PUT A VENEER OVER TRUE FEELINGS, WHICH ARE OF GRATITUDE AT THIS POINT OF TIME.”

I WOULD LIKE TO EXPRESS MY SINCERE GRATITUDE TO MY PARENTS FOR THEIR VITAL SUPPORT, GUIDANCE AND ENCOURAGEMENT – WITHOUT WHICH THIS PROJECT WOULD NOT HAVE COME FORTH. I WOULD ALSO LIKE TO EXPRESS MY GRATITUDE TO MY FRIENDS FOR THEIR SUPPORT DURING THE MAKING OF THIS PROJECT.

**CERTIFICATE**

**THIS IS TO CERTIFY THAT EXPERIMENTS WRITTEN IN THE INDEX HAVE BEEN PERFORMED BY THE STUDENT SATISFACTORILY**

**EXAMINER’S SIGN:**

**TEACHER’S SIGN:**

**PRINCIPAL’S SIGN:**

**SCHOOL STAMP:**

**DATE:**

BIBLIOGRAPHY

THE INFORMATION OF THIS PROJECT HAS BEEN COLLECTED FROM THE FOLLOWING SOURCES:-

1. CBSE book for informatics practices.
2. Saraswati informatics practices book
3. SumitaArora informatics practices book

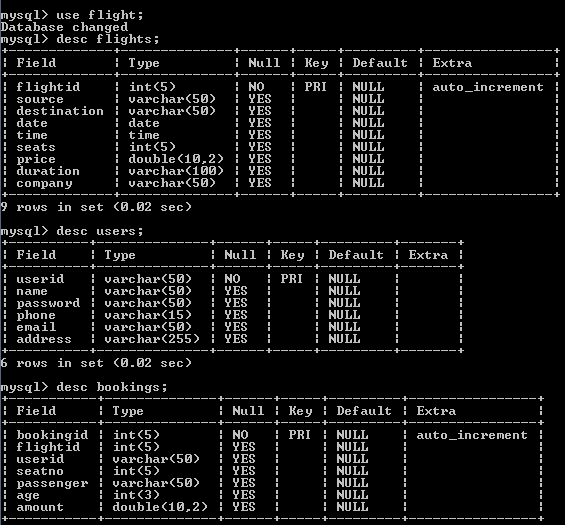
CONTENT

**Frontend**

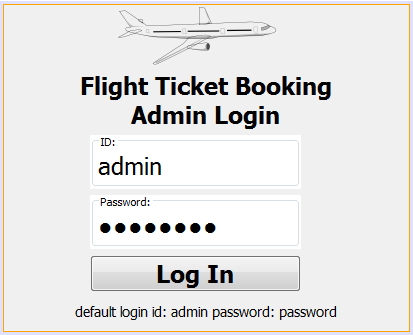
* + **Admin Form** (To add flights and check booking)
  + **Booking Forms**(User registration ,Flight booking, Booking history, Flight cancelation)

**Backend**

MySql Tables with following description



**Admin form**



**Coding for  button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String id=jTextField1.getText();

String pass=new String(jPasswordField1.getPassword());

if(id.equals("admin") && pass.equals("password")) {

jTextField2.setText("yyyy/mm/dd");

jTextField3.setText("hh:mm:ss");

jTextField4.setText(null);

jTextField5.setText(null);

jTextField6.setText(null);

jTextField7.setText(null);

jComboBox1.removeAllItems();

jComboBox2.removeAllItems();

String qry1="select distinct source from flights;";

ResultSet rs=stmt.executeQuery(qry1);

while(rs.next()==true)

{

String src=rs.getString("source");

jComboBox1.addItem(src);

}

rs.close();

String qry2="select distinct destination from flights;";

ResultSet rs2=stmt.executeQuery(qry2);

while(rs2.next()==true)

{

String src=rs2.getString("destination");

jComboBox2.addItem(src);

}

rs2.close();

jComboBox1.setSelectedIndex(-1);

jComboBox2.setSelectedIndex(-1);

FormNewFlight.setVisible(true);

dispose();

}

else {

JOptionPane.showMessageDialog(this,"Please check your login credentials");

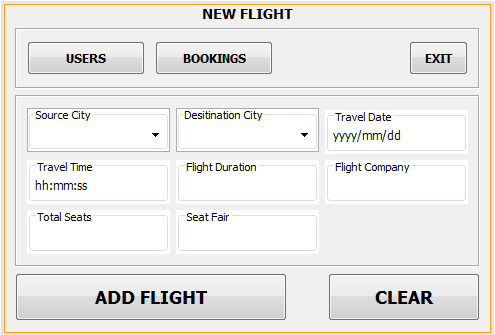
}

}catch(Exception e) {

JOptionPane.showMessageDialog(this,e.getMessage());

}

**New Flight Form**

****

**Coding for  button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String src=(String)jComboBox1.getSelectedItem();

String dest=(String)jComboBox2.getSelectedItem();

String date=jTextField2.getText();

String time=jTextField3.getText();

String dur=jTextField4.getText();

double fare=Double.parseDouble(jTextField5.getText());

String comp=jTextField6.getText();

int seats=Integer.parseInt(jTextField7.getText());

String qry="insert into flights values(default,'"+src+"','"+dest+"',"

+ "'"+date+"','"+time+"',"+seats+","+fare+",'"+dur+"','"+comp+"');";

if((src==null && dest==null && date.isEmpty() && time.isEmpty() && Integer.toString(seats).isEmpty()&& Double.toString(fare).isEmpty() && time.isEmpty())==false)

{

stmt.executeUpdate(qry);

String qry1="select flightid from flights order by flightid desc;";

ResultSet rs=stmt.executeQuery(qry1);

if(rs.next()==true)

{

String flightid=rs.getString("flightid");

String qry2="create table flight"+flightid+"(seatno int(5),bookid int(5))";

stmt.executeUpdate(qry2);

for(int i=1;i<=seats;i++)

{

String qry3="insert into flight"+flightid+" values("+i+",NULL);";

stmt.executeUpdate(qry3);

}

JOptionPane.showMessageDialog(FormNewFlight,"Flight added successfully\nFlight id: "+flightid);

}

rs.close();

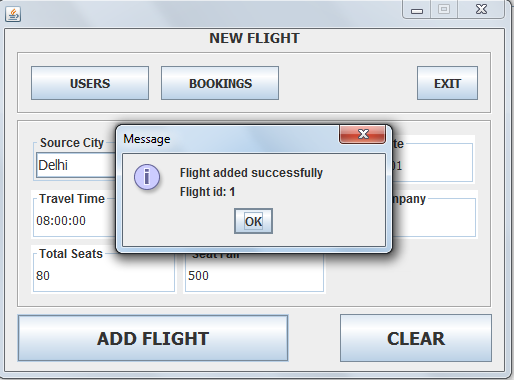
}

else

JOptionPane.showMessageDialog(FormNewFlight,"Please check input fields");

}catch(Exception e) {

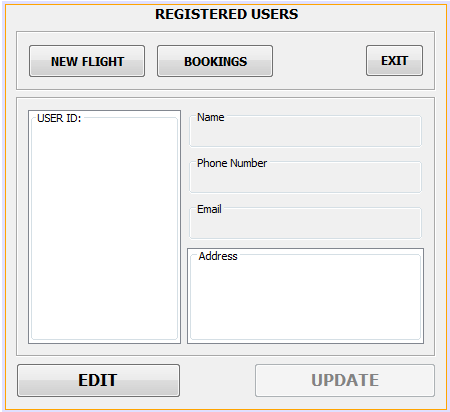
JOptionPane.showMessageDialog(FormNewFlight,e.getMessage());

****

**Coding for  button**

jButton1.doClick();

**Registered Users Form**

****

**Coding for  (navigation)Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

jTextField8.setText(null);

jTextField9.setText(null);

jTextField10.setText(null);

jTextArea1.setText(null);

DefaultListModel model=(DefaultListModel)jList1.getModel();

model.removeAllElements();

jList1.setModel(model);

FormUsers.setVisible(true);

FormNewFlight.setVisible(false);

String qry="select userid from users";

ResultSet rs=stmt.executeQuery(qry);

while(rs.next()==true)

{

model.addElement(rs.getString("userid"));

}

jList1.setModel(model);

}catch(Exception e) {

JOptionPane.showMessageDialog(FormNewFlight,e.getMessage());

}

**Coding for User Id List (Event: value changed)**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String userid=(String)jList1.getSelectedValue();

String qry="select \* from users where userid='"+userid+"';";

ResultSet rs=stmt.executeQuery(qry);

if(rs.next()==true)

{

jTextField8.setText(rs.getString("name"));

jTextField9.setText(rs.getString("phone"));

jTextField10.setText(rs.getString("email"));

jTextArea1.setText(rs.getString("address"));

}

jButton11.setEnabled(false);

}catch(Exception e) {

JOptionPane.showMessageDialog(FormUsers,e.getMessage());

}

**Coding for Button**

String userid=(String)jList1.getSelectedValue();

if(userid!=null)

{

jTextField8.setEditable(true);

jTextField9.setEditable(true);

jTextField10.setEditable(true);

jTextArea1.setEditable(true);

jButton11.setEnabled(true);

}

else

JOptionPane.showMessageDialog(FormUsers,"Please select user first");

**Coding for**  **Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String userid=(String)jList1.getSelectedValue();

String name=jTextField8.getText();

String phone=jTextField9.getText();

String email=jTextField10.getText();

String address=jTextArea1.getText();

if(userid!=null)

{

if((name.isEmpty() && phone.isEmpty() && email.isEmpty() && address.isEmpty())==false)

{

String qry="update users set name='"+name+"', phone='"+phone+

"', email='"+email+"', address='"+address+"' where userid='"+userid+"';";

stmt.executeUpdate(qry);

jButton11.setEnabled(false);

jTextField8.setEditable(false);

jTextField9.setEditable(false);

jTextField10.setEditable(false);

jTextArea1.setEditable(false);

JOptionPane.showMessageDialog(FormUsers,"Updated");

}

else

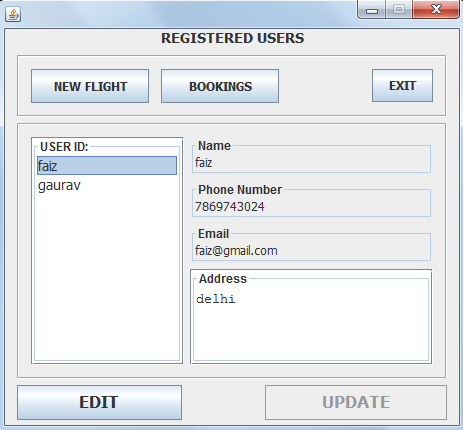
JOptionPane.showMessageDialog(FormUsers,"Please check inputs");

}

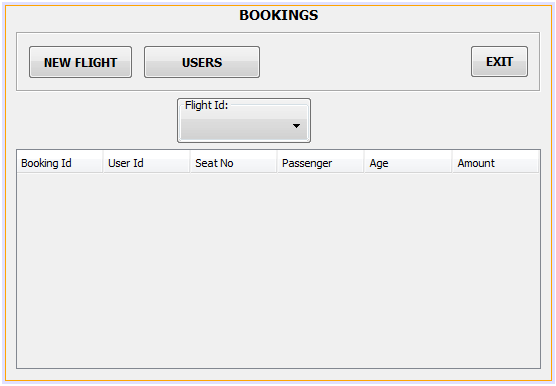
}catch(Exception e) {

JOptionPane.showMessageDialog(FormUsers,e.getMessage());

}



**Booking History Form**

****

**Coding for  (Navigation) Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

DefaultTableModel model=(DefaultTableModel)jTable1.getModel();

int rows=model.getRowCount();

if(rows>0)

{

for(int i=0;i<rows;i++)

{

model.removeRow(0);

}

}

jComboBox3.removeAllItems();

String qry="select flightid from flights";

ResultSet rs=stmt.executeQuery(qry);

while(rs.next()==true)

{

jComboBox3.addItem(rs.getString("flightid"));

}

jComboBox3.setSelectedIndex(-1);

FormBookings.setVisible(true);

FormNewFlight.setVisible(false);

}catch(Exception e) {

JOptionPane.showMessageDialog(FormNewFlight,e.getMessage());

}

**Coding for  (Event: Item state changed)**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

DefaultTableModel model=(DefaultTableModel)jTable1.getModel();

int rows=model.getRowCount();

if(rows>0)

{

for(int i=0;i<rows;i++)

{

model.removeRow(0);

}

}

String flightid=(String)jComboBox3.getSelectedItem();

String qry="select \* from bookings where flightid="+flightid+";";

ResultSet rs=stmt.executeQuery(qry);

while(rs.next())

{

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

String userid=rs.getString("userid");

String seat=rs.getString("seatno");

String pname=rs.getString("passenger");

String amt=rs.getString("amount");

String age=rs.getString("age");

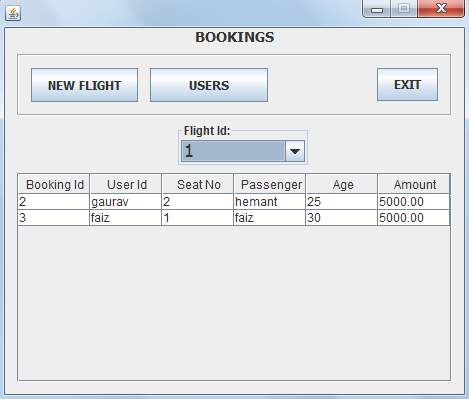
model.addRow(new Object[]{bookid,userid,seat,pname,age,amt});

}

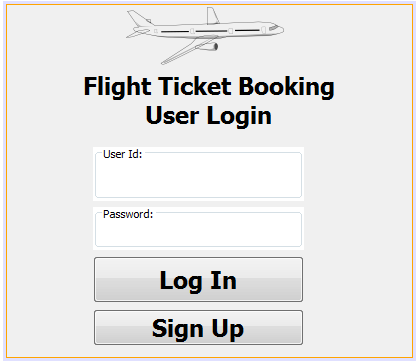
}catch(Exception e) {

JOptionPane.showMessageDialog(FormBookings,e.getMessage());

}



**User Login/Booking Form**

****

**Coding for  Button**

FormSignUp.setVisible(true);

jTextField8.setText(null);

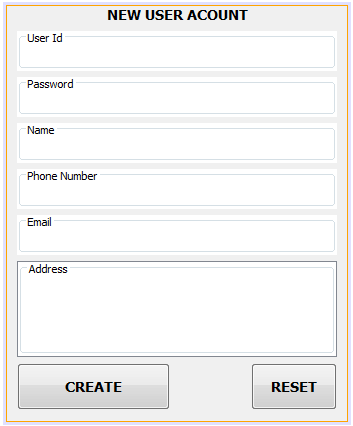
jTextField9.setText(null);

jTextField10.setText(null);

jTextField11.setText(null);

jPasswordField1.setText(null);

jTextArea1.setText(null);



**Coding for  Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String userid=jTextField8.getText();

String pass=new String(jPasswordField1.getPassword());

String name=jTextField11.getText();

String ph=jTextField9.getText();

String email=jTextField10.getText();

String address=jTextArea1.getText();

if((userid.isEmpty() && pass.isEmpty() && name.isEmpty() && ph.isEmpty()

&& email.isEmpty() && address.isEmpty())==false)

{

String qry1="select \* from users where userid='"+userid+"';";

ResultSet rs1=stmt.executeQuery(qry1);

if(rs1.next()==false)

{

String qry2="insert into users values('"+userid+"','"+name+"','"+pass+"','"+ph+"','"+email+"','"+address+"');";

stmt.executeUpdate(qry2);

JOptionPane.showMessageDialog(FormSignUp,"Account created");

FormSignUp.setVisible(false);

rs1.close();

}

else

JOptionPane.showMessageDialog(FormSignUp,"User Id already exists");

}

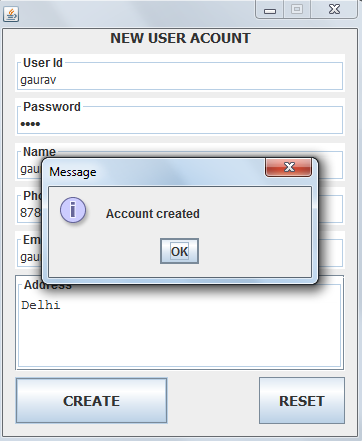
else

JOptionPane.showMessageDialog(FormSignUp,"Please check input fields");

}catch(Exception e) {

JOptionPane.showMessageDialog(FormSignUp,e.getMessage());

}



**Coding for  Button**

jButton13.doClick();

**Coding for  Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String userid=jTextField1.getText();

String pass=new String(jPasswordField2.getPassword());

String qry="select password from users where userid='"+userid+"';";

ResultSet rs=stmt.executeQuery(qry);

if(rs.next()==true)

{

String password=rs.getString("password");

if(pass.equals(password))

{

jButton9.doClick();

FormBook.setVisible(true);

dispose();

}

else

JOptionPane.showMessageDialog(this,"Wrong Password");

}

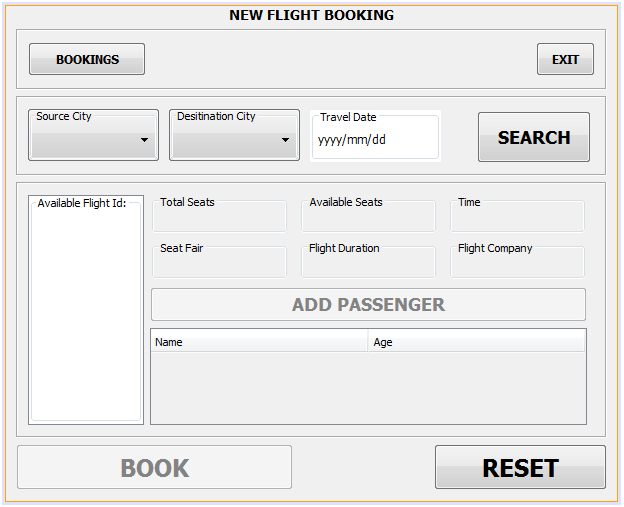
else

JOptionPane.showMessageDialog(this,"User id doen't exists");

}catch(Exception e) {

JOptionPane.showMessageDialog(this,e.getMessage());

}

**Flight Booking Form**

**Coding for  Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String src=(String)jComboBox1.getSelectedItem();

String dest=(String)jComboBox2.getSelectedItem();

String date=jTextField2.getText();

jTextField18.setText(null);

jTextField19.setText(null);

jTextField4.setText(null);

jTextField5.setText(null);

jTextField6.setText(null);

jTextField7.setText(null);

DefaultListModel model=(DefaultListModel)jList1.getModel();

model.removeAllElements();

DefaultTableModel dlm=(DefaultTableModel)jTable1.getModel();

int rows=dlm.getRowCount();

if(rows>0)

{

for(int i=0;i<rows;i++)

{

dlm.removeRow(0);

}

}

jList1.setModel(model);

jButton7.setEnabled(false);

jButton8.setEnabled(false);

if(src!=null && dest!=null && date.isEmpty()==false)

{

String qry1="select datediff('"+date+"',curdate()) as chk;";

ResultSet rs1=stmt.executeQuery(qry1);

if(rs1.next()==true)

{

int check=rs1.getInt("chk");

rs1.close();

if(check>0)

{

String qry2="select flightid from flights where source='"+src+"' and destination='"+dest+"' and date='"+date+"';";

ResultSet rs2=stmt.executeQuery(qry2);

int count=0;

while(rs2.next()==true)

{

model.addElement(rs2.getString("flightid"));

count++;

}

JOptionPane.showMessageDialog(FormBook,count+" Flights found");

}

else

JOptionPane.showMessageDialog(FormBook,"Booking date must be greater than today's date");

}

}

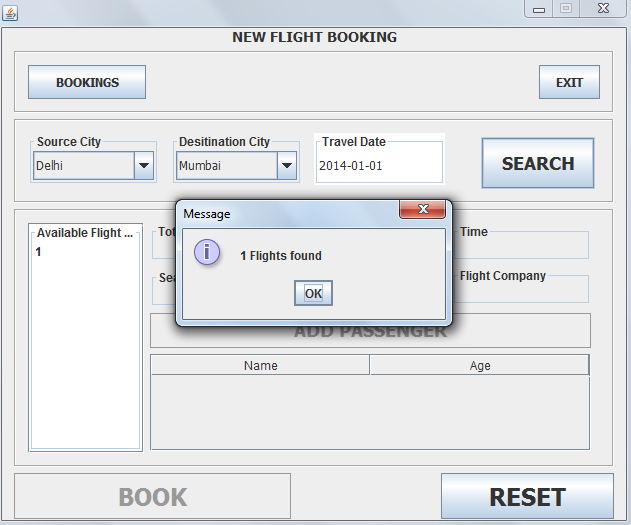
else

JOptionPane.showMessageDialog(FormBook,"Please check input fields");

}catch(Exception e) {

JOptionPane.showMessageDialog(FormBook,e.getMessage());

}



**Coding for Flight Id list (Event: value changed)**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String flightid=(String)jList1.getSelectedValue();

passcount=0;

if(flightid!=null)

{

String qry1="select \* from flights where flightid="+flightid;

ResultSet rs1=stmt.executeQuery(qry1);

int totseats=0,filled=0,availseats=0;

DefaultTableModel dlm=(DefaultTableModel)jTable1.getModel();

int rows=dlm.getRowCount();

if(rows>0)

{

for(int i=0;i<rows;i++)

{

dlm.removeRow(0);

}

}

jTable1.setModel(dlm);

jButton7.setEnabled(false);

jButton8.setEnabled(false);

if(rs1.next()==true)

{

totseats=rs1.getInt("seats");

jTextField19.setText(""+totseats);

jTextField4.setText(rs1.getString("time"));

jTextField5.setText(rs1.getString("price"));

jTextField6.setText(rs1.getString("company"));

jTextField7.setText(rs1.getString("duration"));

}

rs1.close();

String qry2="select count(bookid) as filled from flight"+flightid+";";

ResultSet rs2=stmt.executeQuery(qry2);

if(rs2.next()==true)

{

filled=rs2.getInt("filled");

availseats=totseats-filled;

jTextField18.setText(""+availseats);

}

rs2.close();

if(availseats>0)

{

jButton7.setEnabled(true);

}

else

jButton7.setEnabled(false);

}

}catch(Exception e) {

JOptionPane.showMessageDialog(FormBook,e.getMessage());

}

**Coding for  Button**

passcount++;

int availseats=Integer.parseInt(jTextField18.getText());

DefaultTableModel model=(DefaultTableModel)jTable1.getModel();

model.addRow(new Object[]{});

jButton8.setEnabled(true);

if(passcount==availseats)

{

jButton7.setEnabled(false);

}

**Coding for  Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String flightid=(String)jList1.getSelectedValue();

String userid=jTextField1.getText();

double amt=Double.parseDouble(jTextField5.getText());

int[] bookid,seatno;

bookid=new int[passcount];

seatno=new int[passcount];

TableCellEditor cellEditor = jTable1.getCellEditor();

if(cellEditor!=null)

{

jTable1.getCellEditor().stopCellEditing();

}

int nullcount=0;

DefaultTableModel model=(DefaultTableModel)jTable1.getModel();

int rows=model.getRowCount();

int i=0,j=0;

for(i=0;i<=rows-1;i++)

{

for(j=0;j<=1;j++)

{

String temp = (String) jTable1.getValueAt(i, j);

if(temp==null)

{

nullcount++;

}

}

}

if(nullcount>0)

{

JOptionPane.showMessageDialog(FormBook,"Invalid passenger Details");

}

else{

for(int k=0;k<=passcount-1;k++)

{

String pname=(String)jTable1.getValueAt(k,0);

String age=(String)jTable1.getValueAt(k,1);

String qry3="insert into bookings(flightid,userid,passenger,age,amount) values"

+ "('"+flightid+"','"+userid+"','"+pname+"',"+age+","+amt+");";

stmt.executeUpdate(qry3);

String qry4="select bookingid from bookings order by bookingid desc";

ResultSet rs1=stmt.executeQuery(qry4);

if(rs1.next()==true)

{

bookid[k]=rs1.getInt("bookingid");

rs1.close();

}

}

String qry5="select seatno from flight"+flightid+" where bookid is null";

ResultSet rs2=stmt.executeQuery(qry5);

int count=0;

while(rs2.next()==true)

{

count++;

seatno[count-1]=rs2.getInt("seatno");

if(count==passcount)

break;

}

String output="Booking Successfull\nFlight Id:"+flightid;

for(int k=0;k<=passcount-1;k++)

{

String qry6="update flight"+flightid+" set bookid="+bookid[k]+" where seatno="+seatno[k]+";";

String qry7="update bookings set seatno="+seatno[k]+" where bookingid="+bookid[k]+";";

stmt.executeUpdate(qry6);

stmt.executeUpdate(qry7);

output+="\nBooking Id: "+bookid[k]+" , Seat No: "+seatno[k];

}

amt=amt\*passcount;

output+="\nAmount: Rs "+amt;

JOptionPane.showMessageDialog(FormBook,output);

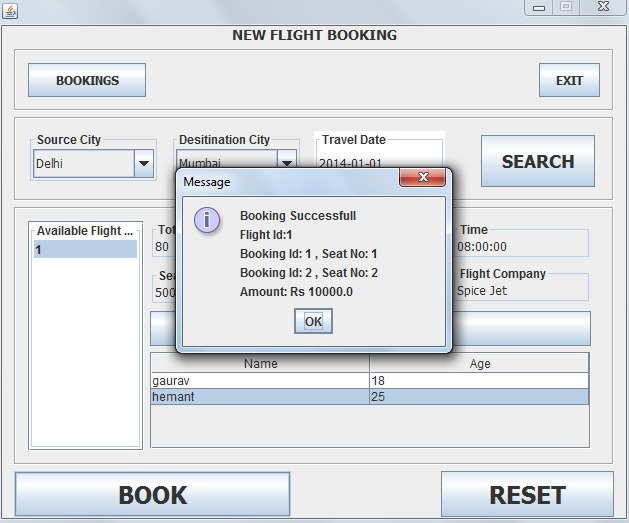
jButton9.doClick();

}

}catch(Exception e) {

JOptionPane.showMessageDialog(FormBook,e.getMessage());

}



**Coding for  (Navigation) Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

DefaultListModel model=(DefaultListModel)jList2.getModel();

model.removeAllElements();

jList2.setModel(model);

jTextField3.setText(null);

jTextField12.setText(null);

jTextField13.setText(null);

jTextField14.setText(null);

jTextField15.setText(null);

jTextField16.setText(null);

jTextField17.setText(null);

jButton12.setEnabled(false);

String userid=jTextField1.getText();

String qry="select bookingid from bookings where userid='"+userid+"';";

ResultSet rs=stmt.executeQuery(qry);

while(rs.next()==true)

{

model.addElement(rs.getString("bookingid"));

}

FormBook.setVisible(false);

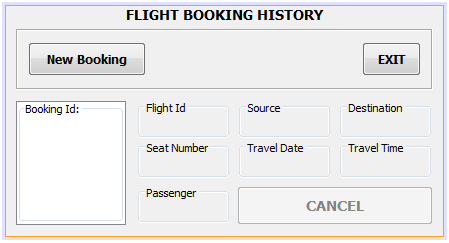
FormHistory.setVisible(true);

}catch(Exception e) {

JOptionPane.showMessageDialog(FormBook,e.getMessage());

}

**User Booking History Form**

****

**Coding for  (Navigation) Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

DefaultListModel model=(DefaultListModel)jList2.getModel();

model.removeAllElements();

jList2.setModel(model);

jTextField3.setText(null);

jTextField12.setText(null);

jTextField13.setText(null);

jTextField14.setText(null);

jTextField15.setText(null);

jTextField16.setText(null);

jTextField17.setText(null);

jButton12.setEnabled(false);

String userid=jTextField1.getText();

String qry="select bookingid from bookings where userid='"+userid+"';";

ResultSet rs=stmt.executeQuery(qry);

while(rs.next()==true)

{

model.addElement(rs.getString("bookingid"));

}

FormBook.setVisible(false);

FormHistory.setVisible(true);

}catch(Exception e) {

JOptionPane.showMessageDialog(FormBook,e.getMessage());

}

**Coding for Booking Id list(Event: value changed)**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String bookid=(String)jList2.getSelectedValue();

String qry="select \* from bookings,flights where bookings.flightid=flights.flightid and bookingid="+bookid+";";

ResultSet rs=stmt.executeQuery(qry);

String date="";

if(rs.next()==true)

{

jTextField12.setText(rs.getString("flightid"));

jTextField16.setText(rs.getString("source"));

jTextField17.setText(rs.getString("destination"));

jTextField14.setText(rs.getString("seatno"));

date=rs.getString("date");

jTextField15.setText(date);

jTextField3.setText(rs.getString("time"));

jTextField13.setText(rs.getString("passenger"));

}

String qry1="select datediff('"+date+"',curdate()) as chk;";

ResultSet rs1=stmt.executeQuery(qry1);

if(rs1.next()==true)

{

int check=rs1.getInt("chk");

rs1.close();

if(check>0)

{

jButton12.setEnabled(true);

}

else

jButton12.setEnabled(false);

}

}catch(Exception e) {

JOptionPane.showMessageDialog(FormHistory,e.getMessage()); }

**Coding for  Button**

try {

Class.forName("java.sql.DriverManager");

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

Statement stmt=(Statement)con.createStatement();

String bookid=(String)jList2.getSelectedValue();

String flightid=jTextField12.getText();

String seatno=jTextField14.getText();

String qry="delete from bookings where bookingid="+bookid+";";

String qry1="update flight"+flightid+" set bookid=NULL where seatno="+seatno+";";

stmt.executeUpdate(qry);

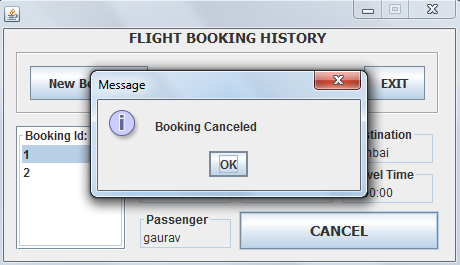
stmt.executeUpdate(qry1);

JOptionPane.showMessageDialog(FormHistory,"Booking Canceled"); jButton5.doClick();

}catch(Exception e) {

JOptionPane.showMessageDialog(FormHistory,e.getMessage());

}



**Coding for  Button**

System.exit(0)