**Design Document for OO Design for Train Reservation**

1 Overview

The goal of this project is to develop a system for performing all booking and cancellation options of train ticket. Diﬀerent conditions have to be satisﬁed by the ﬁnal product and which have been speciﬁed in the SRS. This document speciﬁes the ﬁnal system design for the system. It also gives some explanations on how the design evolved and why some design decisions were taken.

2 Class Diagram

We spitted this project into 6 components:

1.Add journey details: This will take the initial stage information about the trip like train number,train name from station, to station, number of seats, date of journey .And finally stored it in database.

2.Add Passengers: With reference to the pnr number in the journey table we took the passenger details and performed the insertion operation in the passenger table.

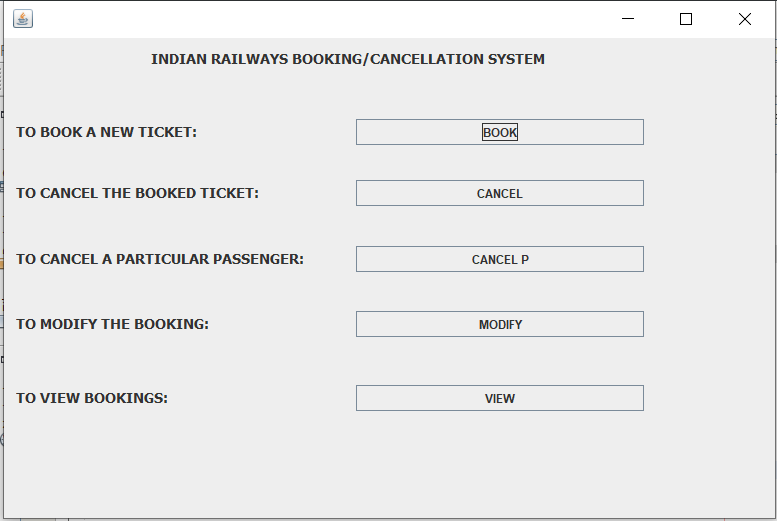
3.Cancel whole ticket:Just by Entering the pnr both the journey as well as passengers record is deleted.

4.Cancel particular passenger:If there are more than 1 passenger then he can cancel his trip by entering the PNR,NAME and AGE.

5.Modify the date of journey:If the passenger wants to modify the date of journey then he has to enter his PNR and NEW DATE OF JOURNEY.

6.View the details:By entering the PNR number both journey as well as passenger details is displayed in a table.

OPTIONS PANEL:



private void btn\_bookActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

journey\_details jd=new journey\_details();

jd.setVisible(true);

op.setVisible(false);

}

private void btn\_cancelActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

cancel\_complete cp=new cancel\_complete();

cp.setVisible(true);

op.setVisible(false);

}

private void btn\_modifyActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

modify\_journey mj=new modify\_journey();

mj.setVisible(true);

op.setVisible(false);

}

private void btn\_viewActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

view\_booking vb=new view\_booking();

vb.setVisible(true);

op.setVisible(false);

}

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

// TODO add your handling code here:

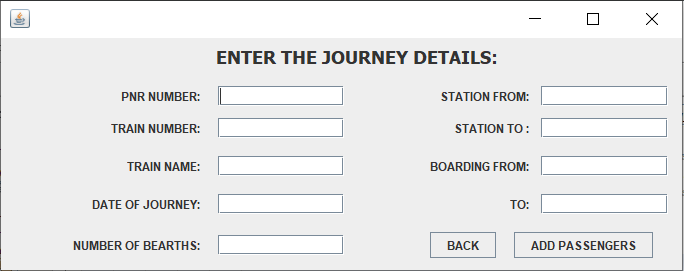
cancel\_particular cp=new cancel\_particular();

cp.setVisible(true);

op.setVisible(false);

}

1.JOURNEY DETAILS



private void btn\_addpActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

try

{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps=con.prepareStatement("insert into journey(pnr,train\_number,train\_name,doj,no\_of\_seat,from\_station,to\_station,booking\_from,resv\_upto) values ( ? , ? , ? , ? , ? , ? , ? , ? , ? )");

// int pnrd=Integer.parseInt(pnr.getText());

ps.setString(1,pnr.getText());

// ps.setInt(1, pnrd);

// int trainNO=Integer.parseInt(train\_numb.getText());

//ps.setInt(2, trainNO);

ps.setString(2,train\_numb.getText());

ps.setString(3, train\_name.getText());

ps.setString(4, doj.getText());

// int Seat=Integer.parseInt(seats.getText());

ps.setString(5,seats.getText() );

ps.setString(6, station\_from.getText());

ps.setString(7, station\_to.getText());

ps.setString(8, boarding\_from.getText());

ps.setString(9, boarding\_to.getText());

int rs = ps.executeUpdate();

System.out.println("Row number inserted==" +rs);

// passengers\_delatils.pass\_seats =Integer.parseInt(seats.getText());

// passengers\_delatils.pass\_pnr=Integer.parseInt(pnr.getText());

// System.out.printf("%d= seats,%d = pnr", passengers\_delatils.pass\_seats,passengers\_delatils.pass\_pnr);

// passengers\_delatils pd=new passengers\_delatils();

//int Seat=Integer.parseInt(seats.getText());

//int pnrd=Integer.parseInt(pnr.getText());

//pd.insertPassenger(Seat,pnrd);

if(rs==0)

{

JOptionPane.showMessageDialog(null, "Can't create journey!! Please recheck the details!");

}

else if(rs==1)

{

JOptionPane.showMessageDialog(null, "Enter the passenger details!!");

passengers\_delatils pd=new passengers\_delatils();

pd.setVisible(true);

jd.setVisible(false);

}

else

{

passengers\_delatils pd=new passengers\_delatils();

pd.setVisible(true);

jd.setVisible(false);

}

}

catch(Exception e)

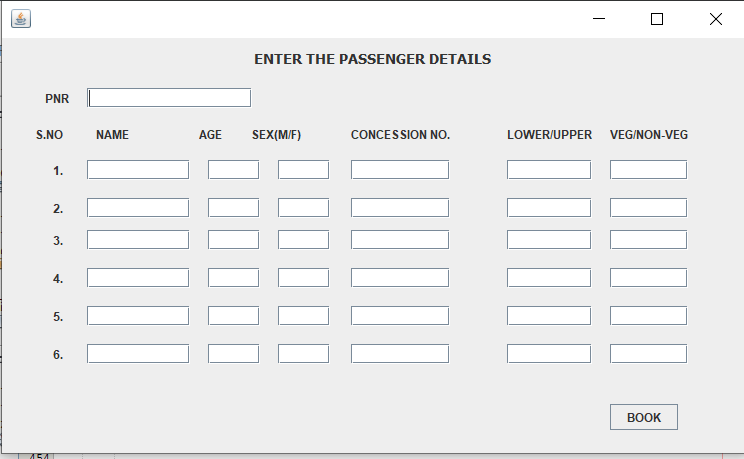
{

//e.printStackTrace();

}

}

2.PASSENGER DETAILS



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

// TODO add your handling code here:

try

{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps=con.prepareStatement("insert into passenger(serial\_numb,name,sex,age,concession,seat\_pref,food\_pref,pnr) values ( ? , ? , ? , ? , ? , ? , ? , ? )");

ps.setInt(1, 1);

ps.setString(2, name1.getText());

ps.setString(3, sex1.getText());

ps.setString(4, age1.getText());

ps.setString(5, concession1.getText());

ps.setString(6, seat1.getText());

ps.setString(7, food1.getText());

ps.setString(8, pnr.getText());

int rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

ps.setInt(1, 2);

ps.setString(2, name2.getText());

ps.setString(3, sex2.getText());

ps.setString(4, age2.getText());

ps.setString(5, concession2.getText());

ps.setString(6, seat2.getText());

ps.setString(7, food2.getText());

ps.setString(8, pnr.getText());

rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

ps.setInt(1, 3);

ps.setString(2, name3.getText());

ps.setString(3, sex3.getText());

ps.setString(4, age3.getText());

ps.setString(5, concession3.getText());

ps.setString(6, seat3.getText());

ps.setString(7, food3.getText());

ps.setString(8, pnr.getText());

rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

ps.setInt(1, 1);

ps.setString(2, name4.getText());

ps.setString(3, sex4.getText());

ps.setString(4, age4.getText());

ps.setString(5, concession4.getText());

ps.setString(6, seat4.getText());

ps.setString(7, food4.getText());

ps.setString(8, pnr.getText());

rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

ps.setInt(1, 1);

ps.setString(2, name5.getText());

ps.setString(3, sex5.getText());

ps.setString(4, age5.getText());

ps.setString(5, concession5.getText());

ps.setString(6, seat5.getText());

ps.setString(7, food5.getText());

ps.setString(8, pnr.getText());

rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

ps.setInt(1, 1);

ps.setString(2, name6.getText());

ps.setString(3, sex6.getText());

ps.setString(4, age6.getText());

ps.setString(5, concession6.getText());

ps.setString(6, seat6.getText());

ps.setString(7, food6.getText());

ps.setString(8, pnr.getText());

rs = ps.executeUpdate();

System.out.println("Row number inserted in passenger table==" +rs);

}

catch(Exception e)

{

e.printStackTrace();

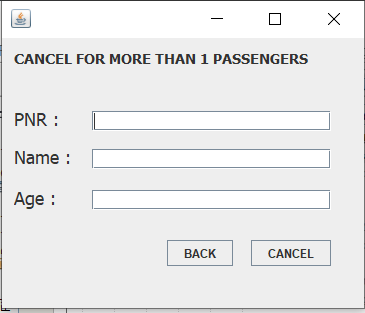
}

new options\_panel().setVisible(true);

pd.setVisible(false);

}

3.CANCEL COMPLETE



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

// TODO add your handling code here:

try{

Class.forName("com.mysql.jdbc.Driver");Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps1=con.prepareStatement("delete from passenger where pnr=?");

PreparedStatement ps=con.prepareStatement("delete from journey where pnr=?");

ps1.setString(1, jTextField1.getText());

ps.setString(1, jTextField1.getText());

int rs1=ps1.executeUpdate();

System.out.println("No. of record deleted from passenger table=="+rs1);

int rs=ps.executeUpdate();

System.out.println("No. of record deleted from journey table=="+rs);

if(rs==0)

{

JOptionPane.showMessageDialog(null, "Can't Cancel!!Recheck the entered details!!");

}

else if(rs==1)

{

JOptionPane.showMessageDialog(null, "Cancelled the ticket successfully!!");

new options\_panel().setVisible(true);

cp.setVisible(false);

}

else

{

new options\_panel().setVisible(true);

cp.setVisible(false);

}}

catch(Exception e)

{e.printStackTrace();

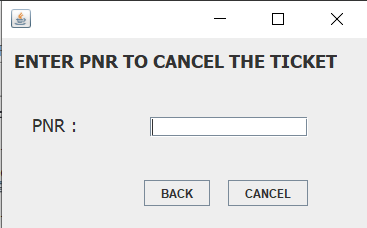
}

new options\_panel().setVisible(true);

cc.setVisible(false);

}

4.CANCEL PARTICULAR



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

// TODO add your handling code here:

try{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps=con.prepareStatement("delete from passenger where pnr=? and name= ? and age = ? ");

ps.setString(1, pnr.getText());

ps.setString(2, name.getText());

ps.setString(3, age.getText());

int rs=ps.executeUpdate();

System.out.println("No. of record deleted from journey table=="+rs);

if(rs==0)

{

JOptionPane.showMessageDialog(null, "Can't Cancel!Plese recheck the entered details and ensure that the number of passengers is greaater than 1!");

}

else if(rs==1)

{

JOptionPane.showMessageDialog(null, "Cancelled the passenger successfully!!");

new options\_panel().setVisible(true);

cp.setVisible(false);

}

else

{

new options\_panel().setVisible(true);

cp.setVisible(false);

}}

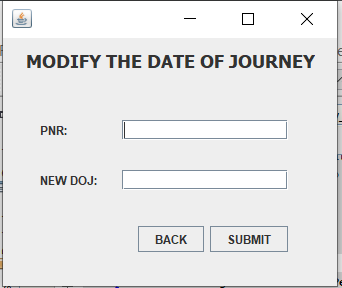
catch(Exception e)

{

e.printStackTrace();

} }

5.MODIFY DATE OF JOURNEY



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

// TODO add your handling code here:

try

{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps=con.prepareStatement("update journey set doj= ? where pnr = ?");

ps.setString(1, doj.getText());

ps.setString(2,pnr.getText());

int rs=ps.executeUpdate();

System.out.println("No.of row updated==" + rs);

if(rs==0)

{

JOptionPane.showMessageDialog(null, "Can't modify the date of journey!!Recheck the entered details!!");

}

else if(rs==1)

{

JOptionPane.showMessageDialog(null, "Modified date of journey successfully!!");

new options\_panel().setVisible(true);

cp.setVisible(false);

}

else

{

new options\_panel().setVisible(true);

cp.setVisible(false);

}

}

catch(Exception e)

{

e.printStackTrace();

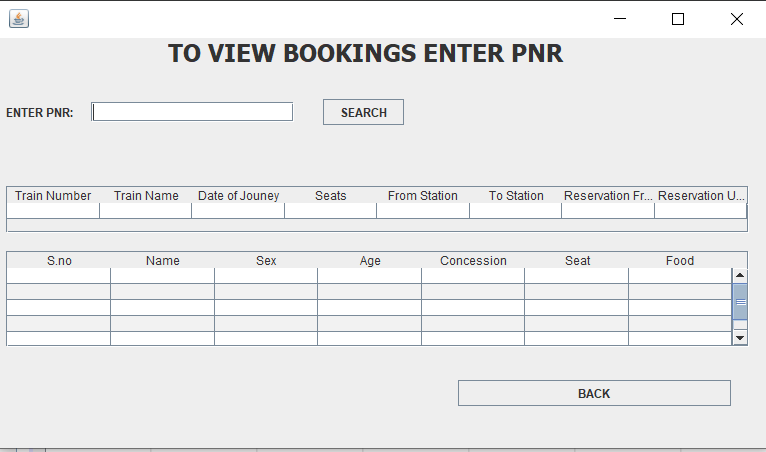
}

new options\_panel().setVisible(true);

mj.setVisible(false);

}

6.VIEW BOOKING



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

// TODO add your handling code here:

try

{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3307/reservation?user=root&password=1234");

PreparedStatement ps=con.prepareStatement("select serial\_numb,name,sex,age,concession,seat\_pref,food\_pref from passenger where pnr= ? ");

PreparedStatement ps1=con.prepareStatement("select train\_number,train\_name,doj,no\_of\_seat,from\_station,to\_station,booking\_from,resv\_upto from journey where pnr= ? ");

ps.setString(1, pnr.getText());

ps1.setString(1, pnr.getText());

ResultSet rs=ps.executeQuery();

ResultSet rs1=ps1.executeQuery();

Journey.setModel(DbUtils.resultSetToTableModel(rs1));

Passenger.setModel(DbUtils.resultSetToTableModel(rs));

}

catch(Exception e)

{

JOptionPane.showConfirmDialog(null,e);

}

}