

# BUS RESERVATION SYSTEM

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## **ACKNOWLEDGEMENT**

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**I am obliged to my project team members for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment .**

**Aritra Dutta,**

**Agnip Karmakar,**

**Anindya Panja,**

**Ankit Kumar,**

**Abhik Pal.**

## PROJECT OBJECTIVE:-

***THE OBJECTIVE OF THE PROJECT WAS TO-FOLD-TO ENSURE THAT THE COSTUMERS DO NOT HAVE TO LEAVE THE CONFINES OF THEIR COMFORT TO BOOK A TICKET AND HELP THEM TO GET A TICKET WHEN THEY NEED IT.***

### The primary project goals consist of:-

- ***It makes management work very easy and simple.***
- ***It ease communication between the customer and the management.***
- ***It also ease payment of fares.***
- ***It helps to acquire customer data(details).***

- Scope of the project:-
- Seat enquiry:- Search for the seat availability.
- Book tickets:- After selecting seats the customer can book the tickets after filling up details.
- Cancel tickets:- Customer can cancel the booked tickets.
- Add new bus:- Admin can add new bus.
- Remove bus:- Admin can remove bus.

## REQUIREMENT SPECIFICATON:-

We get the knowledge about practical life ,how the work is Done in bus ticket booking counters. the main aim behind this Project is to *to-fold-to ensure that the customers do not have to leave the confines of their comfort to book a ticket and help them to get a ticket when they need it . There is a admin login through which Admin can access the control to add or remove bus and give customer Ticket confirmation message. The guest can book ticket directly if there is seat available in the bus route.*

## ● PROBLEM DEFINITION:-

- *SYSTEM THAT ARE USING BY THE STAFF AT THE COUNTER CURRENTLY IS AN INTERNAL SYSTEM AND JUST USED TO SELL THE BUS TICKET AT THE COUNTER. CUSTOMER HAS TO GO TO THE COUNTER TO BUY TICKET OR ASK FOR BUS SCHEDULE.*
- *FURTHERMORE, CUSTOMERS NEED TO PAY CASH WHEN THEY BUY THE BUS TICKETS AND SOMETIMES NEEDS*
- *TO QUEUE UP LONG TIME AND GET THE BUS TICKET.*
- *BESIDE THAT, THE CUSTOMER S ALSO NOT ALLOWED TO BUY BUS TICKET THROUGH TELEPHONE.BESIDE THAT THE BUS COMPANY'S TELEPHONE LINE IS ALWAYS BUSY.*

## ● **FUNCTIONAL REQUIREMENTS:-**

- The Customer and the Bus Administrator are the two parties which interact with the database, who have different 'view level to the database information.

## **CUSTOMER SERVICES:-**

- View , Book or cancel reservations.
- Customers are provided with different reservation status
- Consumers are informed about updates in the reservations.
- Consumers are informed about the BUSES AVAILABLE.



## ADMIN SERVICES:-

- I. Add or delete buses.
- II. Confirms passengers reservation
- III. Access customer accounts.
- IV. View bus list

## Hardware and software used:-

Computer processor	: pentium 4(min)
Hard disk	: 50GB
Ram	: 512mb (min or more)
OPERATING SYSTEM	: Windows 7(min)
LANGUAGE USED	: java1.8
Ide used	: eclipse luna

## ● DATA FLOW DESIGN:-

1. [Businfo.txt:-](#) For saving the bus no. and its details.

Bus type	Bus no.	From	To	Fare	Dept. time	Arr. time	Date Of journey
String	int	String	String	Float	String	String	Local date

2. [Passengerinfo.txt:-](#) For saving the passengers details.

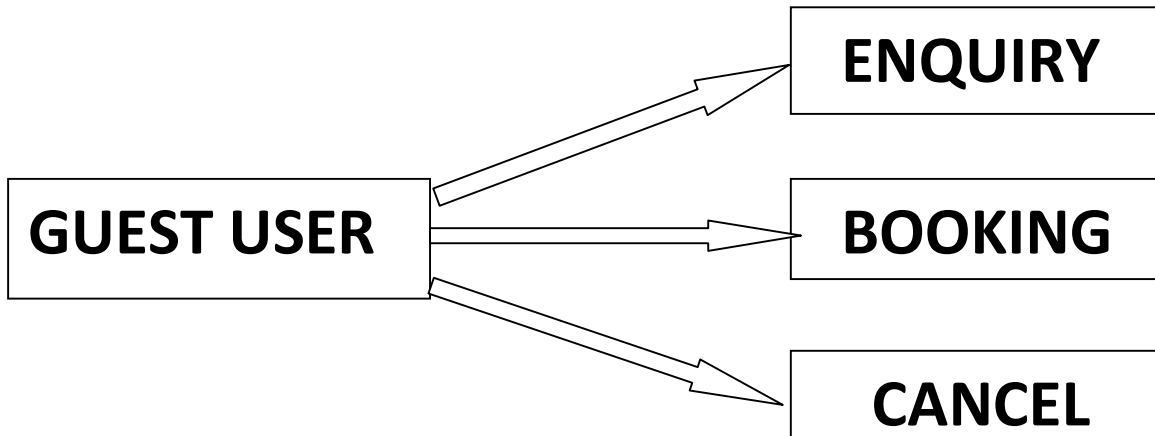
Ticket no.	Name	Age	Sex	Bus type	From	To	Arr. time	Dept. time	Date Of journey
String	String	Int	String	String	String	String	String	String	Local date

3. [Ticketstatus.info:-](#) For saving ticket information.

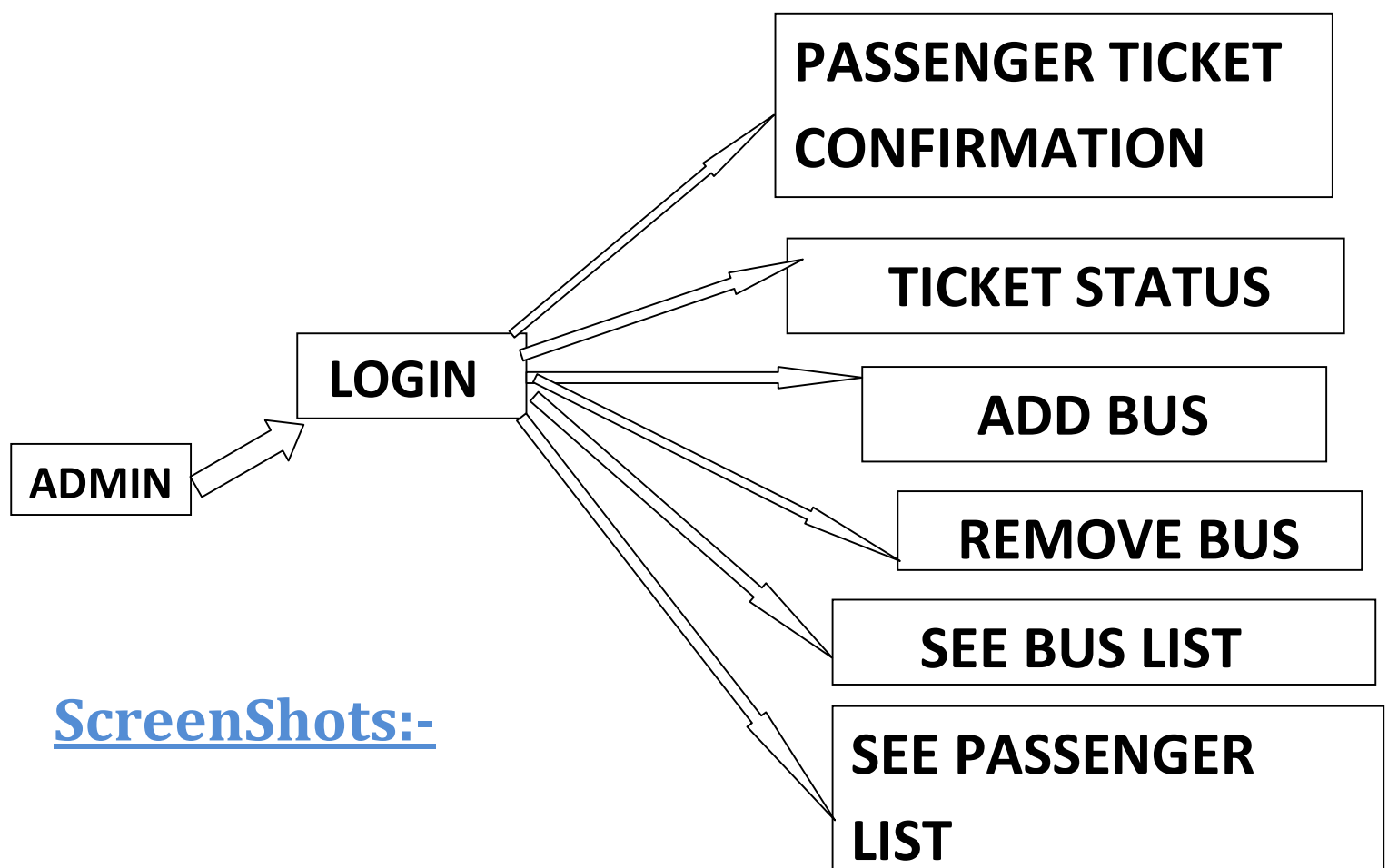
Ticket no.	Bus no.	Status
String	Int	Boolean

# APPLICATION WORK FLOW

## Guest user(Passenger):-

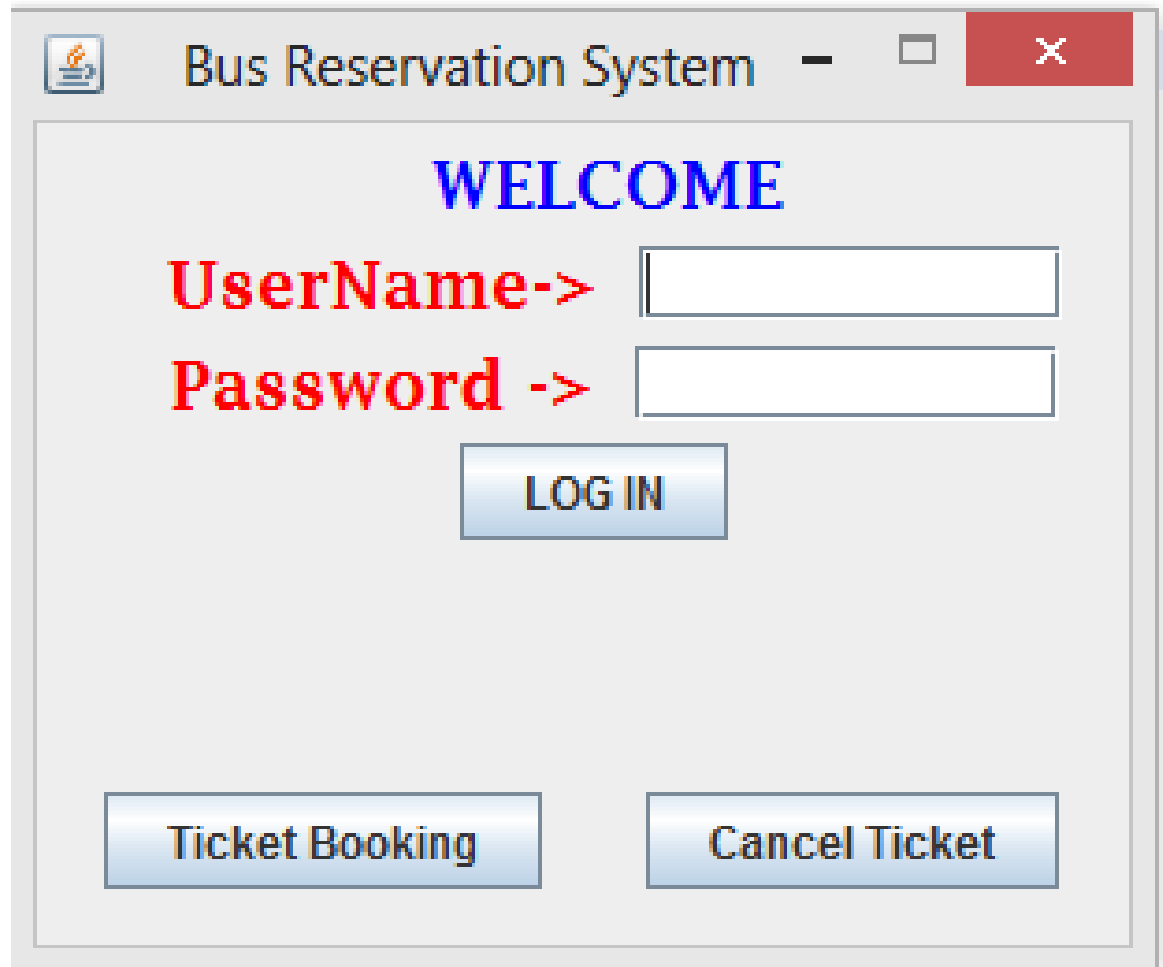


## REGISTERED USER (ADMIN):-



## ScreenShots:-

## Login and customer booking page:-



**Bus Reservation System**

**WELCOME**

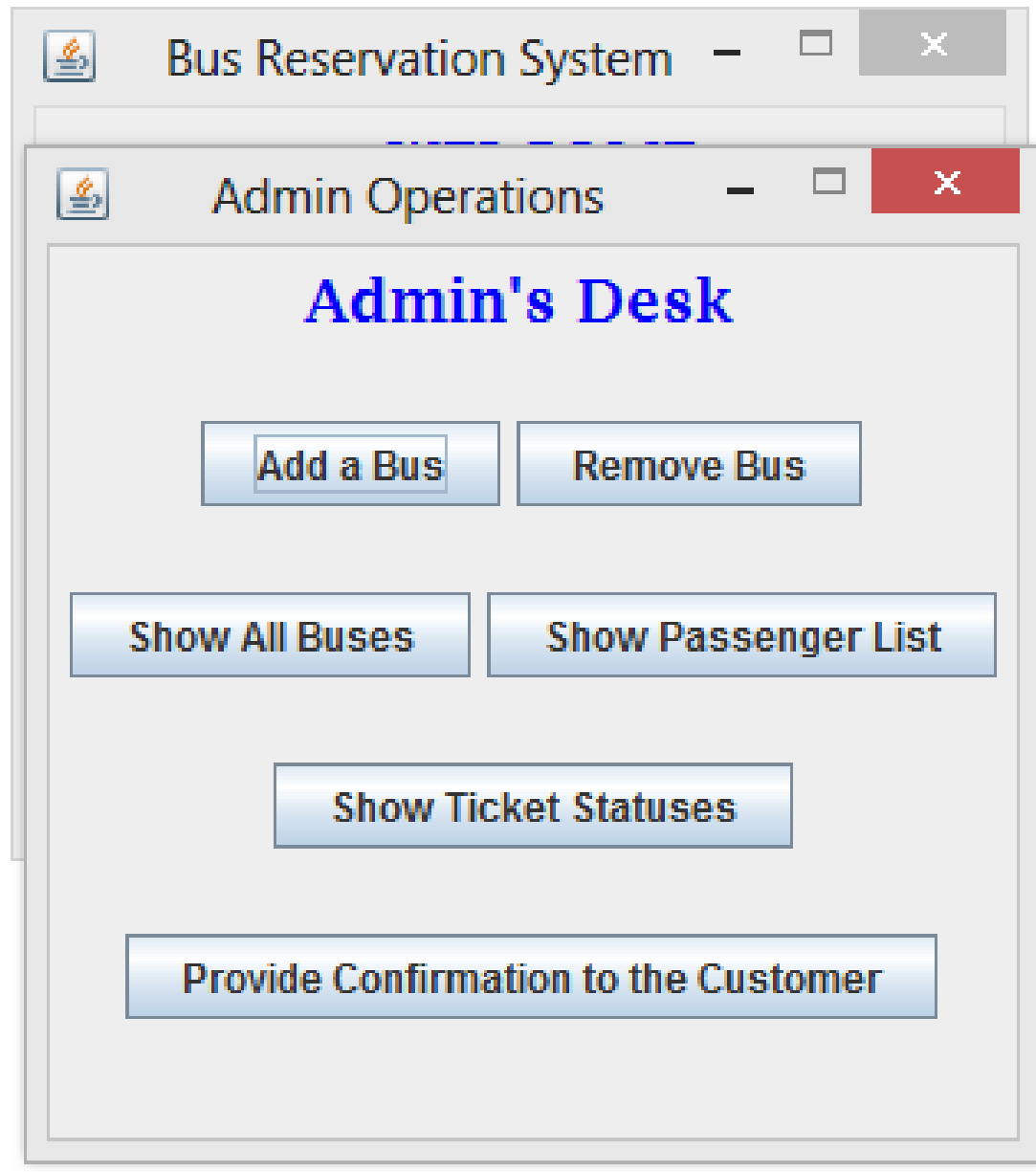
**UserName->**

**Password ->**

**LOG IN**

**Ticket Booking** **Cancel Ticket**

## Admin page of login:-



## Customer booking Page:-

Search Availability

Enter Journey Details

Journey Date (YYYY-MM-DD) ->

2015-01-15

Enter Source ->

Puri

Enter Destination ->

Kolkata

Bus Type ->

☒ AC

☐ Non-AC

CHECK AVAILABILITY

AVAILABLE BUSES

Message

i

Seat Available

OK

## **FUTURE SCOPE OF** **IMPROVEMENT:-**

***THE PROJECT HAS A VERY VAST  
SCOPE IN FUTURE. THE PROJECT  
CAN BE IMPLEMENTED ON  
INTERNET IN FUTURE.PROJECT  
CAN BE UPDATED***

***IN NEAR FUTURE AS AND WHEN  
REQUIREMENT FOR THE SAME  
ARISES, AS IT IS VERY FLEXIBILITY  
IN TERMS OF EXPANSION.***

# CODING:-

## ADD NEW BUS:-

```
package bus.reg;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
//import java.awt.FlowLayout;
```

```
import java.awt.Font;
```

```
import java.awt.GridLayout;
```

```
import java.time.LocalDate;
```

```
import javax.swing.ButtonGroup;
```

```
import javax.swing.JButton;
```

```
import javax.swing.JComboBox;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JRadioButton;
```

```
import javax.swing.JTextField;
```

```
@SuppressWarnings("serial")
```

```
public class AddNewBus extends JFrame
```

```
{
```



```

public AddNewBus()
{
    super("    ADDING A NEW BUS ROUTE");

        JLabel
lblheading, lblheading2, lblfrom, lblto, lblac, lblbusno, lblfare, lblarrtime, lbldepttime, lbldate;

        JTextField tffrom, tfto, tfbno, tffare, tfdate;

        JRadioButton rbac1, rbac2;

        JComboBox<String> jcbarrtime, jcbdepttime;

ButtonGroup btngroup;

        JButton btnsubmit, btnreset;

        String arrtime[] =
{"0","1","2","3","4","5","6","7","8","9","10","11","12","13",

"14","15","16","17","18","19","20","21","22","23"};

        String depttime[] =
{"0","1","2","3","4","5","6","7","8","9","10","11","12","13",

"14","15","16","17","18","19","20","21","22","23"};

        Container c;

        c= getContentPane();

        setLayout(new GridLayout(12,2));

        Font f1 = new Font("Lucida Fax",Font.BOLD,16);

        Font f2 = new Font("Lucida Fax",Font.BOLD,14);

        lblheading = new JLabel("Enter Bus-Route Details",JLabel.CENTER);

        lblheading.setFont(f1);

        lblheading.setForeground(Color.BLUE);

        lblheading2 = new JLabel("");

```

```
lblheading2.setFont(f1);

lblheading2.setForeground(Color.BLUE);

lblbusno = new JLabel("Enter Bus No. ->",JLabel.CENTER);

lblbusno.setFont(f2);

lblbusno.setForeground(Color.DARK_GRAY);

lbldate = new JLabel("Journey Date -> (YYYY-MM-
DD)",JLabel.CENTER);

lbldate.setFont(f2);

lbldate.setForeground(Color.DARK_GRAY);

lblfrom = new JLabel("Enter Source ->",JLabel.CENTER);

lblfrom.setFont(f2);

lblfrom.setForeground(Color.DARK_GRAY);

lblto = new JLabel("Enter Destination ->",JLabel.CENTER);

lblto.setFont(f2);

lblto.setForeground(Color.DARK_GRAY);

lblac = new JLabel("Bus Type ->",JLabel.CENTER);

lblac.setFont(f2);

lblac.setForeground(Color.DARK_GRAY);

lblfare = new JLabel("Enter Fare ->",JLabel.CENTER);

lblfare.setFont(f2);

lblfare.setForeground(Color.DARK_GRAY);

lbldepttime = new JLabel("Enter Departure Time (in hours) -
>",JLabel.CENTER);

lbldepttime.setFont(f2);

lbldepttime.setForeground(Color.DARK_GRAY);
```

```
lblarrtime = new JLabel("Enter Arrival Time (in hours) -  
>",JLabel.CENTER);
```

```
lblarrtime.setFont(f2);
```

```
lblarrtime.setForeground(Color.DARK_GRAY);
```

```
tfbno = new JTextField(15);
```

```
tffrom = new JTextField(15);
```

```
tfto = new JTextField(15);
```

```
tffare = new JTextField(15);
```

```
tfddate = new JTextField(15);
```

```
rbac1 = new JRadioButton("AC");
```

```
rbac2 = new JRadioButton("Non-AC");
```

```
jcbdepttime = new JComboBox<String>(depttime);
```

```
jcbarrtime = new JComboBox<String>(arrtime);
```

```
btngrpac = new ButtonGroup();
```

```
btngrpac.add(rbac1);
```

```
btngrpac.add(rbac2);
```

```
btnreset = new JButton("RESET");
```

```
btnsubmit = new JButton("SUBMIT");
```

```

btnsubmit.addActionListener((ae) -> {

    String f = tffrom.getText().trim(),fr;
    String t = tfto.getText().trim(),t2;
    String ac = new String(),arr = new String(),dept = new String();
    int n;
    LocalDate ld;
    float far;

    try
    {
        n = Integer.parseInt(tfbno.getText().trim());
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(null,"Enter a Valid Bus no....."
                                         + "Busno. is Positive Integer a
non-empty field" );
        return;
    }

    if(rbac1.isSelected())
        ac = "AC";
    if(rbac2.isSelected())
        ac = "Non-AC";

```

```

try
{
    far = Float.parseFloat(tffare.getText().trim());
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null,"Enter a Valid Fare...."
                                   + "\nIt can be any Integer or
Fractional number greater than 0.");
    return;
}

try
{
    ld = LocalDate.parse(tfdate.getText());
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null,"Enter a Valid Date in
accordance with the format mentioned above.");
    return;
}

arr = (String)jcbarrtime.getSelectedItemAt();
dept = (String)jcbdepttime.getSelectedItemAt();

```

```

if(f.length() != 0 && t.length() != 0 && (rbac1.isSelected() || rbac2.isSelected())) && (n > 0)
&& (far>0) && jcbarrtime.getSelectedItem() != null && jcbarrtime.getSelectedItem() != null)
{

    ValidNameCheck vdc = new ValidNameCheck();

    fr = vdc.NameCheckConvert(f);
    t2 = vdc.NameCheckConvert(t);

    if(fr != null && t2 != null)
    {
        Bus b = new Bus(fr,t2,n,ac,far,arr,dept,ld);
        System.out.println("In Add New Bus (Fare) : " + b.getfare());
        new CheckDuplicateBus(b);
    }
    else
    {
        String str = new String();
        str = "You have Entered an Illegal Source or/and Destination
name !!!!!";

        str += "\n1.Every character should be an alphabet";
        str += "\n2.No numerals or special characters are allowed.";
        str += "\n3.Blank spaces are allowed between names.";
        JOptionPane.showMessageDialog(null,str);
    }
}

```

```

else

        JOptionPane.showMessageDialog(null,"Source and/or Destination"
        + " field cannot be empty."

                                + "\nBus.no is a positive field."

        + "\nSelect a Bus Type."
        + "\nSet Fare charged according to the bus type."
        + "\nEnter a Valid date according to the asked format.");

});

btnreset.addActionListener((ae) -> {

    tfbno.setText("");
    tffrom.setText("");
    tfto.setText("");
    tffare.setText("");
    tfdate.setText("");

});

```

## ADD PASSENGER:-

```

package bus.reg;

import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;

```

```
import java.util.ArrayList;
```

```
public class AddPassenger
```

```
{
```

```
    public AddPassenger() {}
```

```
    @SuppressWarnings("unchecked")
```

```
    public AddPassenger(Passenger p)
```

```
    {
```

```
        ArrayList<Passenger> arraylist;
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
FileInputStream("PassengerInfo.txt")))
```

```
        {
```

```
            arraylist = (ArrayList<Passenger>)oin.readObject();
```

```
        }
```

```
        catch(Exception e)
```

```
        {
```

```
            System.out.println("In the first file read catch of the  
PassengerAdd");
```

```
            arraylist = new ArrayList<Passenger>();
```

```
        }
```

```
        System.out.println("Add Passenger (Bus No) : " + p.getbusno());
```

```
        System.out.println("Add Passenger (Seat No) : " + p.getseatno());
```

```
        arraylist.add(p);
```



```

        try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("PassengerInfo.txt")))
        {
            oout.writeObject(arraylist);
            System.out.println("Passenger details added to the file");
        }
        catch(Exception e)
        {
            System.out.println("In the second write catch of the
PassengerAdd");
            arraylist = new ArrayList<Passenger>();
        }
        new PassengerShow();
    }
}

```

```

c.add(lblheading);c.add(lblheading2);
c.add(lblbusno);c.add(tfbno);
c.add(lbldate);c.add(tfddate);
c.add(lblfrom);c.add(tffrom);
c.add(lblto);c.add(tfto);
c.add(lblac);c.add(rbac1);
c.add(new JLabel(""));
c.add(rbac2);
c.add(lblfare);c.add(tffare);

```

```
c.add(lbldepttime);c.add(jcbdepttime);  
c.add(lblarrtime);c.add(jcbarrtime);  
c.add(new JLabel(""));c.add(new JLabel(""));  
c.add(btnreset);c.add(btnsubmit);  
  
setSize(550,400);  
  
setVisible(true);  
setLocation(450,200);  
setResizable(false);  
  
}  
}
```

## ADD TICKET STATUS:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class AddTicketStatus
```

```
{
```

```
_____ @SuppressWarnings("unchecked")
```

```
_____ public AddTicketStatus(TicketStatus ts, Passenger p)
```

```
_____ {
```

```
_____ ArrayList<TicketStatus> arraylist;
```

```
_____ try(ObjectInputStream oin = new ObjectInputStream(new  
_____ FileInputStream("TicketStatusInfo.txt")))
```

```
_____ {
```

```
_____ arraylist = (ArrayList<TicketStatus>)oin.readObject();
```

```
_____ }
```

```
_____ catch(Exception e)
```

```
_____ {
```

```
_____ System.out.println("In the first file read catch of the  
_____ TicketStatusAdd");
```

```
_____ arraylist = new ArrayList<TicketStatus>();
```

```
_____ }
```

```
_____ String str = new String();
```

```
_____ JOptionPane.showMessageDialog(null, "Passenger Details being  
_____ added");
```

```
_____ str += "Passenger name : " + p.getname();
```

```
_____ str += "\nTicket no : " + p.getticketno();
```

```
_____ str += "\n\nTicket Status Being Added are : ";
```

```
_____ str += "\nTicket No : " + ts.getticketno() + "\nTicket Status : " +  
_____ ts.getstatus();
```

```
_____ JOptionPane.showMessageDialog(null, str);
```

```

_____ arrayList.add(ts);

_____
_____ try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("TicketStatusInfo.txt")))
_____ {
_____ oout.writeObject(arraylist);
_____ System.out.println("TicketStatus details added to the file");
_____ }
_____ catch(Exception e)
_____ {
_____ System.out.println("In the second write catch of the
TicketStatusAdd");
_____ arrayList = new ArrayList<TicketStatus>();
_____ }
_____
_____ new TicketStatusShow();
_____
_____ }
}

```

## ADMIN:-

```
package bus.reg;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
import java.awt.FlowLayout;
```

```
import java.awt.Font;
```

```
import javax.swing.JButton;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
//import javax.swing.JOptionPane;
```

```
@SuppressWarnings({"serial"})
```

```
public class Admin extends JFrame
```

```
{
```

```
    public Admin()
```

```
    {
```

```
        super("Admin Operations");
```

```
        JLabel lblheading;
```

```
        JButton
```

```
        btnadddbus,btnremovebus,btnpropassconf,btnshowpass,btnshowbus,btnctckshow;
```

```
        Container c;
```

```
        c = getContentPane();
```

```
        setLayout(new FlowLayout());
```

```
        Font f1 = new Font("Lucida Fax",Font.BOLD,18);
```

```
        lblheading = new JLabel("    Admin's Desk");
```

```
        lblheading.setFont(f1);
```

```
        lblheading.setForeground(Color.BLUE);
```

```
btnaddbus = new JButton("Add a Bus");  
btnremovebus = new JButton("Remove Bus");  
btnshowbus = new JButton("Show All Buses");  
btnshowpass = new JButton("Show Passenger List");  
btntcktshow = new JButton("Show Ticket Statuses");  
btnpropassconf = new JButton("Provide Confirmation to the  
Customer");
```

```
btnaddbus.addActionListener((ae) -> {
```

```
    new AddNewBus();
```

```
});
```

```
btnremovebus.addActionListener((ae) -> {
```

```
    new RemoveBus();
```

```
});
```

```
btnshowbus.addActionListener((ae) -> {
```

```
    new BusShow();
```

```
});
```

```
btnshowpass.addActionListener((ae) -> {
```

```
        new PassengerShow();  
    });
```

```
    btntcktshow.addActionListener((ae) -> {
```

```
        new TicketStatusShow();  
    });
```

```
    btnpropassconf.addActionListener((ae) -> {
```

```
        new ConfirmCustomer();  
    });
```

```
    c.add(lblheading);c.add(new JLabel(""));
```

```
    c.add(new JLabel(""));
```

```
    c.add(btnaddbus);
```

```
    c.add(btnremovebus);
```

```
    c.add(new JLabel(""));
```

```
    c.add(btnshowbus);c.add(btnshowpass);
```

```
    c.add(new JLabel(""));
```

```
    c.add(btntcktshow);
```

```
    c.add(new JLabel(""));
```

```
    c.add(btnpropassconf);
```

```
setSize(300,300);

setVisible(true);

setLocation(535,250);

setResizable(false);

    }

}
```

## **BOOK SEAT:-**

```
package bus.reg;

import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.util.ArrayList;

public class BookSeat
{
    @SuppressWarnings("unchecked")
    public BookSeat(int busno)
    {
        int i;
        boolean flag = false;
        ArrayList<Bus> arraylist;
```



```

try(ObjectInputStream oin = new ObjectInputStream(new FileInputStream("BusInfo.txt")))
{
    arraylist = (ArrayList<Bus>)oin.readObject();
    for(i=0;i<arraylist.size();i++)
    {
        Bus b = arraylist.get(i);

        if(b.getbusno() == busno)
        {
            b.bookseat();
            flag = true;
            break;
        }
    }

    if(flag)
    {
        try(ObjectOutputStream oout = new
ObjectOutputStream(new FileOutputStream("BusInfo.txt")))
        {
            oout.writeObject(arraylist);

            System.out.println("Bus details added to the file");
        }
        catch(Exception e)
        {

```

```

BusAdd");

        System.out.println("In the second write catch of the

        arraylist = new ArrayList<Bus>();

    }

}

else

{

    System.out.println("Seat did not got booked.");

}

}

catch(Exception e)

{

    System.out.println("In the first file read catch of the BusAdd");

    arraylist = new ArrayList<Bus>();

}

try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("BusInfo.txt")))

{

    oout.writeObject(arraylist);

    System.out.println("Bus details added to the file");

}

catch(Exception e)

{

    System.out.println("In the second write catch of the BusAdd");

    arraylist = new ArrayList<Bus>();

```

```
}  
  
}  
  
}
```

## BOOK TICKET:-

```
package bus.reg;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
//import java.awt.FlowLayout;
```

```
import java.awt.Font;
```

```
import java.awt.GridLayout;
```

```
import java.time.LocalDate;
```

```
import javax.swing.ButtonGroup;
```

```
import javax.swing.JButton;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JRadioButton;
```

```
import javax.swing.JTextField;
```

```
@SuppressWarnings("serial")
```

```
public class BookT extends JFrame
```

```
{
```

```

public BookT()
{
    super("Search Availability");
    JLabel lblheading, lblfrom, lblto, lblac, lbldate;
    JTextField tffrom, tfto, tfdate;
    JRadioButton rbac1, rbac2;
    ButtonGroup btngroup;

    JButton btncheck, btnbusshow;
    Container c;

    c = getContentPane();
    setLayout(new GridLayout(8, 2));
    Font f1 = new Font("Lucida Fax", Font.BOLD, 16);
    Font f2 = new Font("Lucida Fax", Font.BOLD, 14);
    lblheading = new JLabel("Enter Journey Details", JLabel.CENTER);
    lblheading.setFont(f1);
    lblheading.setForeground(Color.BLUE);
    lbldate = new JLabel("Journey Date (YYYY-MM-DD) ->
    ", JLabel.CENTER);
    lbldate.setFont(f2);
    lbldate.setForeground(Color.DARK_GRAY);
    lblfrom = new JLabel("Enter Source -> ", JLabel.CENTER);
    lblfrom.setFont(f2);
    lblfrom.setForeground(Color.DARK_GRAY);
    lblto = new JLabel("Enter Destination -> ", JLabel.CENTER);

```

```
lblto.setFont(f2);  
lblto.setForeground(Color.DARK_GRAY);  
lblac = new JLabel("Bus Type -> ",JLabel.CENTER);  
lblac.setFont(f2);  
lblac.setForeground(Color.DARK_GRAY);
```

```
tffrom = new JTextField(15);  
tfto = new JTextField(15);  
tfdate = new JTextField(15);
```

```
rbac1 = new JRadioButton("AC");  
rbac2 = new JRadioButton("Non-AC");
```

```
btngrpac = new ButtonGroup();
```

```
btngrpac.add(rbac1);  
btngrpac.add(rbac2);
```

```
btncheck = new JButton("CHECK AVAILABILITY");  
btnbusshow = new JButton("AVAILABLE BUSES");
```

```
btncheck.addActionListener((ae) -> {  
  
    String f = tffrom.getText().trim();  
    String t = tfto.getText().trim();
```

```

String ac = new String();
LocalDate ld;
if(rbac1.isSelected())
    ac = "AC";
if(rbac2.isSelected())
    ac = "Non-AC";

try
{
    ld = LocalDate.parse(tfdate.getText().trim());
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null, "Please Enter a Valid date ,in
the above mentioned format !!!!!");
    return;
}

System.out.println("Book Ticket (rbac1) : " + rbac1.isSelected());
System.out.println("Book Ticket (rbac2) : " + rbac2.isSelected());

if(f.length() != 0 && t.length() != 0 && (rbac1.isSelected() || rbac2.isSelected()))
    new CheckAvailability(f,t,ac,ld);
else
    JOptionPane.showMessageDialog(null,"Source and/or Destination"

```

```
        + " field cannot be empty."
        + "\nPlease Select Your Bus Type."
        + "\nFare will be charged according to the type of bus selected.");
    });
```

```
btnbusshow.addActionListener((ae) -> {
```

```
    new BusesAvailable();
});
```

```
c.add(lblheading);c.add(new JLabel(""));
```

```
c.add(lbldate);c.add(tfdate);
```

```
c.add(lblfrom);c.add(tffrom);
```

```
c.add(lblto);c.add(tfto);
```

```
c.add(lblac);c.add(rbac1);
```

```
c.add(new JLabel(""));c.add(rbac2);
```

```
c.add(btncheck);
```

```
c.add(btnbusshow);
```

```
setSize(500,350);
```

```
setVisible(true);
```

```
setLocation(450,200);
```

```
setResizable(false);
```

```
}}
```

**BUS:-**

```
package bus.reg;
```

```
import java.io.Serializable;
```

```
import java.time.LocalDate;
```

```
//import javax.swing.JOptionPane;
```

```
@SuppressWarnings("serial")
```

```
public class Bus implements Serializable
```

```
{
```

```
    String from,to,contact;
```

```
    int busno,eseat;
```

```
    int seat[] = new int[3];
```

```
    String isac,arrt,dept;
```

```
    float fare;
```

```
    LocalDate localdate;
```

```
    public Bus() { }
```

```
    public Bus(String f,String t,int i,String ac,float fa,String a,String d,String ld)
```

```
{
```

```
        from = new String(f);
```

```
        to = new String(t);
```

```
        busno = i;
```



```
        isac = new String(ac);  
        fare = fa;  
        arrt = new String(a);  
        dept = new String(d);  
        localdate = LocalDate.parse(ld);  
    }
```

```
public Bus(String f,String t,int i,String ac,float fa,String a,String d,LocalDate ld)  
{  
    from = new String(f);  
    to = new String(t);  
    busno = i;  
    isac = new String(ac);  
    fare = fa;  
    arrt = new String(a);  
    dept = new String(d);  
    localdate = ld;  
}
```

```
public String getfrom()  
{  
    return from;  
}
```

```
public String getto()
{
    return to;
}
```

```
public int geteseat()
{
    int i;
    eseat=0;
    for(i=0;i<seat.length;i++)
    {
        if(seat[i]==0)
            eseat++;
    }
    return eseat;
}
```

```
public int getbusno()
{
    return busno;
}
```

```
public int bookseat()
{
```

```
        int i,j=0;
        for(i=0;i<seat.length;i++)
        {
            if(seat[i] == 0)
            {
                seat[i]=i+1;
                j=i+1;
                break;
            }
        }
        return j;
    }
}
```

```
public void setseatempty(int i)
{
    int j=0;
    while(j != (i-1))
        j++;
    seat[j] = 0;
}
```

```
public String getisac()
{
    return isac;
}
```

```
}
```

```
public void setisac(String a)
```

```
{
```

```
    isac = a;
```

```
}
```

```
public float getfare()
```

```
{
```

```
    return fare;
```

```
}
```

```
public String getarrt()
```

```
{
```

```
    return arrt;
```

```
}
```

```
public String getdept()
```

```
{
```

```
    return dept;
```

```
}
```

```
public String getcon()
```

```
{
```

```
        return contact;
    }

    public LocalDate getlocaldate()
    {
        return localdate;
    }
}
```

## **BUS ADD:-**

```
package bus.reg;

import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.util.ArrayList;

public class BusAdd
{
    ArrayList<Bus> arraylist;

    @SuppressWarnings("unchecked")
```

```

public BusAdd(Bus b)
{
    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("BusInfo.txt")))
    {
        arraylist = (ArrayList<Bus>)oin.readObject();
    }
    catch(Exception e)
    {
        System.out.println("In the first file read catch of the BusAdd");
        arraylist = new ArrayList<Bus>();
    }

    arraylist.add(b);

    try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("BusInfo.txt")))
    {
        oout.writeObject(arraylist);
        System.out.println("Bus details added to the file");
    }
    catch(Exception e)
    {
        System.out.println("In the second write catch of the BusAdd");
        arraylist = new ArrayList<Bus>();
    }
}

```

```
        new BusShow();  
    }  
}
```

## BUS AVAILABLE:-

```
package bus.reg;
```

```
import java.awt.BorderLayout;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
import java.awt.Font;
```

```
import java.io.FileInputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JScrollPane;
```

```
import javax.swing.JTable;
```

```
@SuppressWarnings("serial")
```

```
public class BusesAvailable extends JFrame
```

```

{

@SuppressWarnings("unchecked")

public BusesAvailable()
{

    super("Displaying the buses");

    int i,loc = -1;

    boolean flag = false;

    ArrayList<Bus> arraylist = new ArrayList<Bus>();

    String tableheading[ ] = {"BusNo","From","To","Empty Seats","Bus
Type","Fare","Departure (in hrs)","Arrival (in hrs) ","Journey Date"},tabbody[][];


    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("BusInfo.txt")))
    {

        arraylist = (ArrayList<Bus>)oin.readObject();

        tabbody = new String[arraylist.size()][9];

        try
        {

            if(arraylist.size()>0)
            {

                for(i=0;i<arraylist.size();i++)
                {

                    Bus b = arraylist.get(i);

                    if(b.geteseat() > 0)

```



```

        {
            flag = true;
            loc++;
            tabbody[loc][0] = "      " +
b.getbusno();

            tabbody[loc][1] = "      " +
b.getfrom();

            tabbody[loc][2] = "      " + b.getto();
            tabbody[loc][3] = "      " +
b.geteseat();

            tabbody[loc][4] = "      " +
b.getisac();

            tabbody[loc][5] = "      " +
b.getfare();

            tabbody[loc][6] = "      " +
b.getdept();

            tabbody[loc][7] = "      " +
b.getarrrt();

            tabbody[loc][8] = " " +
b.getlocaldate();

        }
    }

    if(flag)
    {
        System.out.print("\nSetting Tabbody");

        Container c = getContentPane();

```

```

JTable(tabbody,tableheading);

Fax",Font.BOLD,18);

BUSES",JLabel.CENTER);

c.setLayout(new BorderLayout());

JTable datatable = new

JScrollPane jsp = new JScrollPane(datatable);

Font f1 = new Font("Lucida

JLabel lblheading = new JLabel("ALL

lblheading.setFont(f1);

lblheading.setForeground(Color.BLUE);

c.add(lblheading);

c.add(jsp,BorderLayout.EAST);

c.add(jsp,BorderLayout.SOUTH);

System.out.print("\nAfter Adding by

Container");

setSize(1000,500);

setLocation(300,150);

setVisible(true);

setResizable(false);

}

else

{

JOptionPane.showMessageDialog(null,"Sorry !!! No Seat available on

any of the Buses.");

```

```

        return;
    }

    System.out.println("\nAt the End");
}
else
{
    System.out.println("EmptyFile");
    return;
}
}
catch(Exception e)
{
    System.out.println("In the ArrayList.size() catch of the
BusShow");
}
}
catch(Exception e)
{
    System.out.println("In the first file read catch of the BusShow.");
}
}
}

```

## **BUS RESERVATION:-**

```
package bus.reg;
```

```
import java.awt.Color;
```

```
import java.awt.Container;

import java.awt.FlowLayout;

import java.awt.Font;

//import java.awt.GridLayout;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;


import javax.swing.*;

@SuppressWarnings("serial")

public class BusReservation extends JFrame implements ActionListener
{
    JLabel lblheading, lblheading2, lblname, lblpass;
    JTextField tfname;
    JPasswordField pfpass;
    JButton btnbook, btnlogin, btncancel;
    Container c;

    public BusReservation()
    {
        super("  Bus Reservation System");
        new StartBus();
        c = getContentPane();
    }
}
```

```
setLayout(new FlowLayout());
```

```
Font f1 = new Font("Lucida Fax",Font.BOLD,18);
```

```
//Font f2 = new Font("Segoe UI",Font.BOLD + Font.ITALIC,16);
```

```
lblheading = new JLabel("      WELCOME");
```

```
lblheading.setFont(f1);
```

```
lblheading.setForeground(Color.BLUE);
```

```
lblheading2 = new JLabel("      ");
```

```
lblheading2.setFont(f1);
```

```
lblheading2.setForeground(Color.BLUE);
```

```
lblname = new JLabel("  UserName-> ",JLabel.CENTER);
```

```
lblname.setFont(f1);
```

```
lblname.setForeground(Color.RED);
```

```
lblpass = new JLabel("  Password -> ",JLabel.CENTER);
```

```
lblpass.setFont(f1);
```

```
lblpass.setForeground(Color.RED);
```

```
tfname = new JTextField(10);
```

```
pfpass = new JPasswordField(10);
```

```
btnlogin = new JButton("LOG IN");
```

```
btnbook = new JButton("Ticket Booking");
```

```

btncancel = new JButton("Cancel Ticket");

btnbook.addActionListener(this);
btnlogin.addActionListener(this);
btncancel.addActionListener(this);


c.add(lblheading);c.add(lblheading2);
c.add(lblname);c.add(tfname);
c.add(lblpass);c.add(pfpass);
c.add(new JLabel("                "));
c.add(btnlogin);c.add(new JLabel("                "));
c.add(new JLabel("                "));
c.add(new JLabel("                "));
c.add(new JLabel("                "));
c.add(btnbook);
c.add(new JLabel("    "));
c.add(btncancel);


setSize(300,250);
setVisible(true);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setLocation(535,250);
setResizable(false);

}

```

```
public static void main(String a[ ])
```

```
{
```

```
        new BusReservation();
```

```
}
```

```
@SuppressWarnings("deprecation")
```

```
public void actionPerformed(ActionEvent ae)
```

```
{
```

```
        if(ae.getSource() == btnlogin)
```

```
        {
```

```
            String user,pass;
```

```
            user = tfname.getText().trim();
```

```
            pass = pfpass.getText().trim();
```

```
            if(user.equals("ADMIN") && pass.equals("1234"))
```

```
            {
```

```
                                JOptionPane.showMessageDialog(null,"Login  
Succesfull !!! Welcome Admin");
```

```
                                new Admin();
```

```
            }
```

```
            else if(user.length() == 0 || pass.length() == 0 || (user.length()  
== 0 && pass.length() == 0))
```

```
            {
```

```

                                JOptionPane.showMessageDialog(null,"Username
and/or Password field cannot be empty");
                                }
                                else
                                {
                                JOptionPane.showMessageDialog(null,"Login
Unsuccesfull !!! Enter a Valid username or password !!!");
                                }
                                }
                                else if(ae.getSource() == btnbook)
                                {
                                new BookT();
                                }
                                else if(ae.getSource() == btncancel)
                                {
                                new CancelTicket();
                                }
                                }

```

## BUS SHOW:-

```
package bus.reg;
```

```
import java.awt.BorderLayout;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```



```
import java.awt.Font;

import java.io.FileInputStream;

import java.io.ObjectInputStream;

import java.util.ArrayList;


import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JScrollPane;

import javax.swing.JTable;


@SuppressWarnings("serial")

public class BusShow extends JFrame

{

    @SuppressWarnings("unchecked")

    public BusShow()

    {

        super("Displaying the buses");

        int i;

        ArrayList<Bus> arraylist = new ArrayList<Bus>();

        String tableheading[ ] = {"BusNo","From","To","Bus

Type","Fare","Departure (in hrs)","Arrival (in hrs)","Journey Date"},tbody[][];


        try(ObjectInputStream oin = new ObjectInputStream(new

FileInputStream("BusInfo.txt")))

        {

            arraylist = (ArrayList<Bus>)oin.readObject();
```

```
tabbody = new String[arraylist.size()][8];
```

```
try
```

```
{
```

```
    if(arraylist.size()>0)
```

```
    {
```

```
        for(i=0;i<arraylist.size();i++)
```

```
        {
```

```
            Bus b = arraylist.get(i);
```

```
                tabbody[i][0] = "        " + b.getbusno();
```

```
                tabbody[i][1] = "        " + b.getfrom();
```

```
                tabbody[i][2] = "        " + b.getto();
```

```
                tabbody[i][3] = "        " + b.getisac();
```

```
                tabbody[i][4] = "        " + b.getfare();
```

```
                tabbody[i][5] = "        " + b.getdept();
```

```
                tabbody[i][6] = "        " + b.getarrrt();
```

```
                tabbody[i][7] = " " + b.getlocaldate();
```

```
        }
```

```
System.out.print("\nSetting Tabbody");
```

```
Container c = getContentPane();
```

```
    c.setLayout(new BorderLayout());
```

```
JTable datatable = new  
JTable(tabbody,tableheading);
```

```
JScrollPane jsp = new JScrollPane(datatable);
```

```
Font f1 = new Font("Lucida Fax",Font.BOLD,18);
```

```
JLabel lblheading = new JLabel("ALL  
BUSES",JLabel.CENTER);
```

```
    lblheading.setFont(f1);
```

```
    lblheading.setForeground(Color.BLUE);
```

```
    c.add(lblheading);
```

```
    c.add(jsp,BorderLayout.EAST);
```

```
    c.add(jsp,BorderLayout.SOUTH);
```

```
    System.out.print("\nAfter Adding by Container");
```

```
setSize(800,500);
```

```
setLocation(400,150);
```

```
setVisible(true);
```

```
setResizable(false);
```

```
System.out.println("\nAt the End");
```

```
}
```

```
else
```

```
{
```

```
    System.out.println("EmptyFile");
```

```

        return;
    }
}
catch(Exception e)
{
    System.out.println("In the ArrayList.size() catch of the
BusShow");
}
}
catch(Exception e)
{
    System.out.println("In the first file read catch of the BusShow.");
}
}
}
}

```

## CANCEL TICKET:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```

public class CancelTicket
{
    @SuppressWarnings("unchecked")
    public CancelTicket()
    {
        ArrayList<Passenger> arraylist;

        int i;

        boolean flag = false;

        try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("PassengerInfo.txt")))
        {
            arraylist = (ArrayList<Passenger>)oin.readObject();

            try
            {
                if(arraylist.size()>0)
                {
                    String tno = new String();

                    try
                    {
                        tno = JOptionPane.showInputDialog("Enter
ticket no : ").trim();

                        if(tno == null || tno.length() == 0)
                            return;
                    }
                }
            }
        }
    }
}

```

```

    }
    catch(Exception e)
    {
        return;
    }
    for(i=0;i<arraylist.size();i++)
    {
        Passenger p = arraylist.get(i);

        if(tno.equals(p.getticketno()))
        {
            flag = true;

JOptionPane.showMessageDialog(null,"Match Found !!!");

            String str = new String();
            str = "Details of the passenger whose
ticket is being cancelled";

            str += "\nName : " + p.getname() +
"\nAge : " + p.getage() + "    Sex : " + p.getsex();

            str += "\nBus No : " + p.getbusno() + "
SeatNo : " + p.getseatno();

JOptionPane.showMessageDialog(null,str);

            arraylist.remove(i);

            System.out.println("In Cancel ticket : "
+ p.getseatno());

            new
EmptySeat(p.getseatno(),p.getbusno());

```

```

        new RemoveTicketStatus(tno);
    }
}

if(flag==true)
{
    try(ObjectOutputStream oout = new
ObjectOutputStream(new FileOutputStream("PassengerInfo.txt")))
    {
        oout.writeObject(arraylist);
        System.out.println("Ticket Cancelled");
        new PassengerShow();
    }
    catch(Exception e)
    {
        System.out.println("In the write catch
of the cancel ticket.");
    }
}
else
{
    JOptionPane.showMessageDialog(null,"No
Match Found for the ticket!!!");
}
}
else

```

```

        {
            JOptionPane.showMessageDialog(null,"No
Passenger have their ticket booked at present...");

            System.out.println("EmptyFile (Cancel Ticket)");

            return;

        }
    }
    catch(Exception e)
    {
        System.out.println("In the ArrayList.size() catch of the
CancelTicket");
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null,"No Passenger have their
ticket booked at present...");

    System.out.println("In File read Catch of the Cancel Ticket");
}
}
}
}

```

## CHECK AVAILABILITY:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.ObjectInputStream;
```



```
import java.time.LocalDate;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class CheckAvailability
```

```
{
```

```
    ArrayList<Bus> arraylist;
```

```
    @SuppressWarnings("unchecked")
```

```
    public CheckAvailability(String f,String t,String ac,LocalDate ld)
```

```
    {
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
FileInputStream("BusInfo.txt")))
```

```
        {
```

```
            arraylist = (ArrayList<Bus>)oin.readObject();
```

```
        }
```

```
        catch(Exception e)
```

```
        {
```

```
            System.out.println("In the file read catch of the CheckAvail");
```

```
            arraylist = new ArrayList<Bus>();
```

```
        }
```

```
        try
```

```
        {
```

```
        if(arraylist.size()>0)
        {

        }
        else
        {
            System.out.println("Empty File !!!");
            return;
        }
    }
    catch(Exception e)
    {
        System.out.println("In the ArrayList.size() catch of the
CheckAvail");
    }

    int i,sno,bno;
    String fro,tto,dept,arr;
    float far;
    LocalDate locdt;
    boolean flag = false;

    for(i=0;i<arraylist.size();i++)
    {
        Bus b = arraylist.get(i);
```

```

        if(b.getLocaldate().equals(ld) && f.equalsIgnoreCase(b.getfrom())
        && t.equalsIgnoreCase(b.getto()) && b.geteseat() != 0 && ac.equalsIgnoreCase(b.getisac()))
        {
            flag = true;

            JOptionPane.showMessageDialog(null,"Seat Available");

            sno = b.bookseat();

            bno = b.getbusno();

            fro = b.getfrom();

            tto = b.getto();

            far = b.getfare();

            arr = b.getarrrt();

            dept = b.getdept();

            locdt = b.getLocaldate();

            System.out.println("In Check Availability :(Busno) " + bno);

            System.out.println("In Check Availability :(Seat No) : " +
sno);

            System.out.println("In Check Availability :(Fare) : " + far);

            new InputPassDetails(sno,bno,ac,fro,tto,far,arr,dept,locdt);

            break;
        }
    }

    if(!flag)

        JOptionPane.showMessageDialog(null,"Seat not Available Or the
Bus"

```

```
+ "\ndoes not exist for the specified route.");
```

```
}
```

```
}
```

## CHECK DUPLICATE BUS:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class CheckDuplicateBus
```

```
{
```

```
    public CheckDuplicateBus() {}
```

```
    @SuppressWarnings("unchecked")
```

```
    public CheckDuplicateBus(Bus db)
```

```
    {
```

```
        ArrayList<Bus> arraylist;
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
FileInputStream("BusInfo.txt")))
```

```
        {
```

```

boolean flag = true;
arraylist = (ArrayList<Bus>)oin.readObject();
try
{
    for(int i = 0;i < arraylist.size();i++)
    {
        Bus    b = arraylist.get(i);

        if(b.getbusno() == db.getbusno())
        {
            flag = false;
            JOptionPane.showMessageDialog(null,"Bus
with the same no. is already present.");
            return;
        }
        else if(b.getfrom().equals(db.getfrom()) &&
b.getto().equalsIgnoreCase(db.getto()) && b.getdept().equalsIgnoreCase(db.getdept()))
        {
            flag = false;
            JOptionPane.showMessageDialog(null,"Two
buses on the same route cant have same departure time.");
            return;
        }
    }

    if(flag)

```

```

        {
            new BusAdd(db);
        }
    }
    catch(Exception e)
    {
        System.out.println("In the ArrayList.size() catch of the
Check Duplicate Bus.");
    }
}
catch(Exception e)
{
    System.out.println("In the first file read catch of the Check
Duplicate Bus.");

    arraylist = new ArrayList<Bus>();
}

}
}

```

## CONFIRM CUSTOMER:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class ConfirmCustomer
```

```
{
```

```
    ArrayList<TicketStatus> arraylist;
```

```
    @SuppressWarnings("unchecked")
```

```
    public ConfirmCustomer()
```

```
    {
```

```
        int i;
```

```
        boolean flag = true;
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
FileInputStream("TicketStatusInfo.txt")))
```

```
        {
```

```
            flag = false;
```

```
            arraylist = (ArrayList<TicketStatus>)oin.readObject();
```

```
            System.out.println("In Confirm Customer");
```

```
            try
```

```
            {
```

```
                System.out.println("\nIn Confirm Customer before  
ArrayList.size());
```

```

        System.out.println("Before Confirm Customer ArrayList
(size) : () " + arraylist.size());

        if(arraylist.size()>0)
        {

            System.out.println("In Confirm Customer ArrayList
(size) : () " + arraylist.size());

            for(i=0;i<arraylist.size();i++)
            {

                System.out.println("\nIn Confirm Customer
ArrayList.size()");

                TicketStatus t = arraylist.get(i);
                if(t.getstatus()==false)
                {

                    t.setstatus(true);

                    flag = true;

                    System.out.println("\nIn Confirm
Customer ArrayList.size() before Confirm Passenger.");

                    new ConfirmPassenger(t.getticketno());

                    System.out.println("\nIn Confirm
Customer ArrayList.size() after Confirm Passenger.");

                }

            }

        }
        else
        {

            JOptionPane.showMessageDialog(null,"No
Passengers have their tickets booked at present....");

```



```

        System.out.println("Empty File. (Confirm Customer)");
    };

        return;
    }

    }
    catch(Exception e)
    {
        System.out.println("In ArrayList.size() catch of
ConfirmCustomer.");
        arraylist = new ArrayList<TicketStatus>();
    }
    }
    catch(Exception e)
    {
        System.out.println("In the file read catch of ConfirmCustomer");
    }

    if(flag)
    {
try(ObjectOutputStream oout = new ObjectOutputStream(new
    FileOutputStream("TicketStatusInfo.txt")))
{
    oout.writeObject(arraylist);

    System.out.println("Updated ticketstatus of Confirm Customer");
}
catch(Exception e)

```

```
{  
    System.out.println("In Write Catch of the Confirm Customer");  
}  
  
    }  
  
}  
  
}
```

## CONFIRM PASSENGER:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class ConfirmPassenger
```

```
{  
    public ConfirmPassenger()
```

```
{
```

```
}
```

```
@SuppressWarnings("unchecked")
```

```
public ConfirmPassenger(String tno)
```

```

{

    ArrayList<Passenger> arraylist;

    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("PassengerInfo.txt")))
    {

        int i;

        arraylist = (ArrayList<Passenger>)oin.readObject();

        try
        {

            if(arraylist.size()>0)
            {

                for(i=0;i<arraylist.size();i++)
                {

                    Passenger p = arraylist.get(i);

                    if(tno.equalsIgnoreCase(p.getticketno()))
                    {

                        String str = new String();

                        str = "Congartulations !!! Your Ticket
has been Confirmed !!!";

                        str += "\nTicket No : " + p.getticketno();

                        str += "\nName : " + p.getname() + "
Age : "+ p.getage() + " Sex : " + p.getsex();

                        str += "\nFrom : " + p.getfrom() + " To :
" + p.getto();

```

```

                                str += "\nDeparture Time : " +
p.getdept()+":00 hrs." + "  Arrival Time : " + p.getarrrt() + ":00 hrs.";

                                JOptionPane.showMessageDialog(null,str);

                                }

                                }

                                }
                                else
                                {

                                System.out.println("EmptyFile-(Array.size() of
ConfirmPassenger)");

                                return;

                                }

                                }

                                catch(Exception e)

                                {

                                System.out.println("In the ArrayList.size() catch of the
ConfirmPassenger");

                                }

                                }

                                catch(Exception e)

                                {

                                System.out.println("In the file read catch of the
ConfirmPassenger");

                                }

                                }

}

```

## EMPTY SEAT:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
public class EmptySeat
```

```
{
```

```
    public EmptySeat()
```

```
    {
```

```
    }
```

```
    @SuppressWarnings({ "unchecked" })
```

```
    public EmptySeat(int sno,int bno)
```

```
    {
```

```
        int i;
```

```
        ArrayList<Bus> arraylist;
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
        FileInputStream("BusInfo.txt")))
```

```
        {
```

```
            arraylist = (ArrayList<Bus>)oin.readObject();
```

```

    }
    catch(Exception e)
    {
        System.out.println("In the first file read catch of the UpdateSeat");
        arraylist = new ArrayList<Bus>();
    }
    for(i=0;i<arraylist.size();i++)
    {
        Bus b = arraylist.get(i);
        if(b.getbusno() == bno)
            b.setseatempty(sno);
    }
    try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("BusInfo.txt")))
    {
        oout.writeObject(arraylist);
        System.out.println("Bus details added to the file in UpdateSeat");
    }
    catch(Exception e)
    {
        System.out.println("In the second write catch of the UpdateSeat");
        arraylist = new ArrayList<Bus>();
    }
}
}

```

# INPUT PASS DETAILS:-

```
package bus.reg;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
import java.awt.FlowLayout;
```

```
import java.awt.Font;
```

```
import java.time.LocalDate;
```

```
import javax.swing.ButtonGroup;
```

```
import javax.swing.JButton;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JRadioButton;
```

```
import javax.swing.JTextField;
```

```
@SuppressWarnings("serial")
```

```
public class InputPassDetails extends JFrame
```

```
{
```

```
    @SuppressWarnings({ "deprecation", "unused" })
```

```
    public InputPassDetails(int sno,int bno,String ac,String fro,String tto,float far,String  
arr,String dept,LocalDate locdt)
```

```
    {
```

```
        super("Passenger's Personal Details");
```

```
JLabel lblheading,lblname,lblsex,blage,blac;
```

```
JTextField tfname,tfage;
```

```
JRadioButton rbsex1,rbsex2,rbac1,rbac2;
```

```
JButton btnsubmit;
```

```
ButtonGroup bgsex,bgac;
```

```
Container c;
```

```
c=getContentPane();
```

```
setLayout(new FlowLayout());
```

```
Font f1 = new Font("Lucida Fax",Font.BOLD,18);
```

```
Font f2 = new Font("Lucida Fax",Font.BOLD,14);
```

```
lblheading = new JLabel("      Passenger Details      ");
```

```
lblheading.setFont(f1);
```

```
lblheading.setForeground(Color.DARK_GRAY);
```

```
lblname = new JLabel(" Enter Name : ");
```

```
lblname.setFont(f2);
```

```
lblname.setForeground(Color.red);
```

```
blage = new JLabel(" Enter age : ");
```

```
blage.setFont(f2);
```

```
blage.setForeground(Color.red);
```

```
lblsex = new JLabel("  Select Sex : ");
```

```
lblsex.setFont(f2);
```

```
lblsex.setForeground(Color.red);
```

```
blac = new JLabel("Select AC/Non-AC : ");
```



```
lblac.setFont(f2);
```

```
lblac.setForeground(Color.red);
```

```
tfname = new JTextField(10);
```

```
tfage = new JTextField(10);
```

```
rbsex1 = new JRadioButton("Male");
```

```
rbsex2 = new JRadioButton("Female");
```

```
rbac1 = new JRadioButton("AC");
```

```
rbac2 = new JRadioButton("Non-AC");
```

```
btnsubmit = new JButton("Submit");
```

```
bgsex = new ButtonGroup();
```

```
bgac = new ButtonGroup();
```

```
bgsex.add(rbsex1);
```

```
bgsex.add(rbsex2);
```

```
bgac.add(rbac1);
```

```
bgac.add(rbac2);
```

```
btnsubmit = new JButton("Submit");
```

```
btnsubmit.addActionListener((ae) -> {
```

```

String n = tfname.getText().trim(),s = new String(),n1;
int age;
try
{
    age = Integer.parseInt(tfage.getText().trim());
    if(age >0 && age <= 3)
    {
        JOptionPane.showMessageDialog(null,"Till 3 years
of age travelling is free.\nYou Can carry Child your in your lap.");
        return;
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(null,"\nPlease Enter a
valid age."
+ "\nAge is a Positive integer Greater Than 3."
+ "\nTill 3 years age travelling is free.");
    return;
}
boolean b;
int d=0;
if(rbsex1.isSelected())
{
    s = rbsex1.getLabel();
    d = 1;
}

```

```
}  
if(rbsex2.isSelected()  
{  
    s = rbsex2.getLabel();  
    d = 1;  
}  
  
if(d==1 && n.length() > 0 && age > 0)  
{  
    ValidNameCheck vdc = new ValidNameCheck();  
  
    n1 = vdc.NameCheckConvert(n);  
  
    if(n1 != null)  
    {  
        Passenger p = new Passenger(n1,s,age);  
        p.setticketno(bno, sno);  
        p.setseatno(sno);  
        p.setbusno(bno);  
        p.setisac(ac);  
        p.setfrom(fro);  
        p.setto(tto);  
        p.setfare(far);  
        p.setarrrt(arr);  
        p.setdept(dept);
```

```

p.setlocaldate(locdt);
System.out.println("In Input Pass Details (Fare) : " +
p.getfare());

new BookSeat(bno);
new AddPassenger(p);
TicketStatus ts = new TicketStatus(sno,bno);
new AddTicketStatus(ts,p);
hide();
}
else
{
String str = new String();
str = "You have Entered an Illegal name !!!!!";
str += "\n1.Every character should be an alphabet";
str += "\n2.No numerals or special characters are
allowed.";
str += "\n3.Blank spaces are allowed between
names.";
JOptionPane.showMessageDialog(null,str);
}
}
else
{
JOptionPane.showMessageDialog(null,"Please Enter/Select
the Fields properly !!!");
String str = new String();
str = "This is how each field must be filled up.";

```

```
str += "\n1.Name Cannot be a blank field.";
str += "\n2.Age is a Positive Integer greater than equal to
4.";
str += "\n3.Select your Sex and Bus Preference according
to your wish.";
```

```
JOptionPane.showMessageDialog(null,str);
}
});
```

```
c.add(lblheading);
c.add(new JLabel(""));
c.add(new JLabel(""));
c.add(lblname);c.add(tfname);
c.add(lblage);c.add(tfage);
c.add(lblsex);c.add(rbsex1);
//c.add(new JLabel(""));
c.add(rbsex2);
c.add(new JLabel(""));
c.add(new JLabel(""));
c.add(btnsubmit);
```

```
setSize(325,250);
setVisible(true);
setLocation(535,300);
setResizable(false);
```

```
}
```

```
public InputPassDetails()
```

```
{
```

```
}
```

```
}
```

## MASS PASS REMOVE:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class MassPassRemove
```

```
{
```

```
    public MassPassRemove() {}
```

```
    @SuppressWarnings("unchecked")
```

```
    public MassPassRemove(int bno)
```

```

{
    int j = 0;

    boolean flag = false;

    ArrayList<Passenger> arraylist;

    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("PassengerInfo.txt")))
    {
        arraylist = (ArrayList<Passenger>)oin.readObject();
    }
    catch(Exception e)
    {
        System.out.println("In the first file read catch of the Passenger
Remove");

        arraylist = new ArrayList<Passenger>();
    }

    try
    {
        if(arraylist.size()>0)
        {

        }

        else
        {

            System.out.println("No Passengers are registered till
now.");

```

```

        return;
    }
}
catch(Exception e)
{
    System.out.println("In the catch of the ArrayList.size() of
Passenger Remove");
}

for(int i=0;i<arraylist.size();i++)
{
    Passenger p = arraylist.get(i);

    if(p.getbusno() == bno)
    {
        flag = true;
        j++;
        JOptionPane.showMessageDialog(null,"Match Found !!!");
        String str = "The Details of the Passenger being
removed.....";

        str += "\nBus No " + p.getbusno();
        str += "\nName : " +p. getname() + " Age : " + p.getage() + "
Sex : " +p.getsex();

        str += "\nSeat No. : " + p.getseatno();
        JOptionPane.showMessageDialog(null,str);
        arraylist.remove(i);
    }
}

```



```

        i--;
    }
}

System.out.println("ArrayList.size() : (Mass Pass Remove) " + j);

if(flag)
{
    try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("PassengerInfo.txt")))
    {
        oout.writeObject(arraylist);
        //System.out.println("Passenger details added to the file");
    }
    catch(Exception e)
    {
        System.out.println("In the write catch of the
RemovePassenger");
        arraylist = new ArrayList<Passenger>();
    }
}
else
    JOptionPane.showMessageDialog(null,"Match not Found !!!");
}
}

```

# PASSENGER:-

```
package bus.reg;
```

```
import java.io.Serializable;
```

```
import java.time.LocalDate;
```

```
@SuppressWarnings("serial")
```

```
public class Passenger implements Serializable
```

```
{
```

```
    String name,ticketno,sex,isac,from,to,arrrt,dept,contact;
```

```
    int age,seatno,busno;
```

```
    float fare;
```

```
    LocalDate localdate;
```

```
    public Passenger()
```

```
    {
```

```
    }
```

```
    public Passenger(String n,String s,int a)
```

```
    {
```

```
        name = n;
```

```
        age = a;
```

```
        sex = s;
```

```
}
```

```
public void setticketno(int bno,int sno)
```

```
{
```

```
    ticketno = "" + bno + "" + sno;
```

```
}
```

```
public String getname()
```

```
{
```

```
    return name;
```

```
}
```

```
public int getage()
```

```
{
```

```
    return age;
```

```
}
```

```
public String getsex()
```

```
{
```

```
    return sex;
```

```
}
```

```
public String getticketno()
```

```
{
```

```
    return ticketno;
```

```
}
```

```
public void setseatno(int sno)
```

```
{
```

```
        seatno = sno;
```

```
}
```

```
public int getseatno()
```

```
{
```

```
        return seatno;
```

```
}
```

```
public int getbusno()
```

```
{
```

```
        return busno;
```

```
}
```

```
public void setbusno(int bno)
```

```
{
```

```
        busno = bno;
```

```
}
```

```
public String getisac()
```

```
{
```

```
        return isac;
```

```
}
```

```
public void setisac(String a)
```

```
{
```

```
    isac = a;
```

```
}
```

```
public String getfrom()
```

```
{
```

```
    return from;
```

```
}
```

```
public String getto()
```

```
{
```

```
    return to;
```

```
}
```

```
public void setfrom(String f)
```

```
{
```

```
    from = new String(f);
```

```
}
```

```
public void setto(String t)
```

```
{
```

```
    to = new String(t);
```

```
}
```

```
public float getfare()
```

```
{
```

```
    return fare;
```

```
}
```

```
public void setfare(float f)
```

```
{
```

```
    fare = f;
```

```
}
```

```
public String getarrt()
```

```
{
```

```
    return arrt;
```

```
}
```

```
public String getdept()
```

```
{
```

```
    return dept;
```

```
}
```

```
public String getcon()
```

```
{
```

```
    return contact;
```

```
}
```

```
public void setarrt(String a)
```

```
{
```

```
    arrt = a;
```

```
}
```

```
public void setdept(String d)
```

```
{
```

```
    dept = d;
```

```
}
```

```
public void setlocaldate(LocalDate ld)
```

```
{
```

```
    localdate = ld;
```

```
}
```

```
public LocalDate getlocaldate()
```

```
{
```

```
    return localdate;}}
```

## PASSENGER REMOVE:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```

import java.io.FileOutputStream;

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

import java.util.ArrayList;


import javax.swing.JOptionPane;


public class PassengerRemove
{

    public PassengerRemove() {}

    @SuppressWarnings("unchecked")
    public PassengerRemove(String tno)
    {

        boolean flag = false;

        ArrayList<Passenger> arraylist;

        try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("PassengerInfo.txt")))
        {

            arraylist = (ArrayList<Passenger>)oin.readObject();

        }

        catch(Exception e)

        {

            System.out.println("In the first file read catch of the Passenger
Remove");

```



```

        arraylist = new ArrayList<Passenger>();
    }

    try
    {
        if(arraylist.size()>0)
        {

        }

        else
        {
            System.out.println("No Passengers are registered till
now.");

            return;
        }
    }
    catch(Exception e)
    {
        System.out.println("In the catch of the ArrayList.size() of
Passenger Remove");
    }

    for(int i=0;i<arraylist.size();i++)
    {
        Passenger p = arraylist.get(i);
    }

```

```

        if(p.getticketno() == tno)
        {
            flag = true;
            JOptionPane.showMessageDialog(null,"Match Found !!!");
            String str = "The Details of the bus being removed.....";
            str += "\nTicket No. : " + tno;
            str += "\nName : " + p.getname() + " To : " + p.getage() + "
Sex : " + p.getsex();

            JOptionPane.showMessageDialog(null,str);
            arraylist.remove(i);
        }
    }

    if(flag)
    {
        try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("PassengerInfo.txt")))
        {
            oout.writeObject(arraylist);
            //System.out.println("Passenger details added to the file");
        }
        catch(Exception e)
        {
            System.out.println("In the write catch of the
RemovePassenger");

            arraylist = new ArrayList<Passenger>();

```

```
        }  
    }  
    else  
        JOptionPane.showMessageDialog(null,"Match not Found !!!");  
    }  
}
```

## PASSENGER SHOW:-

```
package bus.reg;
```

```
import java.awt.BorderLayout;
```

```
import java.awt.Color;
```

```
import java.awt.Container;
```

```
import java.awt.Font;
```

```
import java.io.FileInputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JScrollPane;
```

```
import javax.swing.JTable;
```

```
@SuppressWarnings("serial")
```

```

public class PassengerShow extends JFrame
{
    @SuppressWarnings("unchecked")
    public PassengerShow()
    {
        super("PASSENGER LIST");

        ArrayList<Passenger> arraylist;

        String tableheading[ ] = {"Ticketno.", "Name", "Age", "Sex", "Bus
No.", "Seat No.", "Bus Type", "From", "To", "Fare", "Journey Date"}, tabbody[ ][ ];

        try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("PassengerInfo.txt")))
        {
            arraylist = (ArrayList<Passenger>)oin.readObject();

            try
            {
                if(arraylist.size()>0)
                {

                }
                else
                {
                    JOptionPane.showMessageDialog(null, "No
Passengers Present");

                    System.out.println("Empty file : Passenger Show");
                }
            }
            return;
        }
    }
}

```

```

        }
    }
    catch(Exception e)
    {
        System.out.println("In the ArrayList.size() catch of the
PassengerShow");
    }

    tabbody = new String[arraylist.size()][11];

    for(int i = 0;i<arraylist.size();i++)
    {
        Passenger p = arraylist.get(i);

        tabbody[i][0] = " " + p.getticketno();
        tabbody[i][1] = "" + p.getname();
        tabbody[i][2] = " " + p.getage();
        tabbody[i][3] = " " + p.getsex();
        tabbody[i][4] = " " + p.getbusno();
        tabbody[i][5] = " " + p.getseatno();
        tabbody[i][6] = " " + p.getisac();
        tabbody[i][7] = " " + p.getfrom();
        tabbody[i][8] = " " + p.getto();
        tabbody[i][9] = " " + p.getfare();
        tabbody[i][10] = " " + p.getlocaldate();
    }
}

```

```
}
```

```
Container c = getContentPane();  
c.setLayout(new BorderLayout());  
JTable datatable = new JTable(tabbody,tableheading);  
JScrollPane jsp = new JScrollPane(datatable);  
Font f1 = new Font("Lucida Fax",Font.BOLD,18);  
JLabel lblheading = new JLabel("LIST OF  
PASSENGERS",JLabel.CENTER);  
    lblheading.setFont(f1);  
    lblheading.setForeground(Color.BLUE);  
    c.add(lblheading);  
    c.add(jsp,BorderLayout.EAST);  
    c.add(jsp,BorderLayout.SOUTH);  
  
setSize(1200,500);  
setLocation(100,100);  
setVisible(true);  
setResizable(false);  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(null,"No Passengers Present");  
    System.out.println("In the first file read catch of the  
PassengerShow");  
    arraylist = new ArrayList<Passenger>();
```

```
}}
```

## REMOVE BUS:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
import javax.swing.JOptionPane;
```

```
public class RemoveBus
```

```
{
```

```
    int i;
```

```
    ArrayList<Bus> arraylist;
```

```
    int busno;
```

```
    @SuppressWarnings("unchecked")
```

```
    public RemoveBus()
```

```
    {
```

```
        boolean flag = false;
```

```

        try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("BusInfo.txt")))
        {
            arraylist = (ArrayList<Bus>)oin.readObject();
        }
        catch(Exception e)
        {
            System.out.println("In the first file read catch of the RemoveBus");
            arraylist = new ArrayList<Bus>();
        }

        try
        {
            if(arraylist.size()>0)
            {

            }

            else
            {
                System.out.println("No Buses are registered till now.");
                return;
            }
        }
        catch(Exception e)

```



```

        {
            System.out.println("In the catch of the ArrayList.size()");
        }

        try
        {
            busno =
Integer.parseInt(JOptionPane.showInputDialog(null,"Enter bus no. to be removed : "));
        }
        catch(Exception e)
        {
            return;
        }

        for(i=0;i<arraylist.size();i++)
        {
            Bus b = arraylist.get(i);

            if(b.getbusno() == busno)
            {
                flag = true;

                JOptionPane.showMessageDialog(null,"Match Found !!!");

                String str = "The Details of the bus being removed.....";

                str += "\nBus No. : " + busno;

                str += "\nFrom : " + b.getfrom() + " To : " + b.getto();
            }
        }
    }
}

```

```

        JOptionPane.showMessageDialog(null,str);

        new RemoveTicketStatus(busno);

        new MassPassRemove(busno);

        arraylist.remove(i);

    }

}

System.out.println("ArrayList.size() : (Remove Bus) " + i);

if(flag)
{
    try(ObjectOutputStream oout = new ObjectOutputStream(new
FileOutputStream("BusInfo.txt")))
    {
        oout.writeObject(arraylist);

        //System.out.println("Bus details added to the file");

    }
    catch(Exception e)
    {
        System.out.println("In the write catch of the RemoveBus");

        arraylist = new ArrayList<Bus>();

    }
}

else

JOptionPane.showMessageDialog(null,"Match not Found !!!");

```

}

}

## REMOVE TICKET STATUS:-

```
package bus.reg;
```

```
import java.io.FileInputStream;
```

```
import java.io.FileOutputStream;
```

```
import java.io.ObjectInputStream;
```

```
import java.io.ObjectOutputStream;
```

```
import java.util.ArrayList;
```

```
public class RemoveTicketStatus
```

```
{
```

```
    @SuppressWarnings("unchecked")
```

```
    public RemoveTicketStatus(String tno)
```

```
    {
```

```
        int i,j = 0;
```

```
        ArrayList<TicketStatus> arraylist;
```

```
        boolean flag = false;
```

```
        try(ObjectInputStream oin = new ObjectInputStream(new  
        FileInputStream("TicketStatusInfo.txt")))
```

```
        {
```

```
            arraylist = (ArrayList<TicketStatus>)oin.readObject();
```

```

try
{
    if(arraylist.size() > 0)
    {

    }
    else
    {
        System.out.println("Empty File in Remove (Ticket
Status)");

        return;
    }
}
catch(Exception e)
{
    System.out.println("In the ArrayList.size() catch of the
RemoveTicketStatus");
}

for(i = 0; i < arraylist.size(); i++)
{
    TicketStatus t = arraylist.get(i);

    if(tno.equals(t.getticketno()))
    {
        flag = true;

```

```

        j++;
        arraylist.remove(i);
    }
}

System.out.println("ArrayList.size() : (Remove Ticket
Status(String))" + j);

if(flag)
{
    try(ObjectOutputStream oout = new
ObjectOutputStream(new FileOutputStream("TicketStatusInfo.txt")))
    {
        oout.writeObject(arraylist);
        System.out.println("TicketStatus details added to
the file");
    }
    catch(Exception e)
    {
        System.out.println("In the second write catch of the
TicketStatusAdd");

        arraylist = new ArrayList<TicketStatus>();
    }
    System.out.println("Ticket Status Removed");
}
else
{

```

```

        System.out.println("Ticket Status Match not Found");
        return;
    }
}
catch(Exception e)
{
    System.out.println("In the first file read catch of the
RemoveTicketStatusAdd");
    arraylist = new ArrayList<TicketStatus>();
}
}

```

```

@SuppressWarnings("unchecked")
public RemoveTicketStatus(int bno)
{
    int i,j = 0;
    ArrayList<TicketStatus> arraylist;
    boolean flag = false;

    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("TicketStatusInfo.txt")))
    {
        arraylist = (ArrayList<TicketStatus>)oin.readObject();

        try
        {

```

```

        if(arraylist.size() > 0)
        {

        }
        else
        {
            System.out.println("Empty File in Remove (Ticket
Status)");

            return;
        }
    }
    catch(Exception e)
    {
        System.out.println("In the ArrayList.size() catch of the
RemoveTicketStatus");
    }

    for(i = 0; i < arraylist.size(); i++)
    {
        TicketStatus t = arraylist.get(i);

        System.out.println("Ticket No : " + t.getticketno());
        if(bno == t.getbno())
        {
            flag = true;

            j++;

```

```

        arraylist.remove(i);

        i--;

    }

}

System.out.println("ArrayList.size() in Remove Ticket Status: " +
j + "  I: " + i);

if(flag)
{
    try(ObjectOutputStream oout = new
ObjectOutputStream(new FileOutputStream("TicketStatusInfo.txt")))
    {
        oout.writeObject(arraylist);

        System.out.println("TicketStatus details added to
the file");

    }
    catch(Exception e)
    {
        System.out.println("In the second write catch of the
TicketStatusAdd");

        arraylist = new ArrayList<TicketStatus>();

    }
    System.out.println("Ticket Status Removed");

}
else
{

```



```

        System.out.println("Ticket Status Match not Found");
        return;
    }
}
catch(Exception e)
{
    System.out.println("In the first file read catch of the
RemoveTicketStatusAdd");
    arraylist = new ArrayList<TicketStatus>();
}
}
}

```

## START BUS:-

```

package bus.reg;

import java.io.FileInputStream;
import java.io.ObjectInputStream;
import java.util.ArrayList;

public class StartBus
{
    @SuppressWarnings("unchecked")
    public StartBus()
    {
        ArrayList<Bus> arraylist;
    }
}

```

```

        try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("BusInfo.txt")))
        {
            arraylist = (ArrayList<Bus>)oin.readObject();
        }
        catch(Exception e)
        {
            System.out.println("In the file read catch of the StartBus");
            arraylist = new ArrayList<Bus>();
        }

        try
        {
            if(arraylist.size()>0)
            {
for(int i = 0;i<arraylist.size();i++)
{
    Bus b1 = arraylist.get(i);
    if(b1.getbusno() == 47 || b1.getbusno() == 56)
    {
        return;
    }
}
            }
        }
    }
}

```

```

        catch(Exception e)
        {
            System.out.println("In the ArrayList.size() catch of the StartBus");
        }

        Bus b = new Bus("Kolkata","Siliguri",47,"Non-
AC",350.00f,"10","22","2015-01-14");

        Bus a = new Bus("Puri","Kolkata",56,"AC",800.00f,"9","20","2015-01-
15");

        System.out.println("Initialising Default Bus for the first time");

        new BusAdd(b);

        new BusAdd(a);

    }
}

```

## TICKET STATUS:-

```

package bus.reg;

import java.io.Serializable;

@SuppressWarnings("serial")
public class TicketStatus implements Serializable
{
    int busno;

    String ticketno;

    boolean status;
}

```

```
public TicketStatus(int sno, int bno)
{
    ticketno = "" + bno + sno;
    status = false;
    busno = bno;
}
```

```
public boolean getstatus()
{
    return status;
}
```

```
public String getticketno()
{
    return ticketno;
}
```

```
public void setstatus(boolean s)
{
    status = s;
}
```

```
public int getbno()
{
```

```
        return busno;
    }
}
```

## TICKET STATUS SHOW:-

```
package bus.reg;

import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Container;
import java.awt.Font;
import java.io.FileInputStream;
import java.io.ObjectInputStream;
import java.util.ArrayList;

import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JScrollPane;
import javax.swing.JTable;

@SuppressWarnings("serial")
public class TicketStatusShow extends JFrame
{
    @SuppressWarnings("unchecked")
```

```

public TicketStatusShow()
{
    ArrayList<TicketStatus> arraylist;
    String tableheading[ ] = {"Bus No.", "Ticketno.", "Status"}, tabbody[ ][ ];
    try(ObjectInputStream oin = new ObjectInputStream(new
FileInputStream("TicketStatusInfo.txt")))
    {
        arraylist = (ArrayList<TicketStatus>)oin.readObject();
        System.out.println("Inside Ticket Status Show");
        try
        {
            if(arraylist.size()>0)
            {

            }
            else
            {
                JOptionPane.showMessageDialog(null, "No
Passengers have their ticket booked as of now.");
                return;
            }
        }
        catch(Exception e)
        {
            System.out.println("In the ArrayList.size() catch of the
TicketStatusShow");

```

```
}
```

```
tbody = new String[alist.size()][3];
```

```
for(int i = 0;i<alist.size();i++)
```

```
{
```

```
    TicketStatus ts = alist.get(i);
```

```
        tbody[i][0] = "          " + ts.getbno();
```

```
        tbody[i][1] = "          " + ts.getticketno();
```

```
        tbody[i][2] = "          " + ts.getstatus();
```

```
}
```

```
Container c = getContentPane();
```

```
setLayout(new BorderLayout());
```

```
JTable datatable = new JTable(tbody,tableheading);
```

```
JScrollPane jsp = new JScrollPane(datatable);
```

```
Font f1 = new Font("Lucida Fax",Font.BOLD,18);
```

```
JLabel lblheading = new JLabel("ALL TICKET  
STATUSES",JLabel.CENTER);
```

```
lblheading.setFont(f1);
```

```
lblheading.setForeground(Color.BLUE);
```

```
c.add(lblheading);
```

```
c.add(jsp,BorderLayout.EAST);
```

```
c.add(jsp,BorderLayout.SOUTH);
```

```

        setSize(500,500);

        setLocation(500,150);

        setVisible(true);

        setResizable(false);

    }

    catch(Exception e)

    {

        JOptionPane.showMessageDialog(null,"No Passengers have their
ticket booked as of now.");

        System.out.println("In the first file read catch of the
TicketStatusShow");

        arraylist = new ArrayList<TicketStatus>();

    }

}

}

```

## VALID NAME CHECK:-

```
package bus.reg;
```

```
public class ValidNameCheck
```

```

{

    public String NameCheckConvert(String n)

    {

        int i,j;

        char s[ ] = new char[n.length()];
    }
}

```



```

String s1;
for(i=0;i<n.length();i++)
{
    s[i] = n.charAt(i);
    j = (int) s[i];

    //Checking whether the name is Valid
    if((j>=65 && j<=90) || (j>=97 && j<=122) || (s[i] == ' '))
    {
        //Converting the first letter of every word in the name to
        if(i==0 && (j>=97 && j <=122))
            s[i] = (char)(j-32);
        else if(i!=0 && (n.charAt(i-1) == ' ') && (j>=97 && j<=122))
            s[i] = (char)(j-32);
        else if(i != 0 && (j>=65 && j<=90) && (n.charAt(i-1) != ' '))
            s[i] = (char)(j+32);
    }
    else
    {
        return null;
    }
}

s1 = new String(s);
return s1;}}

```

UpperCase

## **CONCLUSION:-**

**As we told that further more implementation needs to be done for the betterment of our project which is in process and we hope that we will get to our aim as soon as possible. We are hoping to make this project user friendly so that booking a bus ticket wont be that difficult for passenger.**

**A special thanks to our mentor for guidance and blessing without which the project would not have been presented.**

# **CERTIFICATE:-**

This is to certify that Mr. Aritra Dutta of Jalpaiguri Government Engineer College, registration number: 121010110007, has successfully completed a project on Bus Ticket Booking by JAVA under the guidance of Prof. Arnab Chakraborty.

Prof. Arnab Chakraborty

(Globsyn Finishing School )

(a division of Globsyn Skills)

## **CERTIFICATE:-**

This is to certify that Mr. Agnip Karmakar of Jalpaiguri Government Engineer College, registration number: 121010110001, has successfully completed a project on Bus Ticket Booking by JAVA under the guidance of Prof. Arnab Chakraborty.

Prof. Arnab chakraborty

Globsyn Finishing School

(a division of Globsyn Skills)

# **CERTIFICATE:-**

This is to certify that Mr. Anindya Panja of Jalpaiguri Government Engineer College, registration number: 131010120002, has successfully completed a project on Bus Ticket Booking by JAVA under the guidance of Prof. Arnab Chakraborty.

Prof. Arnab chakraborty

Globsyn Finishing School  
(a division of Globsyn Skills)

# **CERTIFICATE:-**

This is to certify that Mr. Ankit Kumar of Techno India, Salt Lake, registration number- 121300110194, has successfully completed a project on Bus Ticket Booking by JAVA under the guidance of Prof. Arnab Chakraborty.

Prof. Arnab Chakraborty

Globsyn Finishing School

(a division of Globsyn Skills)

## **CERTIFICATE:-**

This is to certify that Mr. Abhik Pal of BP Poddar Institute Of Management And Technology, registration number: 131150120025, has successfully completed a project on Bus Ticket Booking by JAVA under the guidance of Prof. Arnab Chakraborty.

Prof. Arnab Chakraborty

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