Acknowledgement

I would like to take this opportunity to thank every individual who has directly or indirectly in some way helped me during the course of this assignment.

Initially I would to give warm thanks to my module lecturer ********, because without whom the aim of successful completion was really impossible. He is very cooperative, supportive by nature. I want to give lot of thanks to him for his suggestion and guidance.

To being with I wish to express my deepest gratitude towards ********, for providing us a platform to achieve my goals and ambitions.

I also like to express our deepest gratitude towards ********** for motivating us at every juncture.

Again I would like to give thanks to my friends, seniors for their support in the successful completion of the assignment.

Mohit Kumar .....

Signature

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1 Introduction:

This project is based on java programming skills, which will help to create a program or interface for the bus operator to perform tasks related to e-transportation. The main objective of this program is to create a user (bus operator) friendly interface through which he can easily works on different modules like Bus management, Route management, Employee management, Passenger management, Scheduling and Reservation.

The e-transportation system is focus on adding, searching, updating, deleting of the details of buses, employees, passengers and route to the database.

This system has only one administrator who will control all the works of e-transportation system and one default page through which bus operator can access all the forms.

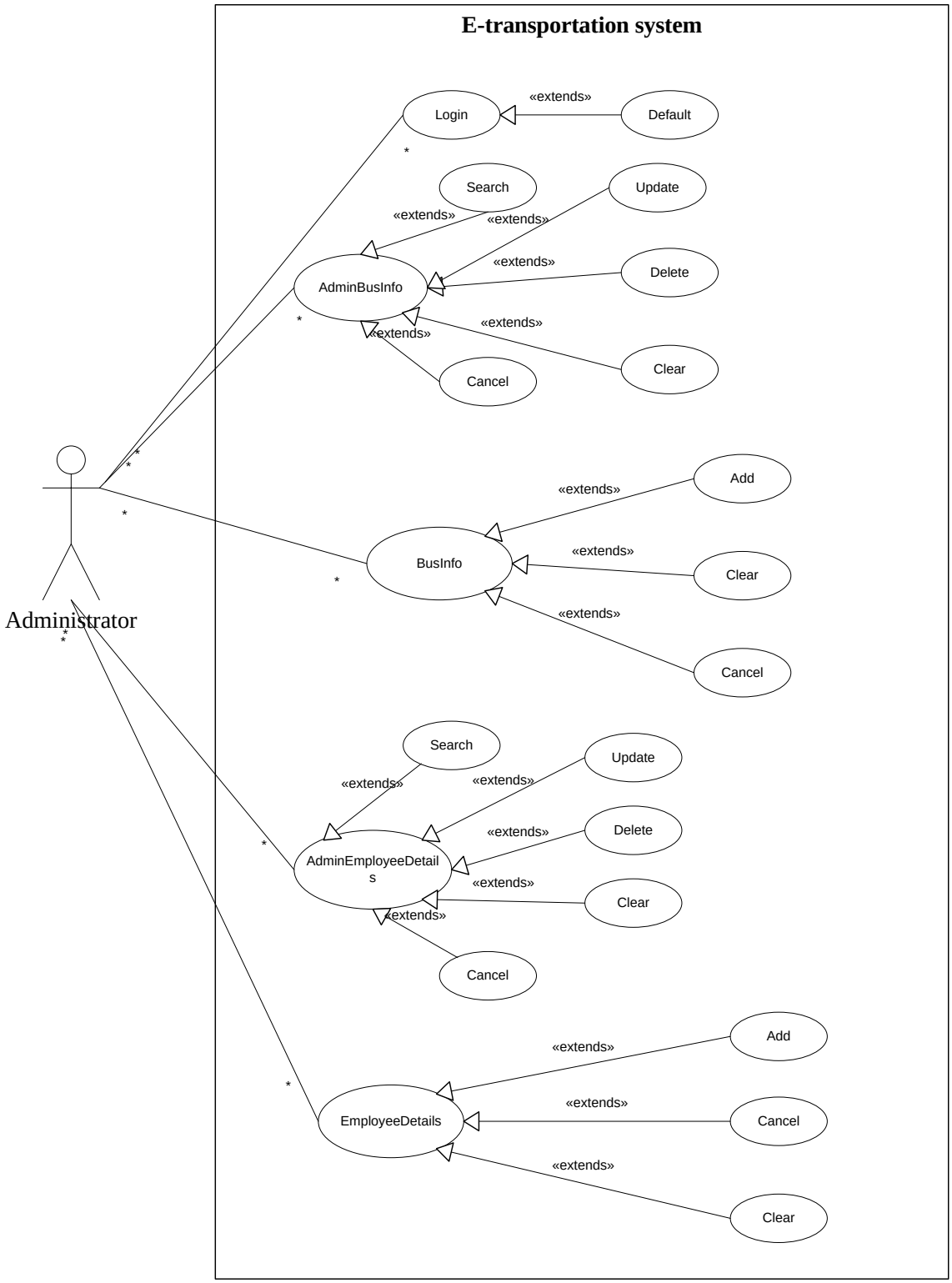
Bus management, Route management, Employee management, Passenger management, Scheduling module has two interfaces, one for adding the details of the buses, route, employee, passenger and schedule and other is for searching, updating and deleting of the existing details of the buses, route, employee, passenger and schedule.

Through Bus Reservation module operator can reserve the ticket for the passenger. After Booking the ticket a ticket number will automatically generated and display to the operator and ticket print button on the form will enable. Operator can click on the ticket print button another form will open which shows the basic information of the reserved ticket.

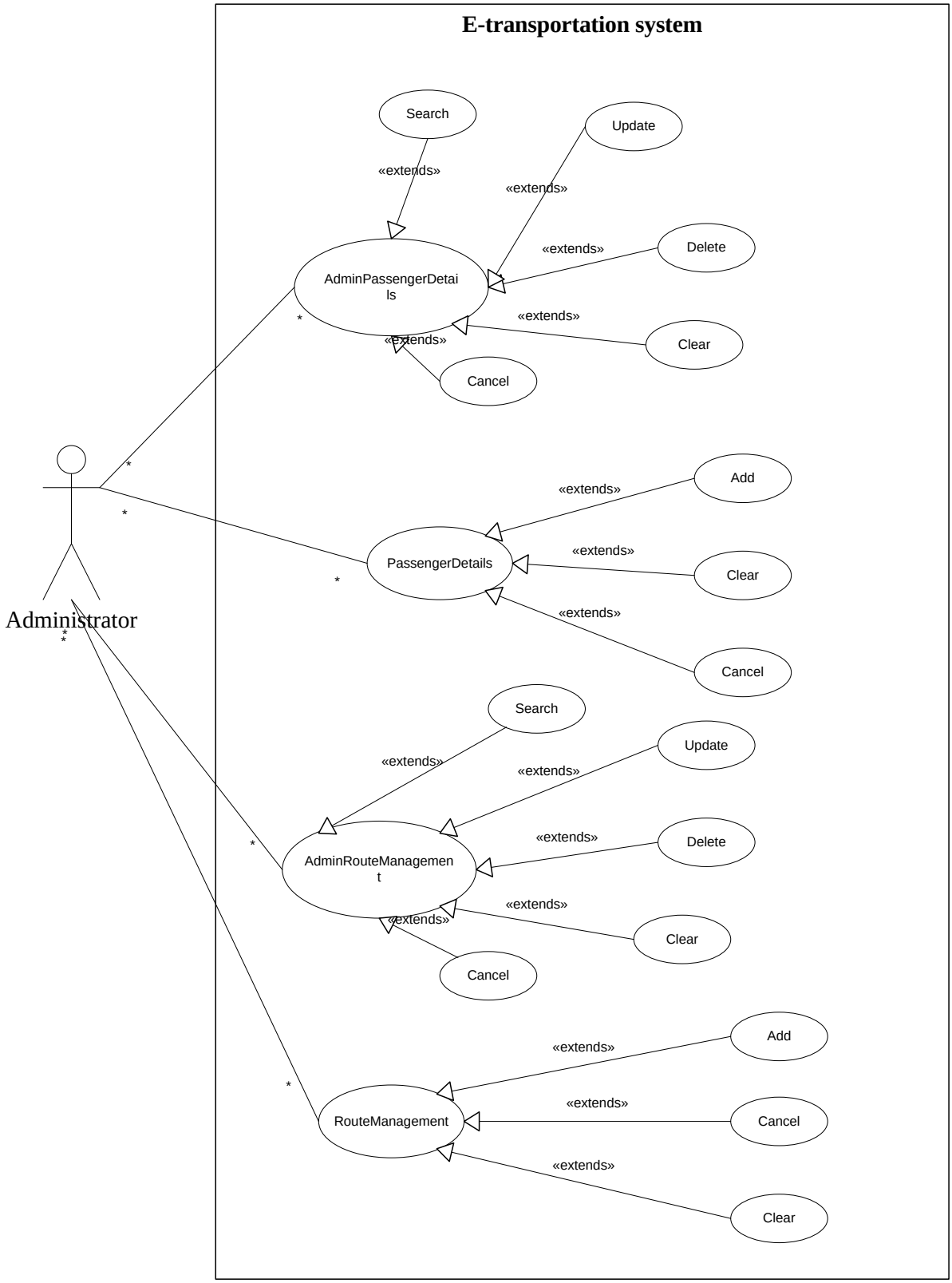
If operator wants to see the details of every buses, passengers, employees or route of buses then he can easily see the reports with the help of list option provided in the default page.

2 UML Diagram:

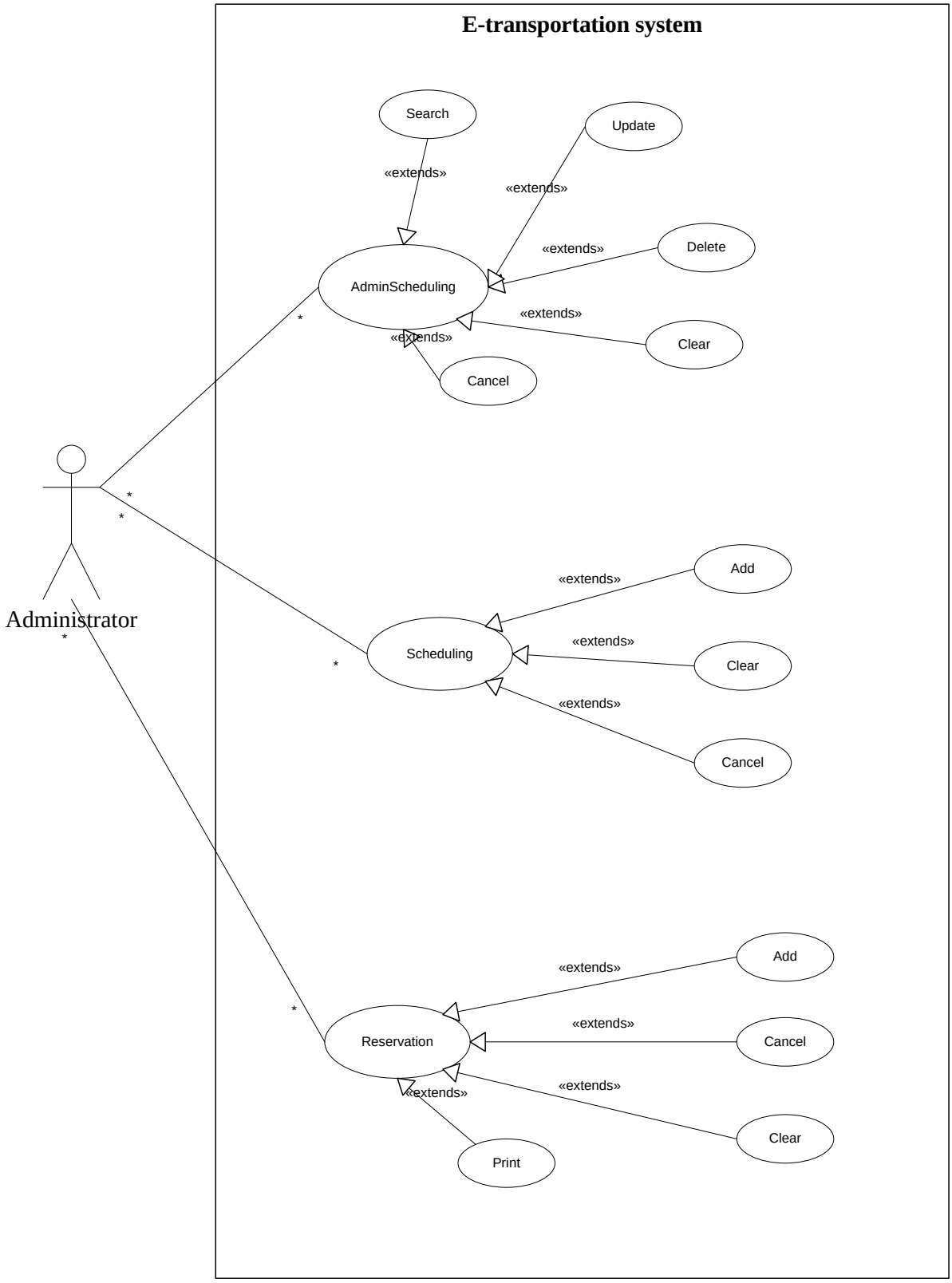
2.1 For Login, bus and employee module:



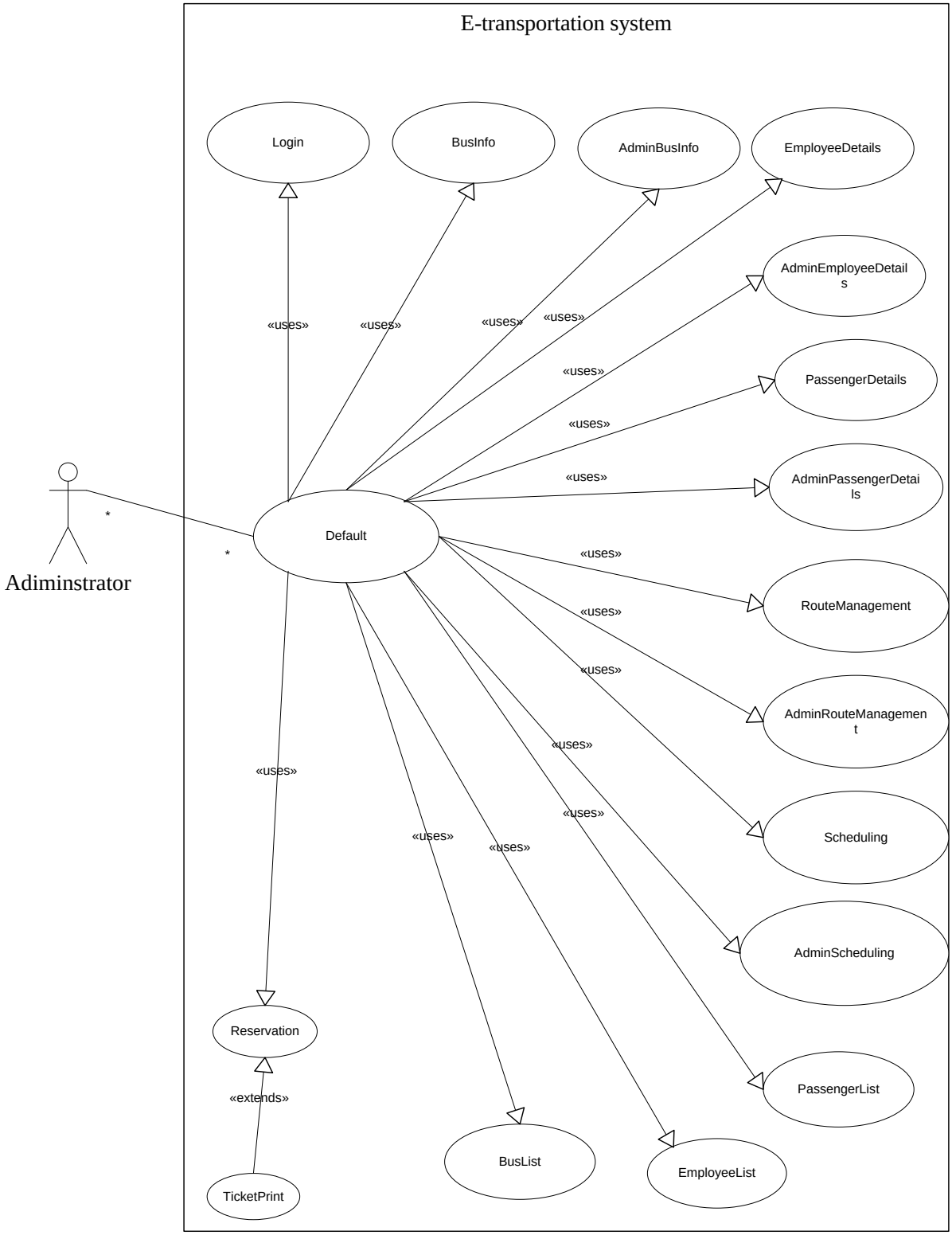
2.2 **For passenger and route module:**



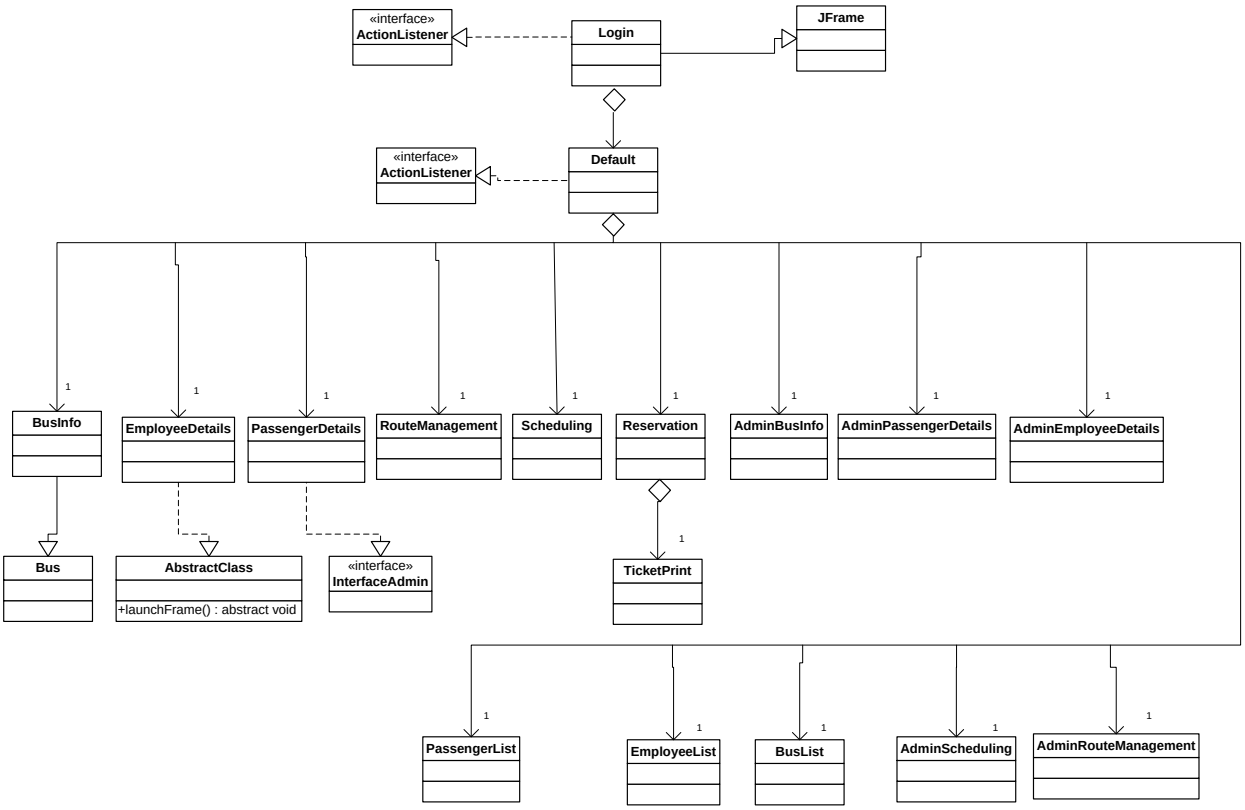
2.3 **For Scheduling and reservation module:**



2.4 **For default module:**



3 Class Diagram:



3.1 **Class Reference:**

Login
-check : Boolean = false -uname : string -pass : Char
+Login() : Login +actionPerformed(in ActionEvent e) : void

Default
+Default() : Default +actionPerformed(in ActionEvent e) : void

BusInfo
-Busno : string = null -Model : string = null -RegNo : string = null -Sitting : string = null -date : string = null -ins : string = null -cato : string = null
+BusInfo() : BusInfo +launchFrame_bus() : void +actionPerformed(in ActionEvent e) : void +add() : void

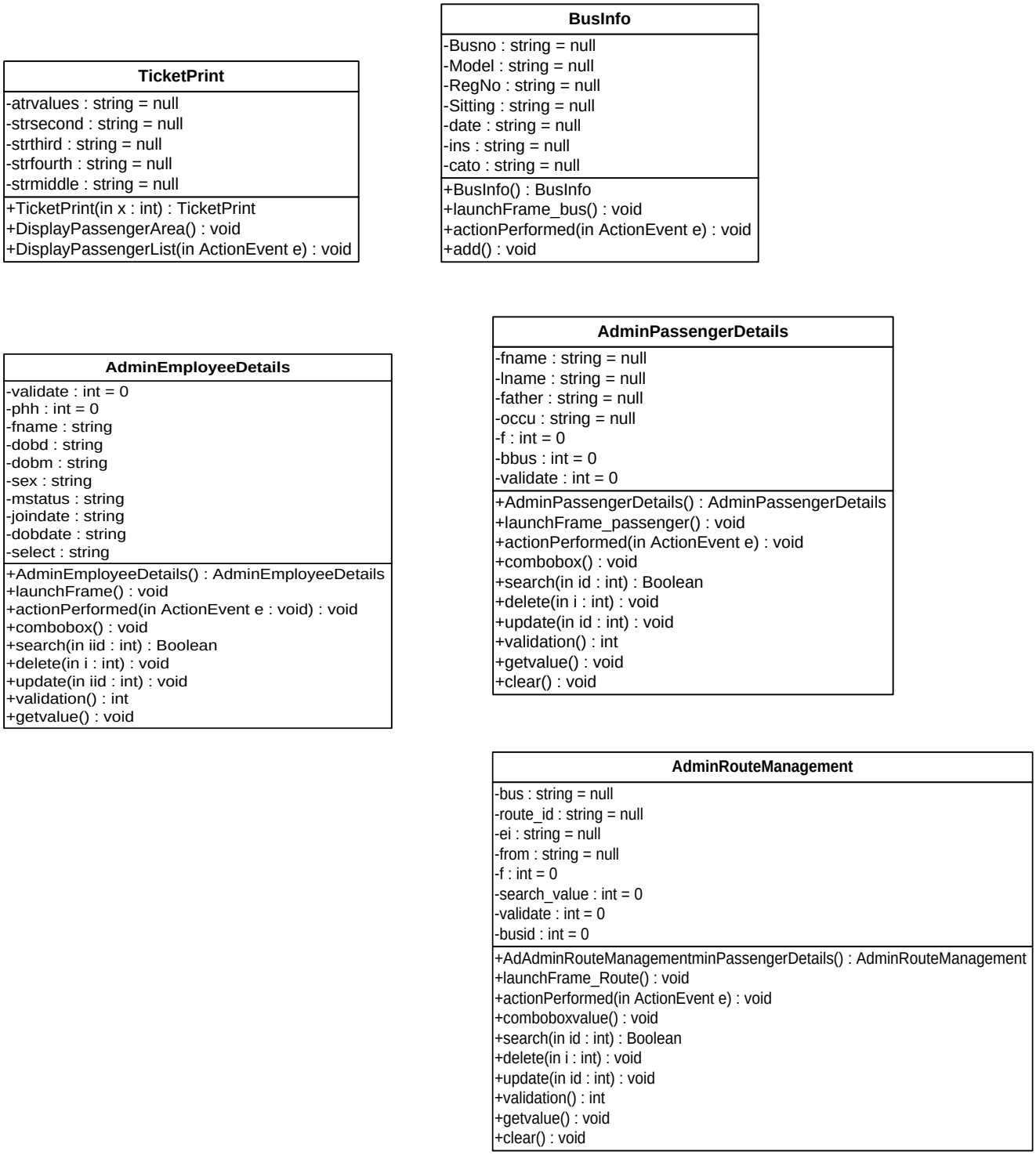
EmployeeDetails
-joindate : string = null -dobdate : string = null -id : string = null -fname : string = null -ph : string = null -sex : string = null -mstatus : string = null
+EmployeeDetails() : EmployeeDetails +launchFrame() : void +actionPerformed(in ActionEvent e) : void +add() : void

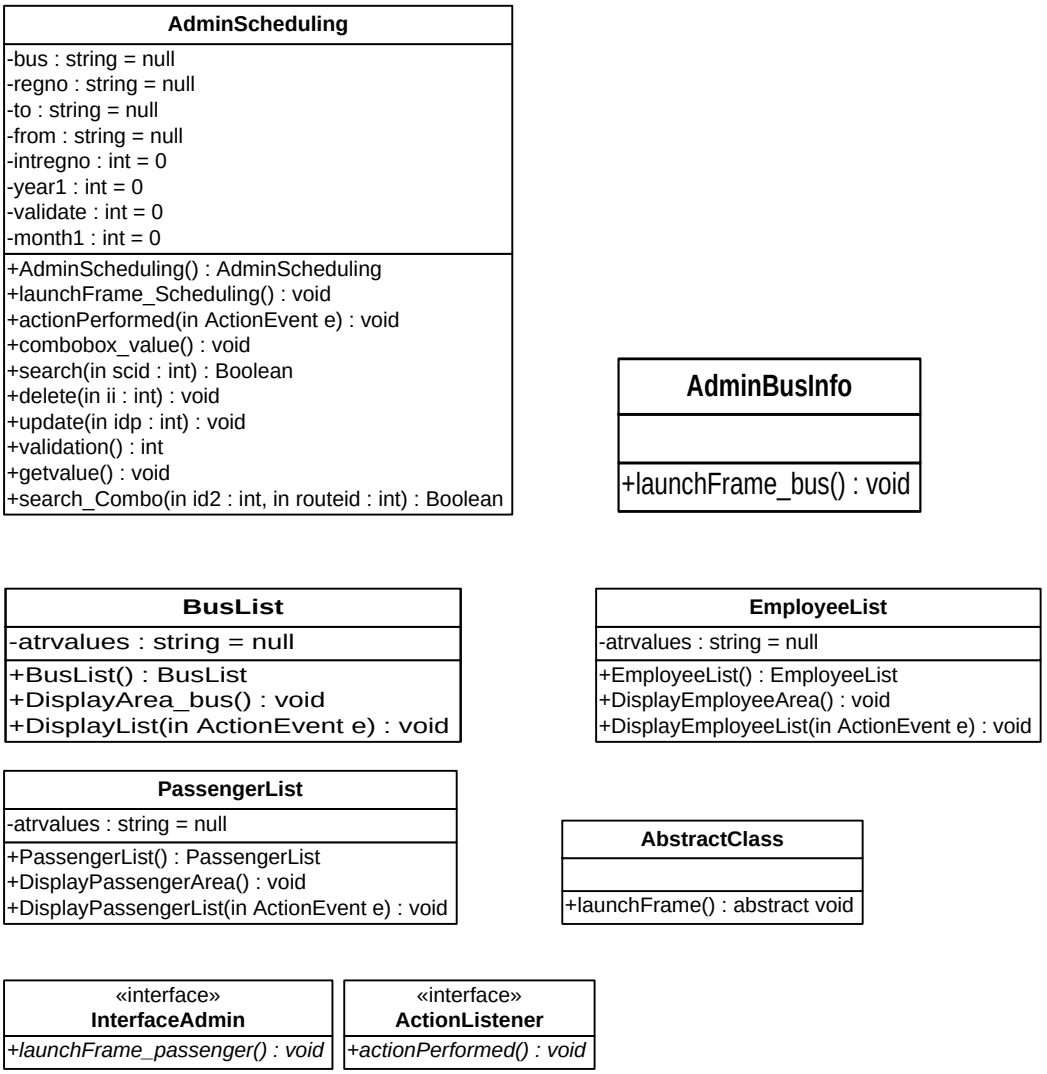
PassengerDetails
-fname : string = null -lname : string = null -father : string = null -occu : string = null -date : string = null -address : string = null -id : string = null
+PassengerDetails() : PassengerDetails +launchFrame_passenger() : void +actionPerformed(in ActionEvent e) : void +add() : void

RouteManagement
-bus : string = null -route_id : string = null -ei : string = null -from : string = null -busid : int = 0
+RouteManagement() : RouteManagement +launchFrame_Root() : void +actionPerformed(in ActionEvent e) : void +add() : void +comboboxvalue() : void

Reservation
-validate : int = 0 -reservationid : int = 0 -pname : string = null -root : string = null -from : string = null -to : string = null -date : string = null -seat : string = null -distance : string = null -fare : string = null
+Reservation() : Reservation +launchFrame_Reservation() : void +actionPerformed(in ActionEvent e : void) : void +combobox() : void +validation() : int +getvalue() : void +add() : void +passenger(in p : int) : void +schedulingfield(in route1 : string) : void +routefill(in q : int) : void

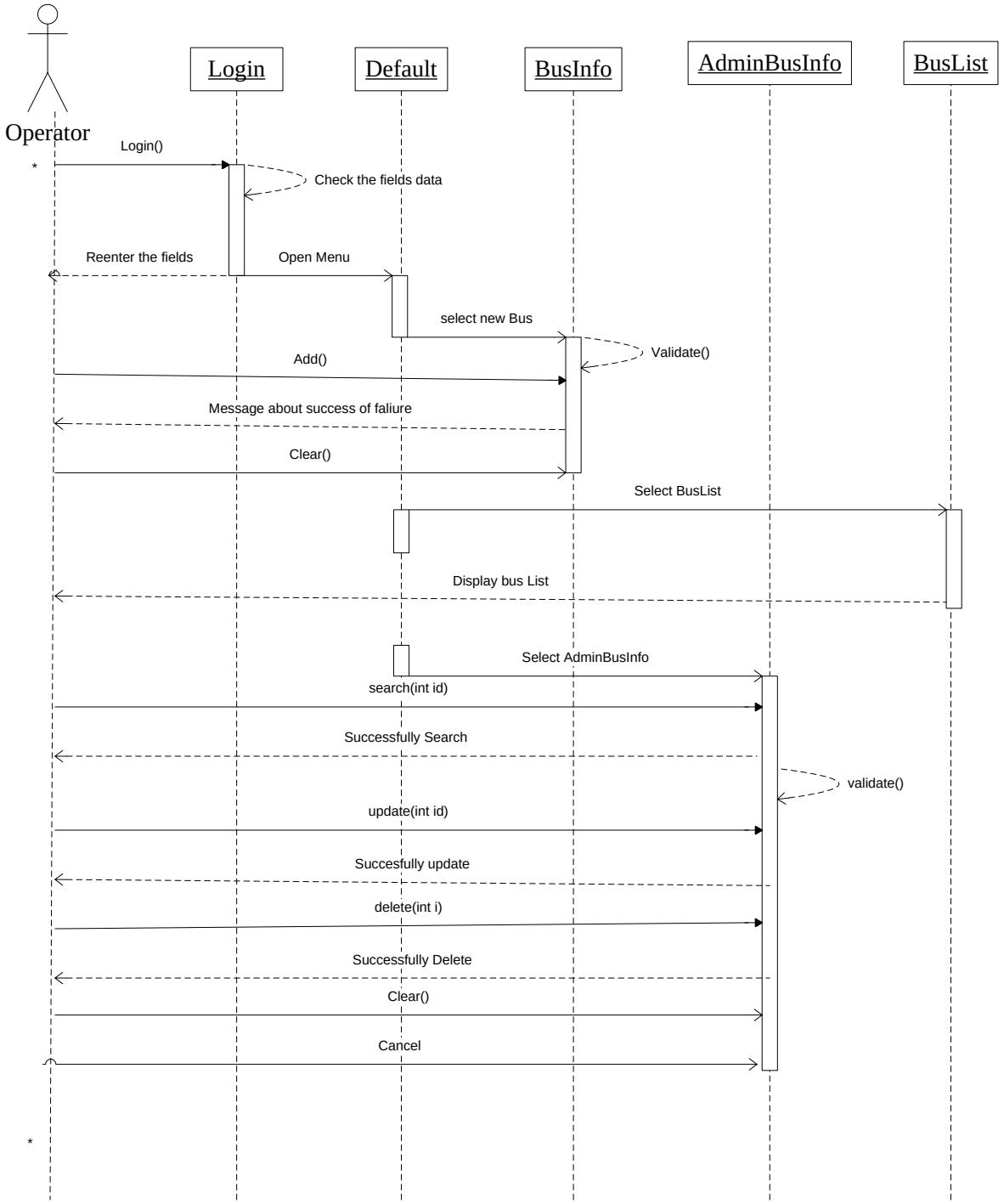
Scheduling
-bus : string = null -regno : string = null -to : string = null -from : string = null -intregno : int = 0 -year1 : int = 0 -validate : int = 0 -month1 : int = 0
+Scheduling() : Scheduling +launchFrame_Scheduling_Scheduling() : void +actionPerformed(in ActionEvent e) : void +combobox_value() : void +search(in id2 : int, in routeid : int) : Boolean +add() : void +validation() : int


TicketPrint
-atrvalues : string = null
-strsecond : string = null
-strthird : string = null
-strfourth : string = null
-strmiddle : string = null
+TicketPrint(in x : int) : TicketPrint
+DisplayPassengerArea() : void
+DisplayPassengerList(in ActionEvent e) : void
BusInfo
-Busno : string = null
-Model : string = null
-RegNo : string = null
-Sitting : string = null
-date : string = null
-ins : string = null
-cato : string = null
+BusInfo() : BusInfo
+launchFrame_bus() : void
+actionPerformed(in ActionEvent e) : void
+add() : void
AdminEmployeeDetails
-validate : int = 0
-phh : int = 0
-fname : string
-dobd : string
-dobm : string
-sex : string
-mstatus : string
-joindate : string
-dobdate : string
-select : string
+AdminEmployeeDetails() : AdminEmployeeDetails
+launchFrame() : void
+actionPerformed(in ActionEvent e : void) : void
+combobox() : void
+search(in iid : int) : Boolean
+delete(in i : int) : void
+update(in iid : int) : void
+validation() : int
+getvalue() : void
AdminPassengerDetails
-fname : string = null
-lname : string = null
-father : string = null
-occu : string = null
-f : int = 0
-bbus : int = 0
-validate : int = 0
+AdminPassengerDetails() : AdminPassengerDetails
+launchFrame_passenger() : void
+actionPerformed(in ActionEvent e) : void
+combobox() : void
+search(in id : int) : Boolean
+delete(in i : int) : void
+update(in id : int) : void
+validation() : int
+getvalue() : void
+clear() : void
AdminRouteManagement
-bus : string = null
-route_id : string = null
-ei : string = null
-from : string = null
-f : int = 0
-search_value : int = 0
-validate : int = 0
-busid : int = 0
+AdAdminRouteManagementminPassengerDetails() : AdminRouteManagement
+launchFrame_Route() : void
+actionPerformed(in ActionEvent e) : void
+comboboxvalue() : void
+search(in id : int) : Boolean
+delete(in i : int) : void
+update(in id : int) : void
+validation() : int
+getvalue() : void
+clear() : void

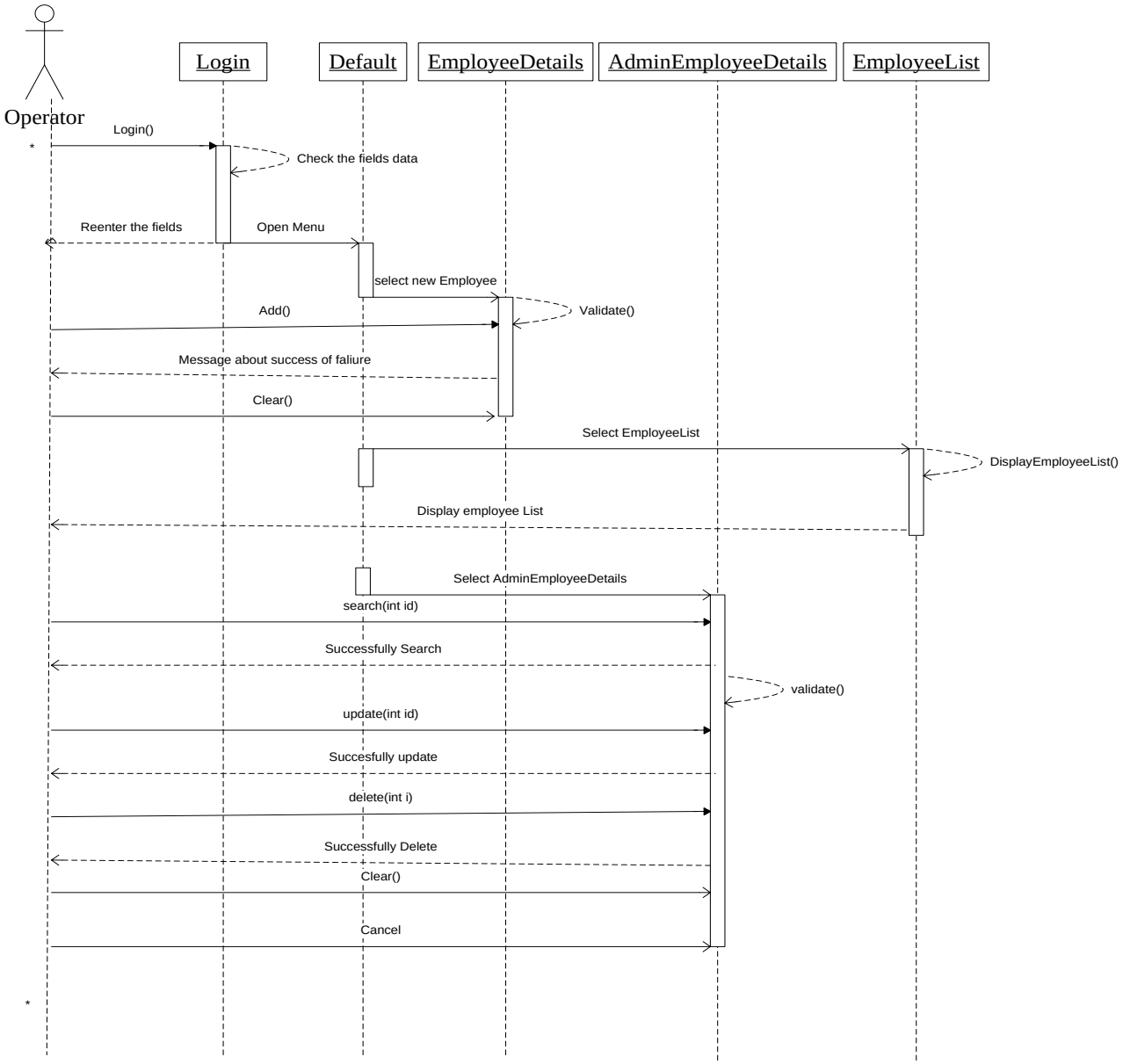

AdminScheduling
-bus : string = null
-regno : string = null
-to : string = null
-from : string = null
-intregno : int = 0
-year1 : int = 0
-validate : int = 0
-month1 : int = 0
+AdminScheduling() : AdminScheduling
+launchFrame_Scheduling() : void
+actionPerformed(in ActionEvent e) : void
+combobox_value() : void
+search(in scid : int) : Boolean
+delete(in ii : int) : void
+update(in idp : int) : void
+validation() : int
+getvalue() : void
+search_Combo(in id2 : int, in routeid : int) : Boolean
AdminBusInfo
+launchFrame_bus() : void
BusList
-atrvalues : string = null
+BusList() : BusList
+DisplayArea_bus() : void
+DisplayList(in ActionEvent e) : void
EmployeeList
-atrvalues : string = null
+EmployeeList() : EmployeeList
+DisplayEmployeeArea() : void
+DisplayEmployeeList(in ActionEvent e) : void
PassengerList
-atrvalues : string = null
+PassengerList() : PassengerList
+DisplayPassengerArea() : void
+DisplayPassengerList(in ActionEvent e) : void
AbstractClass
+launchFrame() : abstract void
«interface»
InterfaceAdmin
+launchFrame_passenger() : void
«interface»
ActionListener
+actionPerformed() : void

4 Sequence Diagram:

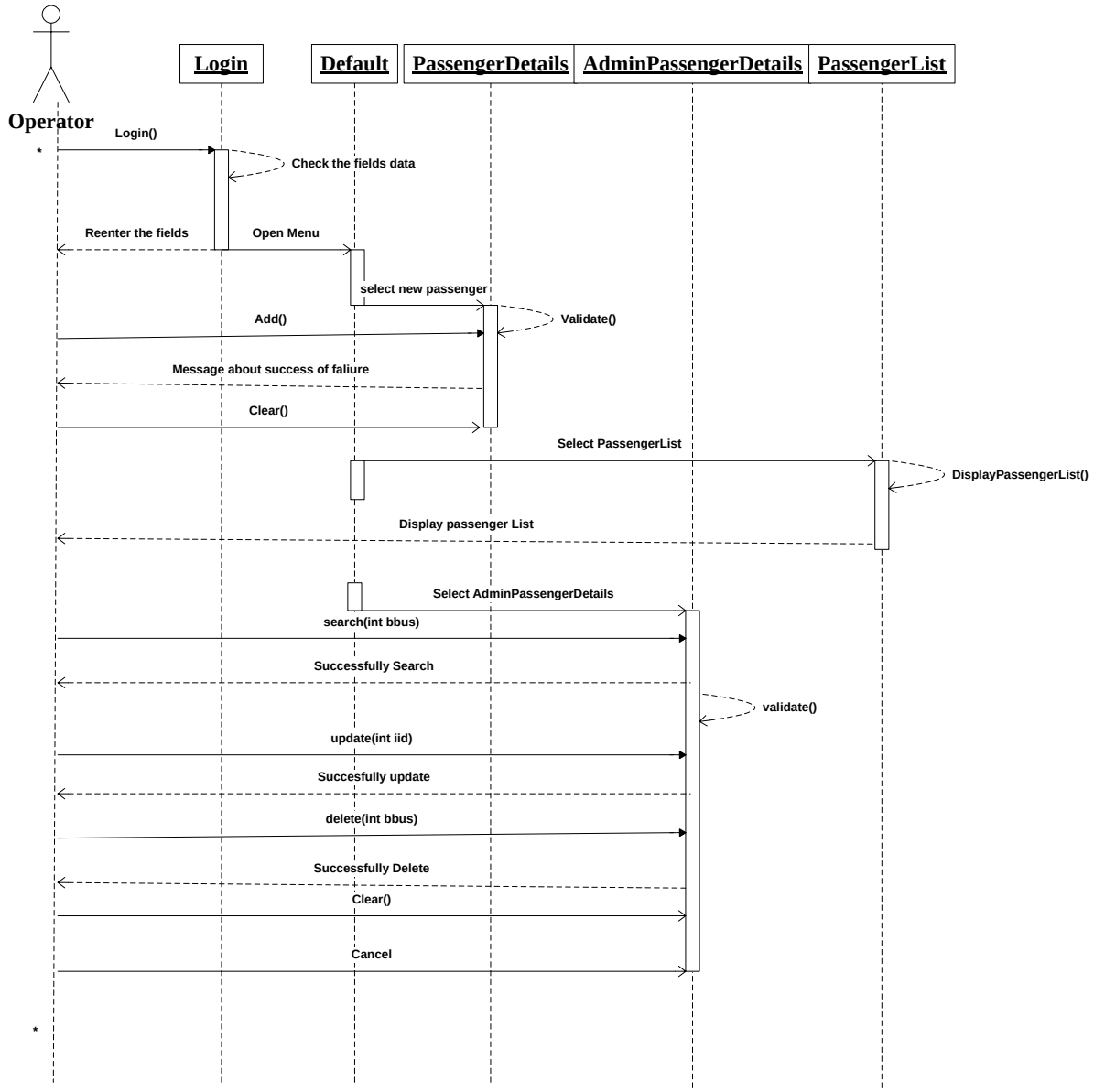
4.1 **Bus:**



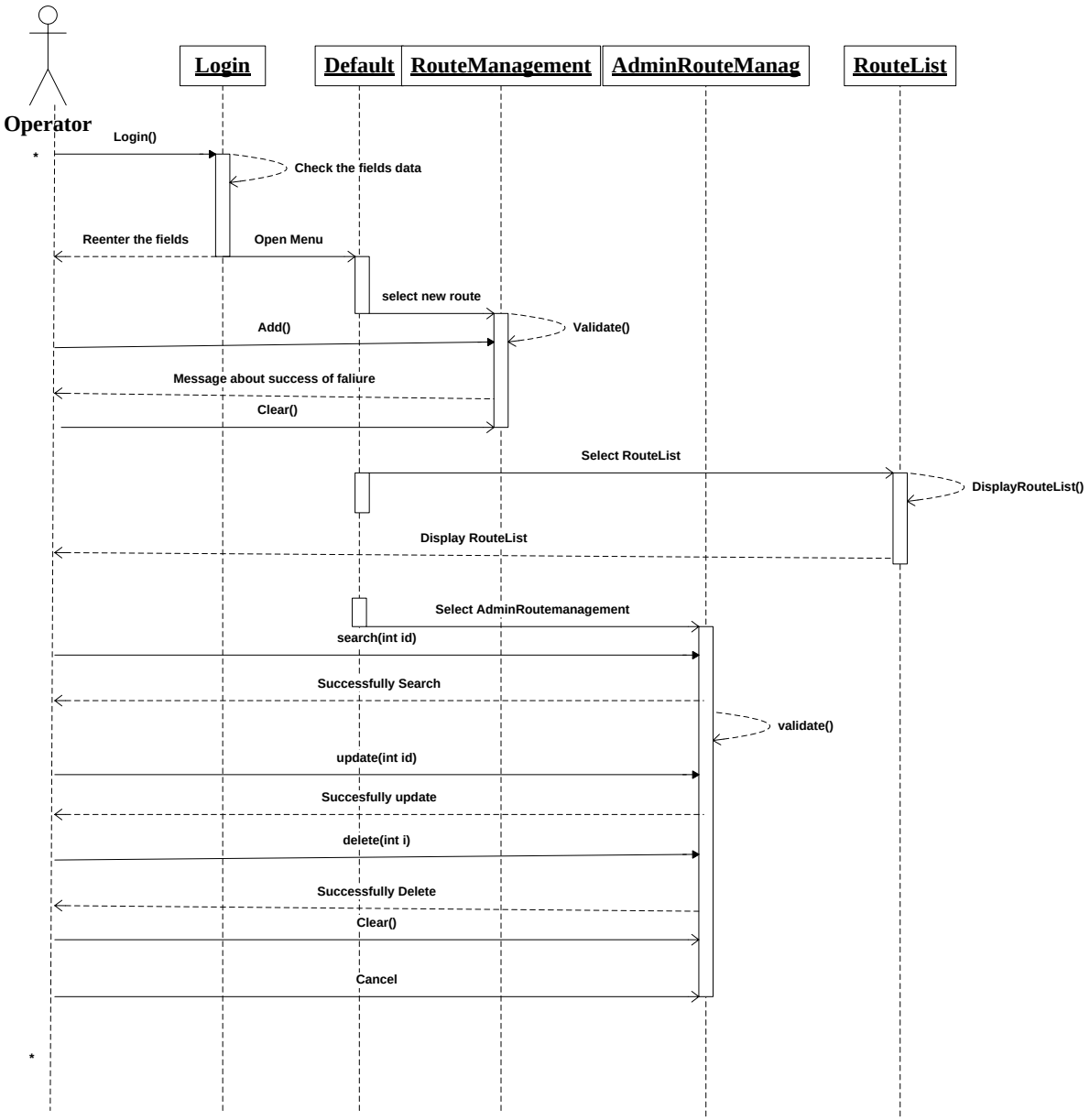
4.2 **Employee:**


Operator
Login
Default
EmployeeDetails
AdminEmployeeDetails
EmployeeList
Login()
Check the fields data
Reenter the fields
Open Menu
select new Employee
Add()
Validate()
Message about success of faliure
Clear()
Select EmployeeList
DisplayEmployeeList()
Display employee List
Select AdminEmployeeDetails
search(int id)
Successfully Search
validate()
update(int id)
Succesfully update
delete(int i)
Successfully Delete
Clear()
Cancel

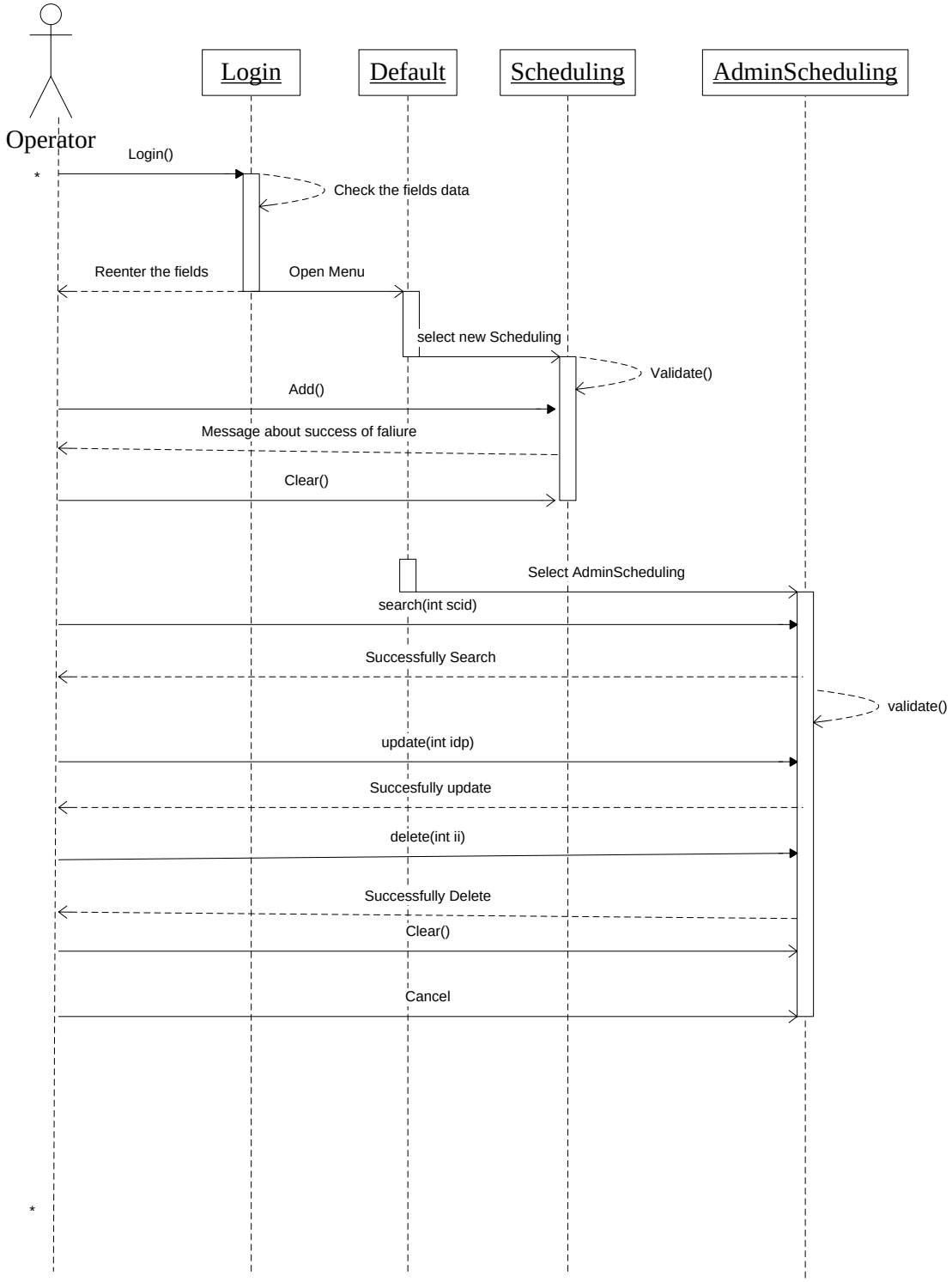
4.3 **Passenger:**



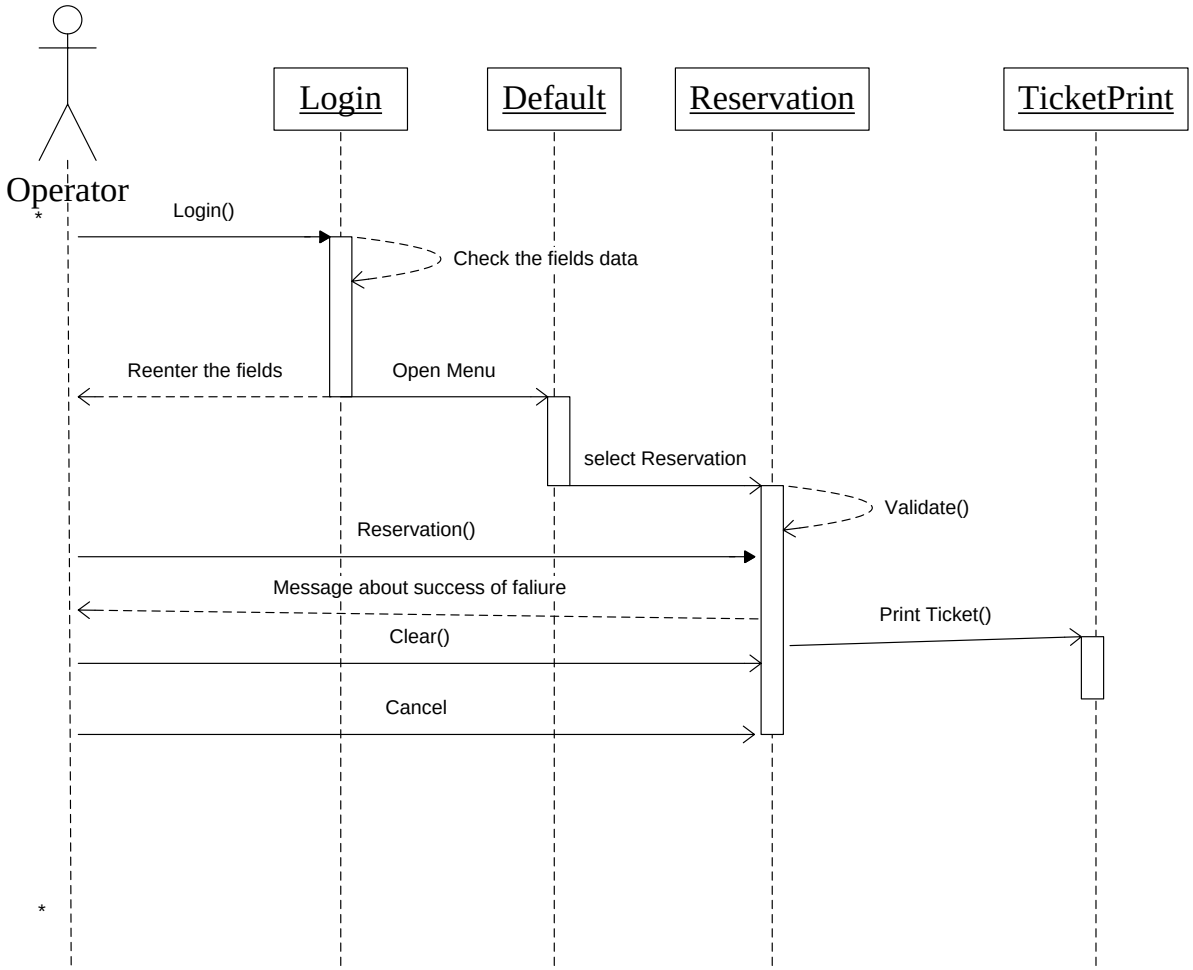
4.4 **Route:**


Operator
Login
Default
RouteManagement
AdminRouteManag
RouteList
Login()
Check the fields data
Reenter the fields
Open Menu
select new route
Add()
Validate()
Message about success of faliure
Clear()
Select RouteList
DisplayRouteList()
Display RouteList
Select AdminRoutemanagement
search(int id)
Successfully Search
validate()
update(int id)
Succesfully update
delete(int i)
Successfully Delete
Clear()
Cancel

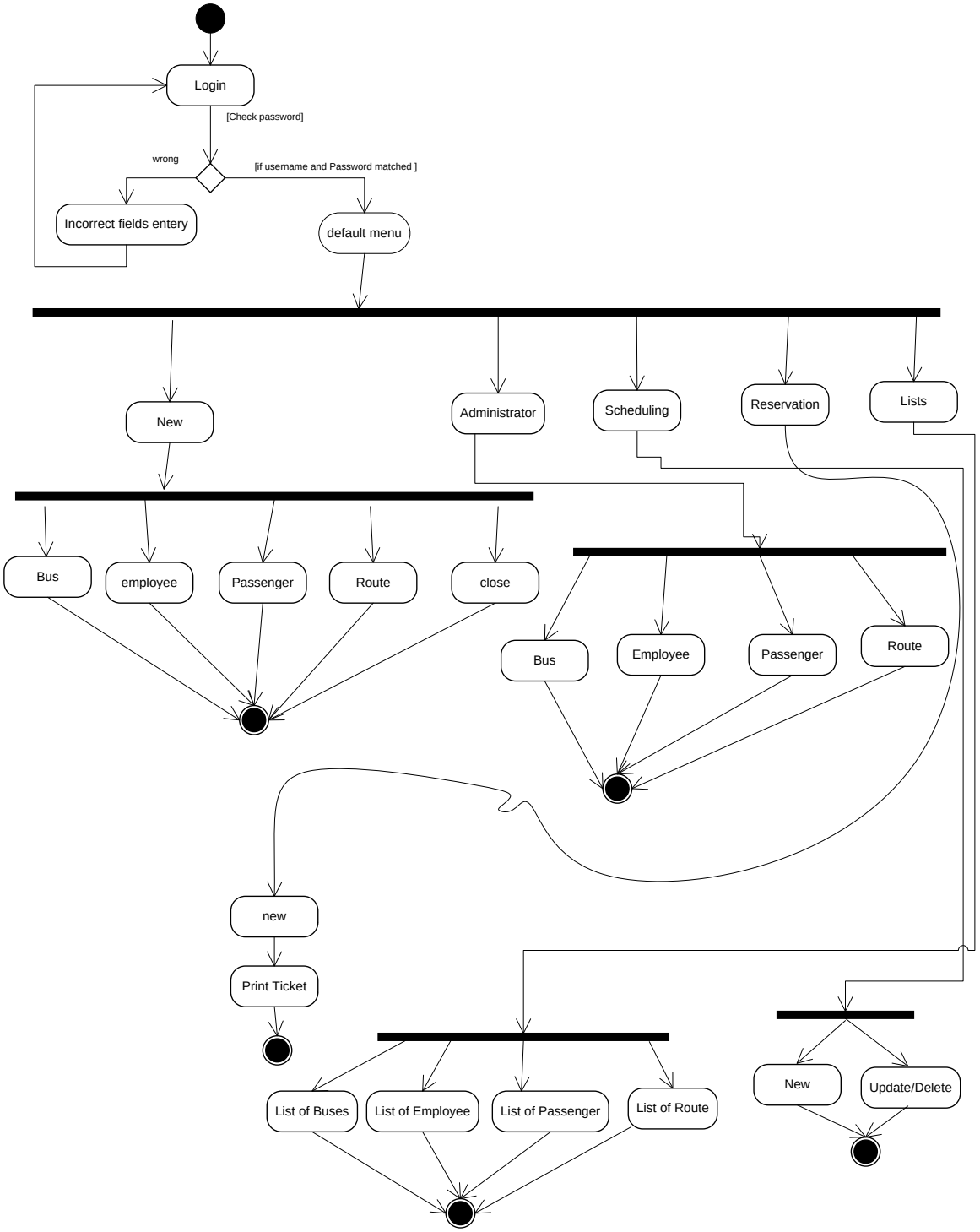
4.5 **Scheduling:**



4.6 **Reservation:**



5 Activity Diagram:



6 Source Code:

6.1 Encapsulation:

Through encapsulation developer make the private access of the data to public via public method. Developer used this technique in likely to all the form. Here is the example of AdminRouteManagement module in which he used this technique.

Here is code snip :

```
import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

import java.sql.*;

/**Through this class administrator can update,search and delete the records of Route and cancel the operation.*/

public class AdminRouteManagement implements ActionListener

{

    private JFrame frame;

    private JButton btnCancel,btnDelete,btnClear,btnUpdate,btnSearch;

    private JLabel, lblHeading,lblBusNo,lblRootNo,lblEmployeeNo,lblFare,lblRunTill,lblSpeed,lblTo,lblFrom,lblTravelDuration,lblDistance,lblVBN,lblVRN,lblVTD,lblVEI,lblVT,lblVF,lblVAT,lblVDT,lblVSA,lblVD;

    private JTextField txtFare,txtRunTill,txtFrom,txtTo,txtTravelDuration,txtDistance,txtspeed;

    private JComboBox cboBusNo,cboEmployeeNo,cboRootNo;

    private JPanel top,center,bottom;
```

```
private String bus=null,route_id=null,ei=null,to=null,from=null,runtill=null,travelduration=null,distance=null,speed=null,fare=null,select=null;

private int busid=0,validate=0,search_value=0,f=0;

private ImageIcon icon;

private Color color1,color2,color3;

/**used to initilise the fields of the form*/

public AdminRouteManagement()

{

        frame=new JFrame("Route Management");

        top=new JPanel();

        center=new JPanel();

        bottom=new JPanel();

        lblHeading=new JLabel("Route Management");

        lblBusNo=new JLabel("Bus No.:");

        lblRootNo=new JLabel("Route No.:");

        lblEmployeeNo=new JLabel("Employee ID:");

        lblSpeed=new JLabel("Avg. Speed:");

        lblFare=new JLabel("Fare:");

        lblRunTill=new JLabel("Run Till:");

        lblFrom=new JLabel("From:");

        lblTo=new JLabel("To:");

        lblTravelDuration=new JLabel("Travel Duration:");
```

```
txtTravelDuration=new JTextField();

cboBusNo=new JComboBox();

cboRootNo=new JComboBox();

cboEmployeeNo=new JComboBox();

txtspeed=new JTextField();

txtFare=new JTextField();

txtRunTill=new JTextField();

txtFrom=new JTextField();

txtTo=new JTextField();

lblDistance=new JLabel("Distance");

txtDistance=new JTextField();


icon=new ImageIcon("wrong.jpeg");

lblVBN=new JLabel("Select one of the option",icon,JLabel.CENTER);

lblVRN=new JLabel("enter number only",icon,JLabel.CENTER);

lblVTD=new JLabel("enter number only",icon,JLabel.CENTER);

lblVEI=new JLabel("Select one of the option ",icon,JLabel.CENTER);

lblVT=new JLabel("Enter Text only",icon,JLabel.CENTER);

lblVF=new JLabel("Enter Text only",icon,JLabel.CENTER);

lblVAT=new JLabel("only number ",icon,JLabel.CENTER);

lblVDT=new JLabel("only number ",icon,JLabel.CENTER);

lblVSA=new JLabel("enter number only",icon,JLabel.CENTER);

lblVD=new JLabel("only Enter number",icon,JLabel.CENTER);
```

```
btnDelete=new JButton("Delete",new
ImageIcon(ClassLoader.getSystemResource("add1.gif")));

btnCancel=new JButton("Cancel",new
ImageIcon(ClassLoader.getSystemResource("delete.png")));

btnClear=new JButton("Clear",new
ImageIcon(ClassLoader.getSystemResource("clear.png")));

btnUpdate=new JButton("Update",new
ImageIcon(ClassLoader.getSystemResource("update.jpg")));

btnSearch=new JButton("Search",new
ImageIcon(ClassLoader.getSystemResource("Search.png")));

color1=new Color(25,107,136);

color2=new Color(191,233,247);

color3=new Color(25,107,136);

}
```

6.2 **Constructor:**

Developer used this concept to initialize the objects.

Code snip of RouteManagement class:

```
public class RouteManagement implements ActionListener

{

private JFrame f;

private JButton btnCancel,btnAdd,btnClear;

private JLabel
lblHeading,lblBusNo,lblRootNo,lblEmployeeNo,lblFare,lblRunTill,lblSpeed,lblTo,lbl
From,lblTravelDuration,lblDistance,lblVBN,lblVRN,lblVTD,lblVEI,lblVT,lblVF,lbl
VAT,lblVDT,lblVSA,lblVD;
```

```
private JTextField txtRootNo,txtFare,txtRunTill,txtFrom,txtTo,txtTravelDuration,txtDistance,txtspeed;

private JComboBox cboBusNo,cboEmployeeNo;

private JPanel top,center,bottom;

public RouteManagement()

{

        f=new JFrame("Route Management");

        top=new JPanel();

        center=new JPanel();

        bottom=new JPanel();

        lblHeading=new JLabel("Route Management");

        lblBusNo=new JLabel("Bus No.:");

        lblRootNo=new JLabel("Route No.:");

        lblEmployeeNo=new JLabel("Employee ID:");

        lblSpeed=new JLabel("Avg. Speed:");

        lblFare=new JLabel("Fare:");

        lblRunTill=new JLabel("Run Till:");

        lblFrom=new JLabel("From:");

        lblTo=new JLabel("To:");

        lblTravelDuration=new JLabel("Travel Duration:");

}
```

6.3 **Polymorphism and Inheritance:**

Developer used overriding technique in the AdminBusInfo class and extending the class bus .

Code snip:

```
package Bus;

import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

import java.sql.*;

import java.util.Vector;

/** Overiding the class Bus method */

 public class AdminBusInfo extends Bus

 {

        public void launchFrame_bus()

        {

              top.setLayout(new FlowLayout(FlowLayout.CENTER,0,15));

             top.setBackground(color1);

             top.add(lblHeading);

             lblHeading.setFont(new Font("Algerian", Font.BOLD, 30));

             lblHeading.setForeground(new Color(234,53,107));


             center.setLayout(null);

             center.setBackground(color2);

             combobox();
```

center.add(lblBusNo);

lblBusNo.setBounds(20,10,70,30);

center.add(cboBusNo);

cboBusNo.setBorder(BorderFactory.createLineBorder(Color.green,1));

cboBusNo.setBounds(120,10,150,30);

center.add(lblVBN);

lblVBN.setBounds(260,10,200,30);

lblVBN.setVisible(false);

center.add(lblModel);

lblModel.setBounds(20,60,70,30);

}

}/**class AdminBusInfo used for administrator to change the data. This class inheriting the JFrame Class and also implements all the method of ActionListener class*/

class Bus implements ActionListener

{

public JFrame frame;

public JLabel lblHeading,lblBusNo,lblModel, lblRegNo,lblSittingCapacity,lblPurchageDate,lblInsuranceStatus,lblCato,lblVBN,lblVM,lblVRN,lblVSC,lblVPD,lblVIS,lblVC;

public JTextField txtModel, txtRegNo,txtSittingCapacity,txtPurchageDate;

public JButton btnDelete, btnCancel, btnClear,btnUpdate,btnSearch;

```
        private String sModel=null,sdate=null,sins=null,scato=null;
        private int sBusno=0,sRegNo=0,sSitting=0,f=0,validate=0;
        public JComboBox cmbInsuaranceStatus,cboCato,cboBusNo;
        public ImageIcon icon;
        Vector v,c;
        public JPanel top,center,bottom;
        public Color color1,color2,color3;
        private String select;
        private String Busno,Model, RegNo,Sitting,date,ins,cato;
        private int id;
/**Constructor of class used to Initilize the values*/
   public Bus()
   {
                frame=new JFrame("Bus Information");
                ----------------------------------------------
                ----------------------------------------------
}

/**Overridden the method by AdminBusInfo class*/
        public void launchFrame_bus()
        {
                System.out.println("PT1181120");
        }
```

6.4 Interface:

It is pure abstract class in java. Developer implementing interface in AdminPassengerDetails class.

Code snip:

```
interface InterfaceAdmin
{
        /**Defing  method as abstract*/
        public abstract void launchFrame_passenger();
}
public class AdminPassengerDetails implements ActionListener,InterfaceAdmin
{
        ----------------------------------------------------------------------------
        ----------------------------------------------------------------------------
public void launchFrame_passenger()
        {
                top.setLayout(new FlowLayout(FlowLayout.CENTER,0,15));
                top.setBackground(color1);
                top.add(lblHeading);
                lblHeading.setFont(new Font("Edwardian Script ITC", Font.BOLD, 35));
                lblHeading.setForeground(new Color(255,255,255));

                center.setLayout(null);
```

```
center.setBackground(color2);

combobox();

center.add(lblFName);

lblFName.setBounds(100,5,120,20);

center.add(txtFName);

txtFName.setBorder(BorderFactory.createLineBorder(Color.green,1));

txtFName.setBounds(240,5,150,20);

center.add(lblVFN);

lblVFN.setBounds(350,5,200,20);

lblVFN.setVisible(false);

center.add(lblLName);

lblLName.setBounds(100,40,120,20);

center.add(txtLName);

txtLName.setBorder(BorderFactory.createLineBorder(Color.green,1));

txtLName.setBounds(240,40,150,20);

        ------------------------------------------

        ------------------------------------------

    }
```

6.5 **Abstract class:**

Developer used this technique in AdminEmployeeDetails.

Code snip:

```
abstract class AbstractClass

{
```

```
        abstract void launchFrame();
}
/**define the method(launchFrame()) of class AbstractClass. Administrator can Search,Update and delete the records of employee, cancel the operation and also clear the form fields.*/
public class AdminEmployeeDetails  extends AbstractClass implements ActionListener
{
                ------------------------------------------------------------
                ------------------------------------------------------------
public void launchFrame()
        {
                top.setLayout(new FlowLayout(FlowLayout.CENTER,0,15));
                top.setBackground(color1);
                top.add(lblHeading);
                lblHeading.setFont(new Font("Algerian", Font.BOLD, 30));
                lblHeading.setForeground(new Color(244,125,0));
                center.setLayout(null);
                center.setBackground(color2);
                combobox();
                center.add(lblID);
                lblID.setBounds(100,5,120,20);
                center.add(cboID);
                cboID.setBorder(BorderFactory.createLineBorder(Color.green,1));
```

```
        cboID.setBounds(240,5,150,20);

        center.add(lblIEmpID);

        lblIEmpID.setBounds(300,5,400,20);

        lblIEmpID.setVisible(false);

        center.add(lblName);

        ------------------------------------------------

        ------------------------------------------------

    }
```

6.6 **Array:**

Developer used this to declear gender ans status in AdminEmployeeDetails class. Object is the parent of all the classes in java.

Code snip:

```
    Object [] gender={"Gender","Male","Female"};

    Object [] status={"Status","Married","Unmarried"};
```

6.7 **Vector:**

Developer used vector to add the elements to the combobox in AdminBusInfo Class.

```
lblCato=new JLabel("Category:");

        c=new Vector();

        c.addElement("Category");

        c.addElement("2*2 AC");

        c.addElement("3*2 AC");

        c.addElement("Sleeper AC");
```

```
c.addElement("2*2 Non-AC");

c.addElement("3*2 Non-AC");

c.addElement("Sleeper Non-AC");

c.addElement("Cabin");

cboCato=new JComboBox(c);
```

6.8 Packages:

Developer provides the grouping of variety of classes with the help of package.

Code snip:

```
package Schedule;

import javax.swing.*;

import java.awt.*;

import java.awt.event.*;

import java.sql.*;

/**Through this class administrator can update,search and delete the records of Scheduling and cancel the operation. */

public class AdminScheduling implements ActionListener

{

        ----------------------------------------

        ----------------------------------------

}
```

6.9 Exception Handling:

Developer used this concept to handle run time (uncheck) exception. He used this concept in many places in the code.

Code snip(AdminEmployeeDetails class):

```
try
{
    iid=Integer.parseInt(id);
}
catch (Exception d)
{
    f=1;
    JOptionPane.showMessageDialog(null," must fill Employee id");
}
```

6.10 **Composition:**

Association is of two type one is composition and other is Aggregation . composition is instance variables that are references to the objects. Developer creates object of the class.

Code snip(Default class):

```
AdminScheduling guiScheduling = new AdminScheduling();
guiScheduling.launchFrame_Scheduling();
```

6.11 Aggregation:

It is a has a relationship.

Code Sinp(AdminPassengerDetails class):

```
Object []
month={"Month","January","February","March","April","May","June","July","August","September","October","October","December"};
```

6.12 **Looping:**

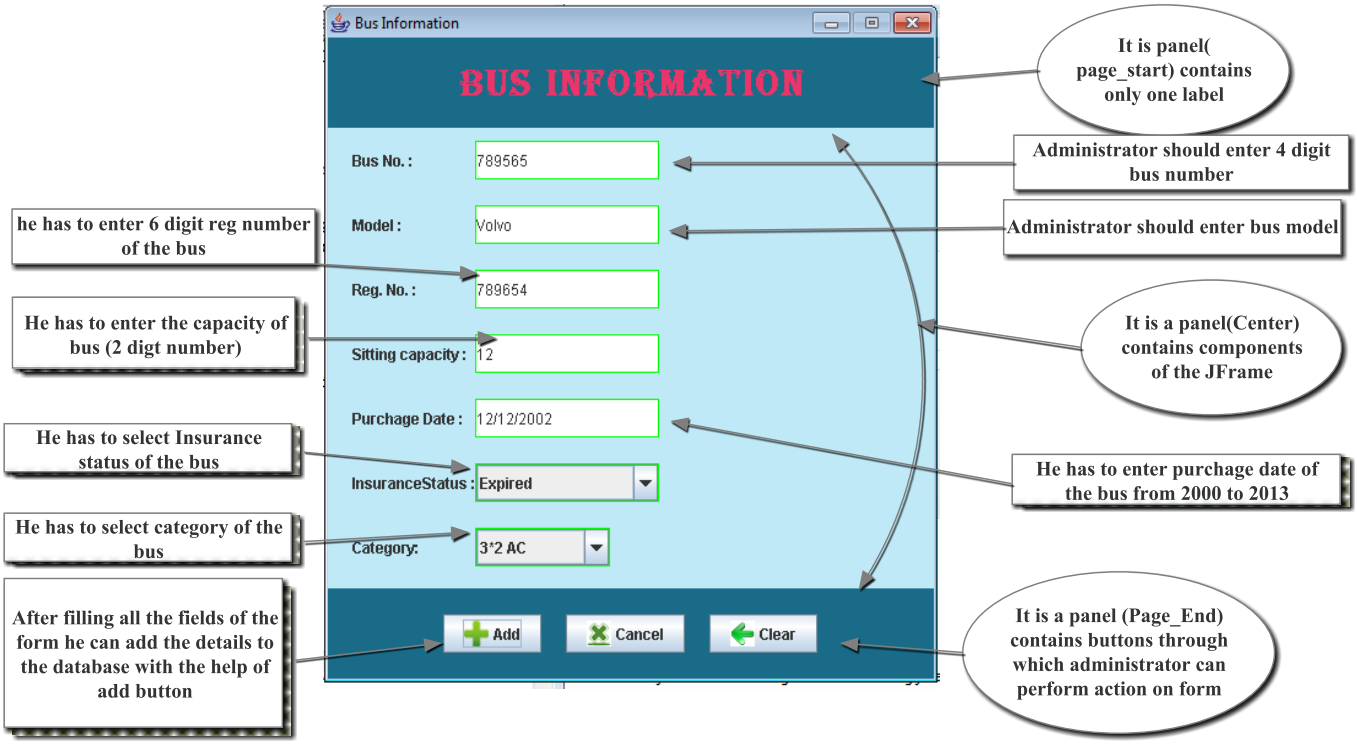
Developer used loop in validation part of his code.

Code sinp(AdminPassengerDetails):

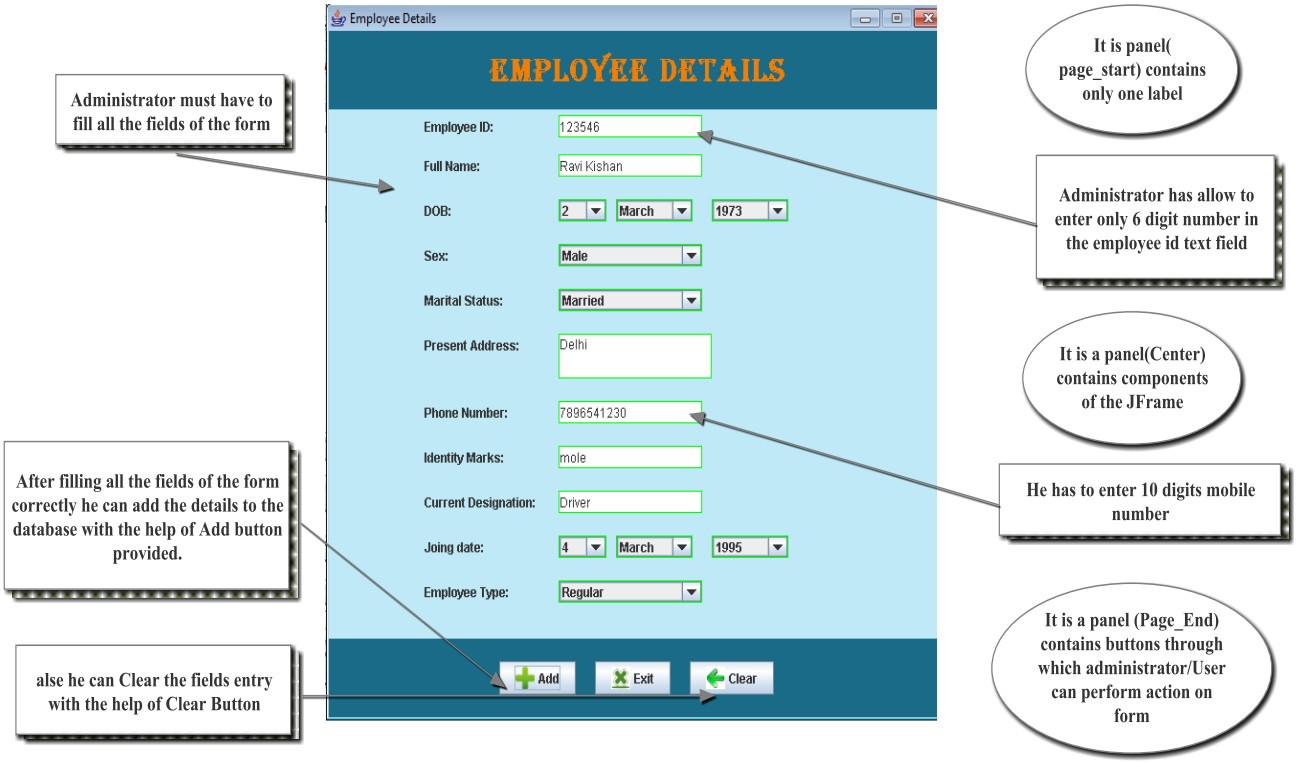
```
for(i=0;i<id.length();i++)
{
    if((id.charAt(i)>='0' && id.charAt(i)<='9') && id.length()==6)
        p++;
}
```

7 Sample Output:

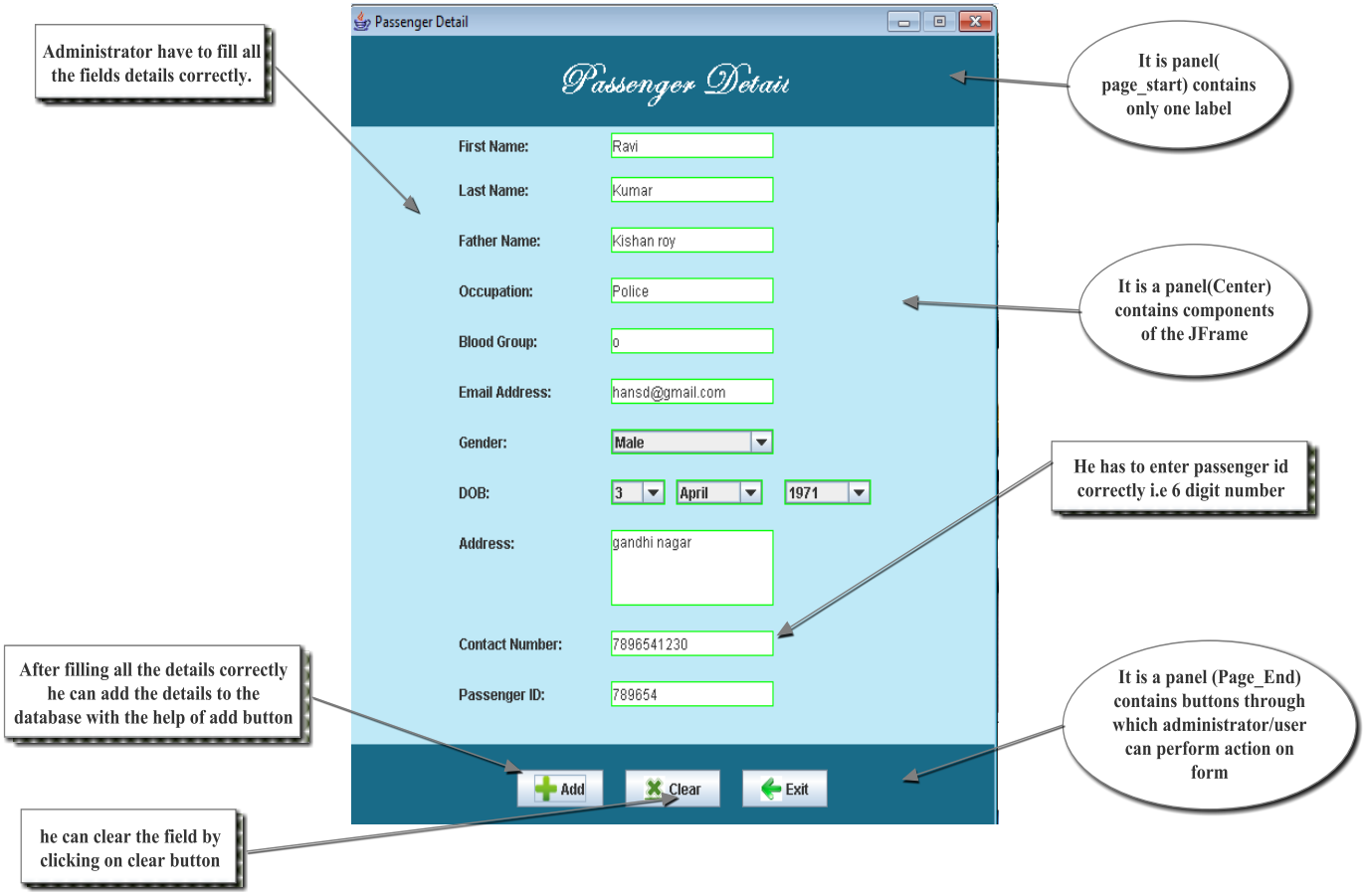
7.1 Bus Module-1:



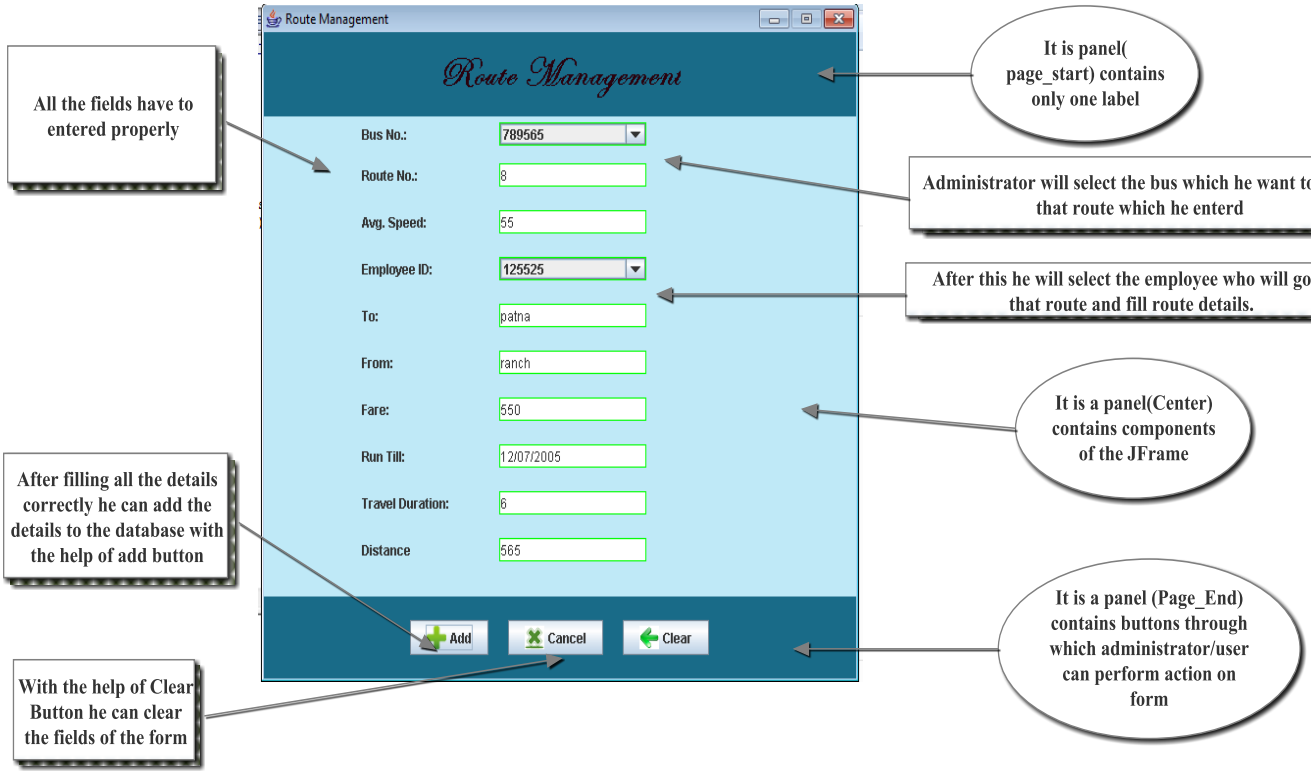
7.2 **Employee Module 1:**



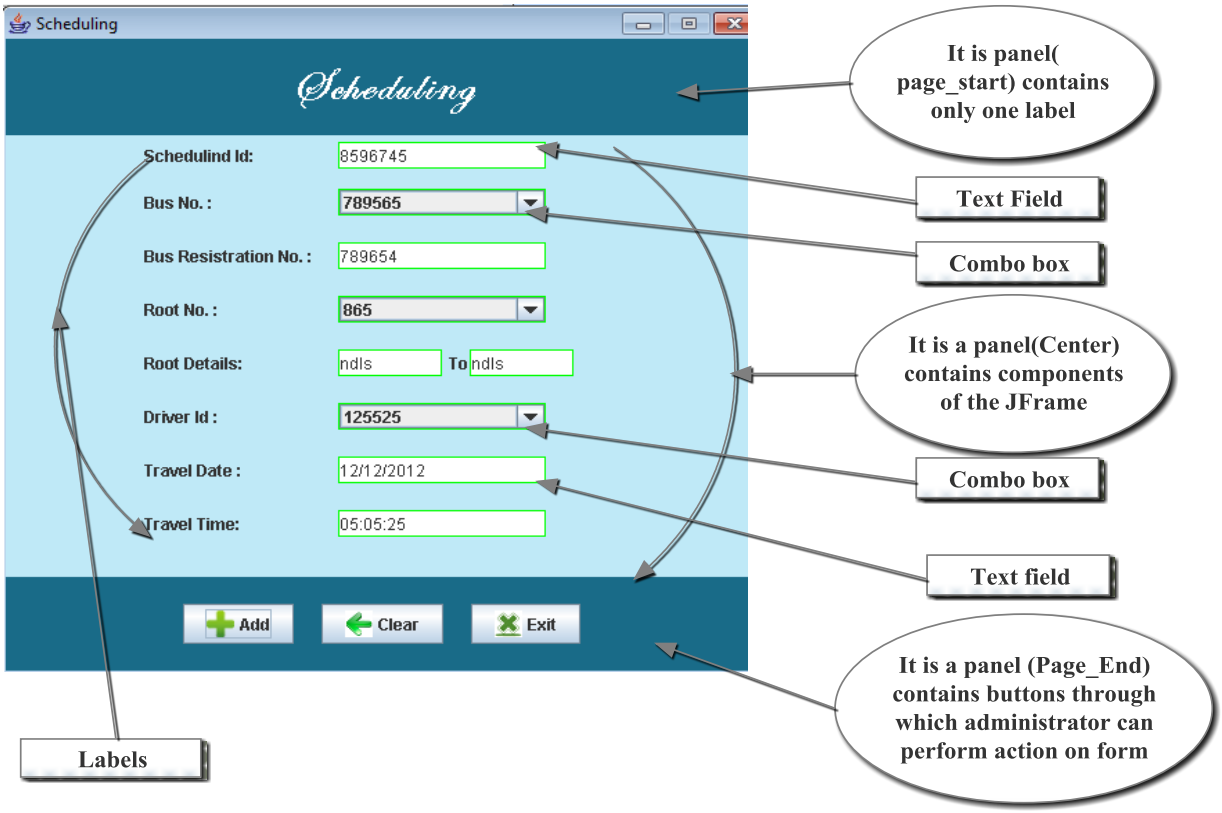
7.3 **Passenger 1:**



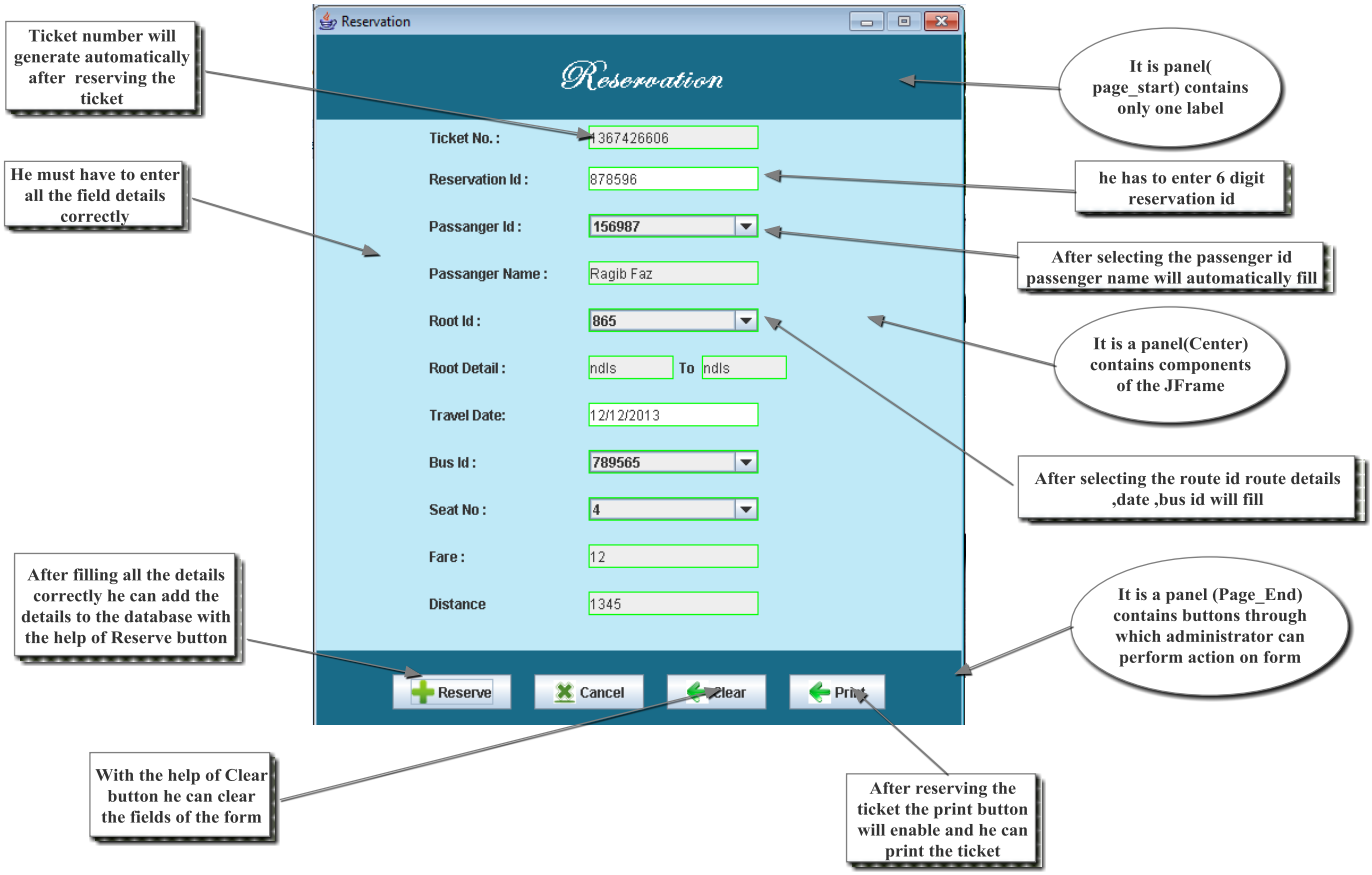
7.4 **Route 1:**


Route Management
Route Management
Bus No.:
789565
Route No.:
8
Avg. Speed:
55
Employee ID:
125525
To:
patna
From:
ranch
Fare:
550
Run Till:
12/07/2005
Travel Duration:
6
Distance
565
Add
Cancel
Clear
All the fields have to entered properly
It is panel(page_start) contains only one label
Administrator will select the bus which he want to go to that route which he enterd
After this he will select the employee who will go to that route and fill route details.
It is a panel(Center) contains components of the JFrame
After filling all the details correctly he can add the details to the database with the help of add button
It is a panel (Page_End) contains buttons through which administrator/user can perform action on form
With the help of Clear Button he can clear the fields of the form

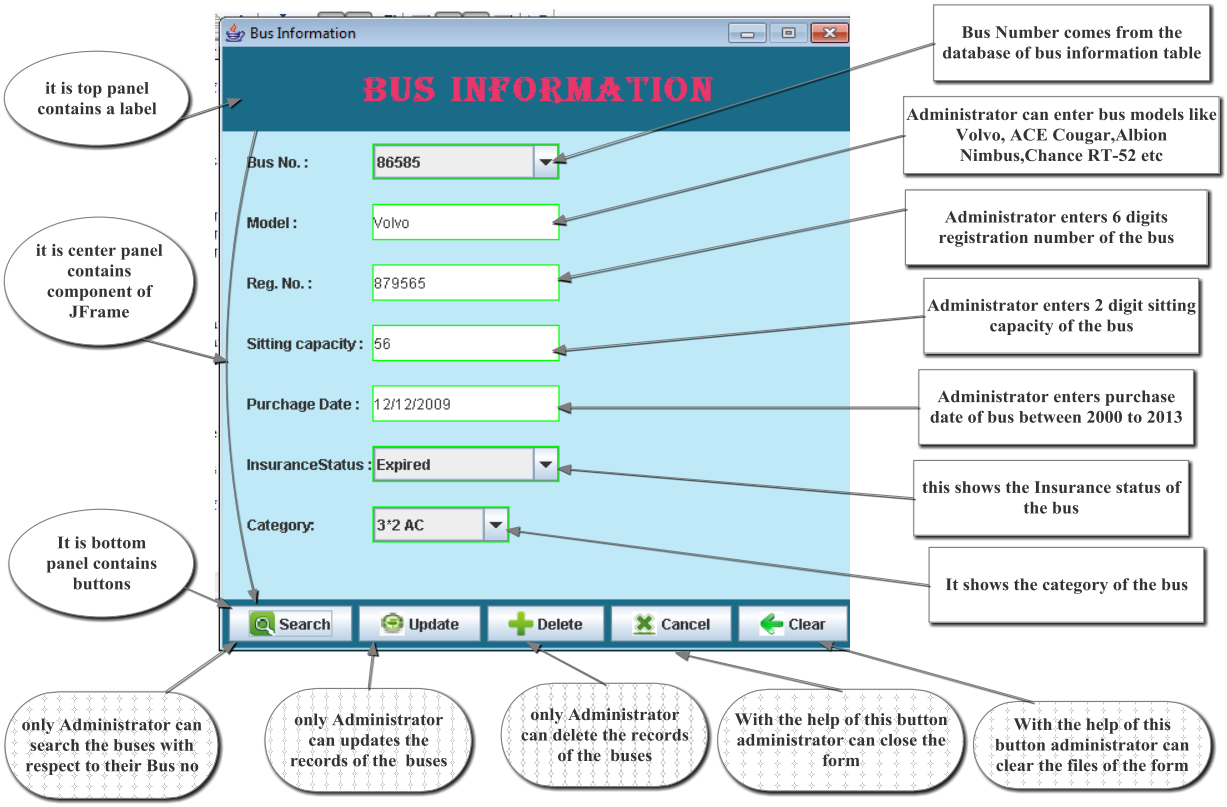
7.5 **Scheduling 1:**



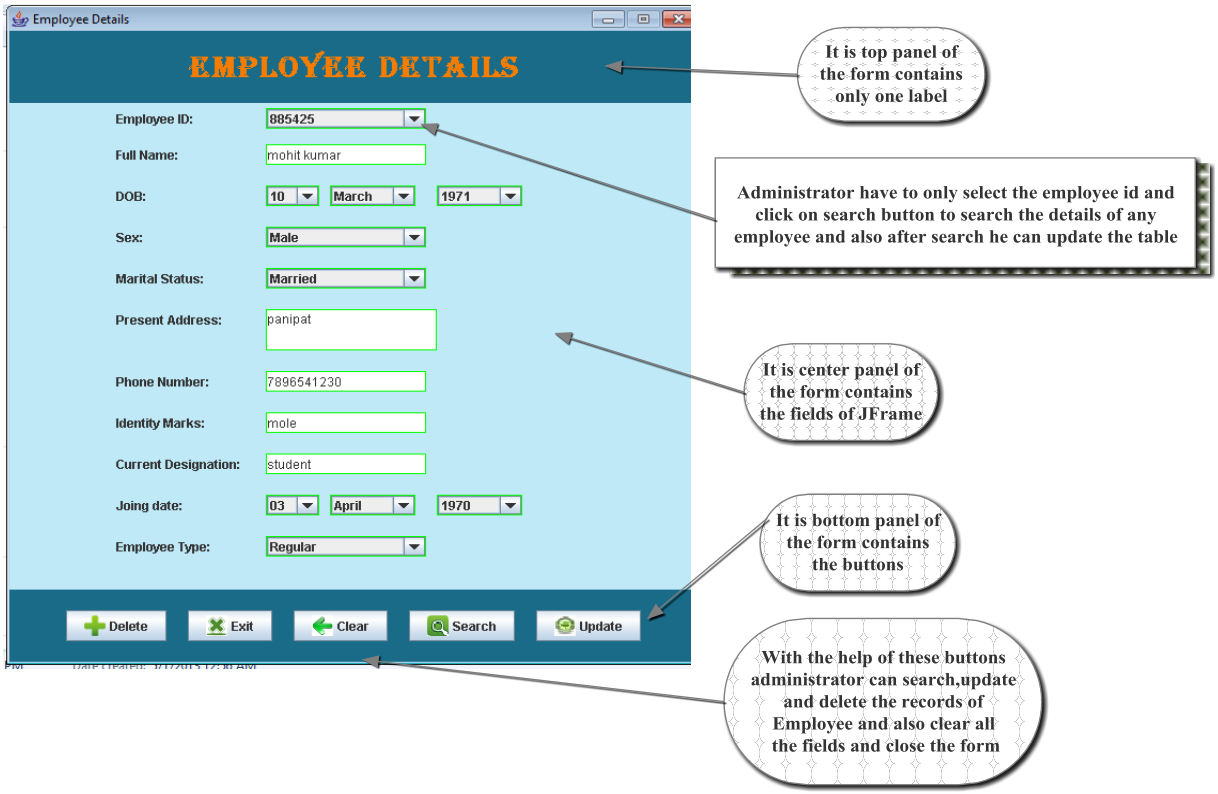
7.6 **Reservation:**



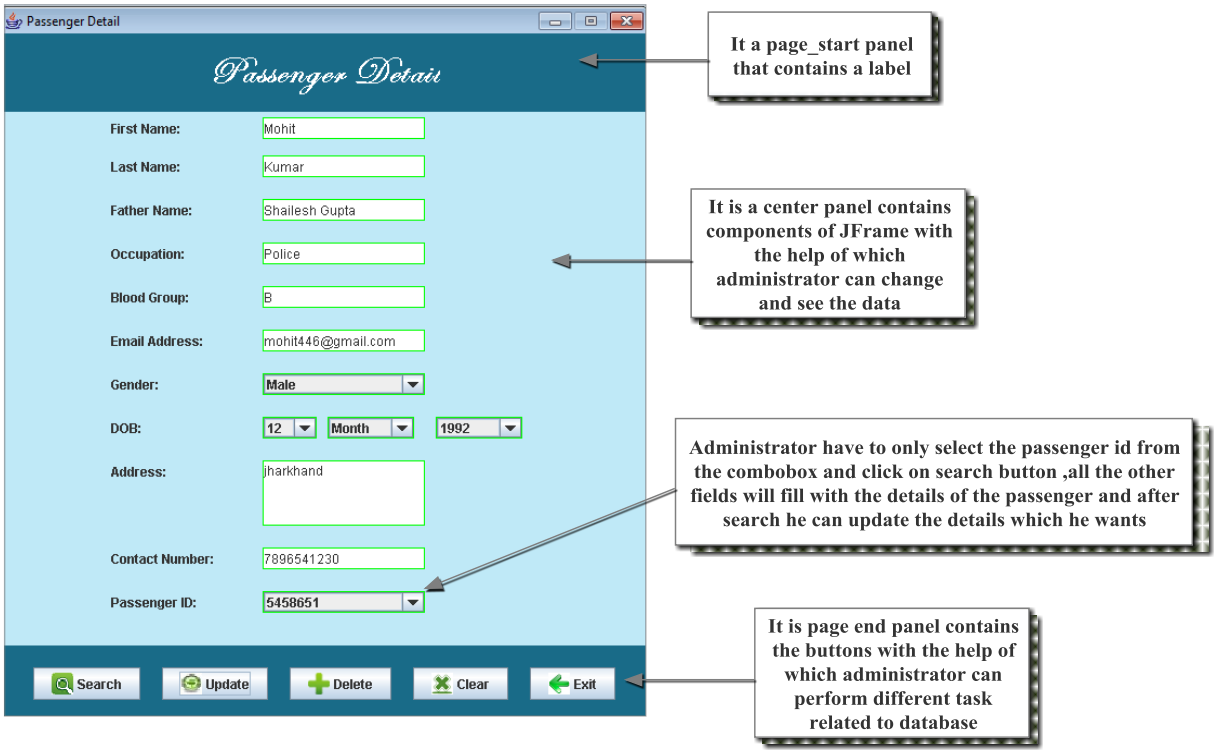
7.7 **Bus module 2**



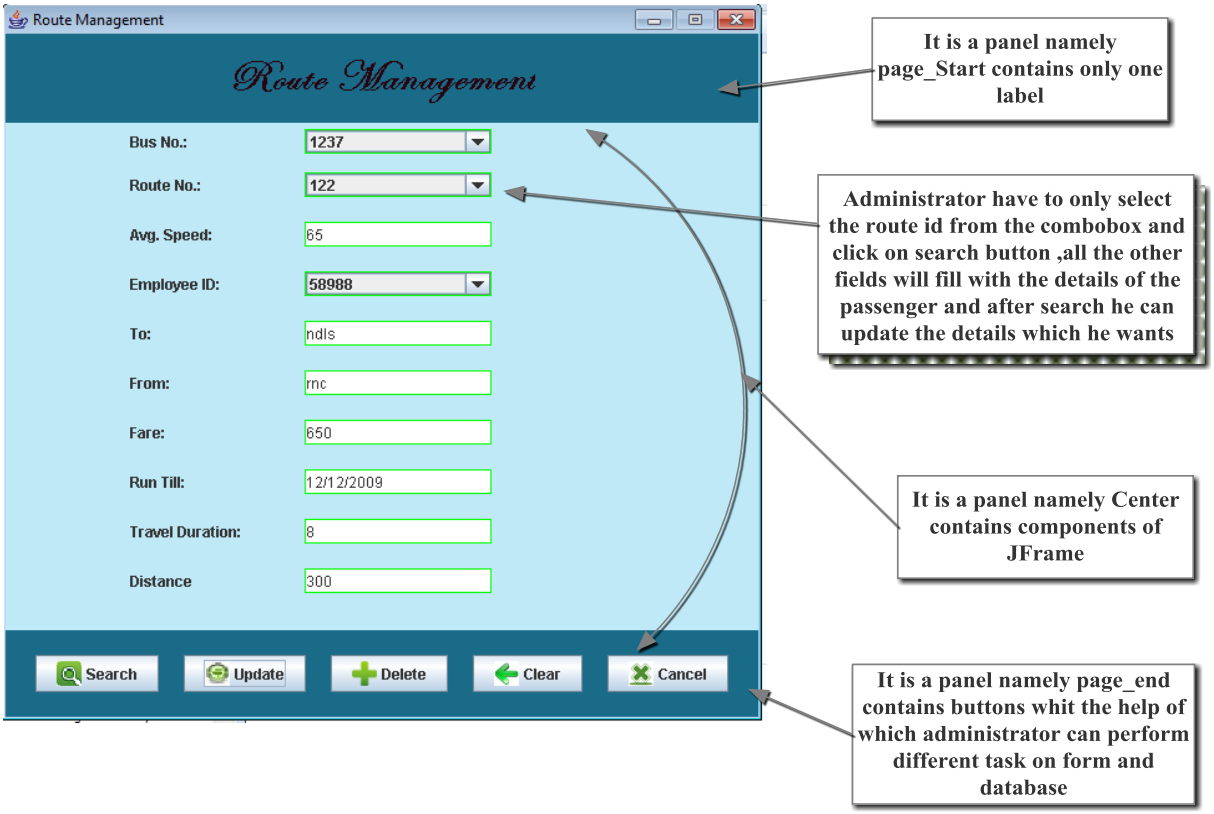
7.8 **Employee module 2:**



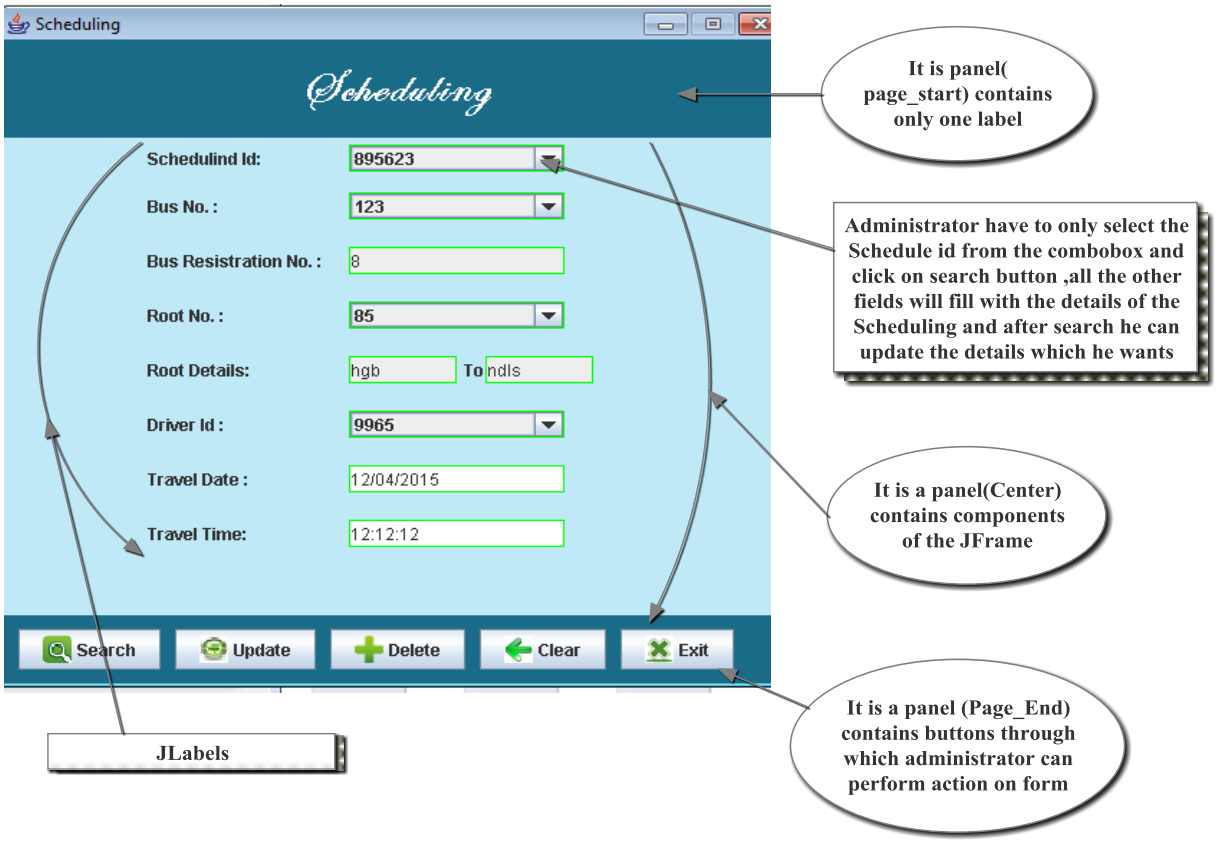
7.9. Passenger module 2:



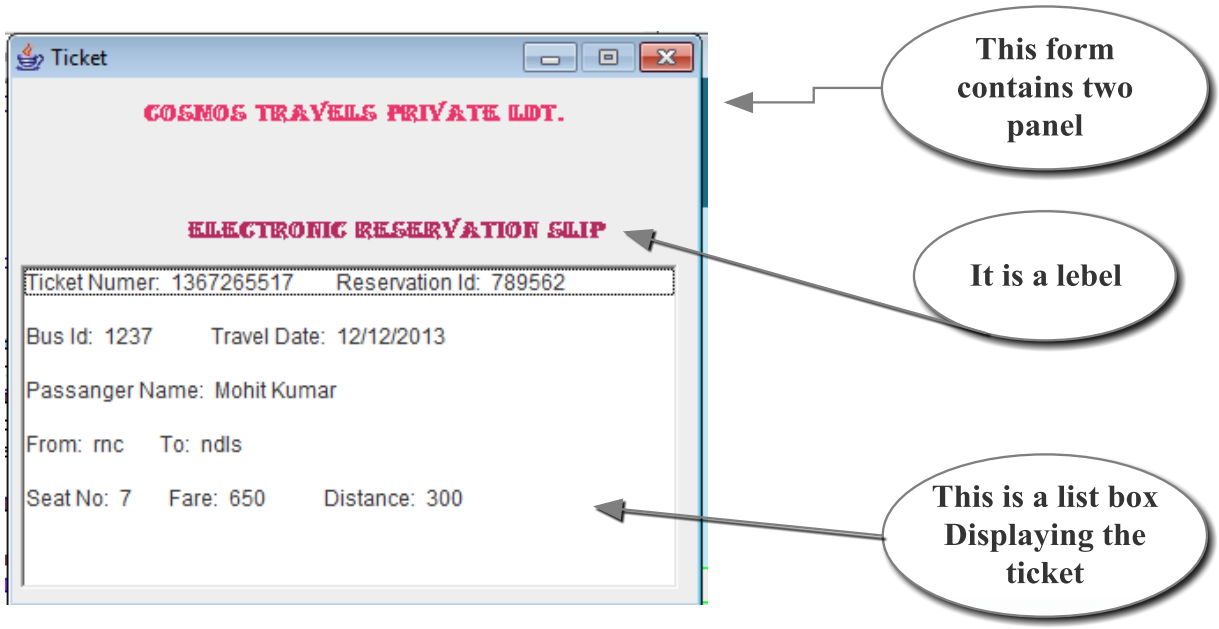
7.9 **Route module 2:**



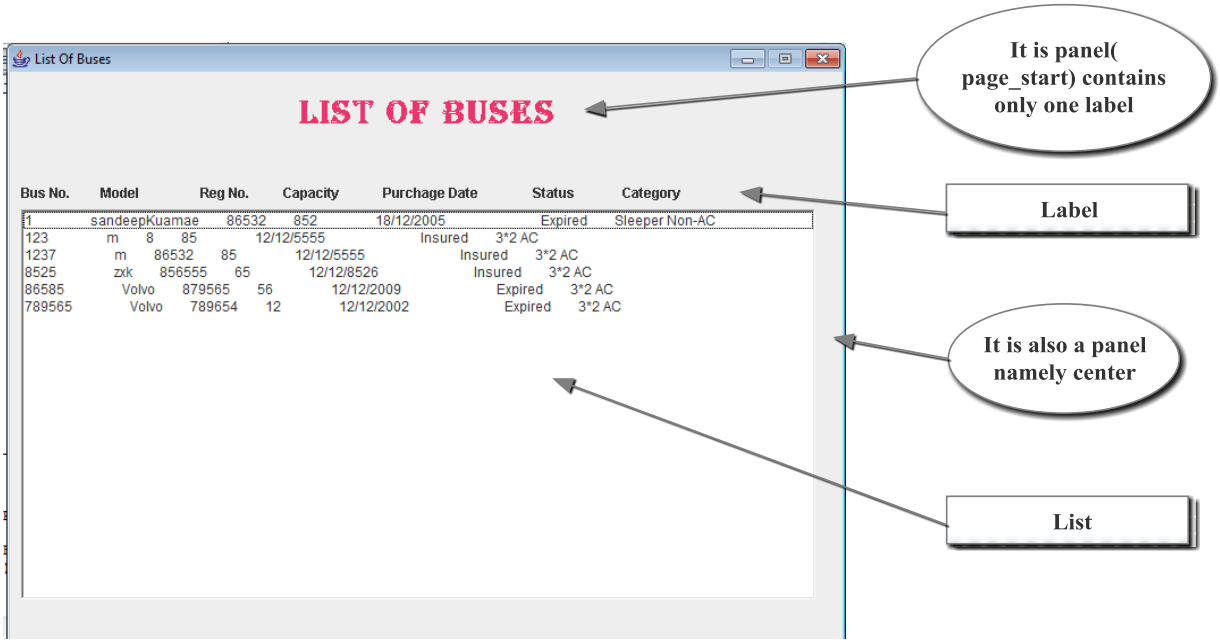
7.10 **Schedule module 2:**



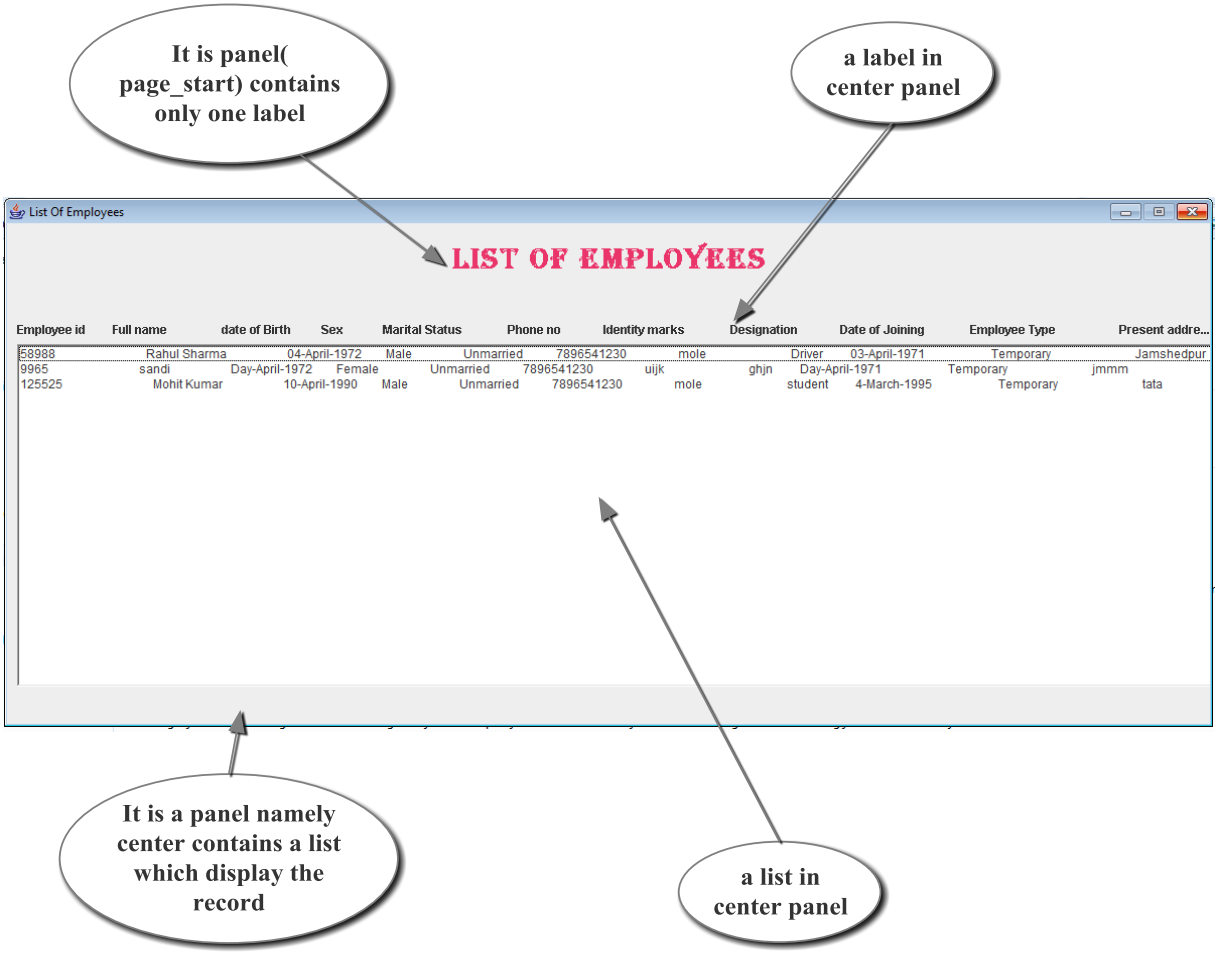
7.11 **Ticket Print:**



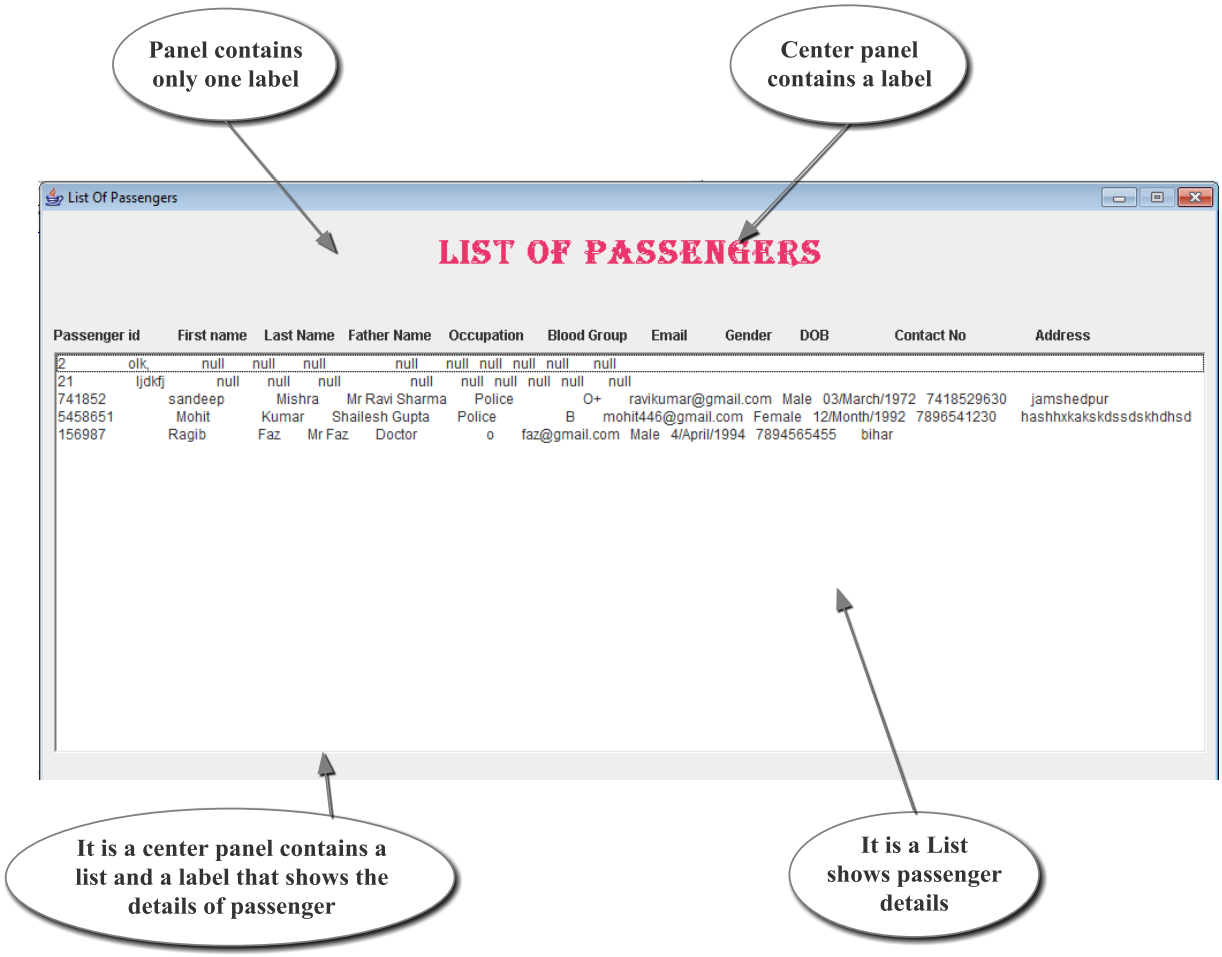
7.12 **BusList:**



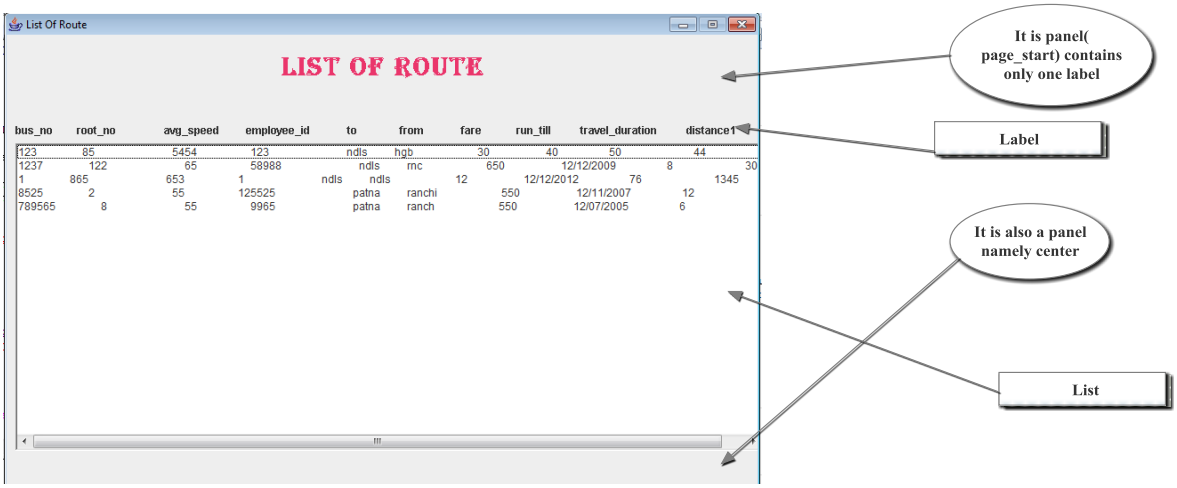
7.13 **Employee List:**



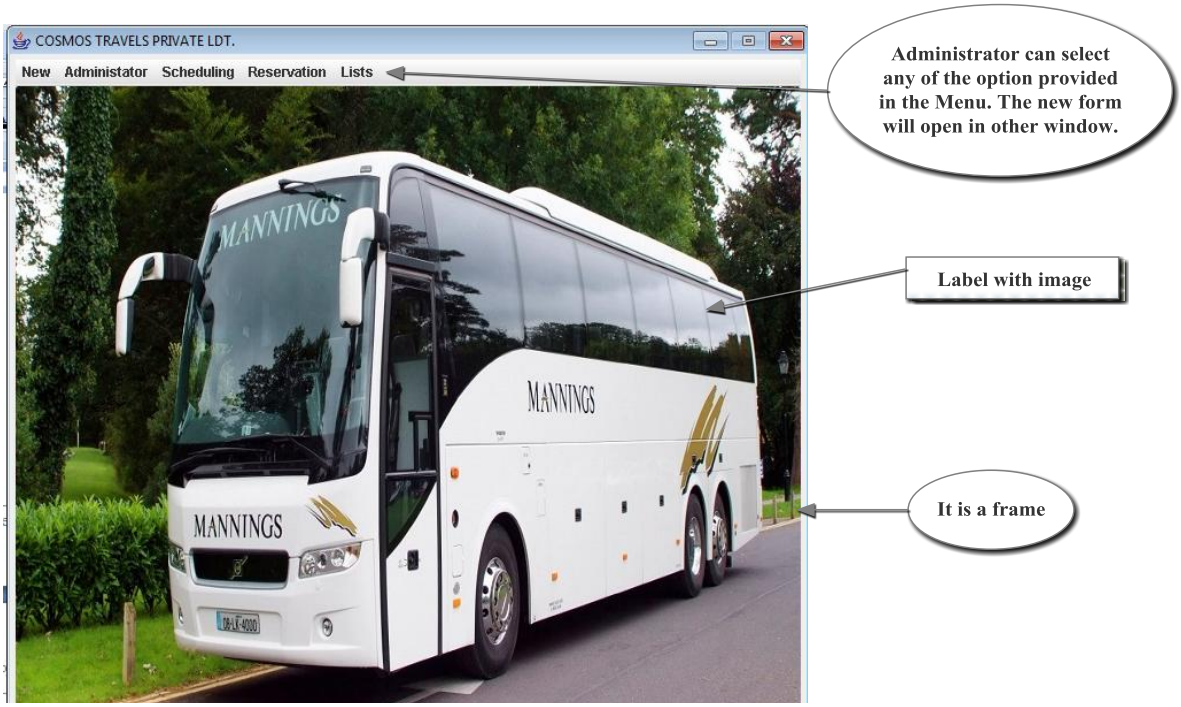
7.14 **Passenger List:**



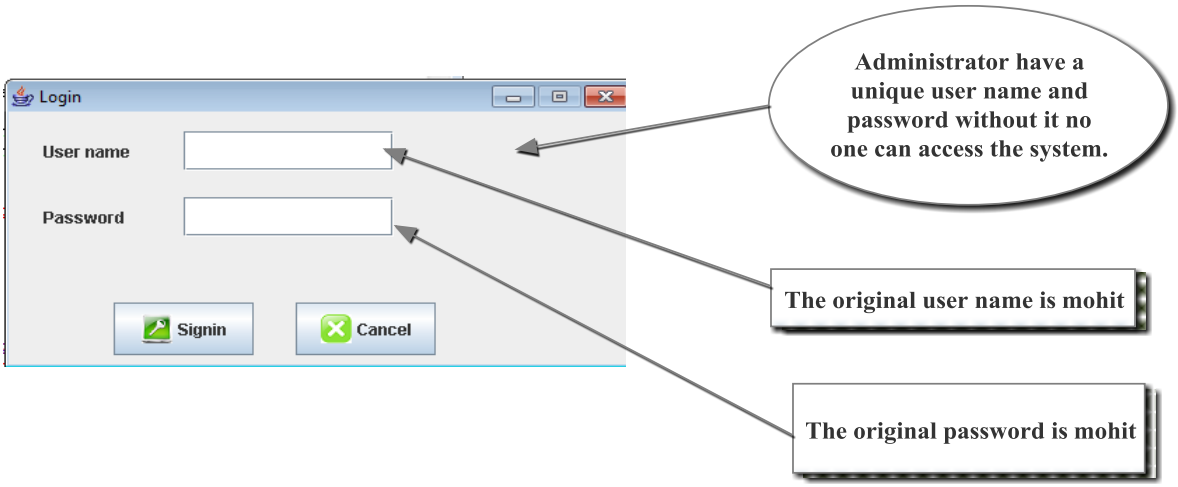
7.15. Route List:



7.16 **Default(Menu):**



7.17 **Password:**



8 Assumptions:

- It is assumed that operator should add the bus details firstly after that he should add the employee details. After this he can able to work with route detail interface because without bus number and employee operator cannot set the route of the bus.
- For scheduling also operator has to details of bus, route. Without it he can not schedule the bus of specific route.
- After adding all the above details, the operator has to only fill or add the details of passenger to the passenger module and after this he will able to reserve a ticket for a the specific passenger.
- It is assumed that all the ids of passenger, route, and employee are of 6 digit number.
- Bus number should have only 4 digits.
- The system has only one administrator.
- The mobile number must be of 10 digits.

9 Additional Features:

- Through this project developer able to learn about core java concepts.
- This project has certainly helped the developer to learn a lot of things about java programming language
- During the project developer were busy to study about the four basic concept of java and other basic concepts namely encapsulation, polymorphism, inheritance and data handling.
- He can learn how to handle the run time exception.
- He learnt how to validate different fields data with the help of loop and string methods.
- Through this project developer came to know about how to create a form with the help of Jframe in java.
- Developer came to know about different types of classes in java like abstract class and interface.
- He also learns how to parse the string value to integer value.
- He is able to learn database management system and how to connect java programe to database through Jdbcodbc driver.
- He came to know the different query statements about database.

10 References

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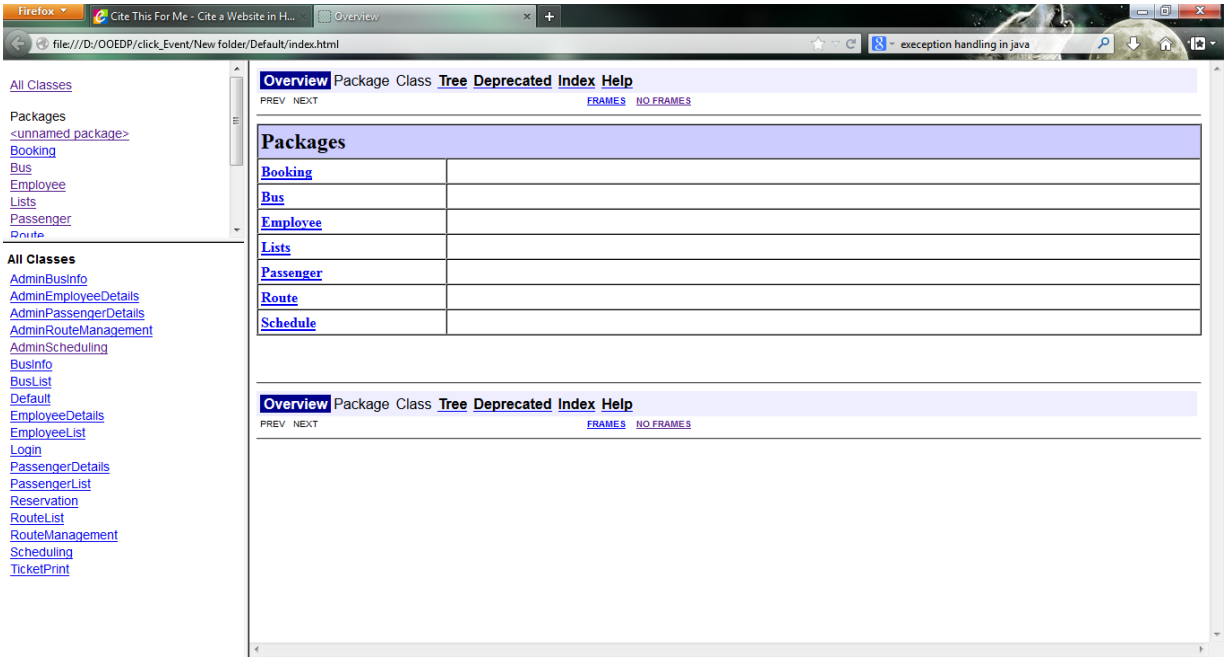
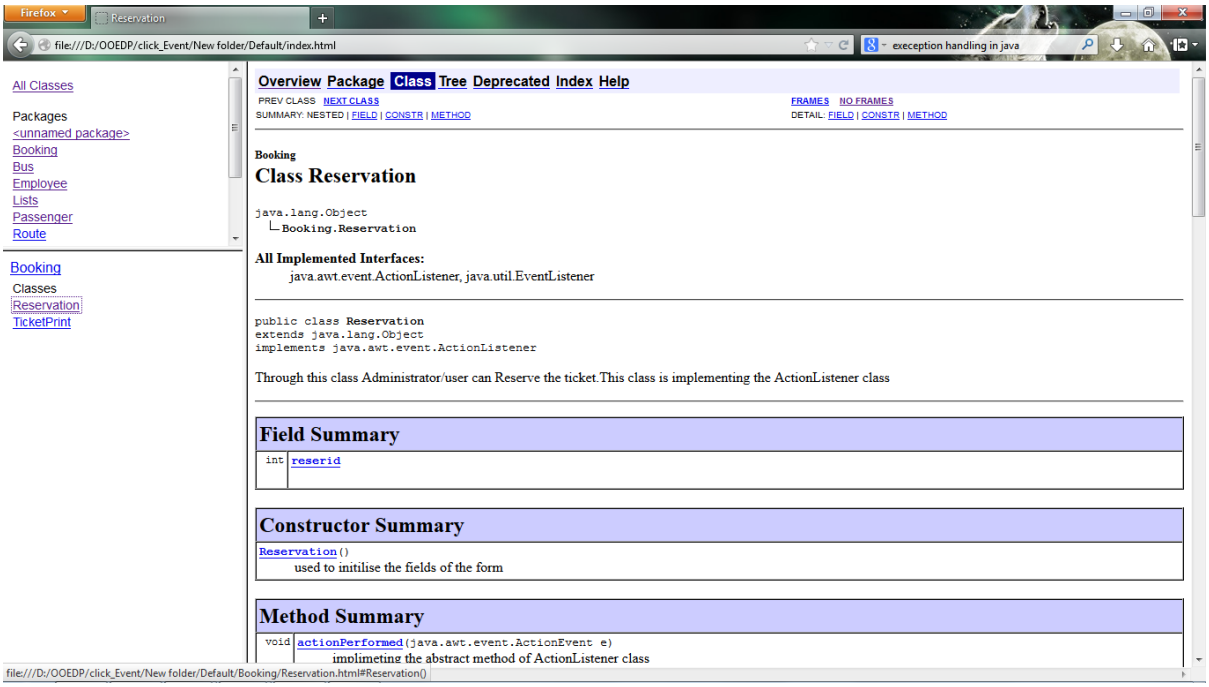
11 Appendex:

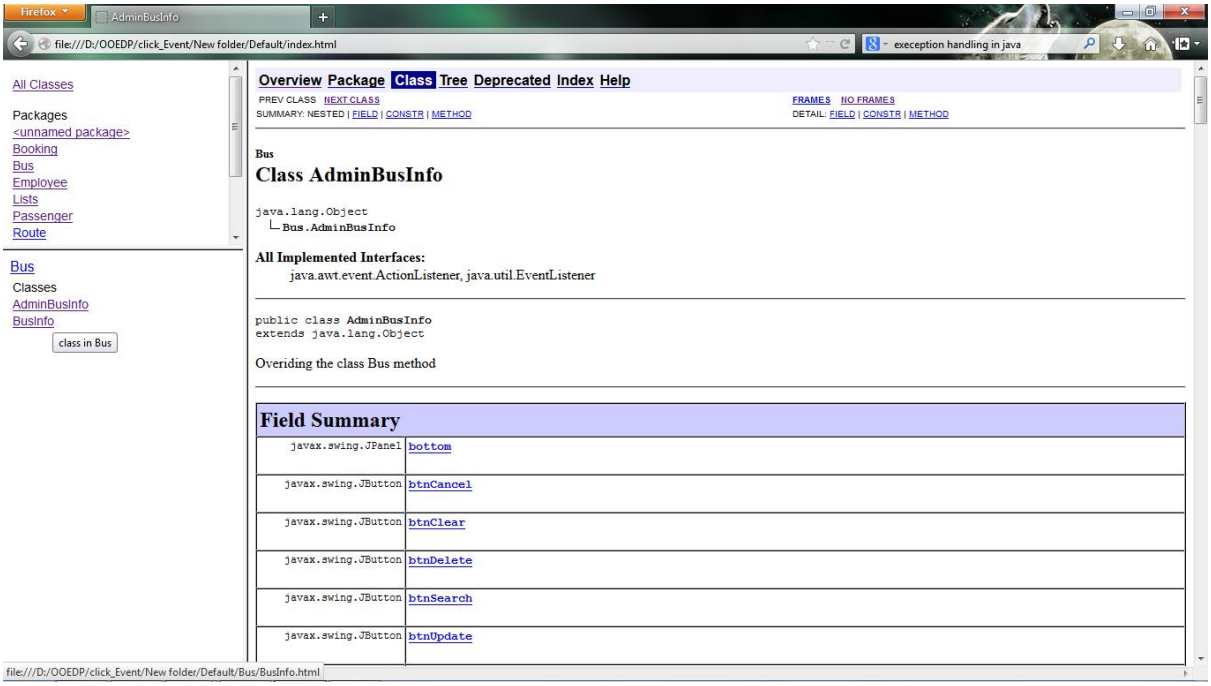
11.1 Java Doc:



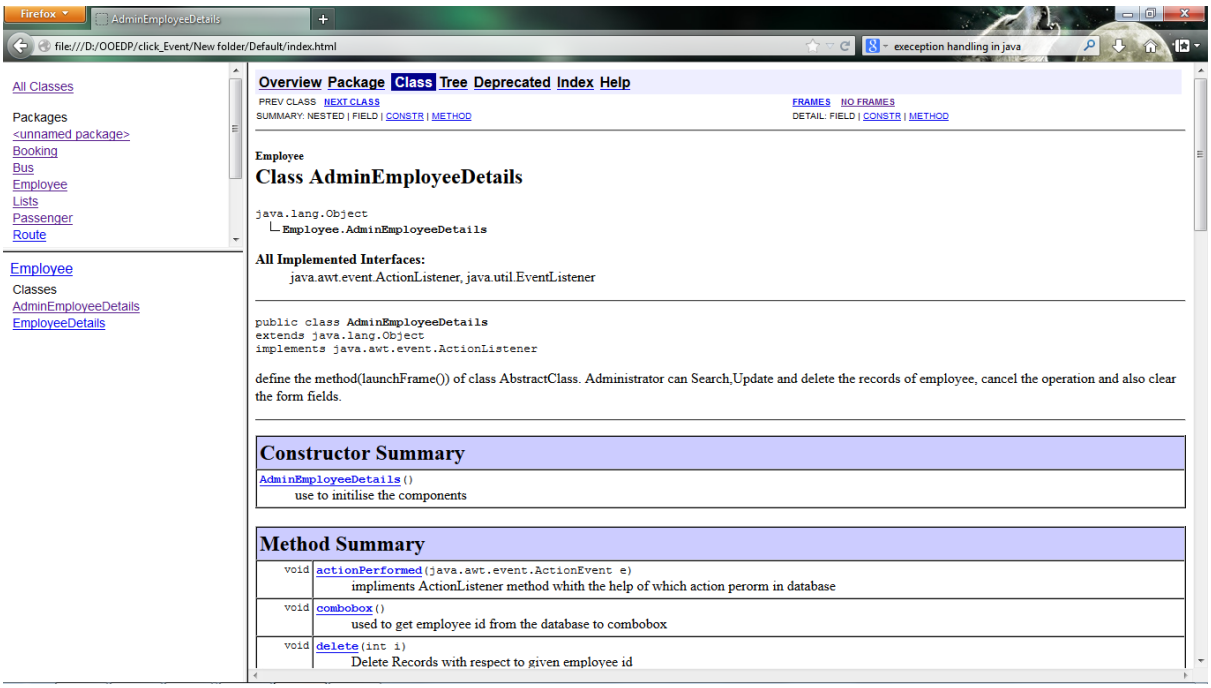
11.2 Booking:



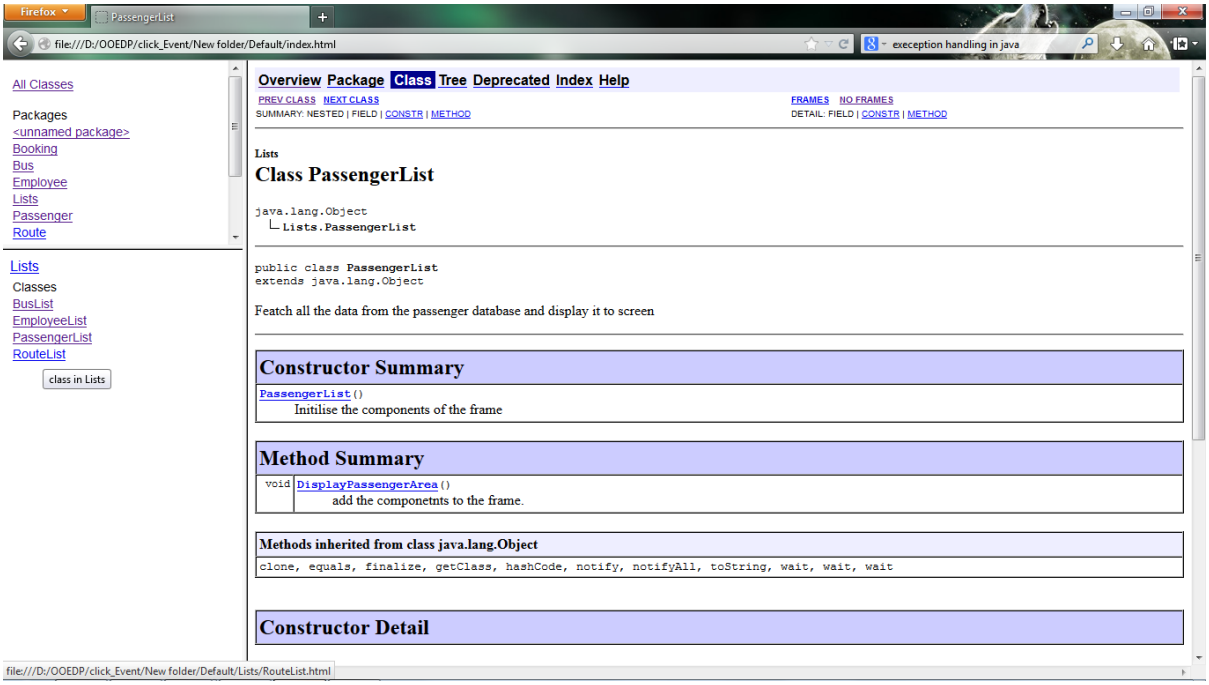
11.3 **Bus:**



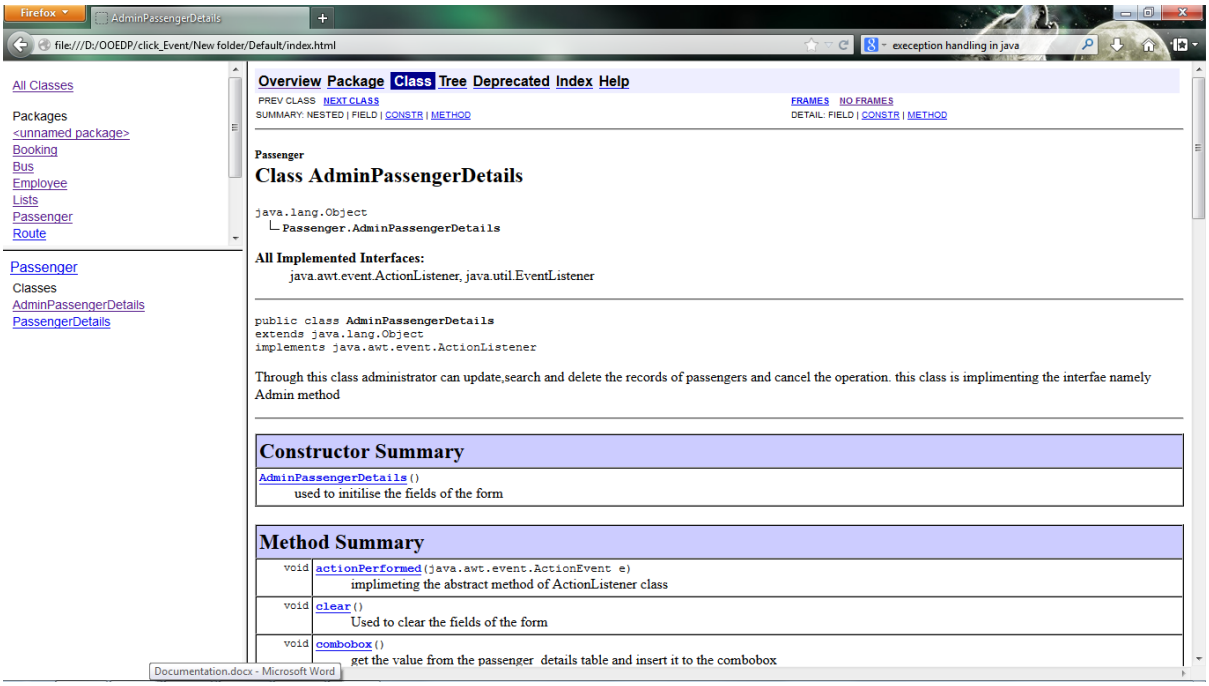
11.4 **Employee:**



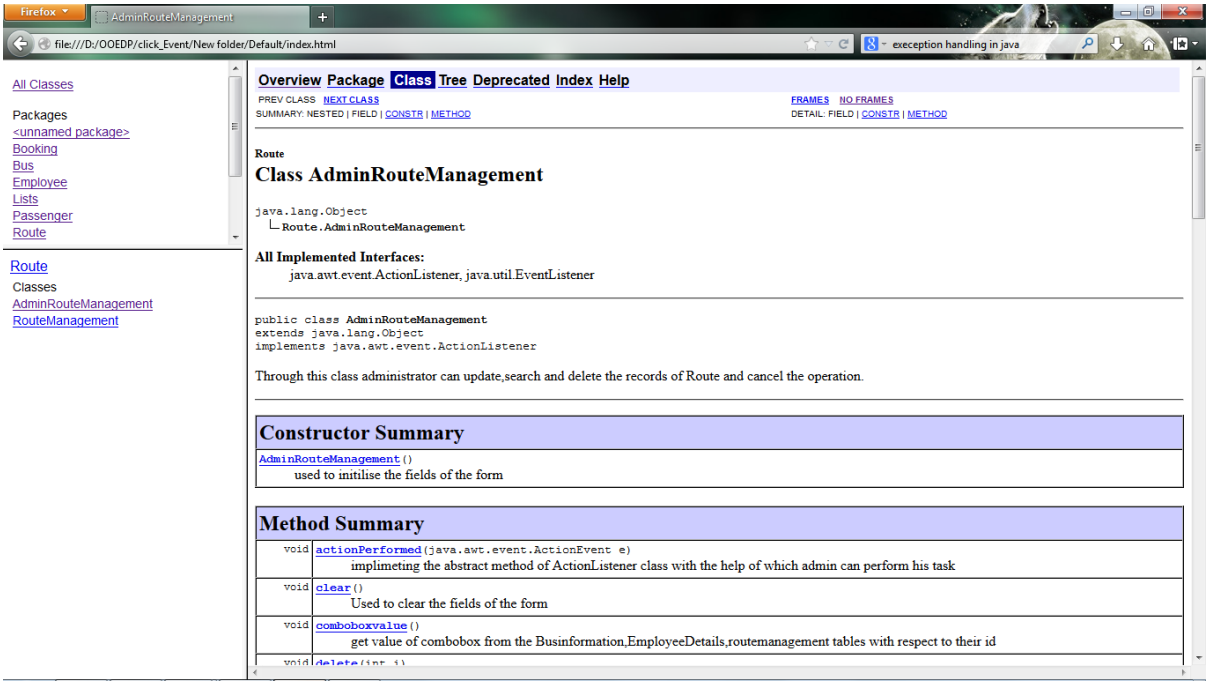
11.5 **List:**



11.6 **Passenger:**



11.7 **Route:**



11.8 **Scheduling:**