

DATABASE (BACK END):

1. Table name: ftbl (contains flight details)

Field	Type	Null	Key	Default	Extra
a_id	varchar(5)	NO	PRI	NULL	
a_name	varchar(25)	YES		NULL	
dep	varchar(25)	YES		NULL	
arr	varchar(25)	YES		NULL	
dep_time	date	YES		NULL	
F_FARE	varchar(6)	YES		NULL	
B_FARE	varchar(6)	YES		NULL	
E_FARE	varchar(6)	YES		NULL	
dep_date	varchar(20)	YES		NULL	

```
CREATE TABLE ftbl (  
    a_id varchar(5) NOT NULL,  
    a_name varchar(25) DEFAULT NULL,  
    dep varchar(25) DEFAULT NULL,  
    arr varchar(25) DEFAULT NULL,  
    dep_time date DEFAULT NULL,  
    F_FARE varchar(6) DEFAULT NULL,  
    B_FARE varchar(6) DEFAULT NULL,  
    E_FARE varchar(6) DEFAULT NULL,  
    dep_date varchar(20) DEFAULT NULL,  
    PRIMARY KEY (a_id)  
)
```

2. Table name: ptb (contains passenger details):

Field	Type	Null	Key	Default	Extra
p_id	varchar(25)	NO	PRI	NULL	
p_name	varchar(25)	YES		NULL	
pass_no	varchar(25)	YES		NULL	
age	varchar(2)	YES		NULL	
sex	varchar(6)	YES		NULL	
a_id	varchar(25)	YES	MUL	NULL	
date	varchar(20)	YES		NULL	
class	varchar(25)	YES		NULL	
meal	varchar(25)	YES		NULL	
lcard	varchar(7)	YES		NULL	
cost	varchar(6)	YES		NULL	

```
CREATE TABLE ptb (  
    p_id varchar(25) NOT NULL,  
    p_name varchar(25) DEFAULT NULL,  
    pass_no varchar(25) DEFAULT NULL,
```

```
age varchar(2) DEFAULT NULL,  
sex varchar(6) DEFAULT NULL,  
a_id varchar(25) DEFAULT NULL,  
date varchar(20) DEFAULT NULL,  
class varchar(25) DEFAULT NULL,  
meal varchar(25) DEFAULT NULL,  
lcard varchar(7) DEFAULT NULL,  
cost varchar(6) DEFAULT NULL,  
PRIMARY KEY (p_id),  
KEY ptb_ibfk_1 (a_id),  
CONSTRAINT ptb_ibfk_1 FOREIGN KEY (a_id) REFERENCES ftbl (a_id) ON DELETE  
CASCADE ON UPDATE CASCADE  
)
```

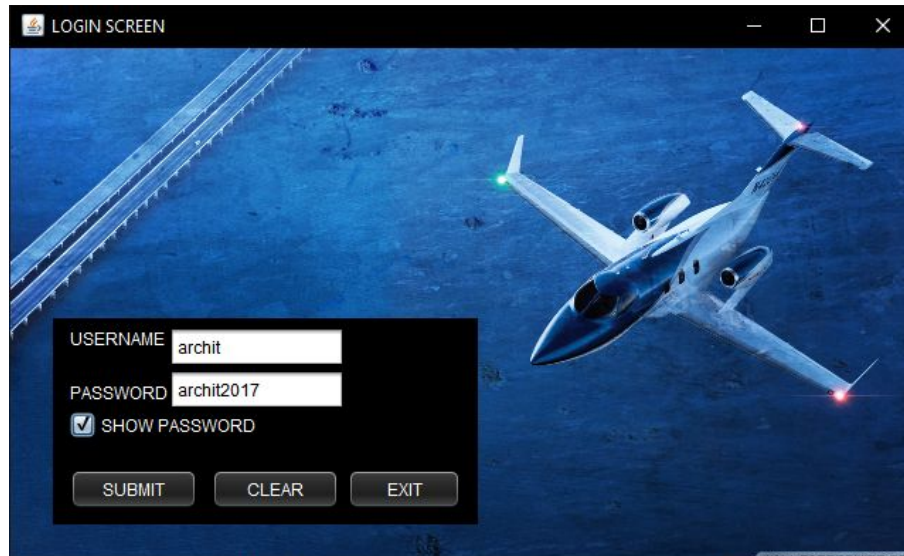
FIRST FRAME



//LABEL MOUSE CLICKED

```
new loginscreen().setVisible(true);  
this.dispose();
```

LOGIN SCREEN:



USER NAME	user
PASSWORD	pass
SHOW PASSWORD	show
SUBMIT	submit
CLEAR	clear
EXIT	exit

//ACTION FOR SHOWING PASSWORD

```
String p=new String(pass.getPassword());  
if(show.isSelected())  
    pass.setEchoChar((char)0);
```

//ACTION FOR CLEARING

```
user.setText("");  
pass.setText("");  
show.setSelected(false);
```

//SUBMIT ACTION PERFORMED

```
String u=user.getText();  
String p=new String(pass.getPassword());
```

```
if((u.equalsIgnoreCase("NAINA") && p.equals("naina2017")) || (u.equalsIgnoreCase("ARCHIT")  
    && p.equals("archit2017")) || (u.equalsIgnoreCase("ABHIJITH") &&  
    p.equals("abhijith2017"))){
```

```
    new mainframe().setVisible(true);  
    this.dispose();
```

```
}  
else  
    JOptionPane.showMessageDialog(rootPane,"INCORRECT USERNAME OR PASSWORD");
```

MAIN FRAME:



FLIGHT DETAILS	flight
PASSENGER DETAILS	passenger
REPORT	report
SIGN OUT	signout
EXIT	exit

//FLIGHT ACTION PERFORMED

```
flightframe n1 = new flightframe();
```

```
DesktopPane.add(n1);
```

```
n1.setVisible(true);
```

//PASSENGER ACTION PERFORMED

```
passengerdetails n2 = new passengerdetails();
```

```
DesktopPane.add(n2);
```

```
n2.setVisible(true);
```

//REPORT ACTION PERFORMED

```
REPORT n3 = new REPORT();
```

```
DesktopPane.add(n3);
```

```
n3.setVisible(true);
```

//SIGNOUT ACTION PERFORMED

```
new loginscreen().setVisible(true);
```

```
this.dispose();
```

//EXIT ACTION PERFORMED

```
JOptionPane.showMessageDialog(this,"THANK YOU");
```

```
System.exit(0);
```

FLIGHT FRAME:

[illegible][illegible]

```
//IMPORT STATEMENTS
```

```
import java.sql.*;
```

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

```
import javax.swing.table.DefaultTableModel;
```

```
//MYSQL CONNECTION
```

```
Connection con;
```

```
void opencon(){
```

```
try{
```

```
Class.forName("java.sql.Driver");
```

```
con=DriverManager.getConnection("jdbc:mysql://localhost/project2017","root","pass");
```

}

```

        catch(Exception e){
            JOptionPane.showMessageDialog(rootPane,e.getMessage());
        }
    }
}

```

//DISPLAYING THE TABLE

```

void display(){
    try{
        String q= "Select * from ftbl";
        Statement stmt= con.createStatement();
        ResultSet rs=stmt.executeQuery(q);
        DefaultTableModel dtm=(DefaultTableModel)tbl.getModel();
        while(dtm.getRowCount()>0){
            dtm.removeRow(0);
        }
        String aid,an,dep,arr,dtime,ff,bf,ef,dd;
        while(rs.next()){
            aid=(rs.getString(1));
            an=(rs.getString(2));
            dep=(rs.getString(3));
            arr=(rs.getString(4));
            dtime=(rs.getString(5));
            ff=(rs.getString(6));
            bf=(rs.getString(7));
            ef=(rs.getString(8));
            dd=(rs.getString(9));

            Object nr[]={aid,an,dep,arr,dd,dtime,ff,bf,ef};
            dtm.addRow(nr);
        }
    }
    catch(Exception e){
        JOptionPane.showMessageDialog(rootPane,e.getMessage());
    }
}

```

//FORM INTERNAL FRAME OPENED

```

opencon();
display();

```

//ADD ACTION PERFORMED

```

try{
    String aid,an,dep,arr,dtime,f,bf,ef,dd;
    aid =AID.getText();

```



```

        an=ANAME.getText();
        dep=DEPA.getText();
        arr=ARRI.getText();
        dtime=TDEPA.getText();
        dd=DDEP.getText();
        f=JOptionPane.showInputDialog("enter the number of first class fare");
        bf=JOptionPane.showInputDialog("enter the number of business class fare ");
        ef=JOptionPane.showInputDialog("enter the number of economy class fare ");
        String q = "Insert into ftbl
Values('"+aid+"','"+an+"','"+dep+"','"+arr+"','"+dd+"','"+f+"','"+bf+"','"+ef+"','"+dtime+"')";
        Statement stmt=con.createStatement();
        stmt.executeUpdate(q);
        display();
    }
    catch(Exception e){
        JOptionPane.showMessageDialog(rootPane,e.getMessage());
    }
}

```

//REFRESH ACTION PERFORMED

```
display();
```

//DELETE ACTION PERFORMED

```

try{
    String a=JOptionPane.showInputDialog("ENTER THE A_ID TO BE DELETED");
    String q="delete from ftbl where a_id='"+a+"'";
    Statement stmt=con.createStatement();
    stmt.executeUpdate(q);
    display();
}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
}

```

//CLEAR ACTION PERFORMED

```

AID.setText("");
ANAME.setText("");
ARRI.setText("");
DEPA.setText("");
TDEPA.setText("");
ASC.setSelected(true);
DDEP.setText("");
HOT.setText("");
se.setText("");

```

```
//EXIT ACTION PERFORMED
```

```
this.dispose();
```

```
//SEARCH ACTION PERFORMED
```

```
try{
    String a,b;
    b=se.getText();
    int i;
    String or;
    if(DISC.isSelected())
        or="desc";
    else
        or="asc";
    i=SORT.getSelectedIndex();
    switch (i) {
        case 0:
            a="A_NAME";
            break;
        case 1:
            a="dep";
            break;
        default:
            a="arr";
            break;
    }
    String g="Select * from ftbl where "+a+" LIKE '%" +b+"%' ORDER BY A_ID "+or;
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(g);
    DefaultTableModel dtm=(DefaultTableModel)tbl.getModel();
    while(dtm.getRowCount()>0)
        dtm.removeRow(0);
    String aid,an,dep,arr,dtime,ff,bf,ef,dd;
    while(rs.next()){
        aid=(rs.getString(1));
        an=(rs.getString(2));
        dep=(rs.getString(3));
        arr=(rs.getString(4));
        dtime=(rs.getString(5));
        ff=(rs.getString(6));
        bf=(rs.getString(7));
        ef=(rs.getString(8));
        dd=(rs.getString(9));
    }
}
```

```
        Object nr[]={aid,an,dep,arr,dd,dtime,ff,bf,ef};
        dtm.addRow(nr);
    }
}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

PASSENGER FRAME:

//IMPORT STATEMENTS

```
import java.sql.*;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
```

//CONNECTING MYSQL

```
Connection con;
try{
    Class.forName("java.sql.Driver");
    con=DriverManager.getConnection("jdbc:mysql://localhost/project2017","root","pass");
} catch (Exception e) {
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

//DISPLAYING TABLE

```
try{
    String q= "Select * from ptb";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    DefaultTableModel dtm=(DefaultTableModel)tbl.getModel();
    while(dtm.getRowCount()>0){
```

```

        dtm.removeRow(0);
    }
    String aid,an,dep,arr,dtime,ff,bf,ef,dd,co;
    while(rs.next()){
        aid=(rs.getString(1));
        an=(rs.getString(2));
        dep=(rs.getString(3));
        arr=(rs.getString(4));
        dtime=(rs.getString(5));
        ff=(rs.getString(6));
        bf=(rs.getString(8));
        ef=(rs.getString(9));
        dd=(rs.getString(10));
        co=rs.getString(11);

        Object nr[]={aid,an,dep,arr,dd,dtime,ff,bf,ef,co};
        dtm.addRow(nr);
    }
}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//FORM WINDOW OPENED

```

try{
    opencon();
    String q= "Select distinct dep from ftbl";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);

    pDep.removeAllItems();
    while(rs.next()){
        pDep.addItem(rs.getString(1));
        System.out.println(rs.getString(1));
        display();
    }}catch(Exception e){
        JOptionPane.showMessageDialog(rootPane,e.getMessage());
    }
}

```

//ADD ACTION PERFORMED

```

try{
    String pd,pna,pas,ag,ge,ai,da,cla,me,lc,co;

```

```

double far;
pd =PID.getText();
pna=pname.getText();
pas=PASSNO.getText();
ag= AGE.getText();
if(MALE.isSelected())
    ge="MALE";
else
    ge="FEMAL";
ai=fid.getText();
cla=(String) CL.getSelectedItem();
me= (String) MEAL.getSelectedItem();
if(LCARD.isSelected()){
    lc="YES";
far=Double.parseDouble(FARE.getText())*0.90;
}
else
    lc="NO";

co=COST.getText();
String q = "Insert into ptb values('"+pd
+ "','"+pna+"','"+pas+"','"+ag+"','"+ge+"','"+ai+"',null,'"+cla+"','"+me+"','"+lc+"','"+co+"')";
Statement stmt=con.createStatement();
stmt.executeUpdate(q);
display();
}
catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
}

```

//DELETE ACTION PERFORMED

```

try{
    String a= JOptionPane.showInputDialog("ENTER THE P_ID TO BE DELETED");
    String q="delete from ptb where p_id='"+a+"'";
    Statement stmt=con.createStatement();
    stmt.executeUpdate(q);
    display();
}
catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
}

```

//pDep Action performed

```
try{
    String d=(String)pDep.getSelectedItemAt();
    String q= "Select distinct arr from ftbl where dep='"+d+"'";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);

    pArv.removeAllItems();
    while(rs.next())
        pArv.addItem(rs.getString(1));
}catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

//pArv ACTION PERFORMED

```
try{
    String d=(String)pDep.getSelectedItemAt();
    String a=(String)pArv.getSelectedItemAt();
    String q= "Select distinct a_name from ftbl where dep='"+d+"' and arr='"+a+"'";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);

    aname.removeAllItems();
    while(rs.next())
        aname.addItem(rs.getString(1));
}catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

//aname ACTION PERFORMED

```
try{
    String d=(String)pDep.getSelectedItemAt();
    String a=(String)pArv.getSelectedItemAt();
    String n=(String) aname.getSelectedItemAt();
    String c=(String) CL.getSelectedItemAt();
    String q="";
    if(c.equals("Business"))
        q= "Select distinct a_id, b_fare from ftbl where dep='"+d+"' and arr='"+a+"' and a_name='"+n+"'";
    else if(c.equals("First"))
        q= "Select distinct a_id, f_fare from ftbl where dep='"+d+"' and arr='"+a+"' and a_name='"+n+"'";
    else if(c.equals("Economy"))
```

```

        q= "Select distinct a_id, e_fare from ftbl where dep='"+d+"' and arr='"+a+"' and
a_name='"+n+"'";
Statement stmt= con.createStatement();
ResultSet rs=stmt.executeQuery(q);

if(rs.next()){
    System.out.println(rs.getString(1));
    fid.setText(rs.getString(1));
    FARE.setText(rs.getString(2));
    COST.setText(rs.getString(2));
}
}catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//CL ACTION PERFORMED

```

try{
    String i=fid.getText();
    String c=(String) CL.getSelectedItem();
    String q="";
    if(c.equals("Business"))
        q= "Select distinct b_fare from ftbl where a_id='"+i+"'";
    else if(c.equals("First"))
        q= "Select distinct f_fare from ftbl where a_id='"+i+"'";
    else if(c.equals("Economy"))
        q= "Select distinct e_fare from ftbl where a_id='"+i+"'";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);

    if(rs.next()){
        FARE.setText(rs.getString(1));
        COST.setText(FARE.getText());
    }
}catch(SQLException e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//CLEAR ACTION PERFORMED

```

COST.setText("");
FARE.setText("");
fid.setText("");
pname.setText("");
MALE.setSelected(false);
FEMALE.setSelected(false);

```



```
PASSNO.setText("");
PID.setText("");
LCARD.setSelected(false);
AGE.setText("");
P_NAME.setText("");
pDep.setSelectedIndex(0);
```

//SEARCH ACTION PERFORMED

```
try{
    String z,y="",b="";
    b=P_NAME.getText();
    int i;
    String or;
    if(DESC.isSelected())
        or="desc";
    else
        or="asc";
    i=SORT.getSelectedIndex();
    switch (i) {
        case 0:
            y="p_name";
            break;
        case 1:
            y="PASS_NO";
            break;
    }
    z="order by "+y;
    String q="Select * from PTB WHERE p_name LIKE '%" +b+"%'"+z;
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    DefaultTableModel dtm=(DefaultTableModel)tbl.getModel();
    while(dtm.getRowCount()>0){
        dtm.removeRow(0);
    }
    String aid,an,dep,arr,dtime,ff,bf,ef,dd,co;
    while(rs.next()){
        aid=(rs.getString(1));
        an=(rs.getString(2));
        dep=(rs.getString(3));
        arr=(rs.getString(4));
        dtime=(rs.getString(5));
        ff=(rs.getString(6));
        bf=(rs.getString(8));
```

```
        ef=(rs.getString(9));
        dd=(rs.getString(10));
        co=rs.getString(11);

        Object nr[]={aid,an,dep,arr,dd,dtime,ff,bf,ef,co};
        dtm.addRow(nr);
    }
    }catch(Exception e){
        JOptionPane.showMessageDialog(rootPane,e.getMessage());
    }
}
```

```
//exit ACTION PERFORMED
```

```
this.dispose();
```

```
//REFRESH ACTION PERFORMED
```

```
display();
```

```
//LCARD FOCUS LOST
```

```
double i=Double.parseDouble(COST.getText());
```

```
if(LCARD.isSelected());
```

```
    COST.setText(""+(i*0.90));
```

REPORT:

FROM 2017 01 01 TO 2017 01 01

AIRLINES

DEPARTURE ARRIVAL

DISPLAY EXIT

P_ID	P_NAME	AIRLINE NAME	DEPARTURE	ARRIVAL	DEP_DATE	CLASS	TOTAL COST

//IMPORT STATEMENTS

```
import java.sql.*;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
```

//CONNECTING MYSQL

```
Connection con;
try{
    Class.forName("java.sql.Driver");
    con=DriverManager.getConnection("jdbc:mysql://localhost/project2017","root","pass");
}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

//DISPLAYING TABLE

```
try{
    String q= "Select* from ftbl natural join ptb";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    DefaultTableModel dtm=(DefaultTableModel)rtbl.getModel();
    while(dtm.getRowCount()>0){
```

```

        dtm.removeRow(0);
    }
    String pd,pna,an,da,cla,co,depa,arri;           //change the string an their values
    while(rs.next()){
        pd=rs.getString(1);
        pna=rs.getString(2);
        an=rs.getString(3);
        depa=rs.getString(4);
        arri=rs.getString(5);
        da=rs.getString(6);
        cla=rs.getString(7);
        co=rs.getString(8);
        Object nr[]={pd,pna,an,depa,arri,da,cla,co};
        dtm.addRow(nr);
    }
}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//FORM WINDOW OPENED

```

try{
    opencon();
    String q= "Select distinct a_name from ftbl order by a_name";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    aname.removeAllItems();
    while(rs.next())
        aname.addItem(rs.getString(1));
}catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//aname ACTION PERFORMED

```

try{
    String an=(String)aname.getSelectedItemAt();
    String q="Select distinct dep from ftbl where a_name='"+an+"'";
    Statement st=con.createStatement();
    ResultSet rs=st.executeQuery(q);
    departure.removeAllItems();
    while(rs.next()){
        departure.addItem(rs.getString(1));
    }
}

```

```

}
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}

```

//display ACTION PERFORMED

```

try{
    String p,v,r,s,t,u;
    p= (String) FROM1.getSelectedItem();
    v=(String) FROM2.getSelectedItem();
    r= (String) FROM3.getSelectedItem();
    s= (String) TO1.getSelectedItem();
    t= (String) TO2.getSelectedItem();
    u= (String) TO3.getSelectedItem();
    String a = p+"/"+v+"/"+r;
    String b = s+"/"+t+"/"+u;

    String g= (String) aname.getSelectedItem();
    String h=(String) departure.getSelectedItem();
    String i=(String) arrival.getSelectedItem();
    String q= "Select p_id,P_name,a_id,dep,arr,dep_time,class,cost from ftbl natural join ptb
    where a_name='"+g+"' and dep='"+h+"' and arr='"+ i + "' and dep_TIME between '"+a+"'
    and '"+b+ "'";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    DefaultTableModel dtm=(DefaultTableModel)rtbl.getModel();
    while(dtm.getRowCount()>0){
        dtm.removeRow(0);
    }
    String pd,pna,an,da,cla,co,depa,arri;           //change the string an their values
    while(rs.next()){
        pd=rs.getString(1);
        pna=rs.getString(2);
        an=rs.getString(3);
        depa=rs.getString(4);
        arri=rs.getString(5);
        da=rs.getString(6);
        cla=rs.getString(7);
        co=rs.getString(8);
        Object nr[]={pd,pna,an,depa,arri,da,cla,co};
        dtm.addRow(nr);
    }
}

```

```
catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```

```
//exit ACTION PERFORMED
```

```
this.dispose();
```

```
//departure ACTION PERFORMED
```

```
try{
    opencon();
    String g= (String) aname.getSelectedItemAt();
    String d=(String) departure.getSelectedItemAt();
    String q= "Select distinct ARR from ftbl where a_name='"+g+"' && dep='"+d+"' order by
arr";
    Statement stmt= con.createStatement();
    ResultSet rs=stmt.executeQuery(q);
    arrival.removeAllItems();
    while(rs.next())
        arrival.addItem(rs.getString(1));
}catch(Exception e){
    JOptionPane.showMessageDialog(rootPane,e.getMessage());
}
```