



**SYMBIOSIS INSTITUTE OF TECHNOLOGY (SIT)**

Constituent of Symbiosis International (Deemed University), Pune

(Established under Section 3 of the UGC Act of 1956 vide notification number F-9-12/2001-U-3 of the Government of India)

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## **Flexi Credit Course - Sem 4 (Mini Project)**

# **ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (2021-25)**

## **Project Report**

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**Topic :-**

**Airline Management System**



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## Index

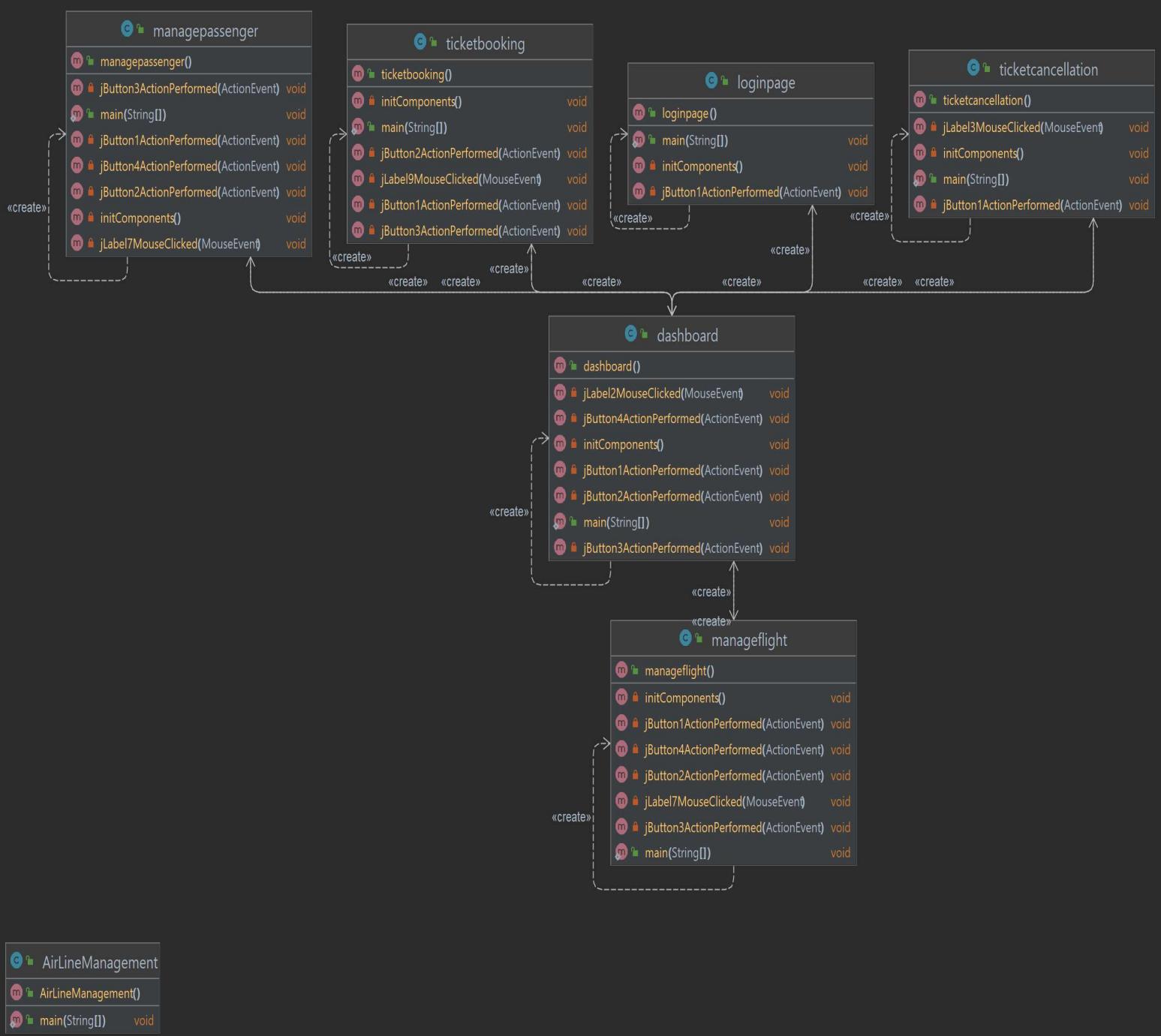
S.no.	Topics	Page No.
1.	Abstract	2
2.	Class Diagram	3
3.	Classes	4
4.	Java Concepts used	5-6
5.	Code snippets & outputs	7-22
6.	Reference	23

## Abstract

Ace Airlines is a Java project developed by Abhinav Kumar, Aadarsh Nayyer, and Aayush Rajput, which is an airline management system that allows users to enter passenger details, book flights, and view tickets. The application is connected to a SQL database, which stores all the data related to flights, passengers, and tickets. The project utilizes the latest technologies and best coding practices to ensure efficient implementation and smooth functioning of the system. Additionally, the project includes an exception handling mechanism to handle unexpected errors gracefully. The user interface is designed to be intuitive and user-friendly, with clear instructions and helpful prompts throughout the application. Overall, Ace Airlines is a well-designed and efficiently implemented airline management system that enhances the overall user experience.



# Class Diagram





# Classes

## 1. 1st Class - LoginPage.java

It is created for logging in to our dashboard. It is connected with SQL database where username and passwords are saved.

## 2. 2nd Class – Dashboard.java

This class generates a dashboard which has tabs like manage flight, manage passenger, book ticket, and ticket cancellation.

## 3. 3rd Class – ManageFlight.java

This class is created to allow user to insert, delete, update or search flight details using SQL database connectivity and MySQL queries.

## 4. 4th Class – ManagePassenger.java

This class is created to allow user to insert, delete, update or search passenger details using SQL database connectivity and MySQL queries.

## 5. 5th Class – TicketBooking.java

This class is created to allow user to insert or search flight ticket details using SQL database connectivity and MySQL queries.

## 6. 6th Class – TicketCancellation.java

This class is created to allow user to delete a particular ticket detail based on ticket id which is same as passenger id using SQL database connectivity and MySQL queries.



# JAVA CONCEPTS USED

## 1. Exception handling:

Exception Handling is a mechanism to handle runtime errors such as ClassNotFoundException, IOException, SQLException, RemoteException, etc.

```
catch(Exception e){  
    JOptionPane.showMessageDialog( parentComponent: this, e);  
}
```

```
catch(SQLException e){  
    JOptionPane.showMessageDialog( parentComponent: this, message: "Error while establishing connection failed!!!");  
} catch (ClassNotFoundException e) {  
    throw new RuntimeException(e);  
}
```

## 2. Java Database Connectivity (JDBC):

JDBC is an API (Application programming interface) used in java programming to interact with databases. The classes and interfaces of JDBC allow the application to send requests made by users to the specified database.

```
try{  
    Class.forName( className: "com.mysql.cj.jdbc.Driver");  
    Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admn6035");  
    Statement st = con.createStatement();  
  
    String id= fc.getText();  
    String sql = "DELETE FROM `manageflight` WHERE flightcode='"+id+"'";  
    PreparedStatement ptst = con.prepareStatement(sql);  
    ptst.executeUpdate();  
    JOptionPane.showMessageDialog( parentComponent: this, message: "Data deleted successfully");  
    con.close();  
  
}  
catch(Exception e){  
    JOptionPane.showMessageDialog( parentComponent: this, e);  
}
```

## 3. Inheritance:

Inheritance in Java is a mechanism in which one object acquires all the properties and behaviors of a parent object. It is an important part of OOPs (Object Oriented programming system).

3 usages

```
public class LoginPage extends javax.swing.JFrame {
```



### 4. Encapsulation:

Encapsulation in Java is a process of wrapping code and data together into a single unit, for example, a capsule which is mixed of several medicines.

```
private javax.swing.JTextField d;  
6 usages  
private javax.swing.JTextField fc;  
5 usages  
private javax.swing.JButton jButton1;  
5 usages  
private javax.swing.JButton jButton2;  
5 usages  
private javax.swing.JButton jButton3;  
5 usages  
private javax.swing.JButton jButton4;  
5 usages  
private javax.swing.JLabel jLabel1;  
4 usages  
private javax.swing.JLabel jLabel2;  
4 usages  
private javax.swing.JLabel jLabel3;  
4 usages  
private javax.swing.JLabel jLabel4;  
4 usages  
private javax.swing.JLabel jLabel5;  
4 usages  
private javax.swing.JLabel jLabel6;  
5 usages  
private javax.swing.JLabel jLabel7;
```

### 5. Objects:

In object-oriented programming technique, we design a program using objects and classes. An object in Java is the physical as well as a logical entity, whereas, a class in Java is a logical entity only.

```
public class Dashboard extends javax.swing.JFrame {  
  
    /**  
     * Creates new form dashboard  
     */  
    6 usages  
    public Dashboard() { initComponents(); }
```



CODE

## LoginPage.java

```
1  //.../
2  package airlinemanagement;
3
4  import java.sql.*;
5  import javax.swing.JOptionPane;
6
7
8  public class LoginPage extends javax.swing.JFrame {
9
10
11     /**
12      * Creates new form loginpage
13     */
14
15     public LoginPage() {
16         initComponents();
17     }
18
19
20
21     /** This method is called from within the constructor to initialize the form. ...*/
22
23     @SuppressWarnings("unchecked")
24     Generated Code
25
26
27
28     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {GEN-FIRST:event_jButton1ActionPerformed
29
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116
117
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119
120
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122
123
124
125
126
127
128 }
```



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```
129     }
130 }
131 }
132 }catch(SQLException e){
133     JOptionPane.showMessageDialog( parentComponent: this, message: "Error while establishing connection failed!!!!");
134 } catch (ClassNotFoundException e) {
135     throw new RuntimeException(e);
136 }
137 }//GEN-LAST:event_jButton1ActionPerformed
138
139 /**
140 * @param args the command line arguments
141 */
142 public static void main(String args[]) {
143
144     /* Create and display the form */
145     java.awt.EventQueue.invokeLater(new Runnable() {
146         public void run() { new LoginPage().setVisible(true); }
147     });
148 }
149
150
151 // Variables declaration - do not modify//GEN-BEGIN:variables
152 5 usages
153 private javax.swing.JButton jButton1;
154 5 usages
155 private javax.swing.JLabel jLabel1;
156 4 usages
157 private javax.swing.JLabel jLabel2;
158 4 usages
159 private javax.swing.JPasswordField pass;
160 // End of variables declaration//GEN-END:variables
161 }
```



## ManagePassenger.java



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```
224 try{  
225     String name=pn.getText();  
226     String gender=g.getText();  
227     String nationality=n.getText();  
228     String passport=pass.getText();  
229     String phone=ph.getText();  
230     Class.forName( className: "com.mysql.cj.jdbc.Driver");  
231     Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");  
232  
233     String sql= "UPDATE `managepassenger` SET `name`='"+name+"', `gender`='"+gender+"', `nationality`='"+nationality+"', `passportnumber`='"+passport+"', `phone`='"+phone+"'";  
234     PreparedStatement ptst = con.prepareStatement(sql);  
235     ptst.executeUpdate();  
236  
237     JOptionPane.showMessageDialog( parentComponent: this, message: "Record Updated!");  
238  
239 }  
240 catch(Exception e){  
241     JOptionPane.showMessageDialog( parentComponent: this, e);  
242 }  
243  
244 //GEN-LAST:event_jButton2ActionPerformed  
245  
246 1 usage  
247     private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {GEN-FIRST:event_jButton3ActionPerformed  
248 try{  
249         Class.forName( className: "com.mysql.cj.jdbc.Driver");  
250         Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");  
251         Statement st = con.createStatement();  
252         String sql ="SELECT * from managepassenger";  
253         PreparedStatement ptst= con.prepareStatement(sql);  
254         ResultSet rs= ptst.executeQuery();  
255         DefaultTableModel dt= (DefaultTableModel)jTable1.getModel();  
256         dt.setRowCount(0);  
257         while(rs.next()){  
258             Object o[]={rs.getString( columnLabel: "name"),rs.getString( columnLabel: "gender"),rs.getString( columnLabel: "nationality"),rs.getString( columnLabel: "passportnumber"),rs.getString( columnLabel: "phone")};  
259             dt.addRow(o);  
260         }  
261     }  
262  
263 }  
264 catch(Exception e){  
265     JOptionPane.showMessageDialog( parentComponent: this, e);  
266 }  
267 //GEN-LAST:event_jButton3ActionPerformed  
268  
269 1 usage  
270     private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {GEN-FIRST:event_jButton4ActionPerformed  
271 try{  
272         Class.forName( className: "com.mysql.cj.jdbc.Driver");  
273         Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");  
274         Statement st = con.createStatement();  
275  
276         String phone= ph.getText();  
277         String sql = "DELETE FROM `managepassenger` WHERE phone='"+phone+"'";  
278         PreparedStatement ptst = con.prepareStatement(sql);  
279         ptst.executeUpdate();  
280         JOptionPane.showMessageDialog( parentComponent: this, message: "Data deleted successfully");  
281         con.close();  
282  
283     }  
284     catch(Exception e){  
285         JOptionPane.showMessageDialog( parentComponent: this, e);  
286     }  
287  
288 }//GEN-LAST:event_jButton4ActionPerformed  
289  
290 1 usage  
291     private void jLabel7MouseClicked(java.awt.event.MouseEvent evt) {GEN-FIRST:event_jLabel7MouseClicked  
292         // TODO add your handling code here:  
293         Dashboard obj=new Dashboard();  
294         obj.setVisible(true);  
295         dispose();  
296     }//GEN-LAST:event_jLabel7MouseClicked  
297  
298     public static void main(String args[]){
```



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```
297 ► public static void main(String args[]) {  
298  
299  
300     /* Create and display the form */  
301     java.awt.EventQueue.invokeLater(new Runnable() {  
302         public void run() { new ManagePassenger().setVisible(true); }  
303     });  
304 }  
305  
306 // Variables declaration - do not modify//GEN-BEGIN:variables  
307 5 usages  
308     private javax.swing.JTextField g;  
309 5 usages  
310     private javax.swing.JButton jButton1;  
311 5 usages  
312     private javax.swing.JButton jButton2;  
313 5 usages  
314     private javax.swing.JButton jButton3;  
315 5 usages  
316     private javax.swing.JButton jButton4;  
317 5 usages  
318     private javax.swing.JLabel jLabel1;  
319 4 usages  
320     private javax.swing.JLabel jLabel2;  
321 4 usages  
322     private javax.swing.JLabel jLabel3;  
323 4 usages  
324     private javax.swing.JLabel jLabel4;  
325 4 usages  
326     private javax.swing.JLabel jLabel5;  
327 4 usages  
328     private javax.swing.JLabel jLabel6;  
329 4 usages  
330     private javax.swing.JLabel jLabel7;  
331 5 usages  
332     private javax.swing.JScrollPane jScrollPane1;  
333 4 usages  
334     private javax.swing.JTable jTable1;  
335 5 usages  
336     private javax.swing.JTextField n;  
337 5 usages  
338     private javax.swing.JTextField pass;  
339 6 usages  
340     private javax.swing.JTextField ph;  
341 5 usages  
342     private javax.swing.JTextField pn;  
343 // End of variables declaration//GEN-END:variables  
344 }
```



## ManageFlight.java

```
5 package airlinemanagement;
6
7 import java.sql.*;
8 import javax.swing.JOptionPane;
9 import javax.swing.table.DefaultTableModel;
10
11 3 usages
12 public class ManageFlight extends javax.swing.JFrame {
13
14     /**
15      * Creates new form manageflight
16      */
17     2 usages
18     public ManageFlight() { initComponents(); }
19
20
21     /** This method is called from within the constructor to initialize the form. ...*/
22     1 usage
23     @SuppressWarnings("unchecked")
24     Generated Code
25
26     1 usage
27     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
28
29
30     try{
31         Class.forName( className: "com.mysql.cj.jdbc.Driver");
32
33         Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");
34
35         Statement st = con.createStatement();
36
37         String query = "select * from flight";
38
39         ResultSet rs = st.executeQuery(query);
40
41         DefaultTableModel model = (DefaultTableModel) jTable1.getModel();
42
43         while(rs.next()){
44             model.addRow(new Object[]{rs.getString("id"), rs.getString("flightno"), rs.getString("airline"), rs.getString("source"), rs.getString("dest"), rs.getString("date")});
45         }
46
47         st.close();
48         rs.close();
49         con.close();
50
51     } catch (Exception e) {
52         JOptionPane.showMessageDialog(null, "Error: " + e.getMessage());
53     }
54
55
56
57
58
59
59
60
61
62
63
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84
85
86
87
87
```

```
210     String sql = "insert into manageflight values (?,?,?,?,?,?)";
211     PreparedStatement ptst= con.prepareStatement(sql);
212     ptst.setString( parameterIndex: 1,fc.getText());
213     ptst.setString( parameterIndex: 2,s.getText());
214     ptst.setString( parameterIndex: 3,d.getText());
215     ptst.setString( parameterIndex: 4,tof.getText());
216     ptst.setString( parameterIndex: 5,nos.getText());
217     ptst.executeUpdate();
218     JOptionPane.showMessageDialog( parentComponent: this, message: "Data inserted Successfully!");
219     con.close();
220 }
221 catch(SQLException e){
222 } catch (ClassNotFoundException e) {
223     throw new RuntimeException(e);
224 }
225
226 }//GEN-LAST:event_jButton1ActionPerformed
227
228 //GEN-FIRST:event_jButton3ActionPerformed
229
230 try{
231     Class.forName( className: "com.mysql.cj.jdbc.Driver");
232     Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");
233     Statement st = con.createStatement();
234     String sql ="SELECT * from manageflight";
235     PreparedStatement ptst= con.prepareStatement(sql);
236     ResultSet rs= ptst.executeQuery();
237     DefaultTableModel dtm= (DefaultTableModel)jTable1.getModel();
```



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```
238     dt.setRowCount(0);
239     while(rs.next()){
240         Object o[]={rs.getString("flightcode"),rs.getString("source"),rs.getString("destination"),rs.getString("takeoff"),rs.getString("noofseat")};
241         dt.addRow(o);
242     }
243     }
244     }
245     catch(Exception e){
246         JOptionPane.showMessageDialog( parentComponent: this, e);
247     }
248     }
249     }//GEN-LAST:event_jButton3ActionPerformed
250
251     1 usage
252     private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
253         |
254         try{
255             Class.forName( className: "com.mysql.cj.jdbc.Driver");
256             Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admn6035");
257             Statement st = con.createStatement();
258
259             String id= fc.getText();
260             String sql = "DELETE FROM `manageflight` WHERE flightcode='"+id+"'";
261             PreparedStatement ptst = con.prepareStatement(sql);
262             ptst.executeUpdate();
263             JOptionPane.showMessageDialog( parentComponent: this, message: "Data deleted successfully");
264             con.close();
265         }
266         catch(Exception e){
267             JOptionPane.showMessageDialog( parentComponent: this, e);
268         }
269
270         }
271         }//GEN-LAST:event_jButton4ActionPerformed
272
273     1 usage
274     private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
275         |
276         try{
277             String id=fc.getText();
278             String source=s.getText();
279             String des=d.getText();
280             String tak=tak.getText();
281             String noofseat=nos.getText();
282             Class.forName( className: "com.mysql.cj.jdbc.Driver");
283             Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admn6035");
284
285             String sql= "UPDATE `manageflight` SET `source`='"+source+"',`destination`='"+des+"',`takeoff`='"+tak+"',`noofseat`='"+noofseat+"';
286             PreparedStatement ptst = con.prepareStatement(sql);
287             ptst.executeUpdate();
288
289             JOptionPane.showMessageDialog( parentComponent: this, message: "Record Updated!");
290         }
291         catch(Exception e){
292             JOptionPane.showMessageDialog( parentComponent: this, e);
293         }
```



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```
294 }  
295 } //GEN-LAST:event_jButton2ActionPerformed  
296  
297     1 usage  
298     ● private void jLabel7MouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_jLabel7MouseClicked  
299         |  
300         Dashboard obj =new Dashboard();  
301         obj.setVisible(true);  
302         dispose();  
303     } //GEN-LAST:event_jLabel7MouseClicked  
304  
305     /**  
306      * @param args the command line arguments  
307      */  
308     ► public static void main(String args[]) {  
309  
310         /* Create and display the form */  
311         java.awt.EventQueue.invokeLater(new Runnable() {  
312             ●     public void run() { new ManageFlight().setVisible(true); }  
313         });  
314     }  
315  
316     // Variables declaration  
317     5 usages  
318     private javax.swing.JTextField d;  
319     6 usages  
320     private javax.swing.JTextField fc;  
  
321     private javax.swing.JButton jButton1;  
322     5 usages  
323     private javax.swing.JButton jButton2;  
324     5 usages  
325     private javax.swing.JButton jButton3;  
326     5 usages  
327     private javax.swing.JButton jButton4;  
328     5 usages  
329     private javax.swing.JLabel jLabel1;  
330     4 usages  
331     private javax.swing.JLabel jLabel2;  
332     4 usages  
333     private javax.swing.JLabel jLabel3;  
334     4 usages  
335     private javax.swing.JLabel jLabel4;  
336     4 usages  
337     private javax.swing.JLabel jLabel5;  
338     4 usages  
339     private javax.swing.JLabel jLabel6;  
340     5 usages  
341     private javax.swing.JLabel jLabel7;  
342     4 usages  
343     private javax.swing.JScrollPane jScrollPane1;  
344     4 usages  
345     private javax.swing.JTable jTable1;  
346     5 usages  
347     private javax.swing.JTextField nos;  
348     5 usages  
349     private javax.swing.JTextField s;  
350  
351     private javax.swing.JTextField tof;  
352     // End of variables declaration//GEN-END:variables  
353 }  
354 }
```



## TicketBooking.java

```
5 package airlinemanagement;
6
7 import java.sql.*;
8 import javax.swing.JOptionPane;
9 import javax.swing.table.DefaultTableModel;
10
11
12 public class TicketBooking extends javax.swing.JFrame {
13
14     /**
15      * Creates new form ticketbooking
16     */
17     public TicketBooking() { initComponents(); }
18
19     /** This method is called from within the constructor to initialize the form. ...*/
20     /unchecked/
21     Generated Code
22
23
24     1 usage
25     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
26
27         try{
28             Class.forName( className: "com.mysql.cj.jdbc.Driver");
29
30             Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");
31             String sql = "insert into ticketbooking values (?,?,?,?,?,?,?,?)";
32
33             PreparedStatement ptst= con.prepareStatement(sql);
34             ptst.setString( parameterIndex: 1,pid.getText());
35             ptst.setString( parameterIndex: 2,pn.getText());
36             ptst.setString( parameterIndex: 3,fc.getText());
37             ptst.setString( parameterIndex: 4,g.getText());
38             ptst.setString( parameterIndex: 5,pass.getText());
39             ptst.setString( parameterIndex: 6,amt.getText());
40             ptst.setString( parameterIndex: 7,n.getText());
41
42             ptst.executeUpdate();
43             JOptionPane.showMessageDialog( parentComponent: this, message: "Data inserted Succesfully!");
44             con.close();
45         }
46         catch(Exception e){
47             JOptionPane.showMessageDialog( parentComponent: null, e);
48         }
49
50     }//GEN-LAST:event_jButton1ActionPerformed
51
52
53     1 usage
54     private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
55
56         pid.setText("");
57         pn.setText("");
58         fc.setText("");
59         g.setText("");
60         pass.setText("");
61         amt.setText("");
62         n.setText("");
63
64     }//GEN-LAST:event_jButton2ActionPerformed
```



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```
249     private void jLabel9MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jLabel9MouseClicked
250
251     Dashboard obj =new Dashboard();
252     obj.setVisible(true);
253     dispose();
254 } //GEN-LAST:event_jLabel9MouseClicked
255
256     1 usage
257     private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton3ActionPerformed
258
259     try{
260         Class.forName( className: "com.mysql.cj.jdbc.Driver");
261         Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "adm1n6035");
262         Statement st = con.createStatement();
263         String sql ="SELECT * from ticketbooking";
264         PreparedStatement ptst= con.prepareStatement(sql);
265         ResultSet rs= ptst.executeQuery();
266         DefaultTableModel dt= (DefaultTableModel)jTable1.getModel();
267         dt.setRowCount(0);
268         while(rs.next()){
269             Object o[] = {rs.getString( columnLabel: "id"),rs.getString( columnLabel: "name"),rs.getString( columnLabel: "flightcode"),rs.getString( columnLabel: "gender"),rs.getString( columnLabel: "p
270             dt.addRow(o);
271         }
272     } catch(SQLException e){
273         JOptionPane.showMessageDialog( parentComponent: this, e);
274     } catch (ClassNotFoundException e) {
275         throw new RuntimeException(e);
276     }
277 }
```

```
279 public static void main(String args[]) {
280
281
282     /* Create and display the form */
283     java.awt.EventQueue.invokeLater(new Runnable() {
284         01
285         public void run() {
286             new TicketBooking().setVisible(true);
287         }
288     });
289 }
290
291     // Variables declaration - do not modify//GEN-BEGIN:variables
292     5 usages
293     private javax.swing.JTextField amt;
294     5 usages
295     private javax.swing.JTextField fc;
296     5 usages
297     private javax.swing.JTextField g;
298     5 usages
299     private javax.swing.JButton jButton1;
300     5 usages
301     private javax.swing.JButton jButton2;
302     5 usages
303     private javax.swing.JButton jButton3;
304     5 usages
305     private javax.swing.JLabel jLabel1;
306     4 usages
307     private javax.swing.JLabel jLabel2;
308     4 usages
```



```
299     private javax.swing.JLabel jLabel3;
300     4 usages
301     private javax.swing.JLabel jLabel4;
302     4 usages
303     private javax.swing.JLabel jLabel5;
304     4 usages
305     private javax.swing.JLabel jLabel6;
306     4 usages
307     private javax.swing.JLabel jLabel7;
308     5 usages
309     private javax.swing.JLabel jLabel8;
310     4 usages
311     private javax.swing.JLabel jLabel9;
312     4 usages
313     private javax.swing.JScrollPane jScrollPane1;
314     4 usages
315     private javax.swing.JTable jTable1;
316     5 usages
317     private javax.swing.JTextField n;
318     5 usages
319     private javax.swing.JTextField pass;
320     5 usages
321     private javax.swing.JTextField pid;
322     5 usages
323     private javax.swing.JTextField pn;
324     // End of variables declaration//GEN-END:variables
325 }
```

## TicketCancellation.java

```
5 package airlinemanagement;
6
7 import java.sql.*;
8 import javax.swing.JOptionPane;
9
10
11 public class TicketCancellation extends javax.swing.JFrame {
12
13     /**
14      * Creates new form ticketcancellation
15      */
16     public TicketCancellation() { initComponents(); }
17
18     /** This method is called from within the constructor to initialize the form. ...*/
19     @Generated
20     // Generated Code
21
22     /**
23      * This method is called from within the constructor to initialize the form.
24      * WARNING: Do NOT modify this code. The content of this method is always
25      * regenerated by the Form Editor.
26      */
27     // Generated Code
28
29     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
30
31     try{
32         Class.forName( className: "com.mysql.cj.jdbc.Driver");
33         Connection con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/ams", user: "root", password: "admin6035");
34         Statement st = con.createStatement();
35
36         String ticketid= tid.getText();
37         String sql = "DELETE FROM `ticketbooking` WHERE id='"+ticketid+"'";
38
39         int i = st.executeUpdate(sql);
40         if(i>0)
41             JOptionPane.showMessageDialog(null, "Ticket Cancellation successful");
42         else
43             JOptionPane.showMessageDialog(null, "Ticket Cancellation failed");
44     }catch(Exception e)
45     {
46         e.printStackTrace();
47     }
48
49     // Generated Code
50
51     // Generated Code
52
53     // Generated Code
54
55     // Generated Code
56
57     // Generated Code
58
59     // Generated Code
60
61     // Generated Code
62
63     // Generated Code
64
65     // Generated Code
66
67     // Generated Code
68
69     // Generated Code
70
71     // Generated Code
72
73     // Generated Code
74
75     // Generated Code
76
77     // Generated Code
78
79     // Generated Code
80
81     // Generated Code
82
83     // Generated Code
84
85     // Generated Code
86
87     // Generated Code
88
89     // Generated Code
90
91     // Generated Code
92
93     // Generated Code
94
95     // Generated Code
96
97     // Generated Code
98
99     // Generated Code
100
101
102
103
104
105
106
107
108
```



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```
109 | PreparedStatement ptst = con.prepareStatement(sql);
110 | ptst.executeUpdate();
111 | JOptionPane.showMessageDialog( parentComponent: this, message: "Data deleted successfully");
112 | con.close();
113 |
114 | }
115 | catch(SQLException e){
116 | JOptionPane.showMessageDialog( parentComponent: this, e);
117 | } catch (ClassNotFoundException e) {
118 |     throw new RuntimeException(e);
119 | }
120 |
121 | }//GEN-LAST:event_jButton1ActionPerformed
122 |
123 | 1 usage
124 | private void jLabel3MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jLabel3MouseClicked
125 |
126 |     Dashboard obj =new Dashboard();
127 |     obj.setVisible(true);
128 |     dispose();
129 | };//GEN-LAST:event_jLabel3MouseClicked
130 |
131 | public static void main(String args[]) {
132 |
133 |
134 |     /* Create and display the form */
135 |     java.awt.EventQueue.invokeLater(new Runnable() {
136 |         public void run() { new TicketCancellation().setVisible(true); }
137 |     });
138 |
139 |     });
140 | }
141 |
142 | // Variables declaration - do not modify//GEN-BEGIN:variables
143 | 5 usages
144 | private javax.swing.JButton jButton1;
145 | 5 usages
146 | private javax.swing.JLabel jLabel1;
147 | 4 usages
148 | private javax.swing.JLabel jLabel2;
149 | 5 usages
150 | private javax.swing.JLabel jLabel3;
151 | 4 usages
152 | private javax.swing.JTextField tid;
153 | // End of variables declaration//GEN-END:variables
154 | }
```

```
139 |     });
140 | }
141 |
142 | // Variables declaration - do not modify//GEN-BEGIN:variables
143 | 5 usages
144 | private javax.swing.JButton jButton1;
145 | 5 usages
146 | private javax.swing.JLabel jLabel1;
147 | 4 usages
148 | private javax.swing.JLabel jLabel2;
149 | 5 usages
150 | private javax.swing.JLabel jLabel3;
151 | 4 usages
152 | private javax.swing.JTextField tid;
153 | // End of variables declaration//GEN-END:variables
154 | }
```



## Dashboard.java

```
2 package airlinemanagement;
3
4
5 > 10 usages
6
7 >  public class Dashboard extends javax.swing.JFrame {
8
9 >     /**
10      * Creates new form dashboard
11      */
12
13     public Dashboard() { initComponents(); }
14
15     /**
16      * This method is called from within the constructor to initialize the form.
17      * WARNING: Do NOT modify this code. The content of this method is always
18      * regenerated by the Form Editor.
19      */
20
21     @SuppressWarnings("unchecked")
22     Generated Code
23
24
25     1 usage
26     private void jLabel2MouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_jLabel2MouseClicked
27
28     LoginPage obj =new LoginPage();
29     obj.setVisible(true);
30     dispose();
31     }//GEN-LAST:event_jLabel2MouseClicked
32
33
34     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton1ActionPerformed
35
36     ManageFlight obj =new ManageFlight();
37     obj.setVisible(true);
38     dispose();
39     }//GEN-LAST:event_jButton1ActionPerformed
40
41     1 usage
42     private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton2ActionPerformed
43
44     ManagePassenger obj=new ManagePassenger();
45     obj.setVisible(true);
46     dispose();
47     }//GEN-LAST:event_jButton2ActionPerformed
48
49     1 usage
50     private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton3ActionPerformed
51
52     TicketBooking obj =new TicketBooking();
53     obj.setVisible(true);
54     dispose();
55     }//GEN-LAST:event_jButton3ActionPerformed
56
57     1 usage
58     private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event_jButton4ActionPerformed
59
60     TicketCancellation obj =new TicketCancellation();
61     obj.setVisible(true);
```



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```
143     dispose();
144 } //GEN-LAST:event_jButton4ActionPerformed
145 
146 public static void main(String args[]) {
147     /* Create and display the form */
148     java.awt.EventQueue.invokeLater(new Runnable() {
149         @Override
150         public void run() {
151             new Dashboard().setVisible(true);
152         }
153     });
154 
155     // Variables declaration - do not modify//GEN-BEGIN:variables
156     private javax.swing.JButton jButton1;
157     private javax.swing.JButton jButton2;
158     private javax.swing.JButton jButton3;
159     private javax.swing.JButton jButton4;
160     private javax.swing.JLabel jLabel1;
161     private javax.swing.JLabel jLabel2;
162     // End of variables declaration//GEN-END:variables
163 }
```

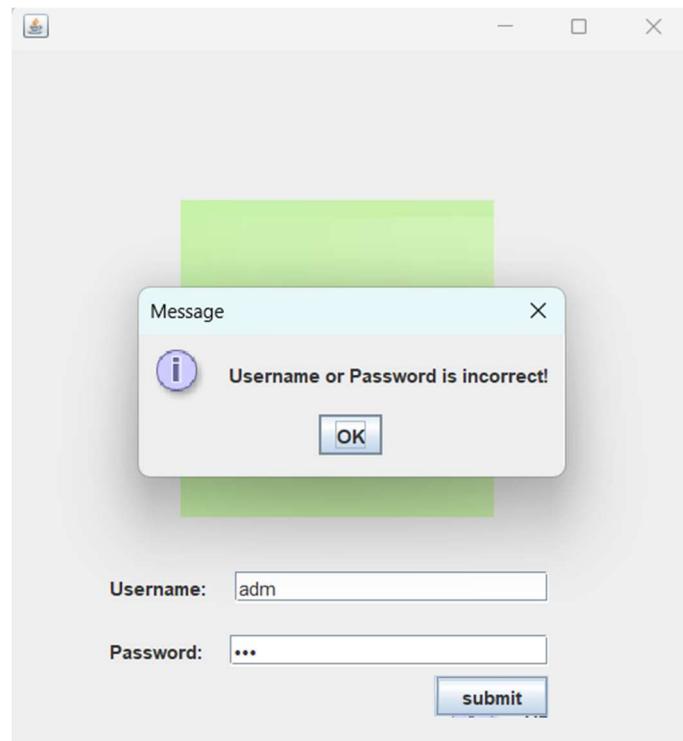
## OUTPUT

ACE AIRLINES  
FLY HIGH FLY SAFE

Username:

Password:

**submit**





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ACE AIRLINES  
FLY HIGH FLY SAFE

Username: admin

Password: .....

submit

<- BACK

## DASHBOARD

Manage Flight

Manage Passenger

Ticket Booking

Ticket Cancellation

Flight Code      Source      Destination      Take off      No of Seats

INSERT      UPDATE      SEARCH      DELETE

FlightCode	Source	Destination	Take off	NoofSeats
F102	AIRINDIA	PUNE	DELHI	50

Flight Code      Source      Destination      Take off      No of Seats

INSERT      UPDATE      SEARCH      DELETE

FlightCode	Source	Destination	Take off	NoofSeats
F101	VISTARA	LUCKNOW	MUMBAI	100

Message

Data inserted Successfully!

OK



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## Manage Passenger

<BACK

Passenger Name:	Gender	Nationality	Passport Number	Phone
Aadarsh Nayyer	MALE	INDIAN	IN82328	9408480100

**INSERT**   **UPDATE**   **SEARCH**   **DELETE**

PassengerName   Message   PassengerName   Phone

**i** Data inserted Successfully!

**OK**

## Manage Passenger

<BACK

Passenger Name:	Gender	Nationality	Passport Number	Phone
<input type="text"/>				

**INSERT**   **UPDATE**   **SEARCH**   **DELETE**

PassengerName	Gender	Nationality	Passportnumber	Phone
Aadarsh Nayyer	MALE	INDIAN	IN82328	9408480100

## TICKET BOOKING

<BACK

Passengerid	Passenger name	Flight Code	Gender	Passportnumber	Amount	nationality
<input type="text"/>						

**SAVE**   **RESET**   **SEARCH**

Passenger ID	PassengerNa...	Flight Code	Gender	Passport Num...	Amout	Nationality
<input type="text"/>						

BACK

## TICKET CANCELLATION

Delete ticket, Enter Ticket ID:

**SUBMIT**



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## Tools

1. IntelliJ IDEA Community Edition
2. MySQL Workbench
3. Apache NetBeans IDE

## References

1. <https://www.freeprojectz.com/premium-synopsis/synopsis-airlines-reservation-system>
2. <https://github.com/AmimaShifa/Airline>
3. <https://www.jstor.org/stable/249202>
4. <https://ieeexplore.ieee.org/document/1450843>
5. [https://www.academia.edu/39233733/\(PDF\)\\_AIRLINE\\_RESERVATION\\_SYSTEM\\_by\\_Pritesh\\_S\\_Academia.edu](https://www.academia.edu/39233733/(PDF)_AIRLINE_RESERVATION_SYSTEM_by_Pritesh_S_Academia.edu)