

Chapter-3: Systems Development & Implementation

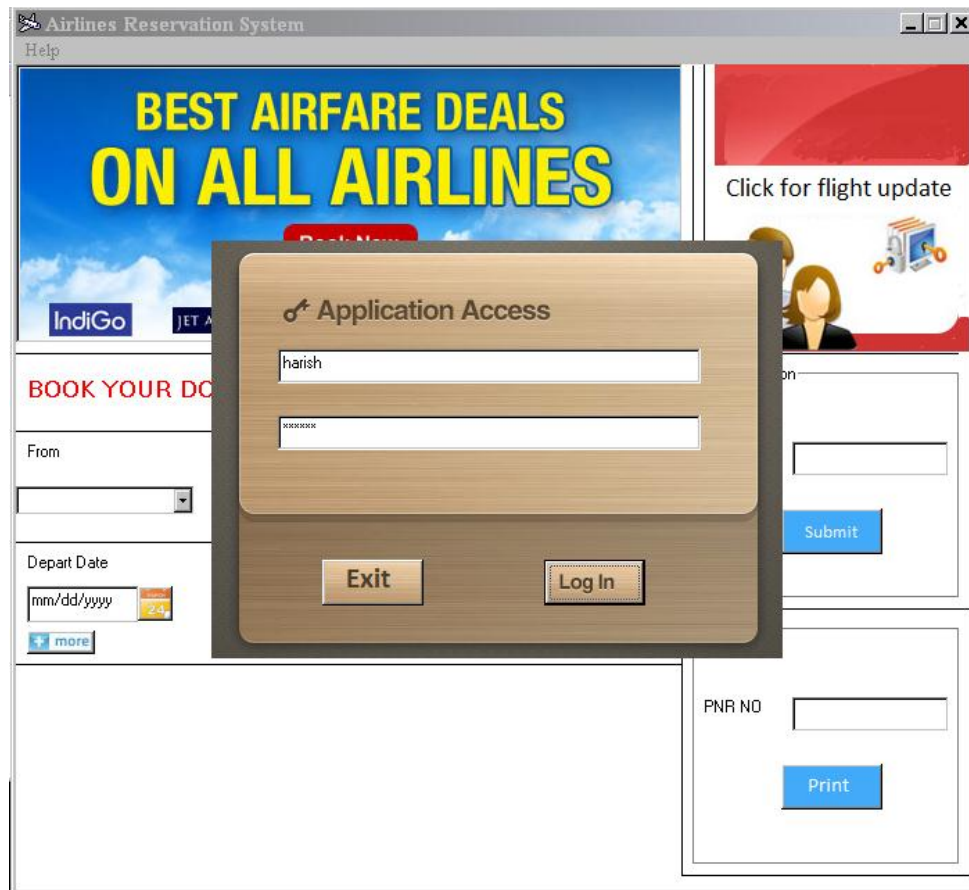
The basic purpose of designing & implementing the proposed system is to automate the process of day-to-day activities like searching the customer details, ticket reservation, ticket cancellation, generate ticket. The manual handling of the record is time consuming & highly prone to errors.

The complete set of rules & procedures related to sports club management for day to day activities is the basis for our system. Our project gives a brief idea regarding automated airline reservation system.

3.1 Program Development

3.1.1 LOGIN FORM

Output:



The screenshot displays the 'Airlines Reservation System' web application. A modal window titled 'Application Access' is centered on the screen, featuring a username field with 'harish' and a password field with masked characters. Below these fields are 'Exit' and 'Log In' buttons. The background interface includes a banner for 'BEST AIRFARE DEALS ON ALL AIRLINES', a 'BOOK YOUR DO' section with a 'From' dropdown and a 'Depart Date' calendar, and a 'Click for flight update' link. A 'PNR NO' field with a 'Print' button is also visible.

Code:

```
Dim db As New ADODB.Connection
```

```
Dim rs As New ADODB.Recordset
```

```
Private Sub back_Click()
```

```
End
```

```
End Sub
```

```
Private Sub Command1_Click()
```

```
Dim i As Integer
```

```
i = 0
```

```
On Error GoTo err_h:
```

```
If rs.EOF Then
```

```
MsgBox "currently no password is added in database .. use master password",
```

```
vbInformation
```

```
Exit Sub
```

```
End If
```

```
If Text1.Text = "" Then
```

```
Image1.Picture = ImageList.ListImages(4).Picture
```

```
Image1.Visible = True
```

```
End If
```

```
If Text2.Text = "" Then
```

```
Image2.Picture = ImageList.ListImages(4).Picture
```

```
Image2.Visible = True
```

```
End If
```

```
rs.MoveFirst
```

```
Do While Not rs.EOF
```

```
If Text1.Text = rs.Fields(0).Value Then
```

```
    Image1.Picture = ImageList.ListImages(3).Picture
```

```
    Image1.Visible = True
```

```
    i = 1
```

```
If Text2.Text = rs.Fields(1).Value Then
```

```
    login_uname = rs.Fields(0).Value
```

```
    login_passwd = rs.Fields(1).Value
```

```
Form1.Visible = True
```

```
Text1.Text = ""
```

```

Text2.Text = ""
Form5.Visible = False
Exit Sub
Else
Image2.Picture = ImageList.ListImages(4).Picture
Image2.Visible = True
End If
Else
Image1.Picture = ImageList.ListImages(4).Picture
Image1.Visible = True
End If
rs.MoveNext
Loop
If i = 1 Then
Image1.Picture = ImageList.ListImages(3).Picture
Image1.Visible = True
End If
Exit Sub
err_h:
MsgBox "connect to your admin or not connected to database"
End Sub

```

```

Private Sub Form_Load()
On Error GoTo err_h:
Open "database_connectivity.dat" For Binary As #1
Get #1, , user_name
Get #1, , pass_word
Close #1
Text1.TabIndex = 0
Picture1.Picture = ImageList.ListImages(1).Picture
Command1.Picture = ImageList.ListImages(2).Picture
Image1.Picture = ImageList.ListImages(3).Picture
Image2.Picture = ImageList.ListImages(4).Picture
back.Picture = ImageList.ListImages(5).Picture
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
rs.Open "select * from login", db, adOpenDynamic, adLockOptimistic, adCmdText
Exit Sub
err_h:

```

```
MsgBox "currently no password is added in database ", vbInformation  
End Sub
```

```
Private Sub Text1_GotFocus()  
Image1.Visible = False  
End Sub
```

```
Private Sub Text2_GotFocus()  
Image2.Visible = False  
End Sub
```

3.1.2 MAIN FORM

Output:

Airlines Reservation System

Help

BEST AIRFARE DEALS ON ALL AIRLINES

Book Now

IndiGo JET AIRWAYS AIR INDIA spicejet

BOOK YOUR DOMESTIC FLIGHT

From To Cabin/Class

New Delhi Goa Economy Business

Depart Date

11/30/2012 2.4

Search

more

Click for flight update

cancellation

PNR NO

Submit

Print Ticket

PNR NO

Print

Code:

```
Dim strSQL As String
```

```
Dim i As Integer
```

```
Dim time As Integer
```

```
Private Sub about_Click()
```

```
frmAbout.Show
```

```
End Sub
```

```
Private Sub business_cabin_Click()
```

```
Image6.Visible = False
```

```
cabin = "business"
```

```
End Sub
```

```
Private Sub Calendar1_Click()
```

```
Dim temp As Integer
```

```
temp = 0
```

```
If Calendar1.year < DatePart("yyyy", Now) Then
```

```
MsgBox "Wrong Date", vbInformation
```

```
temp = 1
```

```

Else
    If Calendar1.month < DatePart("m", Now) And Calendar1.year <= DatePart("yyyy",
Now) Then
        MsgBox "Wrong Date", vbInformation
        temp = 1
    Exit Sub
    End If
    If Calendar1.day < DatePart("d", Now) And Calendar1.month <= DatePart("m",
Now) And
        Calendar1.year <= DatePart("yyyy", Now) Then
            MsgBox "Wrong Date", vbInformation
            temp = 1
        End If
    End If
    If temp = 0 Then
        text1.Text = ""
        text1.Text = Calendar1.Value
        Calendar1.Visible = False
    Else
        text1.Text = "mm/dd/yyyy"
    End If
End Sub

```

```

Private Sub Command1_Click()
    If Calendar1.Visible = True Then
        Calendar1.Visible = False
    Else
        Calendar1.Visible = True
    End If
End Sub

```

```

Private Sub Command1_GotFocus()
    Image7.Visible = False
End Sub

```

```

Private Sub Command2_Click()
    On Error GoTo err_h:
    If Text2.Text = "" Then
        Image2.Visible = True
    Exit Sub
    End If
    pnr_cancel = Text2.Text
    Load Form4
    If pnr_cancel = "notfound" Then
        Image3.Visible = True
    Unload Form4

```

```

Exit Sub
End If
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbExclamation
End Sub

Private Sub Command3_Click()
On Error GoTo err_h:
If Text3.Text = "" Then
Image9.Visible = True
Exit Sub
End If
Dim db As New ADODB.Connection
Dim rs As New ADODB.Recordset
Dim rs1 As New ADODB.Recordset
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
rs.Open "select * from cust_data where pnr_no = " & Text3.Text & " ", db,
adOpenDynamic, adLockOptimistic, adCmdText
If rs.EOF Then
Image8.Visible = True
Else
rs1.Open "select * from flight_data where flight_no = " & rs.Fields("flight_no") & " ",
db, adOpenDynamic, adLockOptimistic, adCmdText

going_from = rs1.Fields("depart_city")

going_to = rs1.Fields("arrival_city")
depart_date = rs1.Fields("depart_Date")
cabin = rs.Fields("cabin")
flight_no = rs.Fields("flight_no")
first_name = rs.Fields("first_name")
last_name = rs.Fields("last_name")
pnr_no = rs.Fields("pnr_no")
If (0 = StrComp(cabin, "economy")) Then
price = rs1.Fields("eco_price")
Else
price = rs1.Fields("busi_price")
End If
depart_hour = rs1.Fields("depart_hour")
depart_minute = rs1.Fields("depart_minute")
rs1.Close
rs.Close
db.Close

```

```
dup_ticket = "true"
Load Form7
Form7.Visible = True
End If
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbExclamation
End Sub
```

```
Private Sub Command4_Click()
If Frame4.Visible = True Then
Frame4.Visible = False
Command4.Picture = ImageList.ListImages(12).Picture
Exit Sub
End If
Image10.Visible = True
Option1.Value = True
Command4.Picture = ImageList.ListImages(13).Picture
Timer2.Enabled = True
Option2.Value = True
End Sub
```

```
Private Sub Command5_Click()
Load Form9
End Sub
```

```
Private Sub economy_cabin_Click()
Image6.Visible = False
cabin = "economy"
End Sub
```

```
Private Sub exit_Click()
Unload Form1
Unload Form2
Unload Form3
Unload Form4
Unload Form5
Unload Form6
Unload Form7
Unload Form8
Unload frmAbout
Unload frmSplash
End Sub
```

```
Private Sub Form_Click()
Calendar1.Visible = False
```



```

End Sub
Private Sub Form_Load()
Image2.Picture = ImageList.ListImages(7).Picture
Image4.Picture = ImageList.ListImages(7).Picture
Image5.Picture = ImageList.ListImages(7).Picture
Image6.Picture = ImageList.ListImages(7).Picture
Image7.Picture = ImageList.ListImages(7).Picture
Image9.Picture = ImageList.ListImages(7).Picture
Image3.Picture = ImageList.ListImages(8).Picture
Image8.Picture = ImageList.ListImages(8).Picture
Command1.Picture = ImageList.ListImages(9).Picture
show_flight_button.Picture = ImageList.ListImages(10).Picture
Image10.Picture = ImageList.ListImages(11).Picture
Image11.Picture = ImageList.ListImages(11).Picture
Command4.Picture = ImageList.ListImages(12).Picture
Command2.Picture = ImageList.ListImages(14).Picture
Command3.Picture = ImageList.ListImages(15).Picture
Image1.Picture = ImageList.ListImages(16).Picture
Image12.Picture = ImageList.ListImages(17).Picture
Calendar1.Visible = False
time = 10
PictureBox.Picture = ImageList.ListImages(2).Picture
Open "database_connectivity.dat" For Binary As #1
Get #1, , user_name
Get #1, , pass_word
Close #1
Calendar1.Value = Date
End Sub

```

```

Private Sub from_box_GotFocus()
Image4.Visible = False
Image12.Visible = False
End Sub

```

```

Private Sub helpbackup_Click()
Shell "winhlp32.exe -i backup help1.hlp"
End Sub

```

```

Private Sub helpbook_Click()
Shell "winhlp32.exe -i booking help1.hlp"
End Sub

```

```

Private Sub helpcancel_Click()
Shell "winhlp32.exe -i cancel help1.hlp"
End Sub

```

```
Private Sub helpchange_Click()  
Shell "winhlp32.exe -i uidpassword help1.hlp"  
End Sub
```

```
Private Sub helpconnection_Click()  
Shell "winhlp32.exe -i connect help1.hlp"  
End Sub
```

```
Private Sub helpdatabase_Click()  
Shell "winhlp32.exe -i deletion help1.hlp"  
End Sub
```

```
Private Sub helphelp_Click()  
Shell "winhlp32.exe help1.hlp"  
End Sub
```

```
Private Sub helpmaster_Click()  
Shell "winhlp32.exe -i masterpassword help1.hlp"  
End Sub
```

```
Private Sub helpreprint_Click()  
Shell "winhlp32.exe -i reprint help1.hlp"  
End Sub
```

```
Private Sub helptreeview_Click()  
Shell "winhlp32.exe -i treeview help1.hlp"  
End Sub
```

```
Private Sub helpupdate_Click()  
Shell "winhlp32.exe -i update help1.hlp"  
End Sub
```

```
Private Sub Image1_Click()  
Form6.Visible = True  
End Sub
```

```
Private Sub Option1_GotFocus()  
strSQL = "SELECT * FROM flight_Data"  
Call show_database  
End Sub  
Private Sub Option2_Click()  
strSQL = "SELECT * FROM cust_data"  
Call show_database  
End Sub
```

```

Private Sub show_flight_button_Click()
i = 0
Call check_all_fill
If i = 0 Then
going_from = from_box.Text
going_to = to_box.Text
depart_date = text1.Text
Image11.Visible = True
Timer3.Enabled = True
Exit Sub
End If
End Sub

```

```

Private Sub Text2_Click()
Image2.Visible = False
Image3.Visible = False
End Sub

```

```

Private Sub Text3_Click()
Image8.Visible = False
Image9.Visible = False
End Sub

```

```

Public Function check_all_fill()
If from_box.Text = "" Then
i = 1
Image4.Visible = True
End If
If to_box.Text = "" Then
i = 1
Image5.Visible = True
End If
If text1.Text = "mm/dd/yyyy" Then
i = 1
Image7.Visible = True
End If
If economy_cabin.Value = False And business_cabin.Value = False Then
i = 1
Image6.Visible = True
End If
If from_box.Text = to_box.Text And from_box.Text <> "" Then
i = 1
Image12.Visible = True
End If
End Function

```

```

Private Sub Timer2_Timer()
Frame4.Visible = True
Image10.Visible = False
Timer2.Enabled = False
End Sub

```

```

Private Sub Timer3_Timer()
On Error GoTo err_h:
Form1.Visible = False
Form2.Visible = True
Image11.Visible = False
Timer3.Enabled = False
Exit Sub
err_h:
Form1.Visible = True
Image11.Visible = False
Timer3.Enabled = False
MsgBox "error occurred while connecting to the database", vbExclamation
End Sub

```

```

Private Sub to_box_GotFocus()
Image5.Visible = False
Image12.Visible = False
End Sub

```

```

Public Function show_database()
Dim oconn As New ADODB.Connection
Dim rs As New ADODB.Recordset
On Error GoTo err_h:
oconn.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" &
pass_word & " "
oconn.Open
rs.CursorType = adOpenStatic
rs.CursorLocation = adUseClient
rs.LockType = adLockOptimistic
rs.Open strSQL, oconn, , , adCmdText
Set DataGrid1.DataSource = rs
Exit Function
err_h:
MsgBox "error is occurred while connecting to database", vbExclamation
End Function

```

3.1.3 All FLIGHT INFORMATION FORM


Output:

All Flight Information

[Back](#) [Previous Day](#) [Next Day](#)

Date 11/30/2012

Result



Flight No Kin3011201274

New Delhi	====>>	Goa
Departure Date	11/30/2012	
Departure Time	3 : 45	
Cabin	economy	
BOOK NOW ►		

[Previous](#) 1 **Result out of 4** [Next](#)

Code:

```
Dim count_no As Integer
Dim val As Integer
Dim db As New ADODB.Connection
Dim rs As New ADODB.Recordset

Private Sub book_now_Click()
    flight_company = rs("flight_company").Value
    flight_no = rs("flight_no").Value
    depart_hour = rs("depart_hour").Value
    depart_minute = rs("depart_minute").Value
    db.Close
    Form3.Visible = True
    Unload Me
End Sub

Private Sub Command1_Click()
    rs.Close
    db.Close
```

```
Form1.Visible = True
Unload Me
End Sub
```

```
Private Sub Command2_Click()
If Command3.Enabled = False Then
    Command3.Enabled = True
End If
If val + 1 = count_no Then
    Command2.Enabled = False
End If
Form2.Refresh
val = val + 1
Label7.Caption = val
rs.MoveNext
Call show_data
End Sub
```

```
Private Sub Command3_Click()
If Command2.Enabled = False Then
    Command2.Enabled = True
End If
rs.MoveFirst
val = 1
Label7.Caption = val
Call show_data
Command3.Enabled = False
End Sub
```

```
Private Sub Form_Load()
Command1.Picture = ImageList.ListImages(1).Picture
previous_day.Picture = ImageList.ListImages(2).Picture
next_day.Picture = ImageList.ListImages(3).Picture
Command3.Picture = ImageList.ListImages(4).Picture
Command2.Picture = ImageList.ListImages(5).Picture
book_now.Picture = ImageList.ListImages(6).Picture
On Error GoTo err_h:
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic, adCmdText
db.Properties.Refresh
rs.Properties.Refresh
    Call start_searching
Exit Sub
err_h:
```

```

Unload Form2
End Sub
Public Function check_flight()
If 0 = StrComp(going_from, rs("depart_city").Value) Then
    If 0 = StrComp(going_to, rs("arrival_city").Value) Then
        If 0 = StrComp(depart_date, rs("depart_date").Value) Then
            If (0 = StrComp(cabin, "economy")) And rs("eco_no_of_seat").Value >= 1
Then
                count_no = count_no + 1
                rs.MoveNext
                Exit Function
            Else
                If (0 = StrComp(cabin, "business")) And (rs("busi_no_of_seat").Value >=
1) Then
                    count_no = count_no + 1
                    rs.MoveNext
                    Exit Function
                End If
                rs.MoveNext
                Exit Function
            End If
        Else
            rs.MoveNext
            Exit Function
        End If
    Else
        rs.MoveNext
        Exit Function
    End If
Else
    rs.MoveNext
    Exit Function
End If
End Function

Public Function show_data()
Do While (Not rs.EOF)
If 0 = StrComp(going_from, rs("depart_city").Value) Then
    If 0 = StrComp(going_to, rs("arrival_city").Value) Then
        If 0 = StrComp(depart_date, rs("depart_date").Value) Then
            If (0 = StrComp(cabin, "economy")) And (rs("eco_no_of_seat").Value >= 1)
Then
                Label1.Caption = rs("flight_no").Value
                Label2.Caption = going_from
                Label4.Caption = going_to
                Label5.Caption = depart_date

```

```

        Label6.Caption = rs("depart_hour").Value
        Label11.Caption = rs("depart_minute").Value
        Label6.Caption = cabin
        price = rs("eco_price").Value
        Call show_images
        Exit Function
    Else
        If (0 = StrComp(cabin, "business")) And (rs("busi_no_of_seat").Value >=
1) Then
            Label1.Caption = rs("flight_no").Value
            Label2.Caption = going_from
            Label4.Caption = going_to
            Label5.Caption = depart_date
            Label6.Caption = rs("depart_hour").Value
            Label11.Caption = rs("depart_minute").Value
            Label6.Caption = cabin
            price = rs("busi_price").Value
            Call show_images
            Exit Function
        Else
            rs.MoveNext
        End If
    End If
Else
    rs.MoveNext
End If
Else
    rs.MoveNext
End If
Else
    rs.MoveNext
End If
End Function

```

```

Public Function show_images()
Select Case rs("flight_company").Value
Case "Jet Airways"
Image1.Picture = ImageList.ListImages(7).Picture
Case "Indigo"
Image1.Picture = ImageList.ListImages(8).Picture
Case "KingFisher"
Image1.Picture = ImageList.ListImages(9).Picture
Case "SpiceJet"
Image1.Picture = ImageList.ListImages(10).Picture
Case "AirIndia"

```



```
Image1.Picture = ImageList.ListImages(11).Picture
End Select
End Function
```

```
Private Sub next_day_Click()
depart_date = DateAdd("d", 1, depart_date)
rs.MoveFirst
Call start_searching
End Sub
```

```
Private Sub previous_day_Click()
depart_date = DateAdd("d", -1, depart_date)
rs.MoveFirst
Call start_searching
End Sub
```

```
Public Function start_searching()
rs.MoveFirst
Command2.Enabled = True
Command3.Enabled = True
Label9.Caption = depart_date
count_no = 0
Do While (Not rs.EOF)
Call check_flight
Loop
Label7.Caption = 1
Label9.Caption = count_no
val = 1
If (count_no = 1) Then
Command2.Enabled = False
Command3.Enabled = False
End If
rs.MoveFirst
If count_no >= 1 Then
Frame1.Visible = True
Call show_data
Else
Frame1.Visible = False
Label17.Visible = True
End If
End Function
```

3.1.4 FLIGHT FORM

Output:

Back	
Departure City New Delhi	Flight No Kin3011201274
Arrival City Goa	Depart Time 3 : 45
Departure Date 11/30/2012	Price 20000
Cabin economy	Continue to Pay
Flight Comapny KingFisher	

Code:

```
Private Sub Command1_Click()  
Form3.Visible = False  
Form8.Visible = True  
End Sub  
  
Private Sub Command2_Click()  
Form2.Visible = True  
Unload Me  
End Sub  
  
Private Sub Form_Load()  
Command2.Picture = ImageList.ListImages(1).Picture  
Command1.Picture = ImageList.ListImages(2).Picture  
Label2.Caption = going_from  
Label4.Caption = going_to  
Label6.Caption = depart_date  
Label8.Caption = cabin  
Label10.Caption = flight_company  
Label12.Caption = flight_no  
Label14.Caption = depart_hour  
Label16.Caption = depart_minute  
Label18.Caption = price  
End Sub
```

3.1.5 CUSTOMER INFORMATION FORM

Output:

Customer Information

Back

Customer Information

Title* First Name* Last Name* Date Of Birth Mobile No*

Mr harish bisht 12 Dec 1992 892374238

Address-Line 1* Address-Line 2

32 dwarka 32 dwarka

City* State* Country* Pin Code*

delhi delhi india 110059

BOOK NOW ►

Code:

```
Dim pnrno As String
Dim i As Integer
Dim db As New ADODB.Connection
Dim rs As New ADODB.Recordset
```

```
Private Sub add1_box_Change()
Image5.Visible = False
End Sub
```

```
Private Sub city_box_Change()
Image6.Visible = False
End Sub
```

```
Private Sub Command1_Click()
Form3.Visible = True
db.Close
Unload Me
```

End Sub

Private Sub continue_booking_button_Click()

On Error GoTo err_h:

i = 0

Call check_all_fill

If i = 0 Then

pnrno = Left(fname_box.Text, 3) & Right(mobile_box.Text, 5) & CInt(Int(Rnd() *
Int(Rnd() * 199)))

rs.Open "insert into cust_data values('" & title_box.Text & "','" & fname_box.Text & "','"
& lname_box.Text & "','" & birth_date.Text & "','" & birth_month.Text & "','" &
birth_year.Text & "','" & mobile_box.Text & "','" & add1_box.Text & "','" &
add2_box.Text & "','" & city_box.Text & "','" & state_box.Text & "','" &
country_box.Text & "','" & pin_box.Text & "','" & pnrno & "','" & flight_no & "','" &
cabin & "')", db, adOpenDynamic, adLockOptimistic, adCmdText

first_name = fname_box.Text

last_name = lname_box.Text

pnr_no = pnrno

continue_booking_button.Picture = ImageList.ListImages(5).Picture

dup_ticket = "false"

Timer1.Enabled = True

End If

Exit Sub

err_h:

MsgBox "fill all the checkbox correctly", vbExclamation

End Sub

Private Sub country_box_Change()

Image8.Visible = False

End Sub

Private Sub fname_box_Change()

Image2.Visible = False

End Sub

Public Function check_all_fill()

If title_box.Text = "" Then

Image1.Visible = True

i = 1

End If

If fname_box.Text = "" Then

Image2.Visible = True

i = 1

End If

If lname_box.Text = "" Then

Image3.Visible = True

```

i = 1
End If
If mobile_box.Text = "" Then
    Image4.Visible = True
    i = 1
End If
If add1_box.Text = "" Then
    Image5.Visible = True
    i = 1
End If
If city_box.Text = "" Then
    Image6.Visible = True
    i = 1
End If
If state_box.Text = "" Then
    Image7.Visible = True
    i = 1
End If
If country_box.Text = "" Then
    Image8.Visible = True
    i = 1
End If
If pin_box.Text = "" Then
    Image9.Visible = True
    i = 1
End If
If Image10.Visible = True Then
    i = 1
End If
End Function

```

```

Private Sub Form_Load()
    Image1.Picture = ImageList.ListImages(1).Picture
    Image2.Picture = ImageList.ListImages(1).Picture
    Image3.Picture = ImageList.ListImages(1).Picture
    Image4.Picture = ImageList.ListImages(1).Picture
    Image5.Picture = ImageList.ListImages(1).Picture
    Image6.Picture = ImageList.ListImages(1).Picture
    Image7.Picture = ImageList.ListImages(1).Picture
    Image8.Picture = ImageList.ListImages(1).Picture
    Image9.Picture = ImageList.ListImages(1).Picture
    Image10.Picture = ImageList.ListImages(2).Picture
    continue_booking_button.Picture = ImageList.ListImages(4).Picture
    Command1.Picture = ImageList.ListImages(3).Picture
    db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
    & " "

```

```
db.Open  
End Sub
```

```
Private Sub lname_box_Change()  
Image3.Visible = False  
End Sub
```

```
Private Sub mobile_box_Change()  
Image4.Visible = False  
Image10.Visible = False  
End Sub
```

```
Private Sub mobile_box_KeyPress(KeyAscii As Integer)  
If KeyAscii = vbKeyBack Then  
Exit Sub  
End If  
If KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then  
KeyAscii = 0  
End If  
End Sub
```

```
Private Sub mobile_box_LostFocus()  
If Len(mobile_box.Text) <= 5 Then  
Image10.Visible = True  
i = 1  
Else  
i = 0  
End If  
End Sub
```

```
Private Sub pin_box_Change()  
Image9.Visible = False  
End Sub
```

```
Private Sub pin_box_KeyPress(KeyAscii As Integer)  
If KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then  
KeyAscii = 0  
End If  
End Sub
```

```
Private Sub state_box_Change()  
Image7.Visible = False  
End Sub
```

```
Private Sub Timer1_Timer()  
continue_booking_button.Picture = ImageList.ListImages(4).Picture
```

```
db.Close  
Form7.Visible = True  
Form8.Visible = False  
Timer1.Enabled = False  
End Sub
```

```
Private Sub title_box_Change()  
Image1.Visible = False  
End Sub  
Private Sub title_box_Click()  
Image1.Visible = False  
End Sub
```

3.1.6 TICKET FORM

Output:

The screenshot shows a Windows-style application window titled "Ticket". Inside the window, on the left, is a vertical barcode with the number "9 300601 219315" below it. To the right of the barcode, the title "Travelling Ticket" is displayed in large blue font. Below the title, the ticket details are listed in a two-column format: "From" (New Delhi) and "To" (Goa) in brown and red text; "Departure Date" (11/30/2012); "Cabin" (economy); "Flight No" (Kin3011201274); and "Depart Hour" (3 .45). On the right side of the window, there are two stacked boxes. The top box contains "Name" (harish bisht) and "PNR NO" (har74238114). The bottom box contains "Rs" (20000). At the bottom of the window, there are two blue buttons: "Exit" on the left and "Print" on the right.

Travelling Ticket	
From New Delhi	To Goa
Departure Date	11/30/2012
Cabin	economy
Flight No	Kin3011201274
Depart Hour	3 .45
Name harish bisht	
PNR NO har74238114	
Rs 20000	

Code:

```
Dim temp As Integer
Dim db As New ADODB.Connection
Dim rs As New ADODB.Recordset

Private Sub Command1_Click()
    CommonDialog1.PrinterDefault = True
    CommonDialog1.ShowPrinter
    Print Picture1
End Sub

Private Sub Command2_Click()
    db.Close
    Unload Form2
    Unload Form3
    Unload Form8
    Form1.Visible = True
    Unload Form7
End Sub

Private Sub Form_Load()
```



```

db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
Image1.Picture = ImageList.ListImages(1).Picture
Command1.Picture = ImageList.ListImages(3).Picture
Command2.Picture = ImageList.ListImages(2).Picture
Label3.Caption = going_from
Label5.Caption = going_to
Label7.Caption = depart_date
Label9.Caption = cabin
Label11.Caption = flight_no
Label13.Caption = first_name
Label14.Caption = last_name
Label18.Caption = pnr_no
Label16.Caption = price
Label20.Caption = depart_hour
Label22.Caption = depart_minute

If dup_ticket = "true" Then
dup_ticket = "false"
Exit Sub
End If
'code for decrement the seat from database
rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic, adCmdText
rs.MoveFirst
Do While (Not rs.EOF)
If 0 = StrComp(flight_company, rs("flight_company").Value) Then
If 0 = StrComp(going_from, rs("depart_city").Value) Then
If 0 = StrComp(going_to, rs("arrival_city").Value) Then
If 0 = StrComp(depart_date, rs("depart_date").Value) Then
If 0 = StrComp(flight_no, rs("flight_no").Value) Then
If (0 = StrComp(cabin, "economy")) And (rs("eco_no_of_seat").Value >= 1)
Then
temp = rs("eco_no_of_seat").Value
temp = temp - 1
rs.Fields("eco_no_of_seat") = temp
rs.Update
Exit Sub
Else
If (0 = StrComp(cabin, "business")) And (rs("busi_no_of_seat").Value >=
1) Then
temp = rs("busi_no_of_seat").Value
temp = temp - 1
rs.Fields("busi_no_of_seat") = temp
rs.Update
Exit Sub

```

```
        End If
    End If
    Else
        rs.MoveNext
    End If
    Else
        rs.MoveNext
    End If
Else
    rs.MoveNext
End If
Else
    rs.MoveNext
End If
Loop
End Sub
```

3.1.7 MAIN FORM (FOR CANCELLATION)

Output:

The screenshot shows the 'Airlines Reservation System' main form. At the top, there's a banner for 'BEST AIRFARE DEALS ON ALL AIRLINES' with a 'Book Now' button. Below this, there's a section for 'BOOK YOUR DOMESTIC FLIGHT' with input fields for 'From' (New Delhi), 'To' (Goa), 'Cabin/Class' (Economy selected), and 'Depart Date' (11/30/2012). A 'Search' button is present. On the right, there's a 'cancellation' section with a 'PNR NO' field containing 'har74238114' and a 'Submit' button. Below that is a 'Print Ticket' section with a 'PNR NO' field and a 'Print' button.

This screenshot shows the same main form as above, but with a 'Cancellation' modal dialog box open in the foreground. The dialog has a 'Back' button at the top left and a 'Cancel Booking' button at the bottom right. It contains a table with the following information:

First Name	harish
Last Name	bisht
Mobile No	892374238
PNR NO	har74238114

The background form is partially obscured by the dialog. The 'cancellation' section on the right still shows the 'PNR NO' field with 'har74238114' and the 'Submit' button.

Code:

```
Dim temp As Integer
Dim db As New ADODB.Connection
Dim rs1 As New ADODB.Recordset
Dim rs As New ADODB.Recordset
```

```
Private Sub Command1_Click()
db.Close
Unload Me
End Sub
```

```
Private Sub Command2_Click()
cabin = rs.Fields("cabin")
flight_no = rs.Fields("flight_no")
Call increment_seat
rs.Delete
db.Close
MsgBox " booking cancelled sucessful", vbInformation
Unload Me
End Sub
```

```
Private Sub Form_Load()
Command1.Picture = ImageList.ListImages(1).Picture
Command2.Picture = ImageList.ListImages(2).Picture
On Error GoTo err_h:
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
rs.Open "select * from cust_data where pnr_no = '" & pnr_cancel & "' ", db,
adOpenDynamic, adLockOptimistic, adCmdText
If (Not rs.EOF) Then
Form4.Visible = True
Form4.Refresh
Label5.Caption = rs.Fields("first_name")
Label6.Caption = rs.Fields("last_name")
Label7.Caption = rs.Fields("mobile_no")
Label8.Caption = rs.Fields("pnr_no")
Else
pnr_cancel = "notfound"
db.Close
End If
Exit Sub
err_h:
Unload Form4
End Sub
```

```
Public Function increment_seat()  
rs1.Open "select * from flight_data where flight_no = '" & flight_no & "' ", db,  
adOpenDynamic, adLockOptimistic, adCmdText  
If cabin = "economy" Then  
temp = rs1("eco_no_of_seat").Value  
temp = temp + 1  
rs1.Fields("eco_no_of_seat") = temp  
rs1.Update  
Else  
temp = rs1("busi_no_of_seat").Value  
temp = temp + 1  
rs1.Fields("busi_no_of_seat") = temp  
rs1.Update  
End If  
End Function
```

3.1.8 FLIGHT ENTRY FORM

Output:

The image displays two screenshots of a web application titled "Flight Entry Form".

Top Screenshot (Initial State):

- Header:** "Flight Entry Form" with a "New Flight Entry" link and "Log Out" and "Clear" buttons.
- Select Flight:** A dropdown menu showing "KingFisher".
- From/To:** "From" is "New Delhi" and "To" is "Goa".
- Departure Date:** "11/29/2012" with a calendar icon.
- Departure Time:** "Hours: 2" and "Minutes: 59".
- Economy Class:** "No Of Seats:" is "10" and "Price Per Seat:" is "120000".
- Bussiness Class:** "No Of Seats:" is "10" and "Price Per Seat:" is "12500".
- Buttons:** "Submit" and "Flight No Kin2911201274".
- Database Tree View:** A checkbox labeled "View Database in tree form" is checked.
- Flight:** A checkbox labeled "Delete all old flight data" is unchecked.
- Customer:** A checkbox labeled "Delete all old customer data" is unchecked.
- Flight Report:** A checkbox labeled "Create flight data report" is unchecked.
- Customer Report:** A checkbox labeled "Create customer data report" is unchecked.
- Setting:** "New ID" and "New Password" fields are empty. "Back" and "Advance" buttons are present.
- Backup and Restore:** Two icons representing backup and restore operations.

Bottom Screenshot (Filled State):

- Select Flight:** "KingFisher" (unchanged).
- From/To:** "New Delhi" and "Goa" (unchanged).
- Departure Date:** "11/29/2012" (unchanged).
- Departure Time:** "Hours: 2" and "Minutes: 59" (unchanged).
- Economy Class:** "No Of Seats:" is "10" and "Price Per Seat:" is "120000" (unchanged).
- Bussiness Class:** "No Of Seats:" is "10" and "Price Per Seat:" is "12500" (unchanged).
- Buttons:** "Submit" and "Flight No Kin2911201274" (unchanged).
- Database Tree View:** "View Database in tree form" is checked (unchanged).
- Flight:** "Delete all old flight data" is unchecked (unchanged).
- Customer:** "Delete all old customer data" is unchecked (unchanged).
- Flight Report:** "Create flight data report" is unchecked (unchanged).
- Customer Report:** "Create customer data report" is unchecked (unchanged).
- Setting:** "New ID" is "harish" and "New Password" is "*****". "Back" and "Submit" buttons are present.
- Backup and Restore:** Two icons representing backup and restore operations (unchanged).

Code:

```
Dim setting As Integer
Dim db As New ADODB.Connection
Dim rs As New ADODB.Recordset
Dim rs1 As New ADODB.Recordset
Dim flight_no As String
Dim val As Integer
Private Sub admin_setting_Click()
    admin_setting.Visible = False
    database_setting.Visible = False
    back.Visible = True
    Label8.Visible = True
    Label9.Visible = True
    Text1.Visible = True
    Text2.Visible = True
    submit.Visible = True
    setting = 0
    Text1.SetFocus
    Text2.PasswordChar = "*"
End Sub
```

```
Private Sub advance_setting_Click()
    Label8.Visible = False
    Label9.Visible = False
    Label10.Visible = True
    Text1.Visible = False
    Text2.Visible = False
    advance_setting.Visible = False
    submit.Visible = False
    Create_database.Visible = True
    Check5.Visible = True
    driver.Visible = True
    Combo1.Visible = True
End Sub
```

```
Private Sub back_Click()
    admin_setting.Visible = True
    database_setting.Visible = True
    back.Visible = False
    Label8.Visible = False
    Label9.Visible = False
    Text1.Visible = False
    Text2.Visible = False
    submit.Visible = False
    Image1.Visible = False
    advance_setting.Visible = False
```

```
Create_database.Visible = False
Check5.Visible = False
driver.Visible = False
Label10.Visible = False
Combo1.Visible = False
End Sub
```

```
Private Sub Calendar1_Click()
Dim temp As Integer
temp = 0
If Calendar1.year < DatePart("yyyy", Now) Then
MsgBox "Wrong Date", vbInformation
temp = 1
Else
If Calendar1.month < DatePart("m", Now) And Calendar1.year <= DatePart("yyyy",
Now) Then
MsgBox "Wrong Date", vbInformation
temp = 1
Exit Sub
End If
If Calendar1.day < DatePart("d", Now) And Calendar1.month <= DatePart("m",
Now) And Calendar1.year <= DatePart("yyyy", Now) Then
MsgBox "Wrong Date", vbInformation
temp = 1
End If
End If
If temp = 0 Then
date_box.Text = ""
date_box.Text = Calendar1.Value
Calendar1.Visible = False
Else
date_box.Text = "mm/dd/yyyy"
End If
End Sub
```

```
Private Sub clear_button_Click()
date_box = "mm/dd/yyyy"
price_economy.Text = ""
price_business.Text = ""
Label12.Caption = ""
End Sub
```

```
Private Sub Command1_Click()
If Calendar1.Visible = True Then
Calendar1.Visible = False
Else
```



```
Calendar1.Visible = True
End If
End Sub
```

```
Private Sub Command2_Click()
On Error GoTo err_h:
db.Close
Unload Me
Exit Sub
err_h:
Unload Me
End Sub
```

```
Private Sub Command3_Click()
If Check3.Value = 1 Then
flight_data_report.Show
Else
MsgBox "Please tick the check box", vbExclamation
End If
End Sub
```

```
Private Sub Command4_Click()
If Check4.Value = 1 Then
cust_data_report.Show
Else
MsgBox "Please tick the check box", vbExclamation
End If
End Sub
```

```
Private Sub Command5_Click()
On Error Resume Next:
If Check6.Value = 1 Then
Form10.Visible = True
Else
MsgBox "Please tick the check box", vbExclamation
End If
End Sub
```

```
Private Sub create_backup_Click()
Dim day As Variant, month As Variant, year As Variant, add As Variant
On Error Resume Next
CommonDialog1.Filter = "Backup file (*.backup)|*.backup"
CommonDialog1.FileName = Date$
CommonDialog1.DialogTitle = "select the location for Backup file"
CommonDialog1.Flags = 0
CommonDialog1.ShowSave
```

```

Kill CommonDialog1.FileName 'check for existing files fo backup
If CommonDialog1.Flags <> 0 Then
    rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic,
adCmdText
    rs1.Open "select * from cust_data", db, adOpenDynamic, adLockOptimistic,
adCmdText
    rs.MoveFirst
    Open CommonDialog1.FileName For Append As #1
    Do While (Not rs.EOF)
        Write #1, rs.Fields(0), rs.Fields(1), rs.Fields(2), rs.Fields(3), rs.Fields(4), rs.Fields(5),
rs.Fields(6), rs.Fields(7), rs.Fields(8), rs.Fields(9), rs.Fields(10)
    rs.MoveNext
        If (rs.EOF) Then
            Write #1, "****", "****", "****", "****", "****", "****", "****", "****", "****",
"****"
            rs1.MoveFirst
            Do While (Not rs1.EOF)
                If IsNull(rs1.Fields(3)) Then day = "blank"
                If IsNull(rs1.Fields(4)) Then month = "blank"
                If IsNull(rs1.Fields(5)) Then year = "blank"
                If IsNull(rs1.Fields(8)) Then add = "blank"
                Write #1, rs1.Fields(0), rs1.Fields(1), rs1.Fields(2), day, month, year, rs1.Fields(6),
rs1.Fields(7), add, rs1.Fields(9), rs1.Fields(10), rs1.Fields(11), rs1.Fields(12),
rs1.Fields(13), rs1.Fields(14), rs1.Fields(15)
            rs1.MoveNext
        Loop
    End If
    Loop
MsgBox "Backup creation sucessful", vbInformation
Close #1
rs.Close
rs1.Close
Else
Exit Sub
End If
End Sub

```

```

Private Sub customer_delete_Click()
On Error GoTo err_h:
Dim tempi As Integer
Dim counter As Integer
counter = 0
tempi = 0
If Check2.Value = 1 Then
    rs1.Open "select * from cust_data ", db, adOpenDynamic, adLockOptimistic,
adCmdText

```

```

If (Not rs1.EOF) Then
rs1.MoveFirst
Else
MsgBox "Customer DataBase is empty", vbInformation
rs1.Close
Exit Sub
End If
rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic, adCmdText
If (rs.EOF) Then
    Do While (Not rs1.EOF)
        rs1.Delete
        rs1.MoveNext
        counter = counter + 1
    Loop
MsgBox counter & " customer data deleted"
rs.Close
rs1.Close
Exit Sub
Else
rs.MoveFirst
End If
Do While (Not rs1.EOF)
    Do While (Not rs.EOF)
        If 0 = StrComp(rs("flight_no").Value, rs1("flight_no").Value) Then
            tempi = 1
            rs.MoveNext
        Else
            rs.MoveNext
        End If
        If rs.EOF And tempi = 0 Then
            counter = counter + 1
            rs1.Delete
            tempi = 0
        End If
    Loop
rs.MoveFirst
rs1.MoveNext
Loop
MsgBox counter & " customer data deleted", vbInformation
rs.Close
rs1.Close
Else
MsgBox "Please tick the check box", vbExclamation
End If
Exit Sub
err_h:

```

```
MsgBox "error occureed while connecting to the database", vbInformation
End Sub
```

```
Private Sub database_setting_Click()
admin_setting.Visible = False
database_setting.Visible = False
back.Visible = True
Label8.Visible = True
Label9.Visible = True
Text1.Visible = True
Text2.Visible = True
submit.Visible = True
Image1.Visible = True
advance_setting.Visible = True
Text1.SetFocus
setting = 1
Text2.PasswordChar = ""
End Sub
```

```
Private Sub flight_delete_Click()
On Error GoTo err_h:
Dim tempdate As Date
Dim tempi As Integer
tempi = 0
tempdate = Date
tempdate = DateAdd("d", -1, tempdate)
If Check1.Value = 1 Then ' means checked
    rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic,
adCmdText
    If (Not rs.EOF) Then
        rs.MoveFirst
    Else
        MsgBox "Flight DataBase is empty", vbInformation
        rs.Close
        Exit Sub
    End If
    Do While (Not rs.EOF)
        If rs("depart_date").Value < tempdate Then
            rs.Delete
            tempi = tempi + 1
        End If
        rs.MoveNext
    Loop
    MsgBox tempi & " flight deleted", vbInformation
    rs.Close
Else
```

```

MsgBox "Please Tick the Check box", vbExclamation
End If
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbInformation
End Sub

```

```

Private Sub Form_Click()
Calendar1.Visible = False
End Sub

```

```

Private Sub Form_Load()
Calendar1.Value = Date
Command1.Picture = ImageList.ListImages(1).Picture
submit_button.Picture = ImageList.ListImages(2).Picture
flight_delete.Picture = ImageList.ListImages(3).Picture
customer_delete.Picture = ImageList.ListImages(4).Picture
Command3.Picture = ImageList.ListImages(5).Picture
Command4.Picture = ImageList.ListImages(6).Picture
submit.Picture = ImageList.ListImages(2).Picture
back.Picture = ImageList.ListImages(7).Picture
admin_setting.Picture = ImageList.ListImages(8).Picture
database_setting.Picture = ImageList.ListImages(10).Picture
Image1.Picture = ImageList.ListImages(11).Picture
Command5.Picture = ImageList.ListImages(12).Picture
create_backup.Picture = ImageList.ListImages(13).Picture
restore_backup.Picture = ImageList.ListImages(14).Picture
On Error GoTo err_h:
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
Calendar1.Visible = False
Exit Sub
err_h:
Calendar1.Visible = False
MsgBox "u have to need change database password and user name or fix the connectivity
problem", vbInformation
Timer1.Enabled = True
End Sub

```

```

Public Function check_all_are_fill()
val = 0
If select_flight.Text = "" Then
val = 1
End If
If from_box.Text = "" Then

```

```

val = 1
End If
If to_box.Text = "" Then
val = 1
End If
If date_box.Text = "mm/dd/yyyy" Then
val = 1
End If
If hour_box.Text = "" Or minutes_box.Text = "" Then
val = 1
End If
If seat_economy.Text = "" Or price_economy.Text = "" Or seat_business.Text = "" Or
price_business.Text = "" Then
val = 1
End If
If from_box.Text = to_box.Text Then
MsgBox "going to same city not possible"
val = 1
End If
End Function

```

```

Private Sub price_business_KeyPress(KeyAscii As Integer)
If KeyAscii = vbKeyBack Then
Exit Sub
End If
If KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
KeyAscii = 0
End If
End Sub

```

```

Private Sub price_economy_KeyPress(KeyAscii As Integer)
If KeyAscii = vbKeyBack Then
Exit Sub
End If
If KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
KeyAscii = 0
End If
End Sub

```

```

Private Sub restore_backup_Click()
Dim a As String, b As String, c As String, d As String, e As Variant, f As Variant, g As
Variant, h As Variant, i As Variant, j As Variant, k As Variant
Dim aa As String, ab As String, ac As String, ad As Variant, ae As String, af As Variant,
ag As Variant, ah As Variant, ai As Variant, aj As Variant, ak As Variant, al As Variant,
am As Variant, an As Variant, ao As Variant, ap As Variant
CommonDialog1.Filter = "Backup file (*.backup)|*.backup"

```

```

CommonDialog1.DialogTitle = "Select the airlines data backup file"
CommonDialog1.Flags = 0
CommonDialog1.ShowOpen
If CommonDialog1.Flags <> 0 Then
On Error GoTo err_h:
Open CommonDialog1.FileName For Input As #1
db.Execute "delete from flight_data"
Do While (1)
Input #1, a, b, c, d, e, f, g, h, i, j, k
If a = "****" Then
db.Execute "delete from cust_data"
Do While (1)
Input #1, aa, ab, ac, ad, ae, af, ag, ah, ai, aj, ak, al, am, an, ao, ap

If ad = "blank" Then ad = ""
If ae = "blank" Then ae = ""
If af = "blank" Then af = ""
If ai = "blank" Then ai = ""
rs1.Open "insert into cust_data values('" & aa & "','" & ab & "','" & ac & "','" & ad
& "','" & ae & "','" & af & "','" & ag & "','" & ah & "','" & ai & "','" & aj & "','" & ak &
','" & al & "','" & am & "','" & an & "','" & ao & "','" & ap & "')", db, adOpenDynamic,
adLockOptimistic, adCmdText
Loop
End If
rs.Open "insert into flight_data values('" & a & "','" & b & "','" & c & "','" & d & "','" &
e & "','" & f & "','" & g & "','" & h & "','" & i & "','" & j & "','" & k & "')", db,
adOpenDynamic, adLockOptimistic, adCmdText
Loop
Close #1
Else
Exit Sub
End If
Exit Sub
err_h:
MsgBox "backup restore sucessful", vbInformation
Close #1
End Sub

Private Sub submit_button_Click()
On Error GoTo err_h:
Call check_all_are_fill
If val = 1 Then
MsgBox "please fill all the entry", vbExclamation
Exit Sub
Else
flight_no = Left(select_flight.Text, 3) & Calendar1.day & Calendar1.month &

```

```

Calendar1.year & CInt(Int(Rnd() * Int(Rnd() * 199)))
rs.Open "insert into flight_data values('" & select_flight.Text & "','" & from_box.Text &
"', '" & to_box.Text & "','" & date_box.Text & "','" & hour_box.Text & "','" &
minutes_box.Text & "','" & seat_economy.Text & "','" & price_economy.Text & "','" &
seat_business.Text & "','" & price_business.Text & "','" & flight_no & "')", db,
adOpenDynamic, adLockOptimistic, adCmdText
Label12.Caption = flight_no
End If
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbInformation
End Sub

```

```

Private Sub submit_Click()
On Error GoTo err_h:
Dim valdata As Variant
Dim valdata1 As Variant
If Text1.Text = "" Or Text2.Text = "" Then
MsgBox "Fill both of box", vbInformation
Exit Sub
End If
If setting = 0 Then
Call change_password
Else
Open "database_connectivity.dat" For Binary As #1
valdata = Text1.Text
valdata1 = Text2.Text
Put #1, , valdata
Put #1, , valdata1
Close #1
MsgBox "Changes Sucessful", vbInformation
Open "database_connectivity.dat" For Binary As #1
Get #1, , user_name
Get #1, , pass_word
Close #1
If db.State Then
db.Close
End If
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
End If
valdata = ""
valdata1 = ""
admin_setting.Visible = True

```



```

database_setting.Visible = True
back.Visible = False
Label8.Visible = False
Label9.Visible = False
Text1.Visible = False
Text2.Visible = False
submit.Visible = False
Text1.Text = ""
Text2.Text = ""
Timer1.Enabled = False
database_setting.Picture = ImageList.ListImages(10).Picture
Image1.Visible = False
advance_setting.Visible = False
Exit Sub
err_h:
MsgBox "error occured while reconnecting to the database", vbInformation
Timer1.Enabled = True
End Sub

```

```

Private Sub Timer1_Timer()
If (database_setting.Picture = ImageList.ListImages(9).Picture) Then
database_setting.Picture = ImageList.ListImages(10).Picture
Else
database_setting.Picture = ImageList.ListImages(9).Picture
End If
End Sub

```

```

Public Sub change_password()
On Error GoTo err_h:

Dim valdata As Variant
Dim valdata1 As Variant
valdata = Text1.Text
valdata1 = Text2.Text
db.Execute "delete from Login where username = '" & login_uname & "' and password="
"' & login_passwd & "' "
db.Execute "insert into login values('" & valdata & "','" & valdata1 & "')"
login_uname = Text1.Text
login_passwd = Text2.Text
MsgBox "username and password sucessfully changed", vbInformation
Exit Sub
err_h:
MsgBox "User name and password not found", vbInformation
End Sub

```

3.1.9 DATABASE TREE VIEW FORM

Output:

Database Tree view

Back

Departure date

Departure to arrival city

Flight no

Passanger PNR no

dbase

Flight

11/30/2012

New Delhi To Goa

Kin3011201274

Air3011201233

Jet3011201246

Air301120121

Jet301120123

Kin2911201274

11/29/2012

Flight Information

Flight Company

KingFisher

Departure City

New Delhi

Arrival City

Goa

Departure Date

11/30/2012

Departure Date

345

Remaining economy seat

9

Price of economy seat

20000

Remaining business

5

Price of business seat

21000

Flight No

Kin3011201274

Database Tree view

Back

Departure date

Departure to arrival city

Flight no

Passanger PNR no

dbase

Flight

11/30/2012

New Delhi To Goa

Kin3011201274

har74238114

Air3011201233

Jet3011201246

Air301120121

Jet301120123

Kin2911201274

11/29/2012

Customer Data

Mr

harish bisht

DOB

12 Dec 1992

Mobile no

892374238

Address Line one

32 dwarka

Address Line two

32 dwarka

City

delhi

State

delhi

Country

india

Pin Code

110059

PNR NO

har74238114

FLIGHT NO

Kin3011201274

Code:

```
Dim db As New ADODB.Connection
Dim rs2 As New ADODB.Recordset
Dim rs1 As New ADODB.Recordset
Dim rs As New ADODB.Recordset
```

```
Private Sub Command1_Click()
db.Close
Unload Form10
End Sub
```

```
Private Sub Form_Click()
Image7.Visible = False
End Sub
```

```
Private Sub Form_Load()
On Error GoTo err_h:
db.ConnectionString = "dsn=airlines_data;uid=" & user_name & ";pwd=" & pass_word
& " "
db.Open
rs.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic, adCmdText
rs1.Open "select * from flight_data", db, adOpenDynamic, adLockOptimistic,
adCmdText
rs2.Open "select * from cust_data", db, adOpenDynamic, adLockOptimistic, adCmdText
Command1.Picture = ImageList1.ListImages(7).Picture
Image1.Picture = ImageList1.ListImages(1).Picture
Image2.Picture = ImageList1.ListImages(3).Picture
Image3.Picture = ImageList1.ListImages(4).Picture
Image4.Picture = ImageList1.ListImages(6).Picture
Image5.Picture = ImageList1.ListImages(8).Picture
Image6.Picture = ImageList1.ListImages(8).Picture
Image7.Picture = ImageList1.ListImages(9).Picture
search.Picture = ImageList1.ListImages(10).Picture
Image8.Picture = ImageList1.ListImages(11).Picture
Call treeview_data
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbInformation
Unload Form10
End Sub
```

```
Public Function treeview_data()
On Error GoTo err_h:
Dim i As Integer, j As Integer, k As Integer, l As Integer, m As Integer
Dim Data As Node
Set Data = TreeView1.Nodes.add
```

```

Data.Image = 2
TreeView1.Nodes(1).Text = "Flight"
i = 0
Do While (Not rs.EOF)
    i = i + 1
    rs.MoveNext
Loop
rs.MoveFirst
Dim node1() As Node
ReDim node1(i) As Node
Dim temparray() As String
ReDim temparray(i) As String
m = 0
For j = 1 To i
    For k = 0 To m
        If (temparray(k) = rs.Fields(3)) Then
            l = 1
        End If
    Next k
    If l = 0 Then
        Set node1(j) = TreeView1.Nodes.add(Data, tvwChild, , rs.Fields(3))
        node1(j).Image = 1
        temparray(m) = rs.Fields(3)
        m = m + 1
    End If
    rs.MoveNext
    l = 0
Next j
TreeView1.Nodes.Item(2).Sorted = True
rs.MoveFirst
Dim children1 As Integer
children1 = TreeView1.Nodes(1).Children
Dim node2() As Node
ReDim node2(children1) As Node
Dim node3 As Node
Dim node4 As Node
i = 0
Do While (Not rs.EOF)
    i = i + 1
    rs.MoveNext
Loop
Dim z As Integer
rs.MoveFirst
For z = 1 To children1
    rs.MoveFirst
    ReDim temparray(i) As String

```

```

m = 0
l = 0
For j = 1 To i
    For k = 0 To m
        If (temparray(k) = (rs.Fields(1) + " " + "To" + " " + rs.Fields(2))) Then
            l = 1
        End If
    Next k
    If l = 0 And (rs.Fields(3) = TreeView1.Nodes.Item(z + 1)) Then
        Set node2(z) = TreeView1.Nodes.add(TreeView1.Nodes.Item(z + 1), tvwChild, ,
rs.Fields(1) + " " + "To" + " " + rs.Fields(2))
        node2(z).Image = 3
        temparray(m) = rs.Fields(1) + " " + "To" + " " + rs.Fields(2)
        m = m + 1
        rs1.MoveFirst
        Do While (Not rs1.EOF)
            If 0 <> InStr(Left(node2(z).Text, (InStr(node2(z).Text, "To") - 2)), rs1.Fields(1))
And 0 <> InStr(Right(node2(z).Text, (Len(node2(z).Text) - InStr(node2(z).Text, "To") -
2)), rs1.Fields(2)) Then
                Set node3 = TreeView1.Nodes.add(node2(z), tvwChild, , rs1.Fields(10))
                node3.Image = 4
                If rs2.BOF = False Then
                    rs2.MoveFirst
                End If
                Do While (Not rs2.EOF)
                    If (rs1.Fields(10) = rs2.Fields(14)) Then
                        Set node4 = TreeView1.Nodes.add(node3, tvwChild, , rs2.Fields(13))
                        node4.Image = 6
                    End If
                    rs2.MoveNext
                Loop
            End If
            rs1.MoveNext
        Loop
    End If
    l = 0
    rs.MoveNext
Next j
Next z
'for expend the tree
TreeView1.Nodes(1).Expanded = True
Exit Function
err_h:
MsgBox " error while connecting to database"
End Function

```

```
Private Sub Image5_Click()  
Frame1.Visible = False  
Frame2.Visible = False  
End Sub
```

```
Private Sub Image6_Click()  
Frame1.Visible = False  
Frame2.Visible = False  
End Sub
```

```
Private Sub search_Click()  
On Error GoTo err_h:  
TreeView1.Refresh  
TreeView1.Nodes(1).Expanded = False  
Dim v As Integer, ul As Integer  
v = 0  
ul = 0  
If Option1.Value = True Then  
    For v = 1 To TreeView1.Nodes.Count  
        If (Text1.Text = TreeView1.Nodes.Item(v)) Then  
            TreeView1.Nodes(1).Expanded = True  
            TreeView1.Nodes.Item(v).FirstSibling.Parent.Expanded = True  
            TreeView1.Nodes.Item(v).FirstSibling.Parent.FirstSibling.Parent.Expanded = True  
            TreeView1.Nodes.Item(v).BackColor = RGB(9, 115, 103)  
            TreeView1.Nodes.Item(v).ForeColor = RGB(250, 250, 250)  
            ul = 1  
        Exit Sub  
        End If  
    Next v  
If (ul = 0) Then Image7.Visible = True  
End If  
If Option2.Value = True Then  
    For v = 1 To TreeView1.Nodes.Count  
        If (Text1.Text = TreeView1.Nodes.Item(v)) Then  
            TreeView1.Nodes(1).Expanded = True  
            TreeView1.Nodes.Item(v).FirstSibling.Parent.Expanded = True  
            TreeView1.Nodes.Item(v).FirstSibling.Parent.FirstSibling.Parent.Expanded = True  
            TreeView1.Nodes.Item(v).FirstSibling.Parent.FirstSibling.Parent.FirstSibling.Parent.Expanded = True  
            TreeView1.Nodes.Item(v).BackColor = RGB(9, 115, 103)  
            TreeView1.Nodes.Item(v).ForeColor = RGB(250, 250, 250)  
            ul = 1  
        Exit Sub  
        End If  
    Next v  
If (ul = 0) Then Image7.Visible = True
```

```

End If
Exit Sub
err_h:
MsgBox "error occureed while connecting to the database", vbInformation
End Sub

```

```

Private Sub Text1_Click()
Image7.Visible = False
End Sub

```

```

Private Sub TreeView1_NodeClick(ByVal Node As MSComctlLib.Node)
On Error Resume Next
If Node.Image = 4 Then
Frame1.Visible = True
Frame2.Visible = False
rs.MoveFirst
Do While (Not rs.EOF)
If rs.Fields(10) = Node.Text Then
Label2.Caption = rs.Fields(0)
Label4.Caption = rs.Fields(1)
Label6.Caption = rs.Fields(2)
Label8.Caption = rs.Fields(3)
Label10.Caption = rs.Fields(4)
Label11.Caption = rs.Fields(5)
Label13.Caption = rs.Fields(6)
Label15.Caption = rs.Fields(7)
Label17.Caption = rs.Fields(8)
Label19.Caption = rs.Fields(9)
Label21.Caption = rs.Fields(10)
Exit Sub
End If
rs.MoveNext
Loop
End If
Label26.Caption = ""
Label27.Caption = ""
Label28.Caption = ""
Label34.Caption = ""
If Node.Image = 6 Then
Frame1.Visible = False
Frame2.Visible = True
rs2.MoveFirst
Do While (Not rs2.EOF)
If rs2.Fields(13) = Node.Text Then
Label22.Caption = rs2.Fields(0)
Label23.Caption = rs2.Fields(1)

```

```
Label24.Caption = rs2.Fields(2)
Label26.Caption = rs2.Fields(3)
Label27.Caption = rs2.Fields(4)
Label28.Caption = rs2.Fields(5)
Label30.Caption = rs2.Fields(6)
Label32.Caption = rs2.Fields(7)
Label34.Caption = rs2.Fields(8)
Label36.Caption = rs2.Fields(9)
Label38.Caption = rs2.Fields(10)
Label40.Caption = rs2.Fields(11)
Label42.Caption = rs2.Fields(12)
Label44.Caption = rs2.Fields(13)
Label46.Caption = rs2.Fields(14)
Exit Sub
End If
rs2.MoveNext
Loop
End If
End Sub
```


3.2 Testing and Debugging

Software Testing is an empirical investigation conducted to provide stakeholders with information about the quality of the product or service under test, with respect to the context in which it is intended to operate. Software Testing also provides an objective, independent view of the software to allow the business to appreciate and understand the risks at implementation of the software. Test techniques include, but are not limited to, the process of executing a program or application with the intent of finding software bugs.

Software Testing can also be stated as the process of validating and verifying that a software program/application/product:

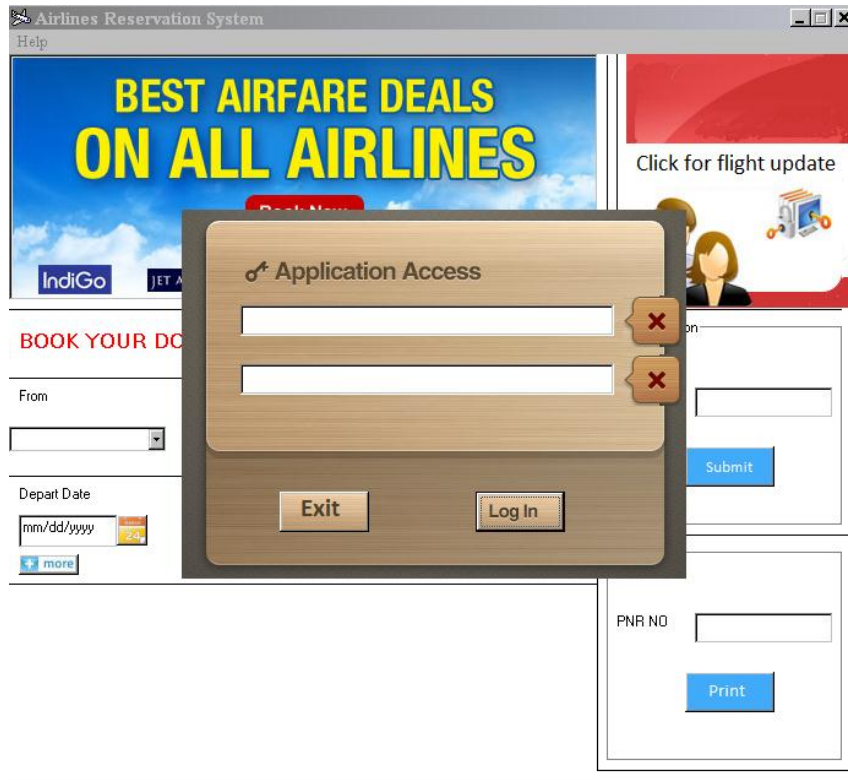
- meets the business and technical requirements that guided its design and development;
- works as expected; and
- can be implemented with the same characteristics

Software Testing, depending on the testing method employed can be implemented at any time in the development process. However, most of the test effort occurs after the requirements have been defined and the coding process has been completed. Different software development models will focus the test effort at different points in the development process. In a more traditional model, most of the test effort occurs after the requirements have been defined and the coding process has been completed. Newer development models, such as Agile or XP, often employ test driven development and place an increased portion of the testing up front in the development process, in the hands of the developer.

3.2.1 Login Form

Test Case: Value of the Login id and Password should be correct and cannot be empty

Output :



Permissible Input: The values entered should be correct, valid and no fields must be left blank

3.2.2 Main Form

Test Case: Value of the source city, destination city, cabin, departure date should be correct and cannot be empty

Output :

The screenshot shows a web application titled "Airlines Reservation System". The main banner features the text "BEST AIRFARE DEALS ON ALL AIRLINES" with a "Book Now" button and logos for IndiGo, Jet Airways, Air India, SpiceJet, and Go. Below the banner, the "BOOK YOUR DOMESTIC FLIGHT" section contains input fields for "From" and "To" (both marked as required), a "Cabin/Class" dropdown with radio buttons for "Economy" and "Business", and a "Depart Date" field (marked as required) with a calendar icon showing "24". A "Search" button is positioned to the right of the date field. On the right side of the form, there are two sections: "cancellation" with a "PNR NO" field (marked as required) and a "Submit" button, and "Print Ticket" with a "PNR NO" field (marked as required) and a "Print" button. A "Help" link is located in the top left corner of the application window.

Permissible Input: The values entered should be correct, valid and no fields must be left blank

3.2.3 Customer Information Form

Test Case: All the values in this form should be correct and cannot be empty

Output :

The screenshot shows a web browser window titled "Customer Information". Inside the window, there is a "Back" button at the top left. Below it, the form is titled "Customer Information". The form contains several input fields, each with a red "* required" label above it. The fields are: Title* (a dropdown menu), First Name* (a text box), Last Name* (a text box), Date Of Birth (three separate dropdown menus for day, month, and year), and Mobile No* (a text box). Below these, there are two text boxes for Address-Line 1* and Address-Line 2. Further down, there are four text boxes for City*, State*, Country*, and Pin Code*, each with a red "* required" label above it. At the bottom right of the form, there is a "BOOK NOW" button with a right-pointing arrow.

Permissible Input: The values entered should be correct, valid and no fields must be left blank

Chapter-4: Scope of Improvement, Summary and Conclusions

4.1 Objectives of the project

The various objectives of AIRLINE RESERVATION SYSTEM that have been achieved through this project are as follows:

- Simple to use, easy to understand
- Allows for easy search for the flight, Cancellation of ticket.
- Customer information is kept safe.
- Less time, efforts and resource consuming.
- To handle the most complex and challenging tasks.
- Database Treeview make easier search
- Reprint Ticket Option at the time of loss/theft

4.2 Scope of Improvement

There is always room for improvements, and the system we created can also be improved to some extent. There are some additional functionalities or tasks that can be added to our system as an improvement. These functionalities can be:

- System can be altered to support the searching of indirect flights
- The system can be further enhanced with a seat reservation available. It is to fulfill passengers request to sit where they prefer. They are allowed to choose their seat whether near to window's seat or in the middle.
- System can be altered to support booking ticket for more the one passenger
- System can be altered to support concession benefits or discounts allowed to customers.

4.3 Limitations

- One of the limitations of the software is the system only supports for domestic flight. Domestic flight means it only handles local flights (within India). This system is unable to support huge international flights for all countries.
- The system does not provide any feature to for passenger to change their reservation directly. Sometimes passengers might be frustrated to cancel their reservation and make a new one. Therefore, passengers are also advised to confirm their reservations before making any flights reservation