Bahria University,

Karachi Campus



COURSE: Computer Programming

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**PROJECT NAME:**

AIRLINE RESERVATION SYSTEM

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Signed Remarks: Score:

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**BACKGROUND**

The World Wide Web has turned out to be massively well known throughout the most recent four years,

and at present, the vast majority of the airlines have made arrangement for online reservation of their flights. The Internet has turned into a noteworthy asset for individuals searching for reserving a spot online without the issue of meeting travel specialists by executing an online reservation system.

As the innovation advancements are immediately created including mobile innovation, a web application

for reservation services can upgrade people's life, make it less complex. This looks into presents a reservation system for airline organizations to rearrange the way toward booking a flight.

**INTRODUCTION**

Airline Reservation System will hold flight schedules and its fare tariffs, passenger reservations and ticket records. It saves time as it allows online procedure as users no longer to wait in a queue to book the flights. It is automatically generated by the server. Admin is the main authority who can do addition, deletion, and modification of flights if required. The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. The database connectivity is planned using the “SQL Connection” methodology. The standards of security and data protective mechanism have been given a big choice for proper usage.

**EXISTING SYSTEM**

In few countries if a person wants to book a flight ticket, he uses to follow one of these things:

* Manually goes to the Airport and book his ticket.
* Downloading the ticket form as paper document, filling it manually and submitting it at Airport.
* Fill the Ticket form on system and get the print out as paper documents to submit it at Airport.
* Booking the Ticket at some particular registered ticket counters in online.

Even above approaches make a ticket booking.

Passenger may not have much freedom over this approach. Hence the Passenger may or may not be satisfied with this approach as it includes manual intervention like travelling to Airport for booking his ticket.

**PROPOSED SYSTEM**

The Proposed system ensures complete freedom for Admins, where admin at his own system can login and can book his ticket. Our proposed system allows admins to book the tickets, view timings and cancel their tickets.

**OBJECTIVES**

An airline’s inventory contains all flights with their available seats. The inventory of an airline service is generally divided into three category of classes (e.g. First, Business or Economy class) and each category is having seats up to 26 bookings, along with prices and booking conditions. Inventory data is imported and maintained through a Schedule Distribution System over standardized interfaces.

The Main Objectives of the Airline Reservation System are:

* To develop a system that has good management of data along with integrity and minimizing redundancy.
* To develop a system that will be user friendly in all possible ways.
* To provide better customer support for passengers.

**PROBLEM DEFINITION**

Normally a person wants to reserve his ticket and he has to contact at nearest Overseas Travels

branch. The Airline Reservation System provides an interface to schedule flights and

reservations for an airline through internet. Its responsibility is to keep track of system users,

customers, Airbus information, flight information and cancellation.

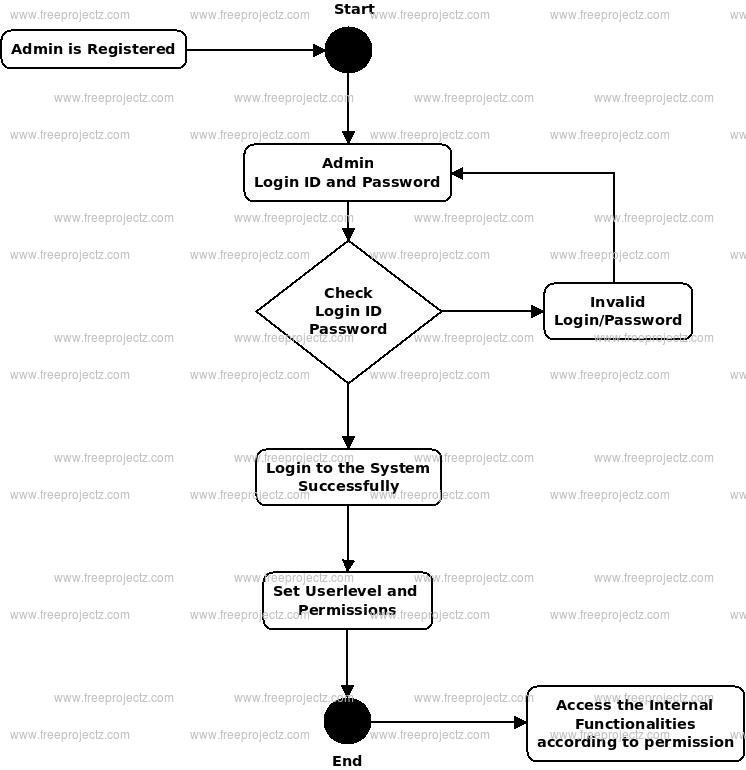
**MODULE DISTRIBUTION**

**MODULE 1: SIGN IN / SIGN UP DETAILS**

Inthis module, the user signs into his account by entering his username and password and if he/she

does not have an account he/she should first sign up his/her credentials and get a password and

username to enter the next step.

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**MODULE 2: FLIGHT DETAILS**

This module is used to view the flight details with

ease and it tends the passenger to book tickets

without much difficulty.

**MODULE 3: ADD, UPDATE OR DELETE**

This module is used to add another flight, update your current flights, and delete the flight that you

don’t want to pursue your current account.

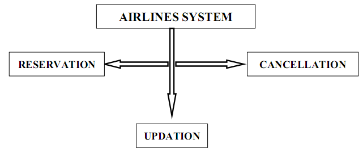
**MODULE 4: BOOK TICKET**

This module is used to book the ticket on the flights. A ticket can be booked just by entering the ID

and departure and arrival time and city.

**MODULE 5: EXIT**

This module is used to exit from the reservation form.



**PLAN AND SCOPE OF THE PROJECT**

Airline Reservation System is one the modifications that were carried out in the Passenger

Service System so that the working and availability of Service area can be broadened. On one

hand, it helps the admins and on the other, it also makes the life of the airline service

companies easier and if there is any change in the fight due to some reason the admins are able

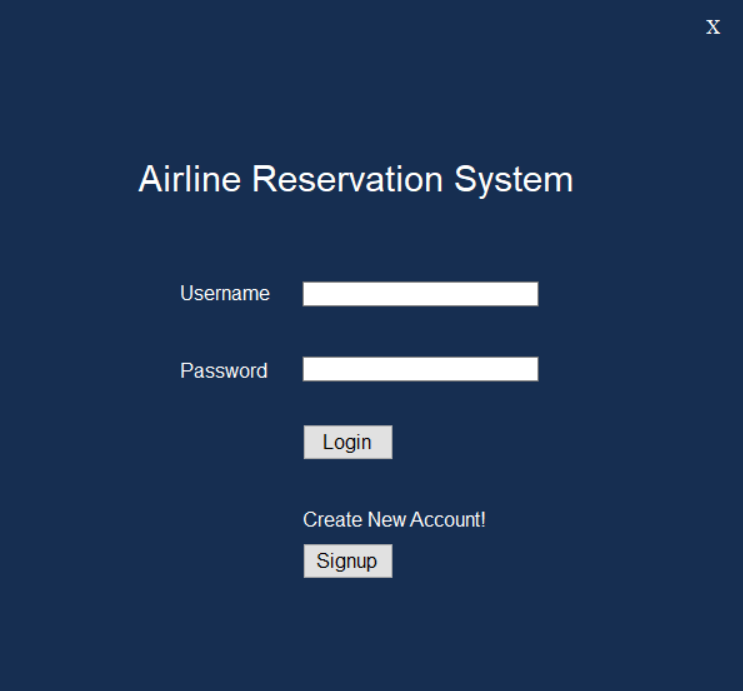
to change, update or cancel their flights.

**FACTORS TOWARDS SYSTEM DEVELOPMENT**

A few factors that direct us to develop a new system are given below -:

* Faster System
* Accuracy
* Reliability
* Informative
* Reservations

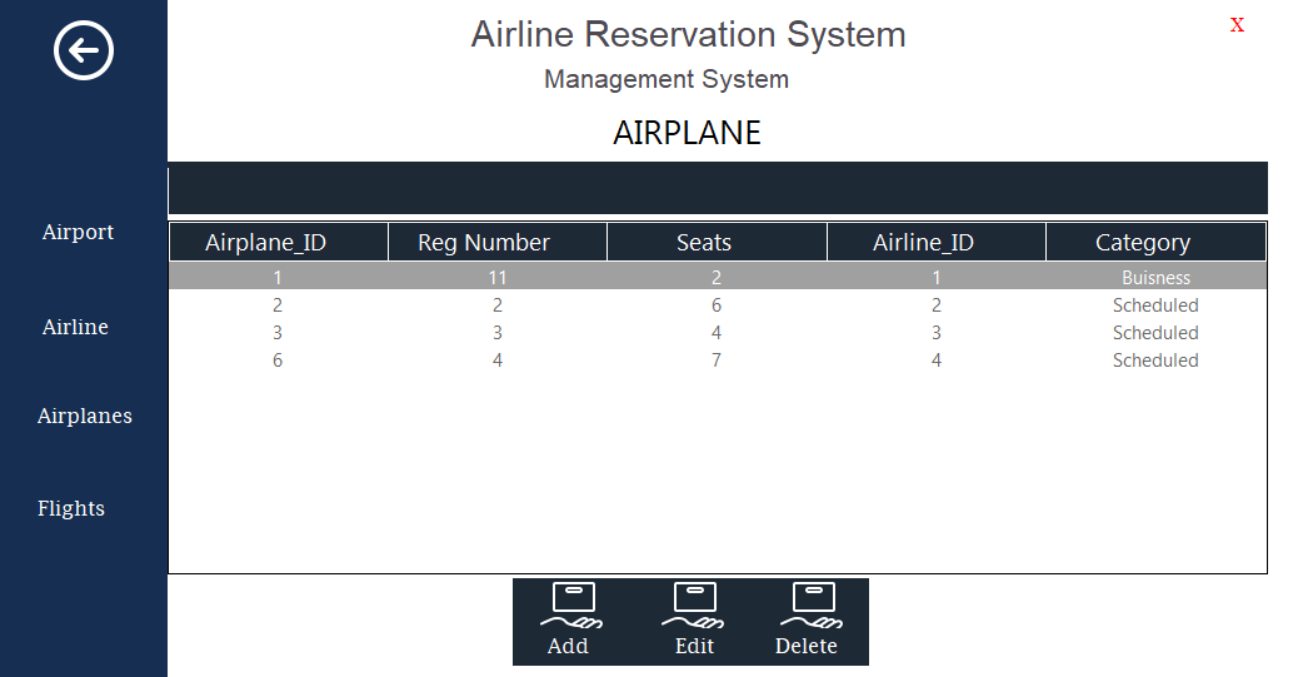
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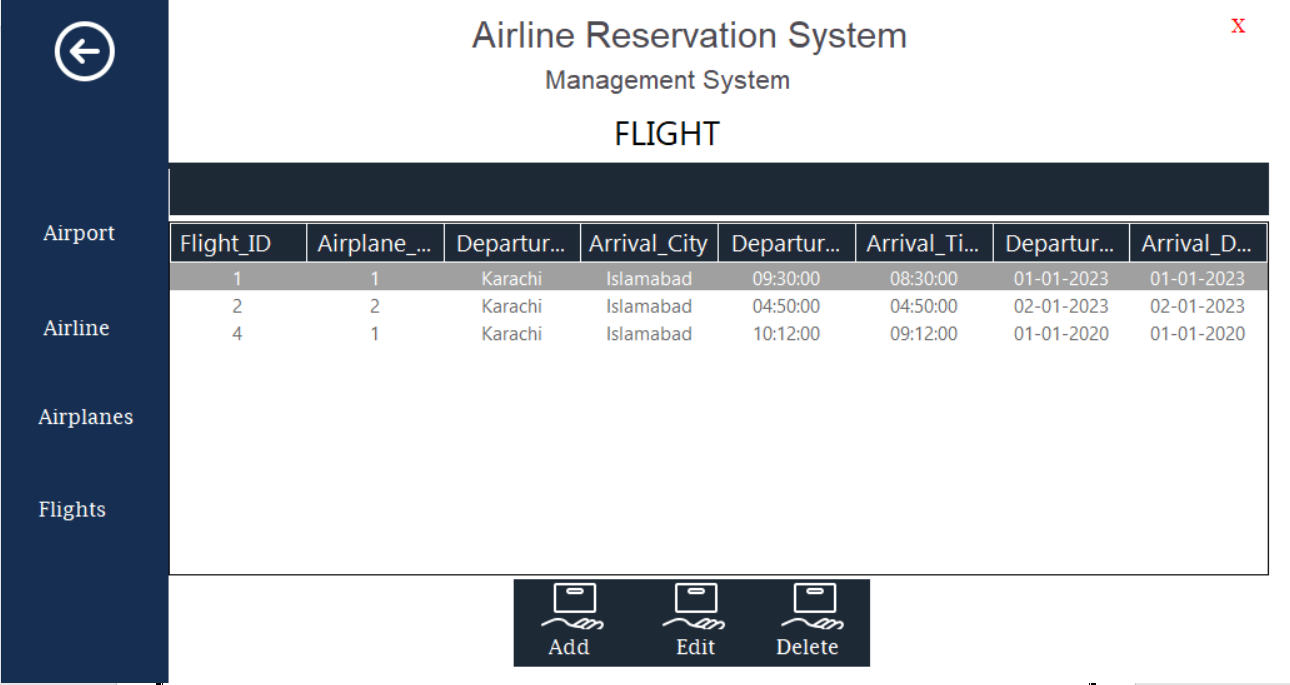


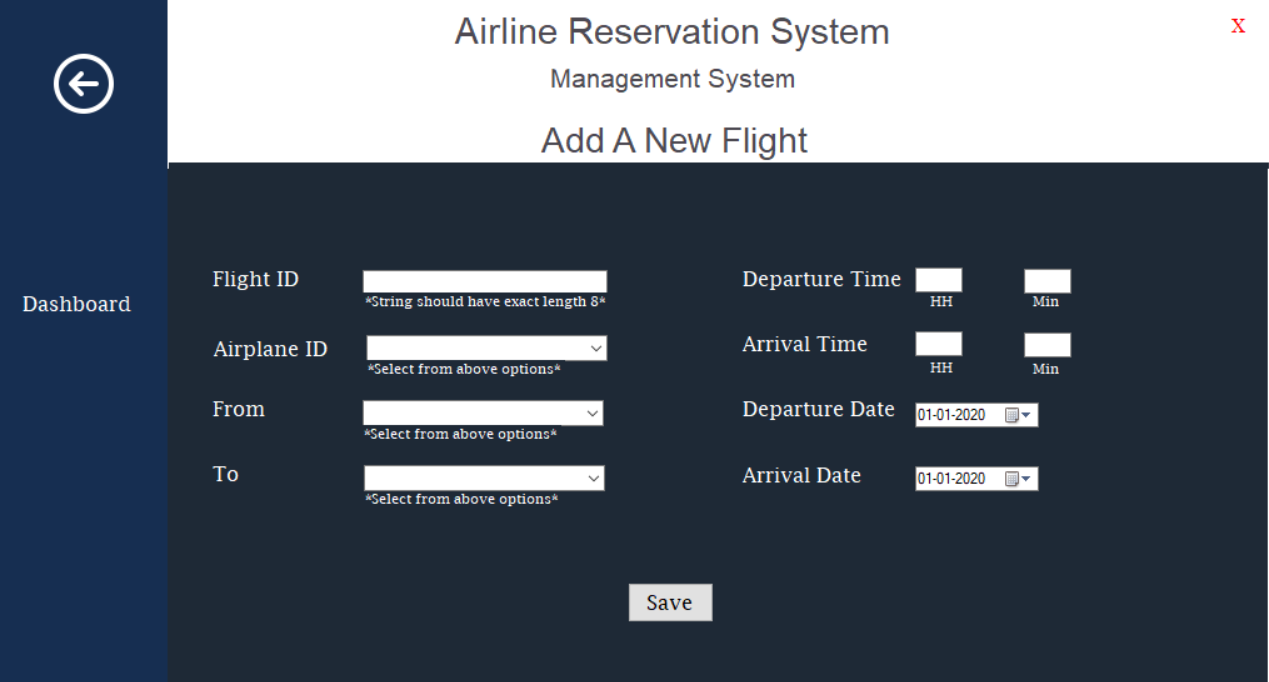


Timeline

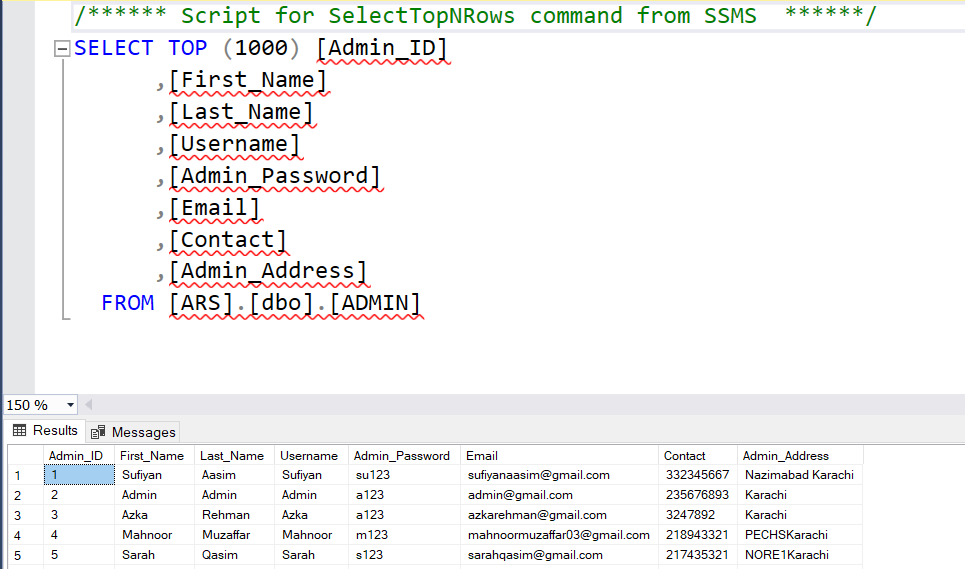
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**DATABASE USING SQL (STRUCTURAL QUERY LANGUAGE)**



**CODE**

**Sign In**

private void logBtn\_Click(object sender, EventArgs e)

{

con.Open();

string user, pass;

user = namBox.Text;

pass = passBox.Text;

string logQuery = "select \* from Admintemp where Username = @id and Password= @pin";

SqlCommand logCmd = new SqlCommand(logQuery, con);

logCmd.Parameters.AddWithValue("@id", user);

logCmd.Parameters.AddWithValue("@pin", pass);

SqlDataAdapter LogAdpater = new SqlDataAdapter(logCmd);

DataSet LogSet = new DataSet();

LogAdpater.Fill(LogSet);

if ((LogSet.Tables[0].Rows.Count) > 0)

{

new Dashboard().Show();

this.Hide();

}

else

{

MessageBox.Show("Credientials are incorrect. Try Again :)");

namBox.Text = "";

passBox.Text = "";

}

con.Close();

}

private void exitBtn\_Click(object sender, EventArgs e)

{

Application.Exit();

}

private void button2\_Click(object sender, EventArgs e)

{

new Form6().Show();

this.Hide();

}

**Sign Up**

private void button1\_Click(object sender, EventArgs e)

{

string firstName = firstNameBox.Text;

string lastName = lastNameBox.Text;

string adminID = adminBox.Text;

string userName = namBox.Text;

string password = passBox.Text;

string email = emailBox.Text;

string contact = contactBox.Text;

string address = addressBox.Text;

con.Open();

string firstQuery = "INSERT INTO ADMIN(First\_Name, Last\_Name, Admin\_ID, Username, Admin\_Password, Email, Contact, Admin\_Address ) values(@a, @b, @c, @d, @e, @f, @g, @h)";

SqlCommand cmd = new SqlCommand(firstQuery, con);

cmd.Parameters.AddWithValue("@a", firstName);

cmd.Parameters.AddWithValue("@b", lastName);

cmd.Parameters.AddWithValue("@c", adminID);

cmd.Parameters.AddWithValue("@d", userName);

cmd.Parameters.AddWithValue("@e", password);

cmd.Parameters.AddWithValue("@f", email);

cmd.Parameters.AddWithValue("@g", contact);

cmd.Parameters.AddWithValue("@h", address);

cmd.ExecuteNonQuery();

con.Close();

new Form5().Show();

this.Hide();

}}

**Aiport:**

private void deleteButtonCon\_Click(object sender, EventArgs e)

{

string A\_ID = airportID.Text;

string A\_Name = airportName.Text;

string A\_City = city.Text;

string A\_Country = country.Text;

con.Open();

string firstQuery = "INSERT INTO AIRPORT(Airport\_ID, Airport\_Name, City, Country) values(@id, @name, @city, @country)";

SqlCommand cmd = new SqlCommand(firstQuery, con);

cmd.Parameters.AddWithValue("@name", A\_Name);

cmd.Parameters.AddWithValue("@id", A\_ID);

cmd.Parameters.AddWithValue("@city", A\_City);

cmd.Parameters.AddWithValue("@country", A\_Country);

cmd.ExecuteNonQuery();

MessageBox.Show("Your Data has been saved😊");

airportID.Text = "";

airportName.Text = "";

city.Text = "";

country.Text = "";

con.Close();

}

**Airline:**

public void save()

{

string A\_ID = airlineID.Text;

string A\_Name = airlineName.Text;

string A\_Crafts = crafts.Text;

con.Open();

string firstQuery = "INSERT INTO Airline(Airline\_ID, Airline\_Name, Airplanes) values(@id, @name, @crft)";

SqlCommand cmd = new SqlCommand(firstQuery, con);

cmd.Parameters.AddWithValue("@name", A\_Name);

cmd.Parameters.AddWithValue("@id", A\_ID);

cmd.Parameters.AddWithValue("@crft", A\_Crafts);

cmd.ExecuteNonQuery();

this.msgBox.Text = "Your Data has been saved😊";

airlineID.Text = "";

airlineName.Text = "";

crafts.Text = "";

con.Close();

}

**Airplane:**

private void saveButton\_Click(object sender, EventArgs e)

{

string A\_ID = airplaneID.Text;

string A\_rn = regNumber.Text;

string A\_seats = seats.Text;

string A\_cat = category.Text;

string A\_AID = airlineIDBox.Text;

con.Open();

string firstQuery = "INSERT INTO Airplane(Airplane\_ID, Airline\_ID, RegNumber, Seats, Category) values(@id, @airlineID, @rg, @seats, @cat)";

SqlCommand cmd = new SqlCommand(firstQuery, con);

cmd.Parameters.AddWithValue("@rg", A\_rn);

cmd.Parameters.AddWithValue("@id", A\_ID);

cmd.Parameters.AddWithValue("@seats", A\_seats);

cmd.Parameters.AddWithValue("@cat", A\_cat);

cmd.Parameters.AddWithValue("@airlineID", A\_AID);

cmd.ExecuteNonQuery();

this.msgBox.Text = "Your Data has been saved😊";

airplaneID.Text = "";

regNumber.Text = "";

seats.Text ="";

category.Text = "";

airlineIDBox.Text = "";

con.Close();

}

**CONCLUSION AND FUTURE ENHANCEMENTS**

As a future enhancement, we have decided to further enhance 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. In Conclusion, the main purpose of this software is to reduce the

manual errors involved in the airline reservation process and make it convenient for the customers

to book the flights as when they require such that they can utilize this software to make reservations,

modify reservations or cancel a particular reservation.

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