# AIRLINE RESERVATION SYSTEM

**1.0 PROBLEM DEFINITION**

Ticket reservation system for airlines has to be developed. The system developed should contain the following features

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2. Search for information about the flight by means of flight number and destination

3. While displaying information about the flight it has to provide availability of seats.

4. While reserving tickets the system obtain following information from the user

Passenger Name, Sex, Age, Address.

Credit Card Number, Bank Name.

Flight number, Flight name, Date of Journey and number of tickets to be booked.

5. Based on the availability of tickets, the ticket has to be issued. The ticket issued should contain the following information –ticket number, flight no, flight name, date of journey, number of passengers, sex, age and departure time.

6. Cancellation of booked tickets should be available.

**2.0 SYSTEM REQUIREMENT SPECIFICATION**

# 2.1 INTRODUCTION

## 2.1.1 Purpose

2.1.1.1 The purpose of this SRS is to describe the requirements involved in developing an Airline Reservation system (ARS).

2.1.1.2 The intended audience is any person who wants to reserve or cancel tickets or to check the availability of Airline tickets.

## 2.1.2 Scope

2.1.2.1 The product is titled Airline Reservation system (ARS).

2.1.2.2 The product will perform the following tasks

2.1.2.2.1 The software that is being developed can be used to check the availability of the flight tickets for the specified flight, destination and date of journey

2.1.2.2.2 If the tickets are available to the user’s needs and specification, then the software provide a facility to book the tickets.

2.1.2.2.3 If the passengers want to cancel the tickets, he can use the cancellation module of the Airline Reservation System.

## 2.1.3 Definitions, Acronyms and Abbreviations

## 2.1.4 References

## 2.1.5 Overview

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2.2 THE OVERALL DESCRIPTION

## 2.2.1 Product perspective

2.2.1.1 Hardware interfaces

2.2.1.2 Software interfaces

2.2.1.2.1 Back End:

2.2.1.2.2 Front End:

* + - 1. Operations

## 2.2.2 Product Functions

## 2.2.2.1 Viewing Flight Details: The user must have the access up-to-date information about the flights including

## 2.2.2.1.1Flight number

## 2.2.2.1.2 Flight Name

## 2.2.2.1.3 Flight route (Start and Destination stations)

## 2.2.2.1.4 Flight timings

## 2.2.2.1.5 Seat availability.

## 2.2.2.2 Reserving Tickets: The user must be able to reserve tickets after selecting

## 2.2.2.2.1Flight number

## 2.2.2.2.2 Flight Route

## 2.2.2.3 Canceling Tickets: The user must be able to cancel tickets that he has earlier reserved by quoting the ticket number, credit card number and bank name.

## 2.2.3 User characteristics

2.2.3.1 The intended users of this software need not have specific knowledge as to what is the internal operation of the system. Thus the end user is at a high level of abstraction that allows easier, faster operation and reduces the knowledge requirement of end user.

2.2.3.2 The Product is absolutely user friendly, so the intended users can be the naïve users.

2.2.3.3 The product does not expect the user to possess any technical background. Any person who knows to use the mouse and the keyboard can successfully use this product.

## 2.2.4 Constraints

2.2.4.1 At the time of reservation, each user is provided a unique ticket number that must be used for further operation like cancellation. Hence the user is required to remember or store this number carefully.

2.3 SPECIFIC REQUIREMENTS

## 2.3.1 Logical Database Requirements

2.3.1.1 The system should contain databases that include all necessary information for the product to function according to the requirements. These include relations such as flight details, reservation details, and cancellation details.

2.3.1.2 The user details refer to the information such as flight number and name, start and destination stations, seat availability.

2.3.1.3 Reservation details refer to personal information that is obtained from the user.

2.3.1.4 At the time of reservation, the passenger is provided a unique ticket no that could be used at the time of cancellation.

2.3.1.5 While displaying any information about the flight it has to provide the following information

Flight no and name

Availability of seats for the particular flight

The flight timing

The passenger personal details should be obtained for reserving the tickets.

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2.4 FRONT – END DESCRIPTION

The front-end for the Airline Reservation system (ARS) is designed using Microsoft Visual Basic 6.0. The front-end contains a user- friendly interface. The first form contains a welcome screen that provides an option for the user to select one of the following;

Enquiry

Reservation

Booking details

Cancellation

In the Enquiry form the user can get details of the flight by means of either flight name destination or date 0of journey. In the reservation form, there can be book details by entering the personal details. The ticket is displayed with details about the flight name and number, number of passengers, ticket number, sex and age. The cancellation form helps the user to cancel a ticket, which he had booked earlier.

2.5 BACK – END DESCRIPTION

The Airline Reservation system consists of two tables. One contains the flight details such as the flight name, flight number, destination, date of journey and seats available in each class that is referred to during enquiry. The other table has the passenger details such as name, age, sex, credit card number, and bank name. This table is referred to at the time of reservation or cancellation.

2.6 DATA STRUCTURES

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## 2.7 DATA FLOW DIAGRAM

3.0 TESTING

4.0 SAMPLE FORMS

MAIN MENU FORM

TICKET AVAILABILITY FORM

RESERVATION FORM

CANCELLATION FORM

5.0 RESULT

Thus the online Airline Reservations System was implemented using the specified front end and back end tools.