

# RAILWAY RESERVATION SYSTEM

## **1.0 PROBLEM DEFINITION :-**

Ticket reservation system for railway department has to be developed.

The system developed should contain the following features

1. The system should contain the following features
2. Search for information about the train by means of train number and destination
3. While displaying information about the train it has to provide availability of seats in different classes (first class , second class, a.c)
4. While reserving tickets the system obtain following information from the user Passenger Name, Sex, Age, Address. Credit Card Number, Bank Name. Class through passenger is going to travel i.e first class/second class/A.C Train number, Train 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 –PNR number, train no, train name, date of journey, class, number of passengers, sex, age and departure time.
6. Cancellation of booked tickets should be available.

## **2.0 SRS DOCUMENT FOR RAILWAY RESERVATION SYSTEM :-**

### **2.1 INTRODUCTION :-**

#### 2.1.1 Purpose

2.1.1.1 The purpose of this SRS is to describe the requirements involved in developing a Railway Reservation system (RRS).

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

#### 2.1.2 Scope

2.1.2.1 The product is titled Railway Reservation system (RRS).

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 train tickets for the specified train, destination and date of journey

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

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

### **2.2 THE OVERALL DESCRIPTION :-**

#### 2.2.1 Product perspective

##### 2.2.1.1 Hardware interfaces

2.2.1.1.1 Hard disk: The database connectivity requires a hardware configuration with a fast database system running on high rpm hard-disk permitting complete data redundancy and back-up systems to support the primary goal of reliability.

2.2.1.1.2 The system must interface with the standard output device, keyboard and mouse to interact with this software.

##### 2.2.1.2 Software interfaces

2.2.1.2.1 Back End: Oracle

2.2.1.2.2 Front End: Microsoft Visual Basic 6.0

##### 2.2.1.3 Operations

2.2.1.3.1 The user mode enables the end-users to do the end user operations like checking the availability, reserving and canceling of train tickets.

## 2.2.2 Product Functions

### 2.2.2.1 Viewing Train Details

The user must have the access up-to-date information about the trains including

#### 2.2.2.1.1 Train number

#### 2.2.2.1.2 Train Name

#### 2.2.2.1.3 Train route(Start and Destination stations)

#### 2.2.2.1.4 Train timings

#### 2.2.2.1.5 Seat availability in each class.

### 2.2.2.2 Reserving Tickets

The user must be able to reserve tickets after selecting

#### 2.2.2.2.1 Train number

#### 2.2.2.2.2 Train Name

### 2.2.2.3 Canceling Tickets

The user must be able to cancel tickets that he has earlier reserved by quoting the PNR 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 naive 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 PNR 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 train details, reservation details, and cancellation details.

2.3.1.2 The user details refer to the information such as train 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 PNR no that could be used at the time of cancellation.

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

Train no and name

Availability of seats for the particular train

The train timing

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

## 2.4 FRONT – END DESCRIPTION :-

The front-end for the Railway Reservation system (RRS) 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

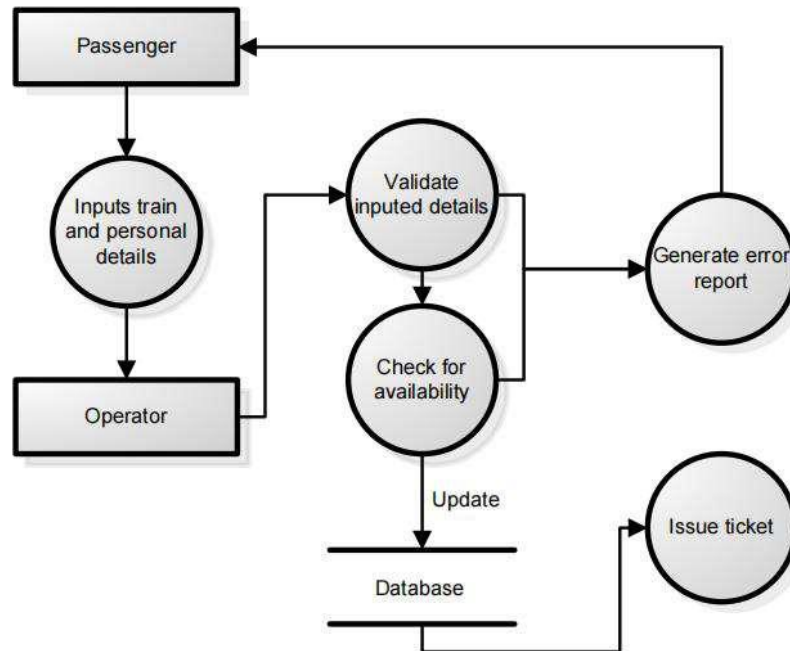
Cancellation

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

## 2.5 BACK – END DESCRIPTION :-

The Railway Reservation system consists of two tables. One contains the train details such as the train name, train 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 FLOW DIAGRAM:-



FORM NAME	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
Title	Enquiry was clicked.	Enquiry form must be displayed.	Enquiry form was displayed.	Pass
Enquiry	Train name was clicked.	Train details must be displayed.	Train details were displayed.	Pass
Reservation	Personal details were entered.	Ticket must be booked and database updated.	Ticket was booked and database was updated.	Pass
Booking Details	PNR number was entered.	Booking details must be displayed.	Booking details were displayed.	Pass
Cancellation	PNR number was entered.	Ticket must be cancelled and database must be updated.	Ticket was cancelled and database was updated.	Pass