### A PROJECT REPORT

On

## "Railway Reservation System"

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE

#### **BACHELOR OF TECHNOLOGY**

(Computer Science and Engineering)

# SUBMITTED TO DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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### **ABSTRACT**

The railway reservation system facilitates the passengers to enquiry about the trains available on the basis of source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc. The aim of case study is to design and develop a data base maintaining records of different trains, train status and passengers. This project contains introduction to the railways reservation system. It is the computerized system of reserving the seats of train seats in advance. It is mainly used for a long route. Online reservation has made the process for the reservation of seats very much easier than ever before.

In our country India, there are number of counters for the reservation of the seats and one can easily make reservations and get tickets. Railway reservation system, has described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization it better utilization of resources. Administrator of the project, with the help of a password, can enter new train record, display all train records, modify train records and delete train records. The record of train includes its number, name, source, destination, and days on which it is available, whereas record of train status includes dates for which tickets can be booked, total number of seats available, and number of seats already booked.

## **MOTIVATION**

- 1. To provide facility to passengers to enquiry about the trains available on the basis of source and destination, booking and cancellation of tickets, enquiry about the status of the booked ticket, etc.
- 2. To design and develop a data base maintaining records of different trains, train status and passengers.
- 3. Online reservation make the process for the reservation of seats very much easier than ever before.

## LITERATURE REVIEW

The system is basically concerned with the reservation and cancellation of railway tickets to the passenger. The need of this system arose because as it is the known fact that India has the largest railway network in the whole world and it is not possible to handle such a large system manually. By computerizing it, it became possible to overcome the limitations and make the system operations more efficient. The complexity in handling data and records of such a vast system got reduced and became easier by computerizing the system.

This online railway reservation system is better because it facilates the passengers to enquiry the railway availablity, reservation and cancellation of seats at ease.

## PROBLEM OBJECTIVES

- 1. Through this system, a practical approach has been taken under study to understand how online reservation system works.
- 2. This system will include all the necessary fields which are required during online reservation system.
- 3. This system will be easy to use and can be used by any person.
- 4. The basic idea behind this project is to save data in a central database which can be accessed by any authorize person to get information and saves time and burden which are being faced by their customers

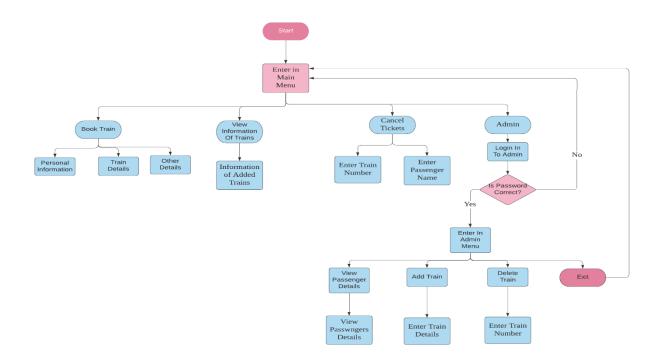
## **METHODOLOGY**

The Railway reservation system is a console based application that was written in C++ programming language. This system is a simple project that was created in Dev C++ IDE. This project is extremely beneficial for managing passengers railway reservation.

This Railway Reservation System make use of C++ classes, structures and record keeping features. This system is based on passenger record information idea. The passenger can have facilities to enquiry train availability, reservation and cancellation of seats.

#### The project have two sides:

- ADMIN Login -: In admin login, you can add numerous types of data regarding the information about trains and details by using structures.
   By switch case statements you can choose the given options.
- 2) PASSENGER Login-: Similarly in passenger module, you can add the required options by switch case method, and added strings to add multiple entries. To save the tickets we added file handlings for faster responses



## REQUIREMENTS

### Software Requirements:

C-compiler (cc, gcc, egcs, ...)

**Recommended Operating Systems** 

• Windows: 7 or newer

• MAC: OS X v10.7 or higher

• Linux: Ubuntu

### Hardware Requirements:

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above

## **REFERENCE**

#### Web References:

- www.indianrail.com
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- Gray & A; Reuter. 1995
- C in a Nutshell: the Definitive Reference 2<sup>nd</sup> Edition