

PROJECT SYNOPSIS

Title of the Project:

Railway Reservation Management System (RRMS)

Problem Definition:

Railway communication is in extensive use and passengers face huge traffic while accessing data on server. In a widely populated nation like India, communication services should be efficient and quick, making the interface easy to use.

The aim is to develop a management system using python and MySQL database to provide all railway reservation relates services: status of train, booking details, seat number, train timings, food services. Our aim is to design a program to organize railway reservations in India to help passengers in easily getting to their respective trains.

Reason for choosing the Topic:

The Railway Reservation System facilitates the passengers to enquire about the trains available on the basis of source and destination, enquire about the status of the booked ticket, etc. The aim of this project is to facilitate a software to easily manage train status, destinations, seat and etc. This project contains Introduction to the Railways

Reservation System. It is the computerized system of managing booked train tickets for passengers. In our country India, there are multiple counters for enquiry about tickets, this will help in easily navigating to their respective trains and make their experience hassle-free.

Objective:

In India, Railway is one of the most prominent sources of transportation, providing best class services all over India. Hence, communication plays a major role in providing quick and hassle-free details to passengers about their train journey. It is a hectic procedure to stand in queues at enquiry counter and retrieve information about journey.

During COVID, it is very difficult to manage social distancing at platforms and reduce infection risk. The key solution is to make these services available in user's hands. RRMS aims to make this process efficient and reliable via integrating python and MySQL database to organize this information.

Python will enable users to enter their details rapidly without making any mistakes. MySQL will express booking details in a tabular way, allowing them to view details easily and in a comfortable manner.

The main objective of the railway reservation system is to manage the booking details of train, booking, seat, ticket. The purpose of the project is to build an application program to reduce the manual work for managing the Train, booking, customer, payment. Passenger will be asked to fill train details like destination, arrival, date of journey and class. Available trains will be displayed with train number, departure and arrival time and available seats. Passenger will select the desired train and then personal details like number of passengers, name, age, preferred berth, food

options are to be filled. After confirmation, booking ticket will be displayed in tabular mode via MySQL.

The project is totally built at administrative end and thus only the administrator is guaranteed the access.

Project Requirements

Hardware Requirement:

A desktop/laptop with
X86 64-bit CPU (Intel/ AMD architecture)
4 GB Ram.
4 GB Free disk space.

Software Requirements:

Operating system-Windows 10 and higher or Mac OS
Mojave or higher.
Python 3.9 or higher
MS Word
MY SQL 8.0

Limitations:

1. It isn't a web-based project.
2. Once booked, details can't be changed.
3. Seat availability for any train may differ.
4. Other reservations need to be added manually.
5. Only available for 4 locations.