

A PROJECT REPORT ON
RAILWAY RESERVATION SYSTEM

In partial fulfillment for the degree of Third Year of Computer Engineering.
IN
COMPUTER ENGINEERING

SUBMITTED BY

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CERTIFICATE

This is to certify that requirements for the Report entitled “Railway Reservation System” have been successfully completed by the following students

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PROBLEM STATEMENT

Railway passengers frequently need to know about their ticket reservation status, ticket availability on a particular train or for a place, train arrival or departure details, special trains etc... Customer information centers at the railway stations are unable to serve such queries at peak periods So this problem was sorted by RAILWAY RESERVATION SYSTEM which provides the train timing details, reservation, billing and cancellation of tickets. In addition, it will also helps the commuters in getting support, refunds and other real time fixes.

INTRODUCTION

The Railway Reservation System facilitates the passengers to enquire about the trains available on the basis of source and destination, Booking and Cancellation of tickets, enquire about the status of the booked ticket, etc. The aim of case study is to design and develop a database maintaining the 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 advanced. It is mainly used for long route. On-line 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. Then this project contains entity relationship model diagram based on railway reservation system and introduction to relation model .There is also design of the database of the railway reservation system based on relation model. Example of some SQL queries to retrieves data from rail management database.

RELEVANCE OF SUBJECTS

Technology has transformed many aspects of life in the 21st century, including the way many of us make train reservations. For example, to make ticketing more convenient for travelers, an online reservation system helps us in booking tickets from the comfort of our homes or offices. While this is convenient for most people, it has made things particularly easier for people residing in remote locations.

The various advantages of using the online reservation system are as follows:

Convenient – You can book or cancel your tickets sitting in the comfort of your home or office.

Saves Time and Effort - You can save the time needed to travel to the railway reservation office and waiting in the queue for your turn.

Towards a greener planet – Instead of printing your ticket you can also choose to travel with the soft copy of your booked ticket in your laptop or even on your mobiles.

SCOPE OF PROJECT

Railway ticket reservation will help the passengers to book their tickets for their journey, Search train between two stations and get details of particular train Schedules including their fare details. To use this system, users should be registered and should have a valid login and password to make their reservation. Even if users who have not their valid login id password can make new registration and get their id and password as per their choice. The main objective of this login module is to keep each passengers safe which will not allowed to make fraud and make their transactions Secure. After making registration passengers have to enter the Source and destination station name and the system will able to provide the list of all available trains for particular destination and their arrival and departure time and date. Upon selecting particular train, system will able to display the number of seats available under particular coach type. To book their tickets passengers have to select coach type and total number of passengers and passengers will be provided with Choice to selecting the seat numbers as per their convenience. When all the work will be done, passengers will be provided with total fare charges and mode of payment which they want to select for making final payment.

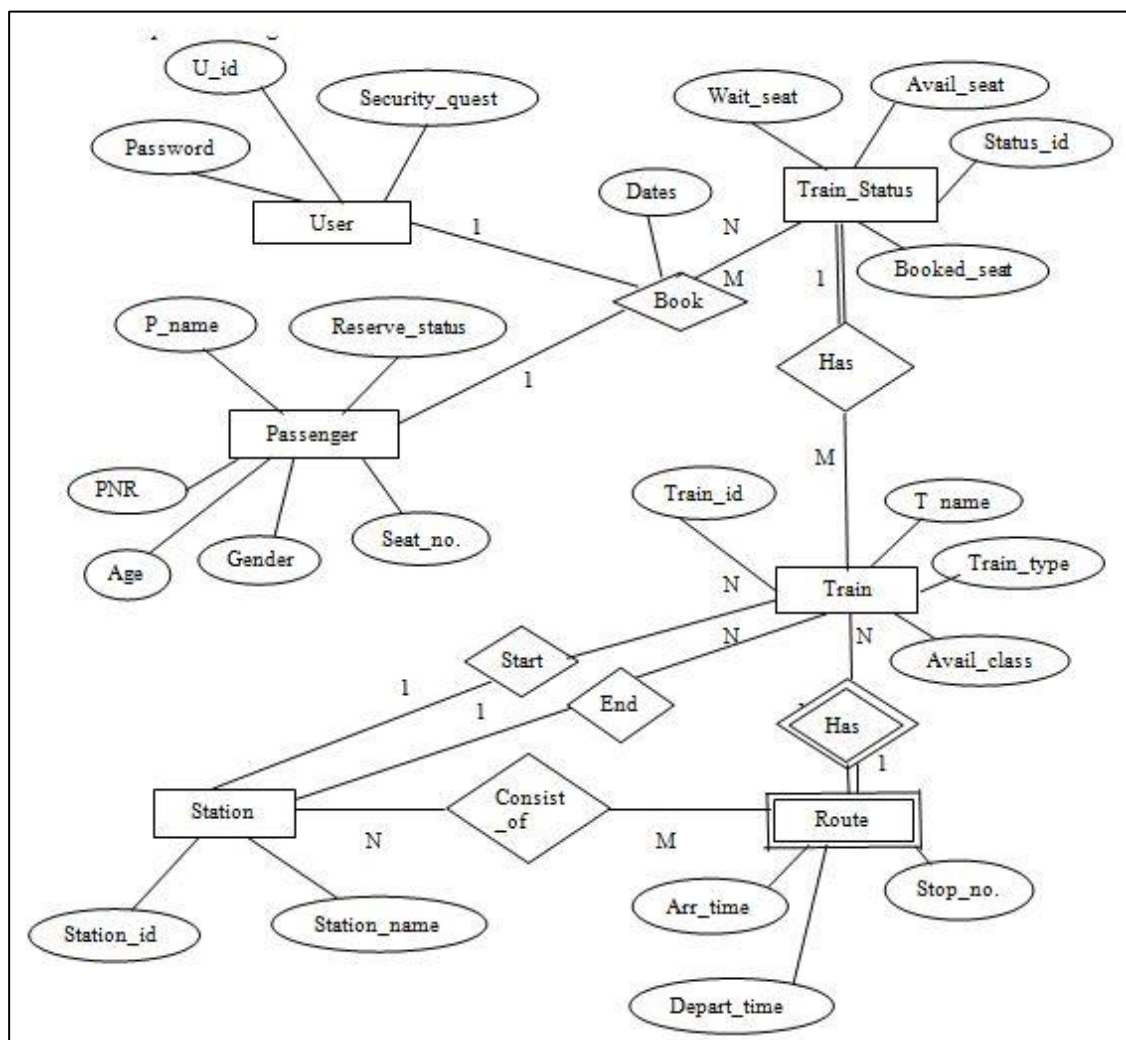
METHODOLOGY

As soon as the problem statement was provided by our mentors we started on research part of our project. Google was the resource behind the search it results in having a proper idea of what to do next.

We started working on development of front-end. For front-end of project we used languages like HTML5, Javascript, PHP and AJAX. To make front-end more attractive and user friendly we worked on CSS of system. For Back-end we have PHP and MySQL database.

Then we started to implement the code as we had small parts of codes we need to club it together and make a single unit of program after that we implemented GUI in our project this was the last step behind our project.

ER Diagram



SYSTEM REQUIREMENTS

Hardware Configuration:

Pentium IV Processor Architecture with

1. 2 GB or higher RAM
2. 80 GB Hard Disk Space

Software Configuration:

Operating System	: Windows /Linux
Design Tool	: Text Editing Application
Database	: MySQL
Language	: HTML5, PHP, JAVASCRIPT, AJAX
Additional Tools	: XAMPP

PROJECT SNAPSHOTS

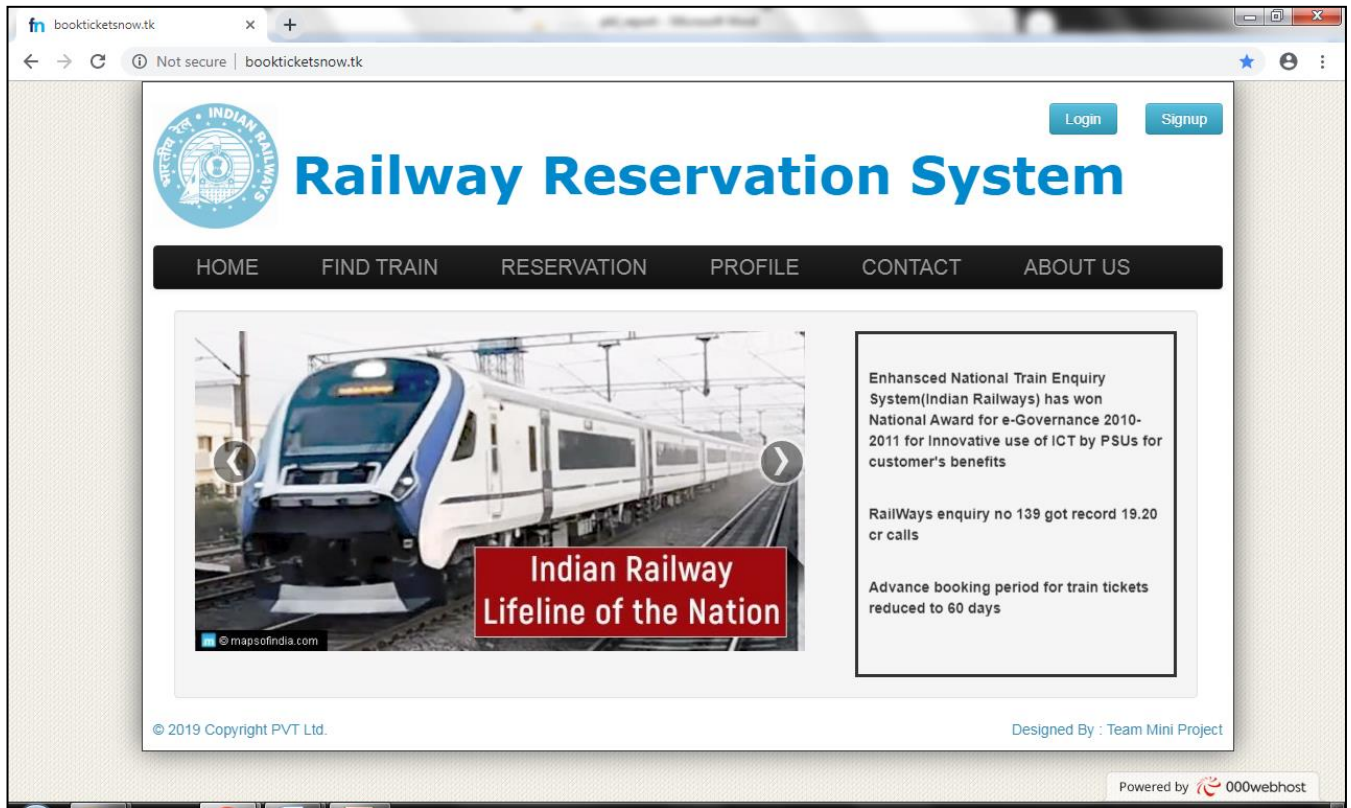


Fig 2: Homepage

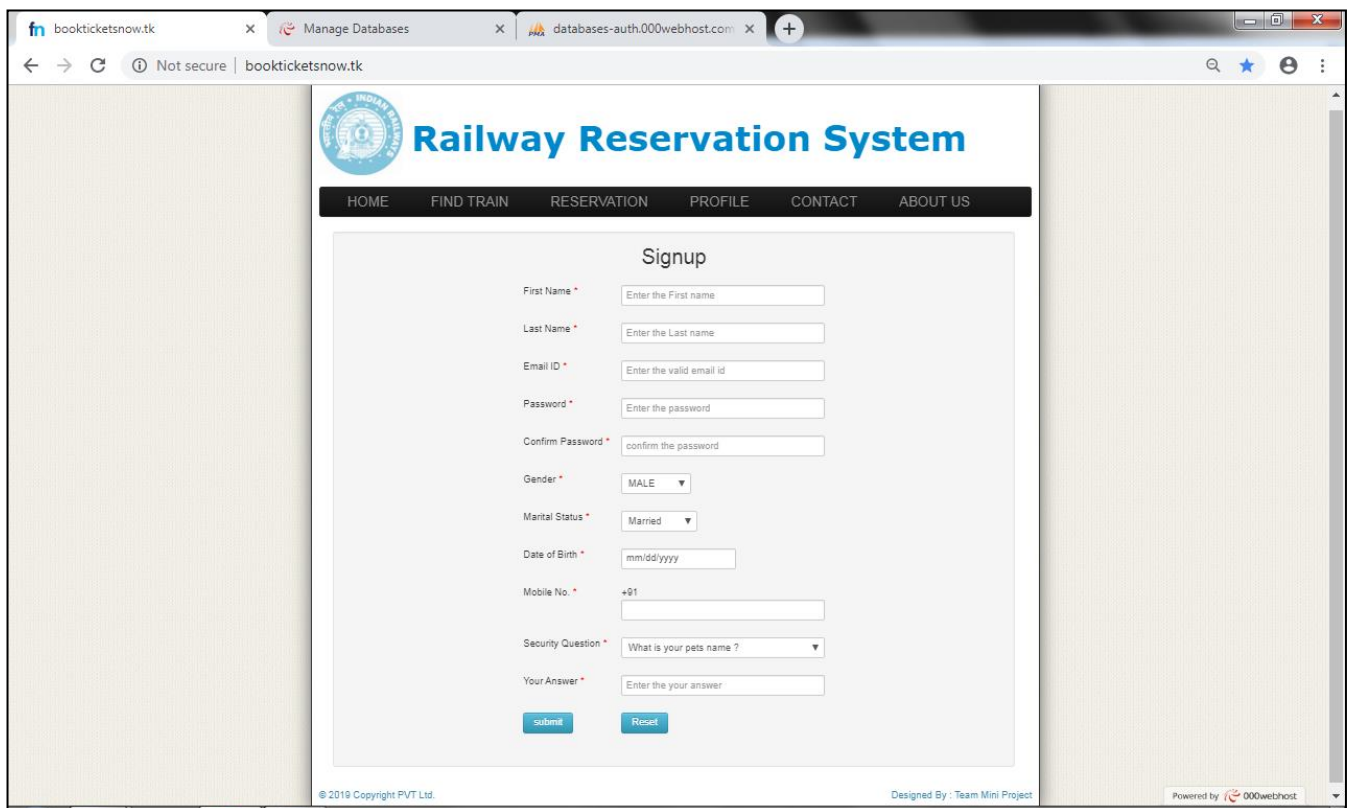


Fig 3: Signup page

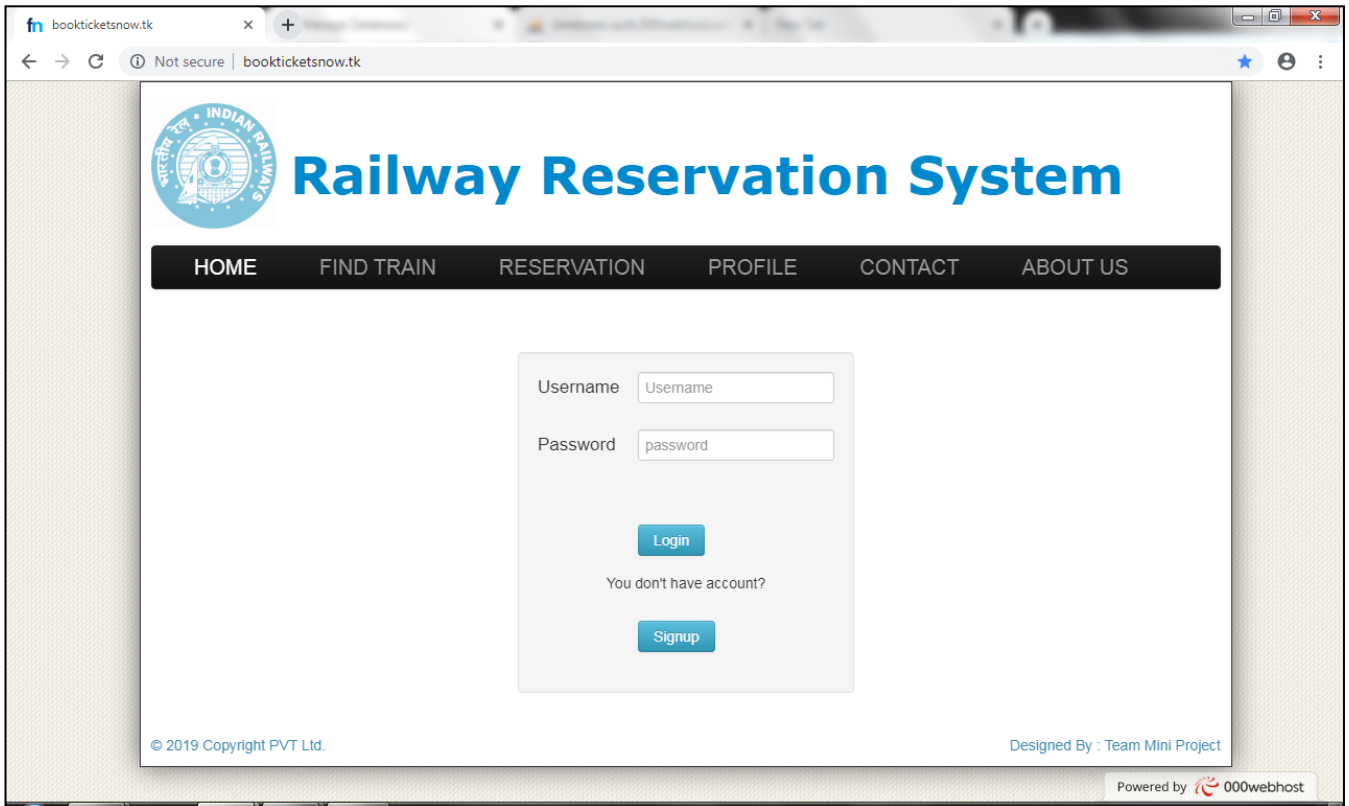


Fig 4: Login Page

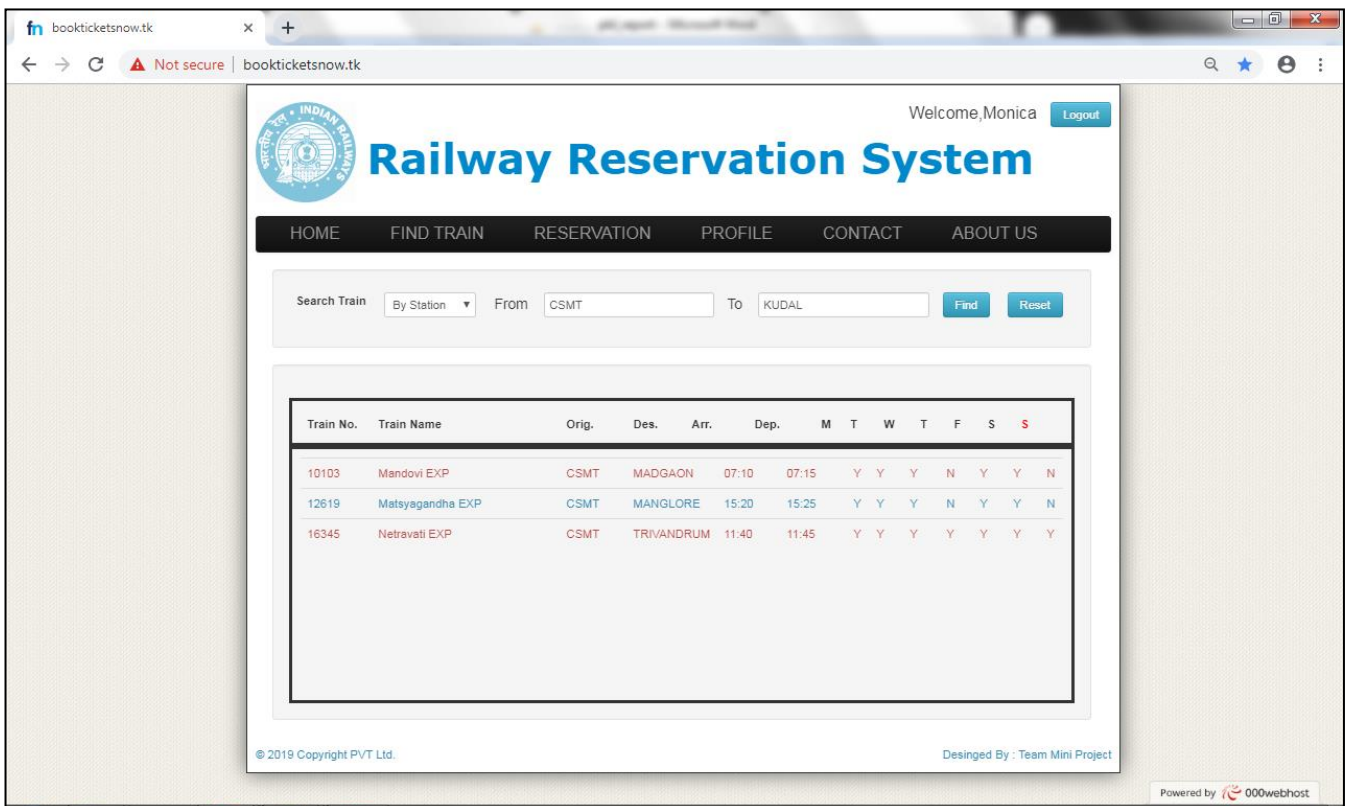


Fig 5: Find trains

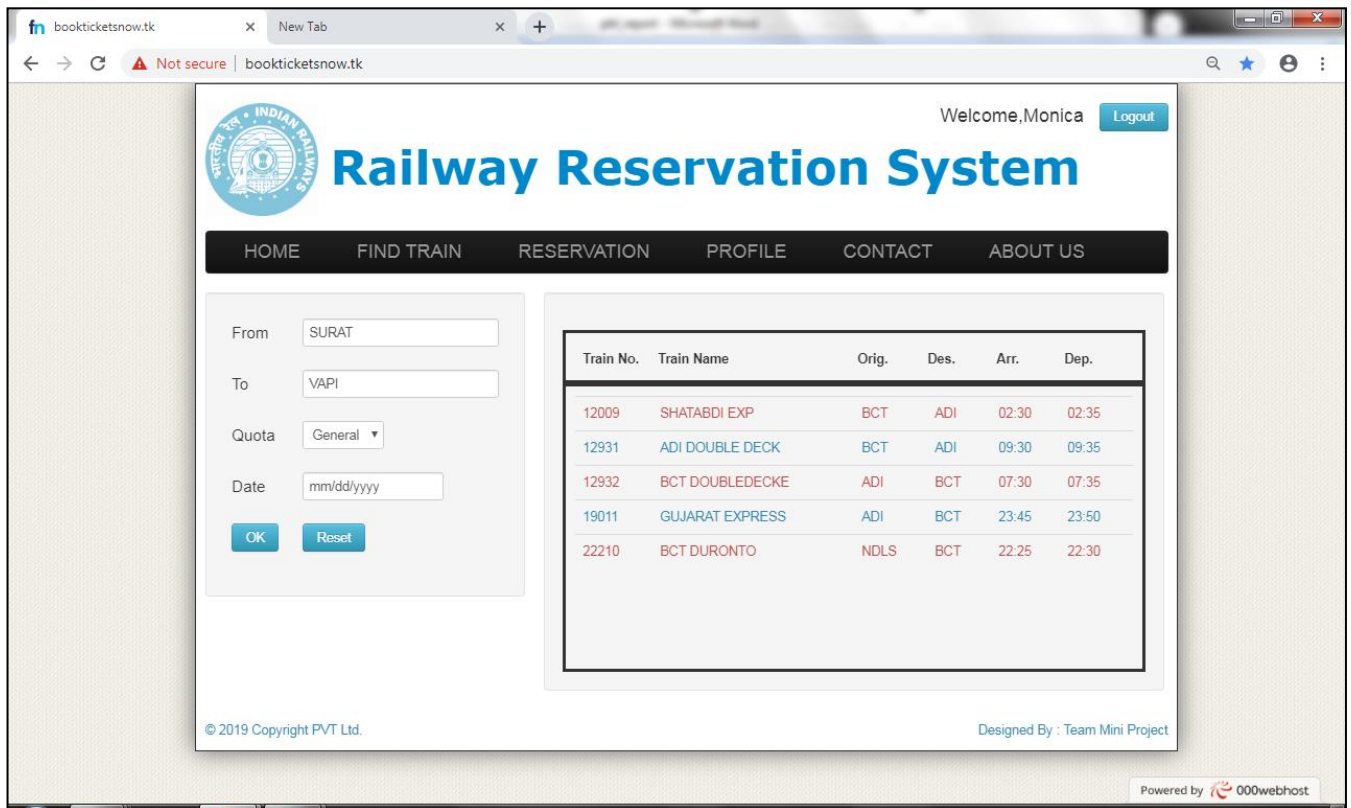


Fig 6: Reservation Page

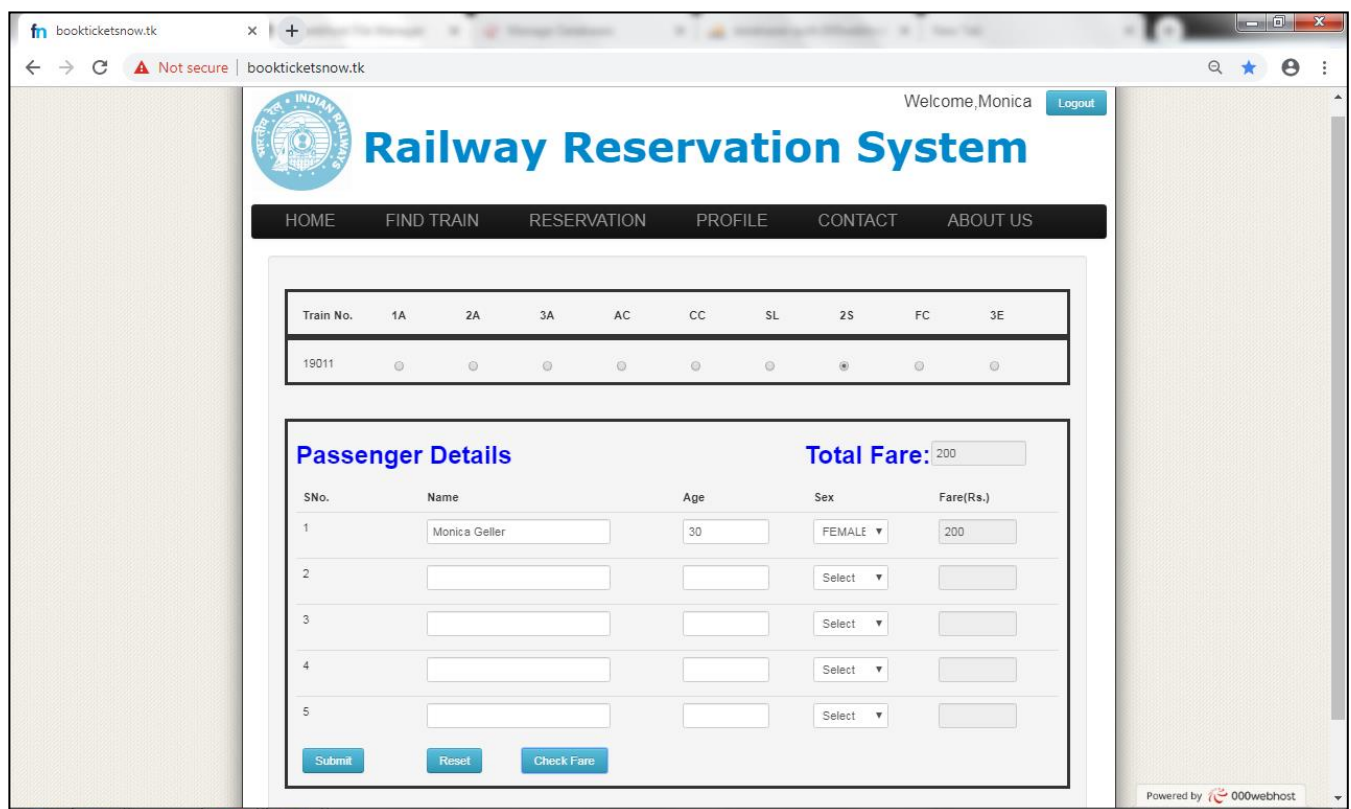


Fig 7: Book Tickets

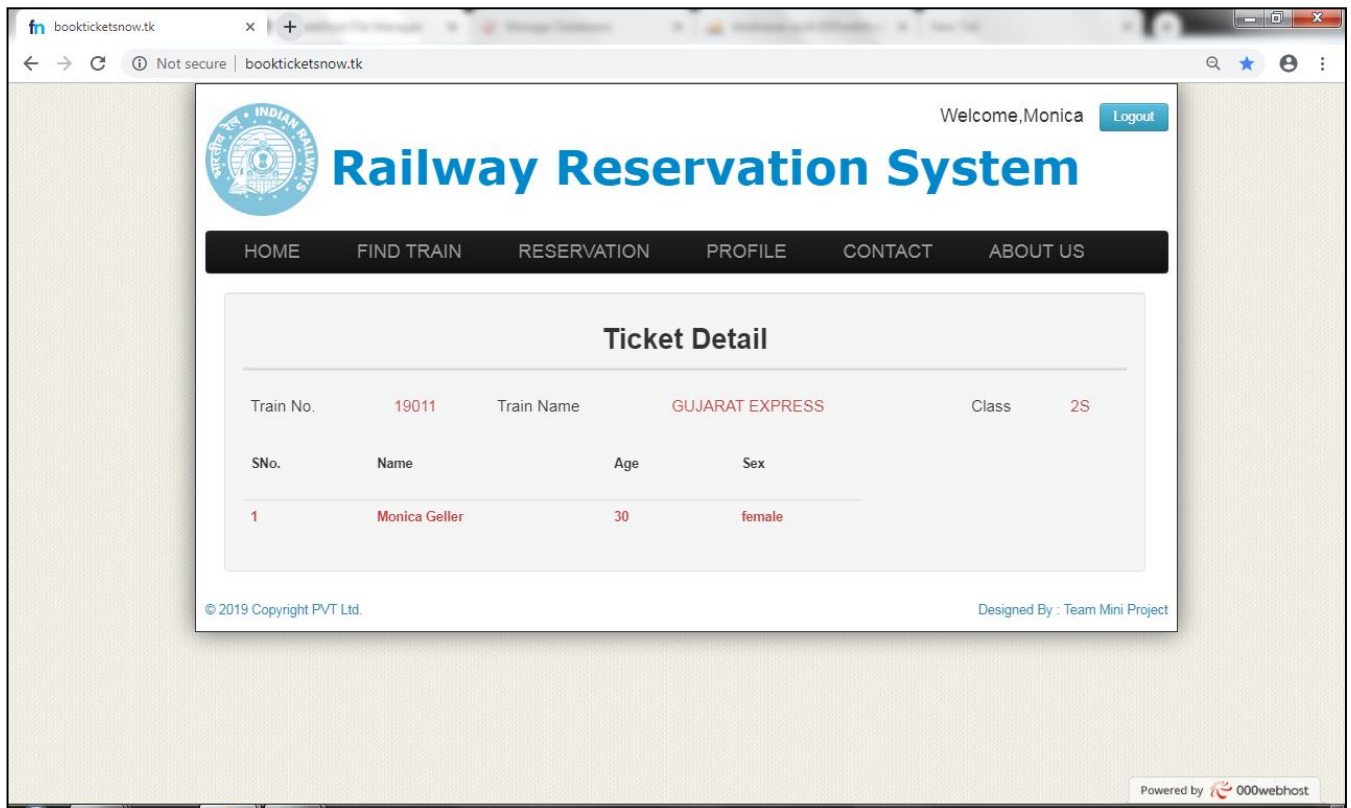


Fig 8: Ticket Details

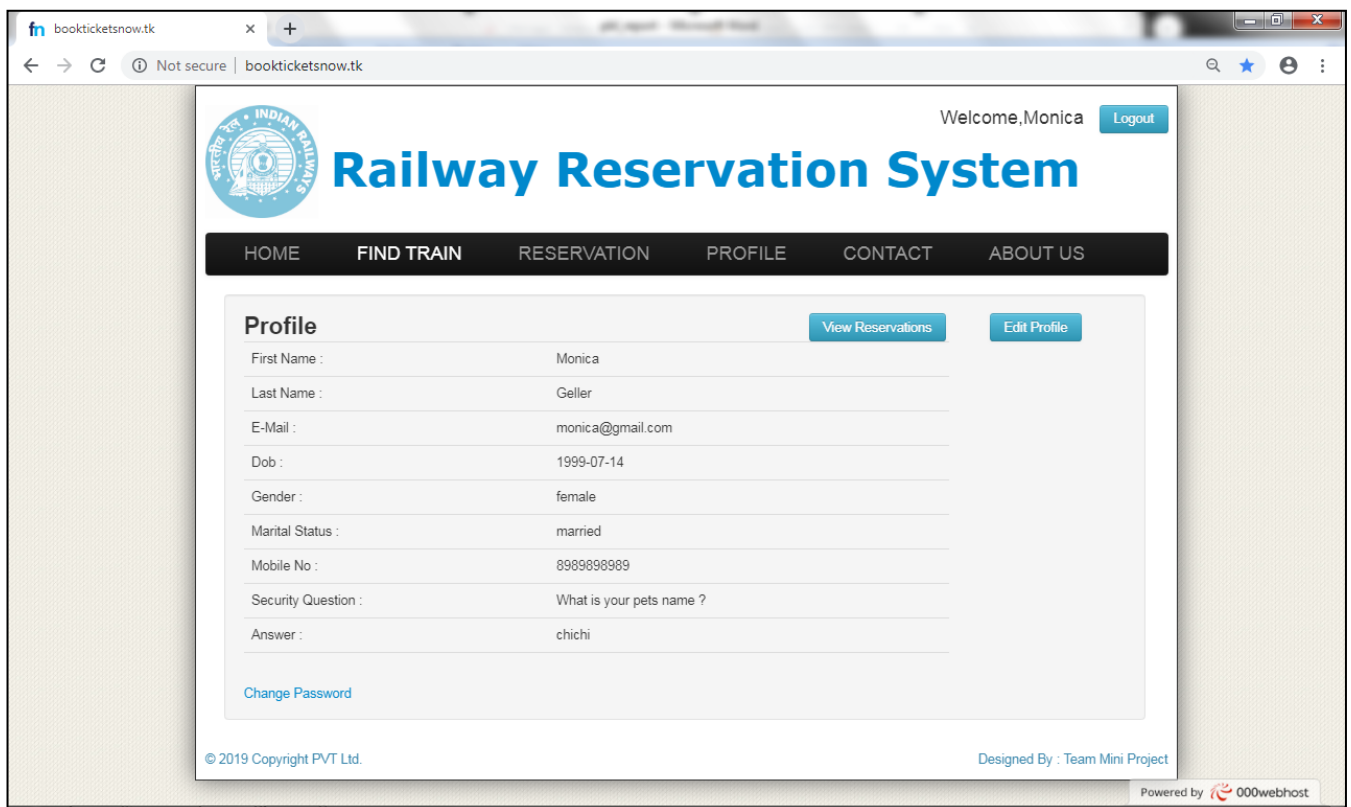


Fig 9: Profile Page

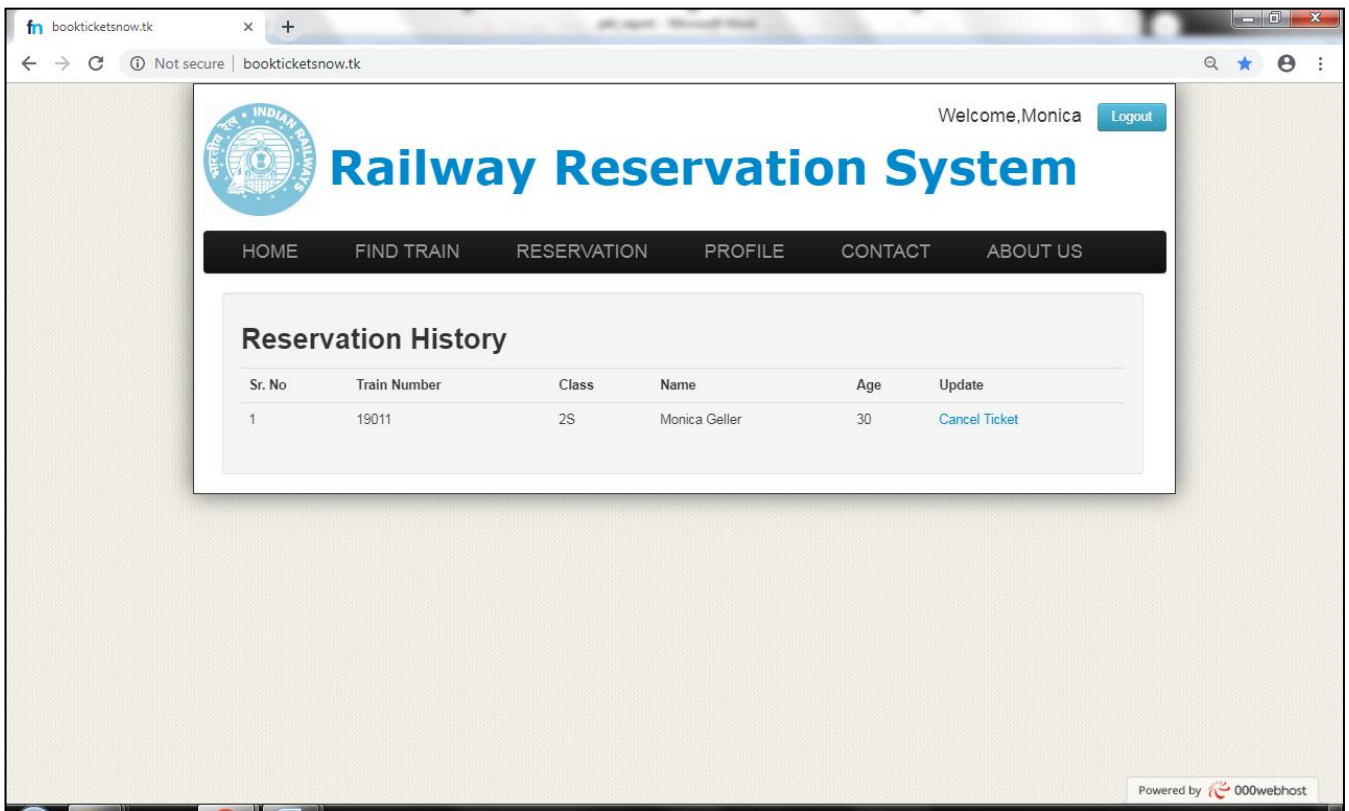


Fig 10: Reservation History

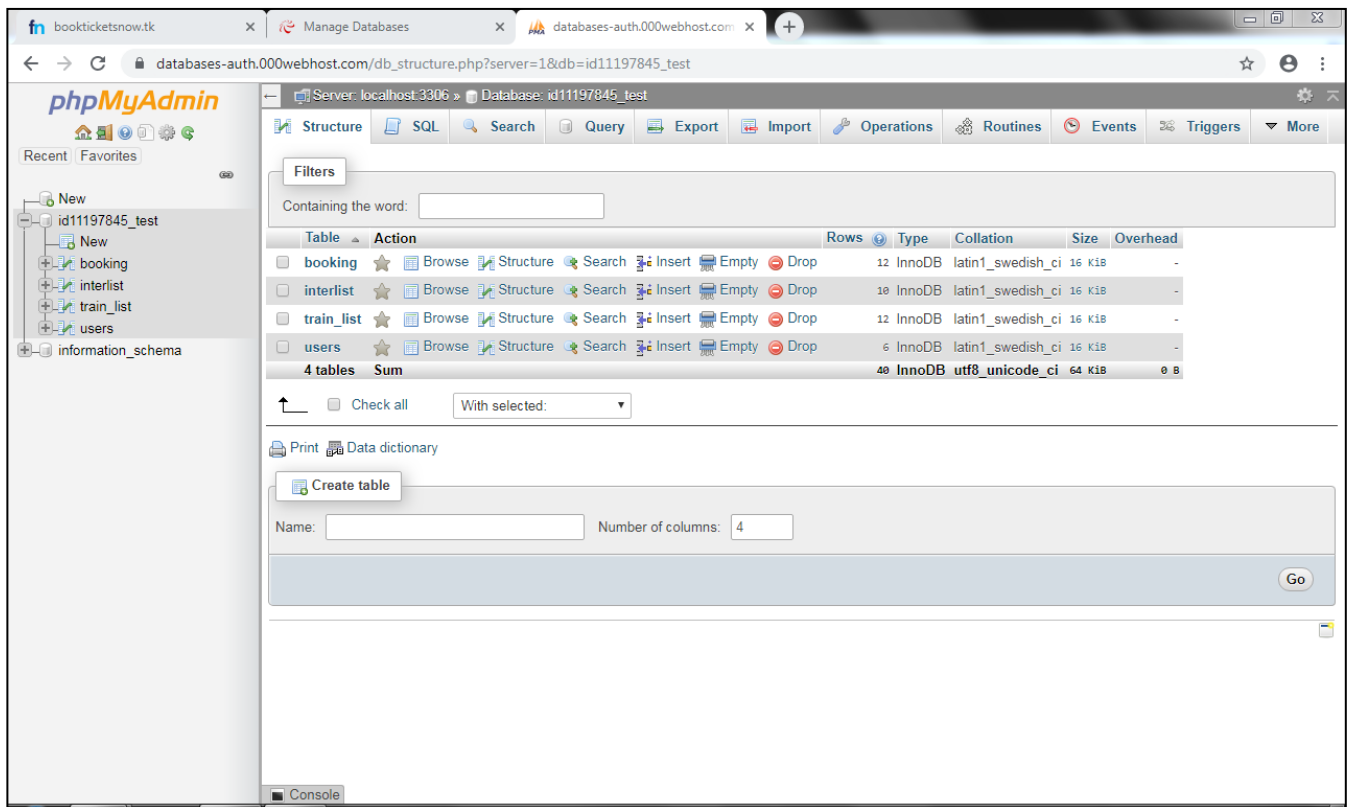


Fig 11: Database and tables

FUTURE SCOPE

In a nutshell, it can be summarized that the future scope of the project circles around maintaining information regarding:

- We can add printer in future.
- We can use more advance software for Railway Reservation System including more facilities
- Integrate multiple load balancers to distribute the loads of the system
- Create the master and slave database structure to reduce the overload of the database queries.
- Implement the backup mechanism for taking backup of codebase and database on regular basis on different servers

PROJECT LEARNING OUTCOMES

- Able to formulate a problem definition and select appropriate hardware and software.
- Able to analyze and practically implement theoretical concepts.
- Able to think critically and apply different problem solving approaches for a given problem statement.
- Able to develop self-learning skills and presentation skills
- Able to develop team spirit and work in multi-disciplinary teams.

ACKNOWLEDGEMENT

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