A

Project Report on

Online Railway Ticket Booking System

By

Lalit Kumar

Roll No : 185020

Branch : CSE (B.Tech)

Certification

This is to be certified that Lalit Kumar, third year student of National Institute of Technology, Hamirpur in the department of Computer Science and Engineering have worked on the College Project Entitled with:

"ONLINE railway ticket reservation SYSTEM"

Under the guidance of

Dr. Dharmendra Prasad Mahato

……. **…….**

Authorized **Dr. Dharmendra Prasad Mahato**

Signature

Dated:

ACKNOWLEDGEMENT

I am very thankful to Dr. Dharmendra Prasad Mahato ,to give me the opportunity to build this project and guide because without his guidance it would not be possible to build this project.

Last but not the least we would like to thank the entire

National Institute of Technology Computer Science Department for allowing me to proceed with the project.

ABSTRACT

The Indian Railways (IR) carries about 5.5 lakhs passengers in reserved accommodation every day. The Computerised Passenger Reservation System (PRS) facilates the booking and cancellation of tickets from any of the 4000 terminals (i.e. PRS booking window all over the countries). These tickets can be booked or cancelled for journeys commencing in any part of India and ending in any other part, with travel time as long as 72hours and distance upto several thousand kilometers.

In the given project I will be developing a website which will help users to find train details, book and cancel tickets and the exact rates of their tickets to the desired destination.

With the help of online booking people can book their tickets online through internet, sitting in their home by a single click of mouse. Using their credit cards people can easily get their tickets done within minutes.

INTRODUCTION

General Overview

My website has various kinds of information that helps regarding booking of tickets via railways .

Users will be able to search the train ,the exact fare and they can also book the ticket by using the debit ,credit or master card and after booking the ticket if the user want to cancel it then they can easily do it also.

Survey

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. The number of the reservation counters available to the passengers and customers are very less. On most of the reservation systems there are long queues, so it takes a long time for any individual to book the ticket. As now there are no call centers facilities available to solve the queries of the passengers.

The online railway ticket reservation system aims to develop a web application which aims at providing trains details, trains availability, as well as the facility to book ticket in online for customers.

So, we thought of developing a web based application which would provide the users all these facilities from his terminal only as well as help them in booking their tickets. The Application was to be divided into two parts namely the user part , and the administrator part. And each of these has their corresponding features.

We decided to give the name of the website “ONLINE RAILWAY TICKET RESEVATION”.

The online railway ticket reservation system is developed using Node Js as Backend and mongodb as database.

Objectives:

The objective of the online railway ticket reservation system

Project is to design software to fully automate the process of issuing a railway ticket. That is:-

1. To create a database of the trains

2. To search the trains.

3.To check the users booked tickets.

4.To book the ticket.

5.To cancel the ticket if necessary

Software Requirements Specification

Development Environments

Hardware :

Intel core 2 duo T6400 2.00 GHz with 2GB RAM, 250 GB hard disk space and other Standard accessories.

Environment and Applications:

Microsoft Windows 7.

Microsoft Visual Studio 2010.

Microsoft Internet Explorer.

Operating environment:

Hardware configuration:

The minimum configuration for hardware is given below:

Intel® Pentium® or higher processor.

65 MB RAM or higher

Software configuration:

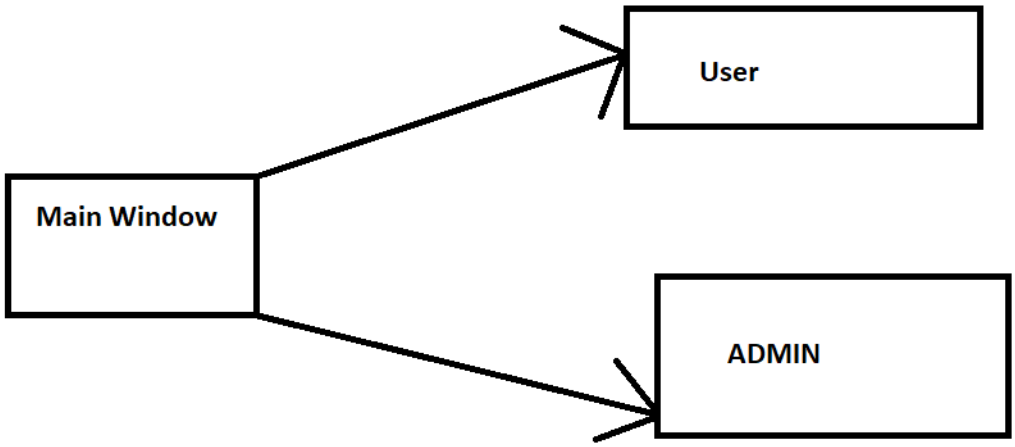
Microsoft® Windows® XP or later versions

A standard web browser.

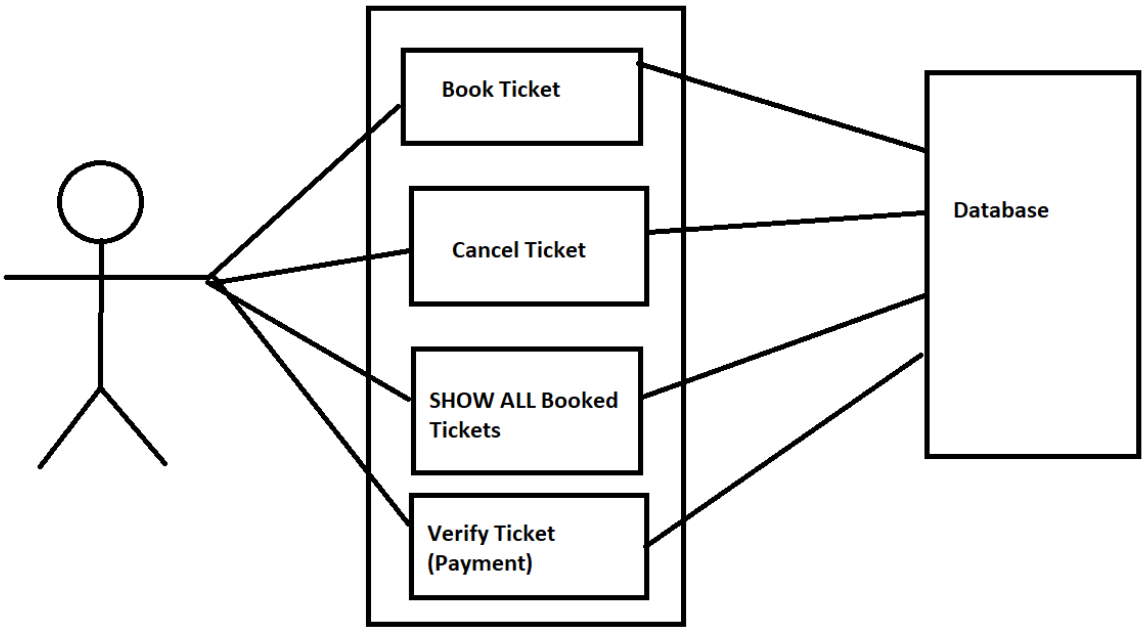
Mongodb installed

NodeJs installed

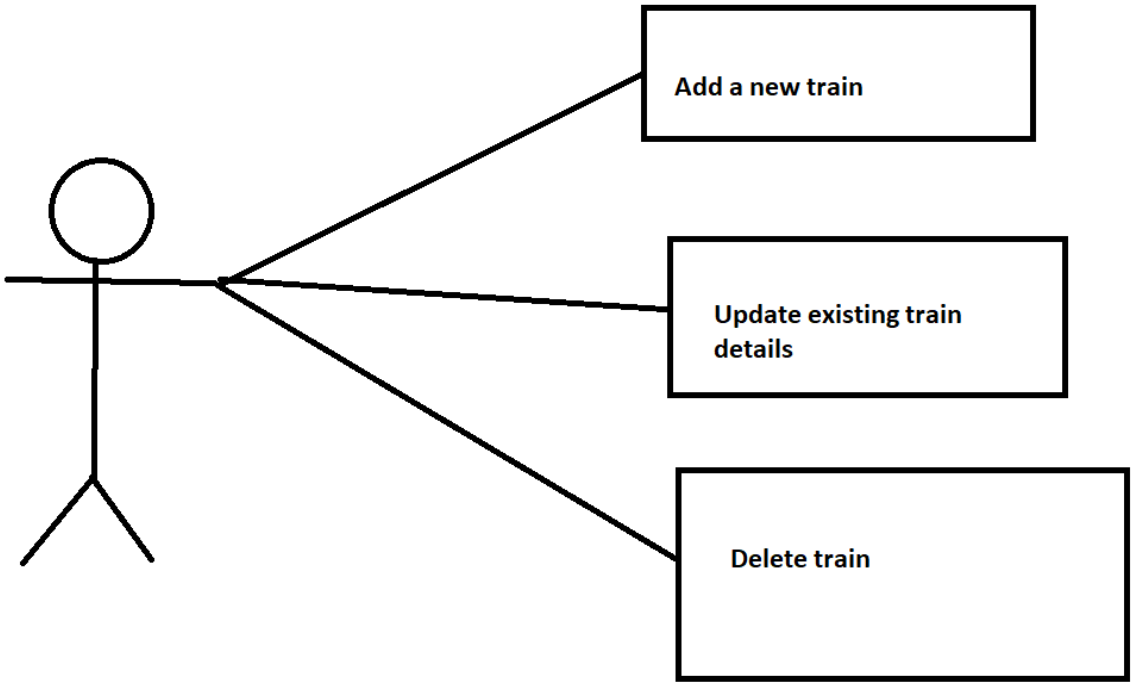
Detailed design specification:



Home Page

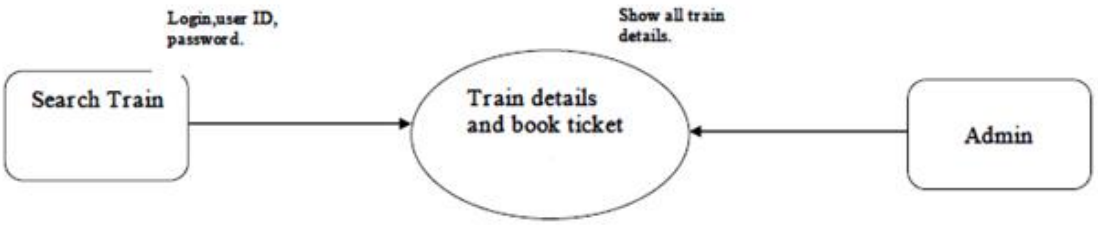


User's Booking Window

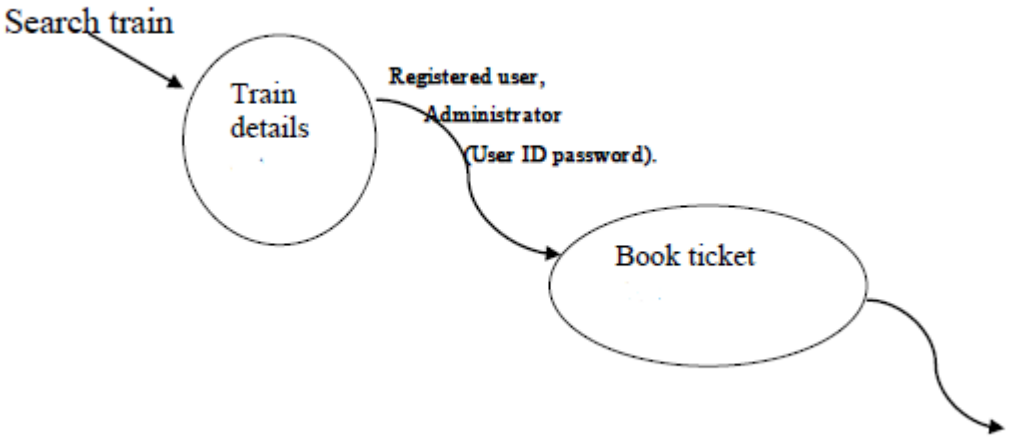


Admin's Window

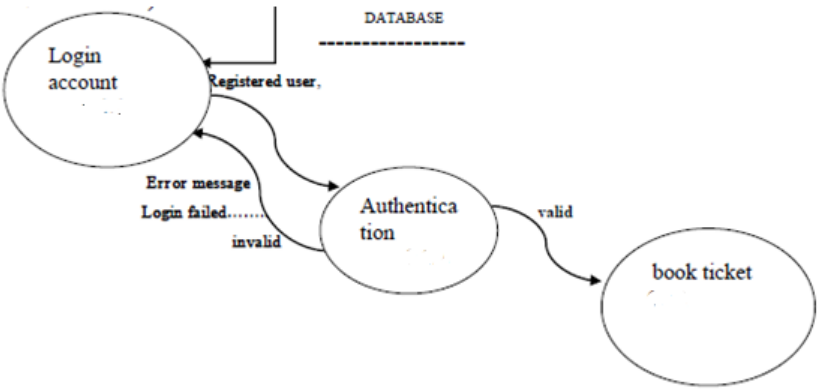
Context Diagram



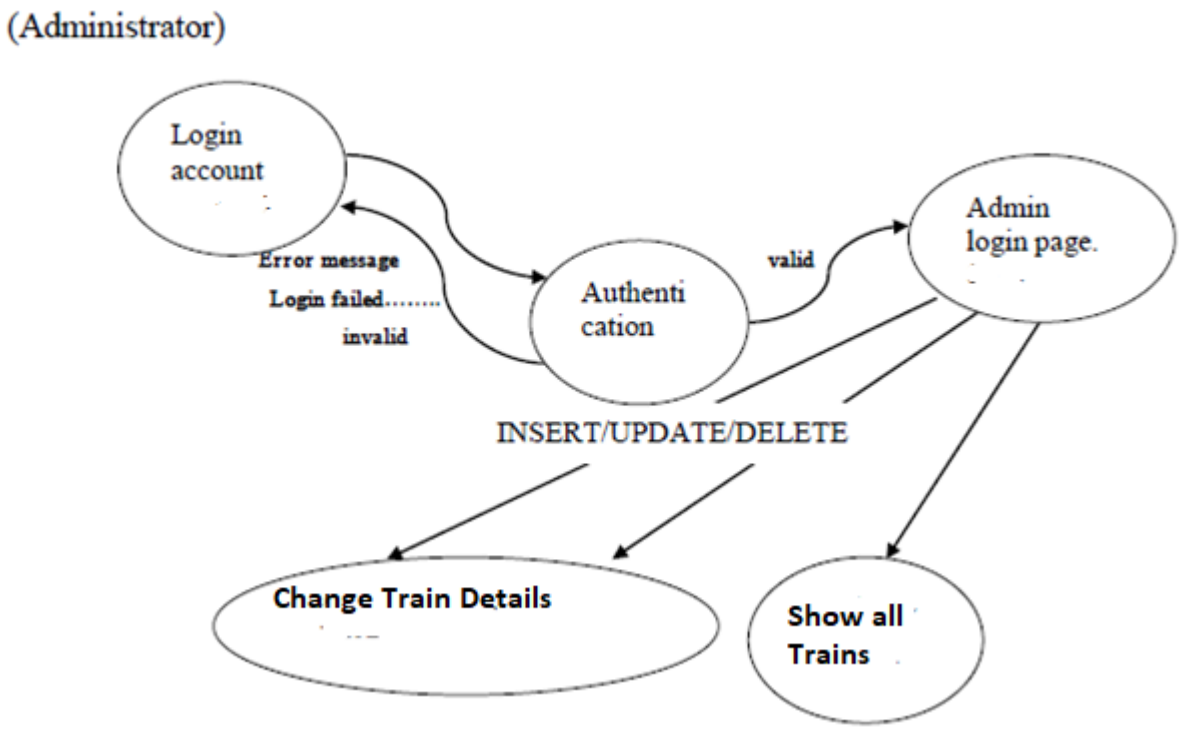
Search Train



Registered User



Administrator



SDLC (Software development Life Cycle)

Every activity has a life cycle and software development process is not an exception for the same. Even if you are not aware of SDLC you still must be following it unknowingly. But if a software professional is aware about SDLC he can execute the project in a much controlled fashion. One of the big benefits of this awareness is that hot blooded developers will not start directly execution (coding) which can really lead to project running in an uncontrolled fashion. Second it helps customer and software professional to avoid Confusion by anticipating the problems and issues before hand. In short SDLC defines the various stages in a software life cycle. But before we try to understand what SDLC is all about. We need to get a broader view of the start and end of SDLC. Any project started if it does not have a start and end then its already in trouble. It's like if you go out for a drive you should know where to start and where to end or else you are moving around endlessly.

Iterative model

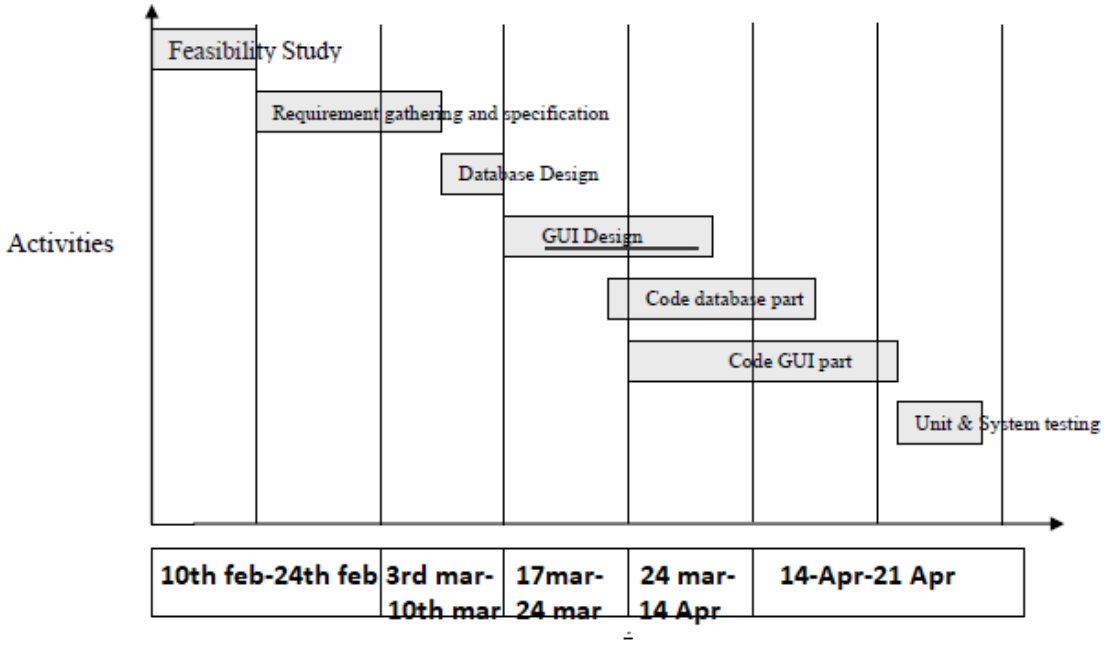
The iterative waterfall model is used in the development of the system. The system is developed in increments, each increments adding some functional capability to the system until the full system is fully implemented.

The advantage of this approach is that it will result in better testing, as testing of each increment is easier than testing the entire system in totality. Furthermore, this approach provided us with important feedback that was very useful in the implementation of the system.

Development Schedule

The work on the proposed ONLINE RAILWAY TICKET RESERVATION was started on 10th Feb 2021.

The following Gantt chart has explained the estimated duration of the different phases of the software development work diagrammatically



Implementation Details

Backend : Nodejs

Authentication : passport

Front-end : HTML,EJS,Bootstrap,CSS,Javascript

Database : Mongodb

Database Tables :

Trains : Store information about train.

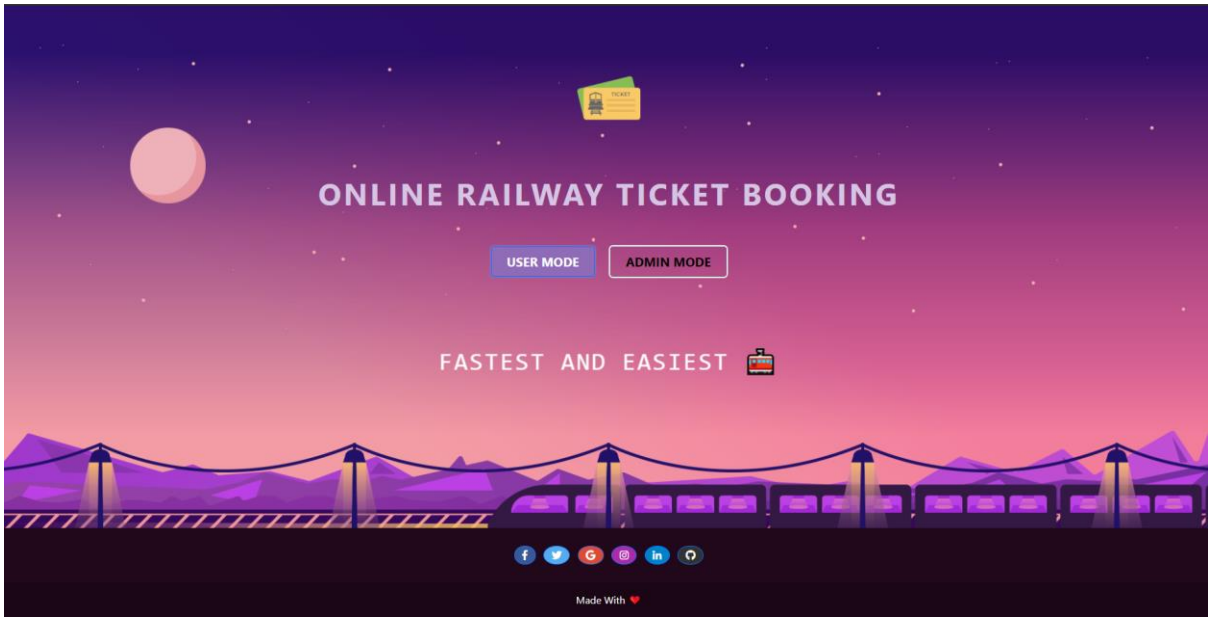
Users : Store information about users.

Items : Store booked Tickets for each user.

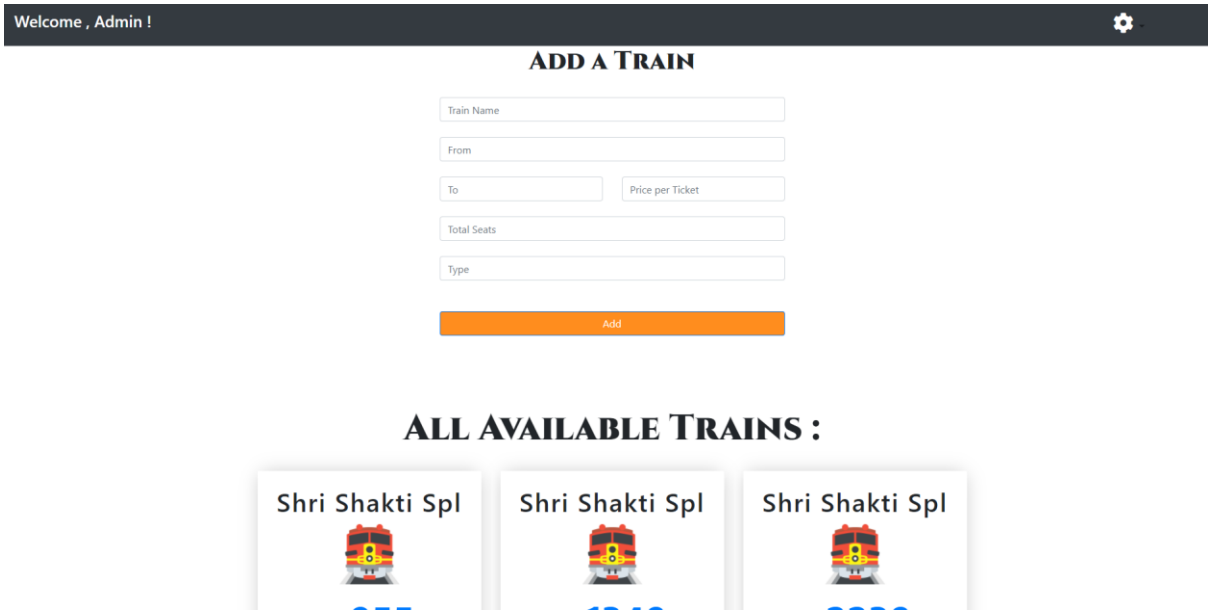
Occupies : Store information about seats booked for each train for a particular day.

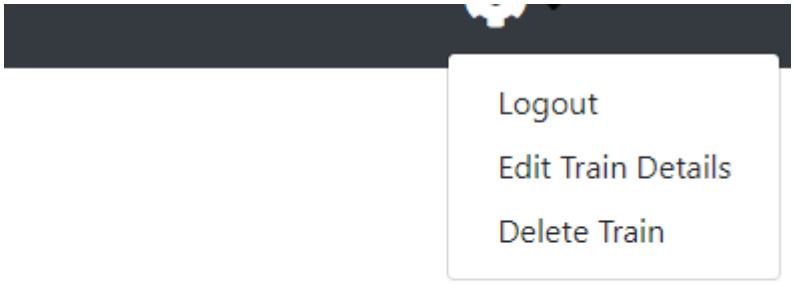
Cancels : Store information about booking id and train , day,type for each booking id.

First Page:

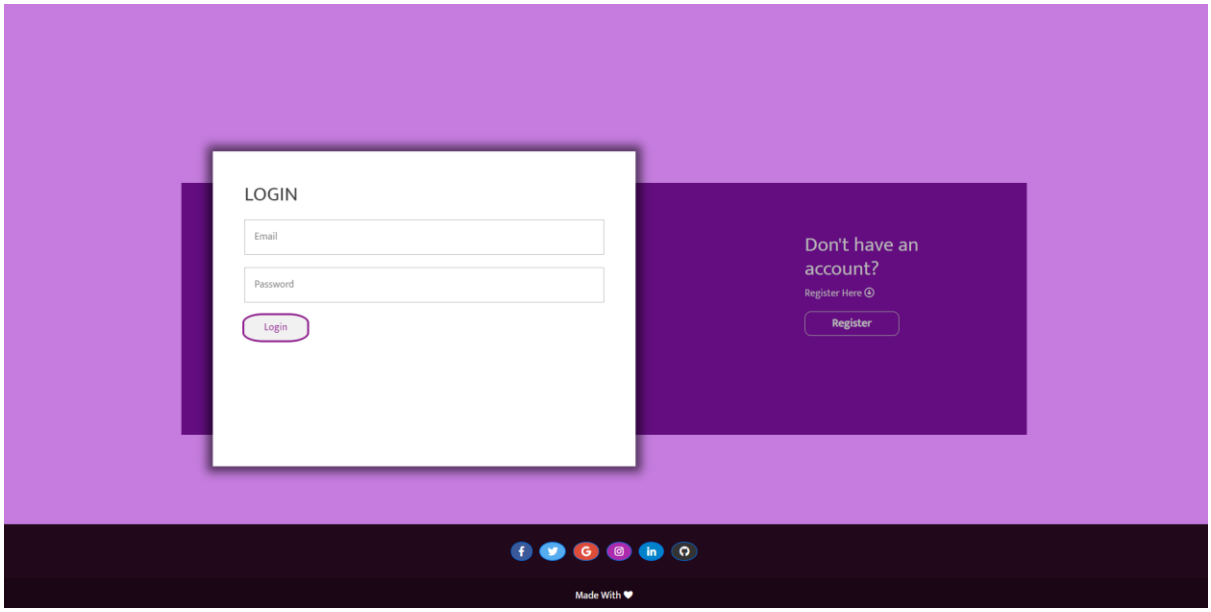


In the Admin Mode after logging in,

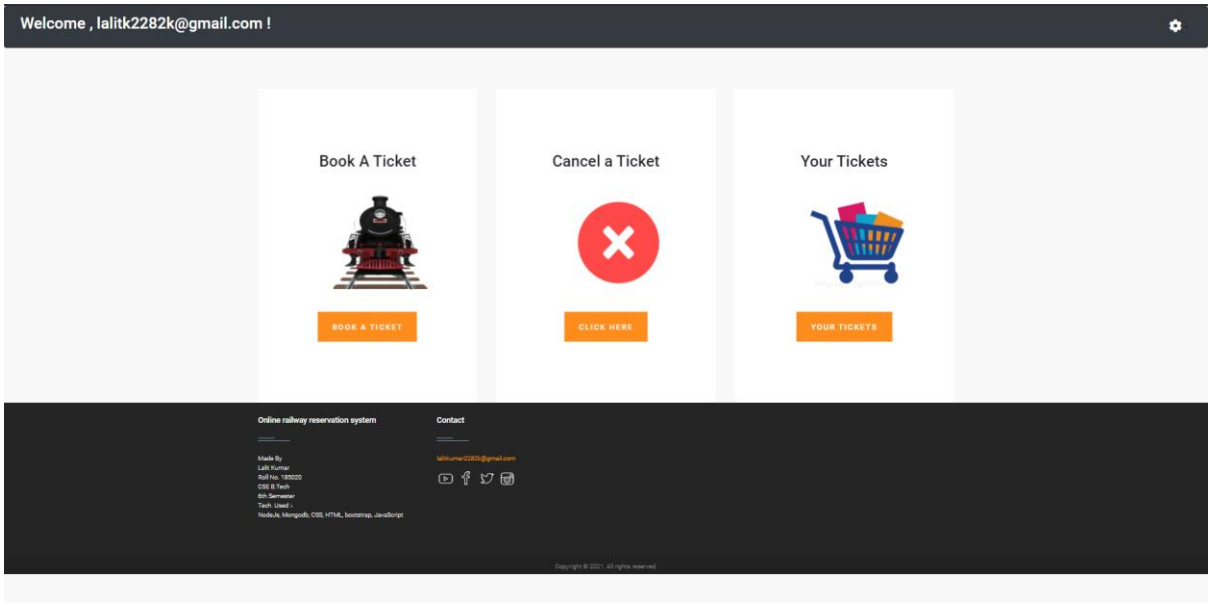




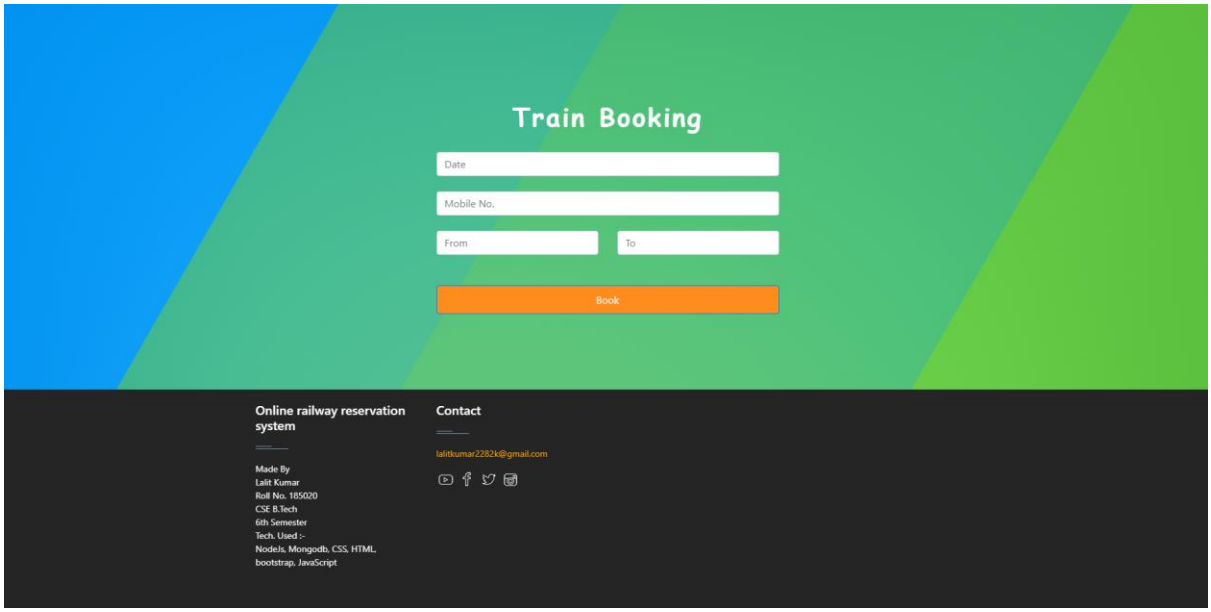
In the User mode ,



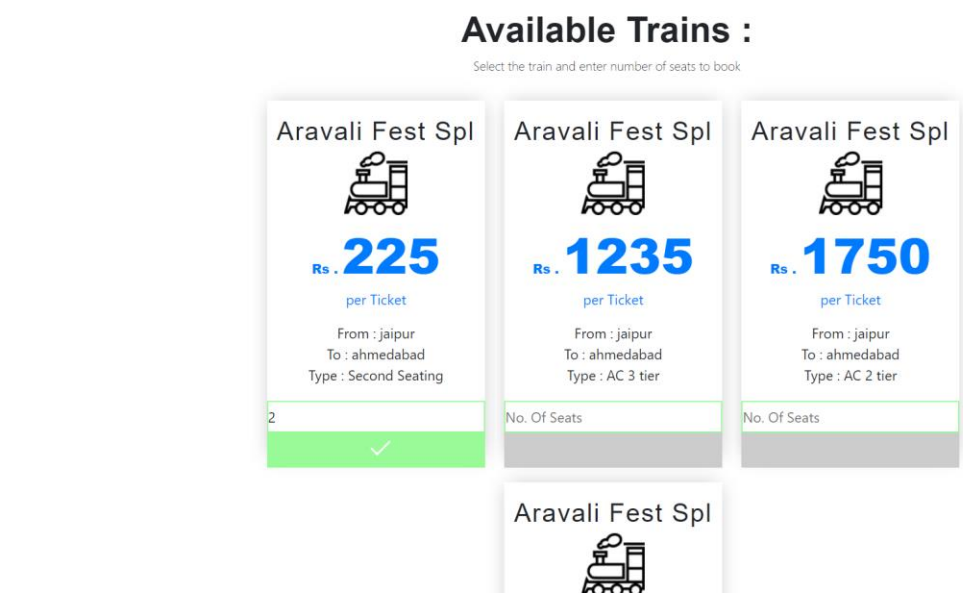
After Logging in,

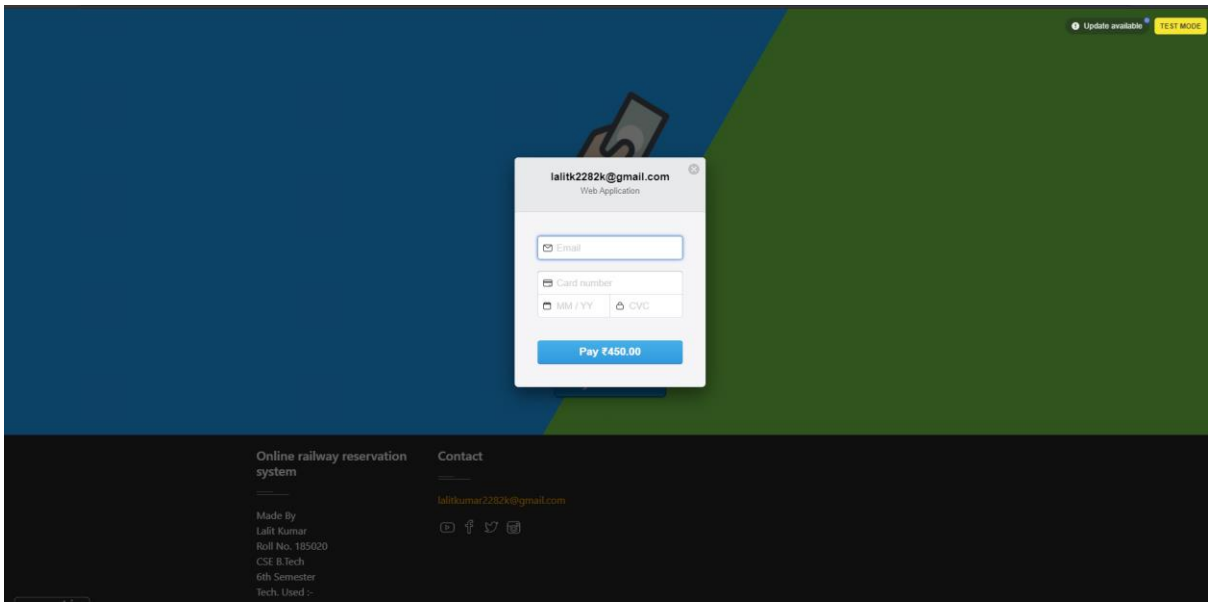


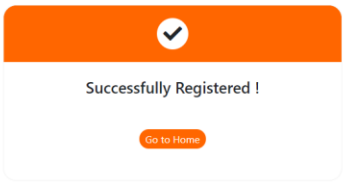
On clicking Book a ticket

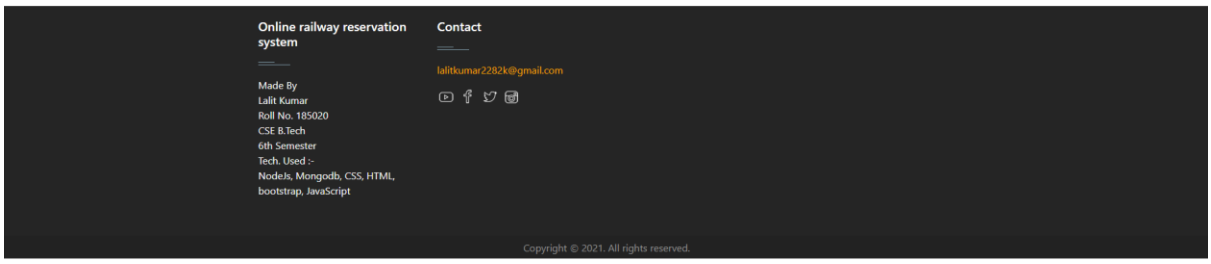


After Entering details,

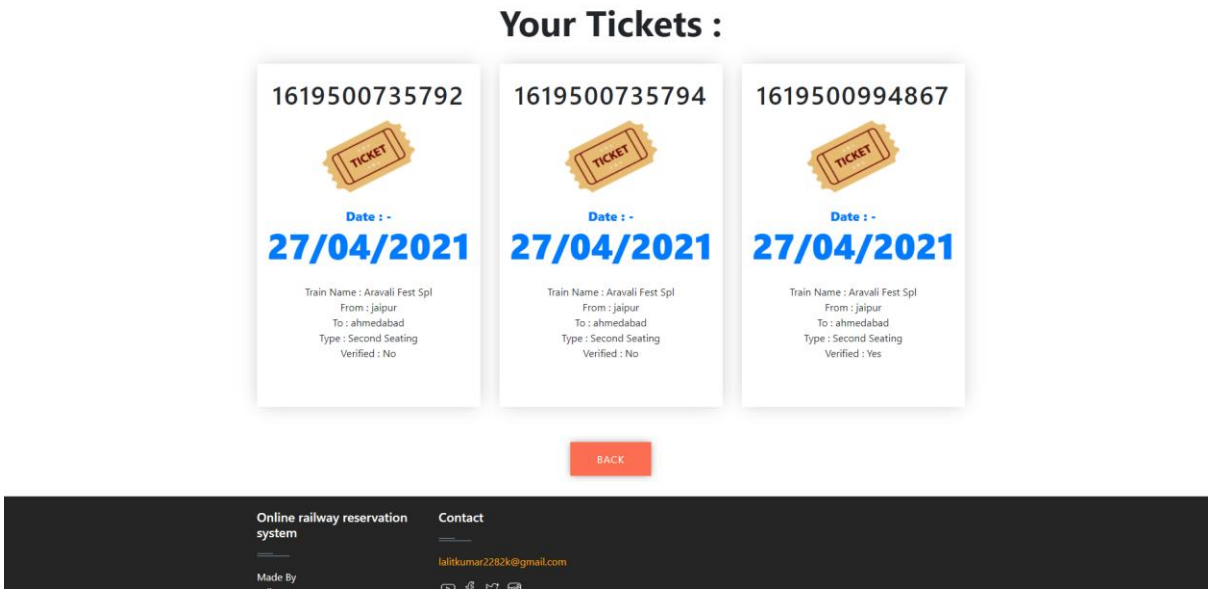

Available Trains :
Select the train and enter number of seats to book
Aravali Fest Spl
Rs. 225
per Ticket
From : jaipur
To : ahmedabad
Type : Second Seating
2
Aravali Fest Spl
Rs. 1235
per Ticket
From : jaipur
To : ahmedabad
Type : AC 3 tier
No. Of Seats
Aravali Fest Spl
Rs. 1750
per Ticket
From : jaipur
To : ahmedabad
Type : AC 2 tier
No. Of Seats
Aravali Fest Spl


Update available
TEST MODE
lalitk2282k@gmail.com
Web Application
Email
Card number
MM / YY
CVC
Pay ₹450.00
Online railway reservation system
Made By
Lalit Kumar
Roll No. 185020
CSE B.Tech
6th Semester
Tech. Used :-
Contact
lalitkumar2282k@gmail.com



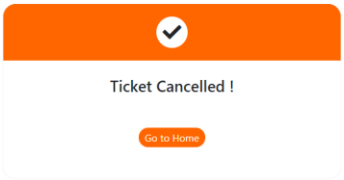


You call check all your orders by clicking Your Ticktes,



Verified “Yes”means its payment is done , the tickets with verified “No” can be verified later by clicking verify ticket,

You can also cancel a ticket by Clicking cancel Ticket and entering the booking id,



Online railway reservation system

Made By
Lalit Kumar
Roll No. 185020
CSE B.Tech
6th Semester
Tech. Used :-
Nodejs, Mongodb, CSS, HTML, bootstrap, JavaScript

Contact

lalitkumar2282k@gmail.com