SOFTWARE REQUIREMENT SPECIFICATION

TOPIC: RAILWAY RESERVATION SYSTEM

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1. Introduction

The introduction of the software requirement system provides the entire SRS purpose, scope, references and overview of SRS.
The purpose of this document is to gather, build and analyse and give an indepth and insight of complete railway system.
An online system is to manage trains and passengers to ease the IRCTC management so that passengers can search for trains and can book tickets from the system.

1.1 Purpose

The purpose of the project is to describe railway reservation which provide train reservation system, train timings.
There are role of 3 major things, developer, client and user. SRS is a medium through which the client's and the user's needs are accurately specified.

Factors that help to develop new system.

1. Faster System
2. Accuracy
3. Reliability
4. Informative
5. Reservations from any where

1.2 DOCUMENT CONVENTIONS

This document uses the following conventions.

DB	**Database**
DDB	**Distributed Database**
ER	**Entity Relationship**
NTES	**National Train Enquiry System**
PRS	**Passanger railway system**

1.3 INTENDED AUDIENCE AND READING SUGGESTIONS

This project is a prototype for the railway management system and it is restricted within the college premises. This has been implemented under the guidance of college professors. This project is useful for the railway employee and as well as to the passengers.

2.Overall Description

2.1 PRODUCT PERSPECTIVE

A distributed airline database system stores the following information.

- **Train details:**
  It includes the originating flight terminal and destination terminal, along with the stops in between, the number of seats booked/available seats between two destinations etc.
- **Customer description:**
  It includes customer code, name, address and phone number. This information may be used for keeping the records of the customer for any emergency or for any other kind of information.
- **Reservation description:**
  It includes customer details, code number, train number, date of booking, date of travel.

2.2 User Classes and Characteristics:

The main parts of this system are user, train ticket, train details. The user will select flight and book seats on it. The system assists the user to get the necessary information date, time and the necessary information regarding the train. Allows the customer to efficiently use their options and the passangers will have the authority to both booking and train details.

- User
  - Has the features like Username and Password.
- Booking
  - Has features like Departure, Arrival, Number of Travelers, Class, Category of Customer.
- Train Details

o Has the features like Train Number, Train Name, Train time, Train Day and Price.

2.3 Operating Environment:

The developed system is envisioned as a website that could be accessible through any web browser from anywhere around the world. It would not be reliant on the system of the user's or the competence of the software.

2.4 Assumption Dependencies

The request from the customer for booking or cancellation from anywhere around the world to any destination that could provide a train.

The transaction should be safe and secure assuming both are single transactions happening with respect to the requirement for the database to be created.

To access the system, the booking agent will need a valid username and password.

3.Requirements.

3.1 Functional Requirements

3.1.1 Perfomance requirement:

- Satisfaction of user.
- Response time.
- Portable
- User friendly

3.2 Non- Functional Requirements

3.2.1 Avaiability Requirements- The system should be avaiable all time, means the user can acces it using web browser.

3.2.2 Security Requirements - System use SSL in all transactions that include any cofendential customer information.

3.2.3 Software Supportability- Code of the system is well documented and easy to understand.

3.3 Hardware Requirements

- RAM - 2 GB
- Hard disk drive - 128MB
- There is no need of hardware as such for this software.

3.4 Software Requirements - Any windows based operating system or MAC OS or Linux.

Operating System

●This system is best supported by Windows for it to be more efficient.

●This software should be a web-based system as it focuses on a wide range of users.

Database

●Workbench SQL should store the details of the Flights, Rescheduled Flights, and Login Entries.

IntelliJ Idea

● To execute the project we have opted for IntelliJ Idea . The design incorporates efficiency and intelligence, resulting in a highly smooth development workflow.

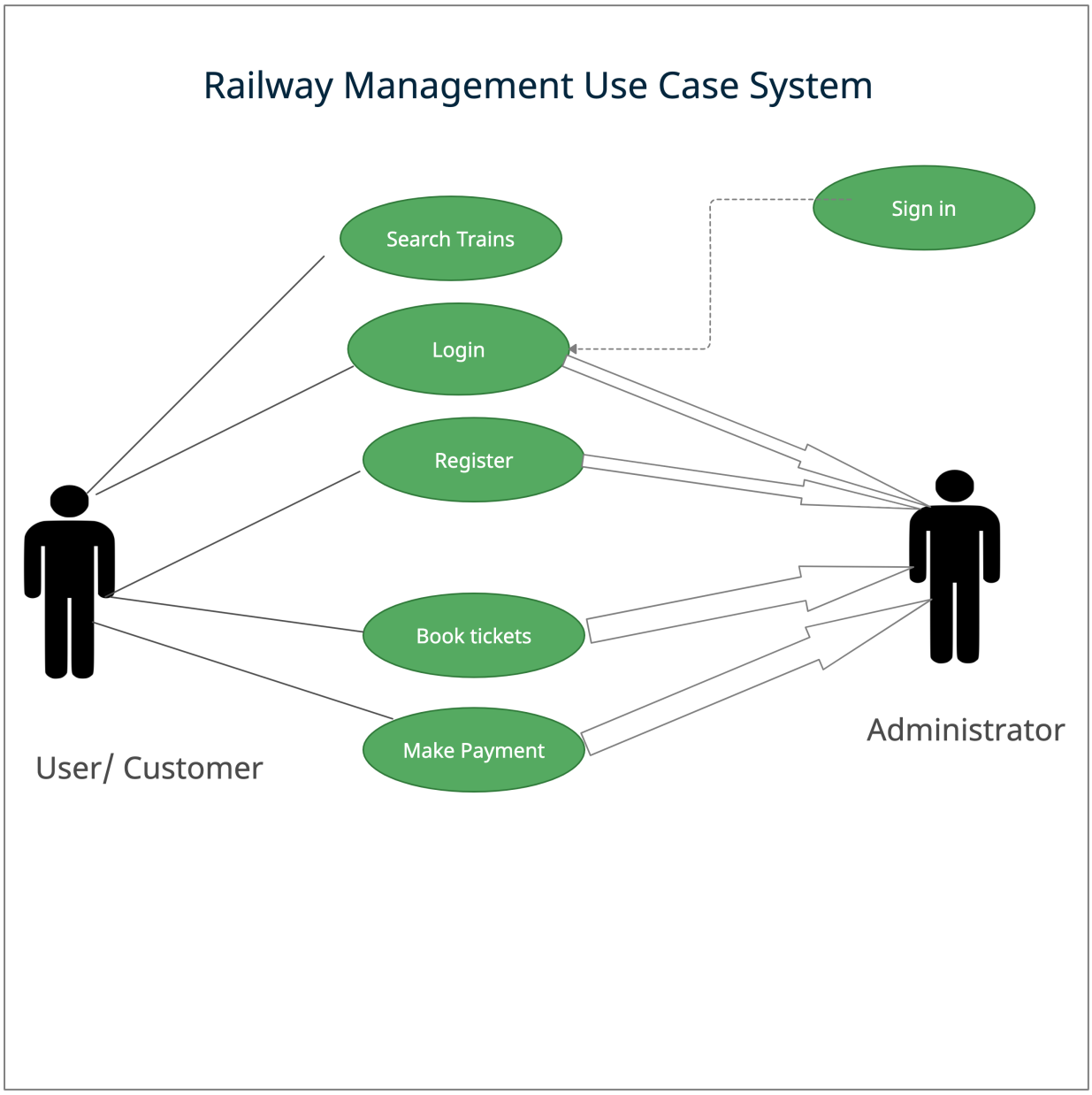
3.6 Feasibility Study

3.6.1 Economic Feasibility - Online ticket booking helps in going outside to book ticket with saves travel of money.

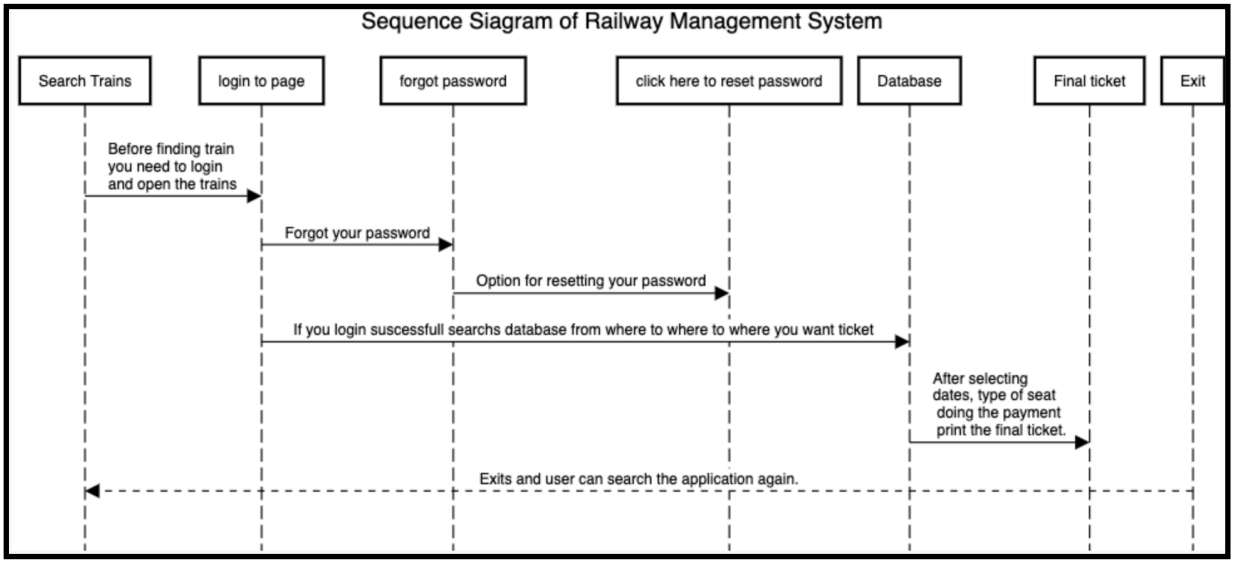
3.6.2 Technical Feasibility - Since the system is made easy so that the passanger can enter details and search what he wants.

4. Design and Implementation

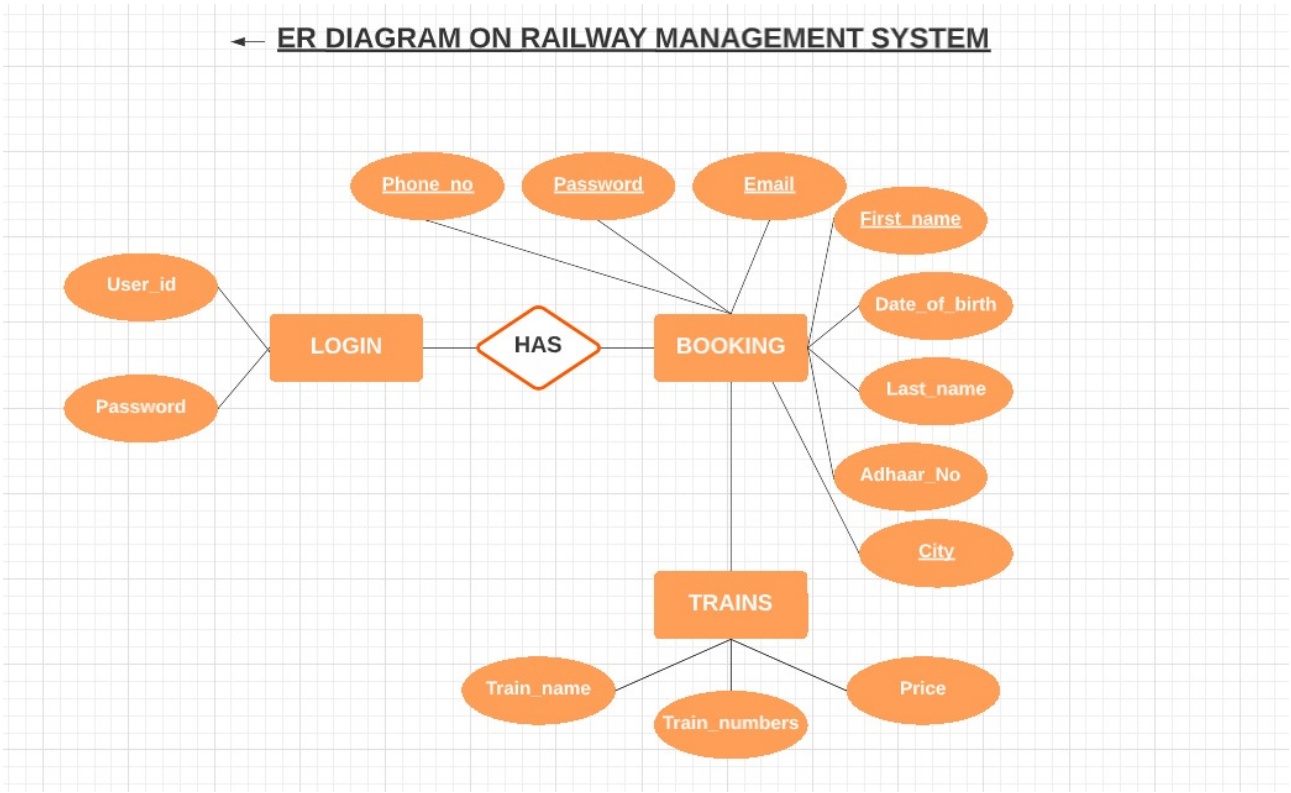
5.1 Use case diagram



5.2 Sequence diagram



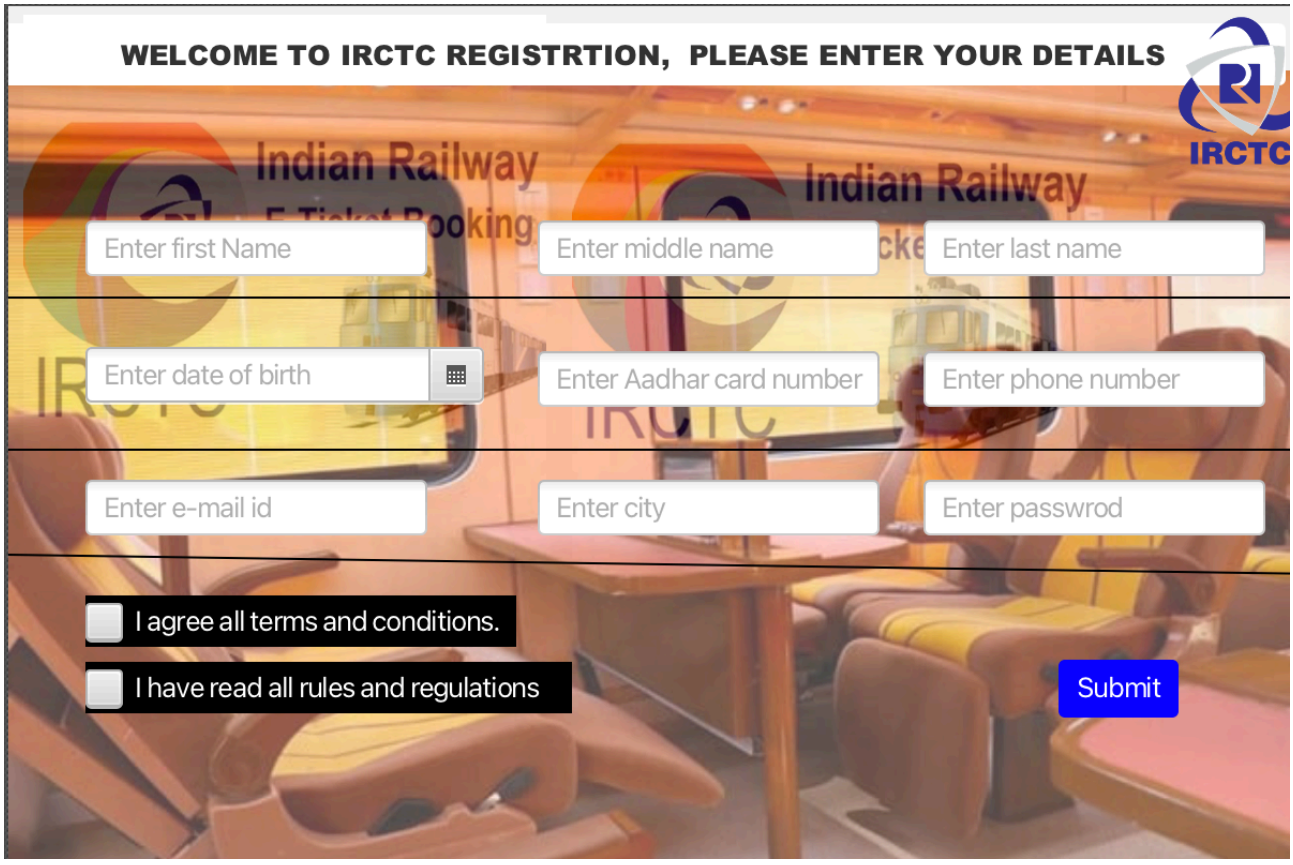
5.3 E-R Diagram



6. GUI

6.1 Screen Shot


WELCOME TO INDIAN RAILWAYS
IRCTC
From
DD/MM/YYYY
All Classes
To
Quota
Felxible with dates
Search
Person with disability
Login
Register
Know about us


WELCOME TO IRCTC REGISTRTION, PLEASE ENTER YOUR DETAILS
IRCTC
Enter first Name
Enter middle name
Enter last name
Enter date of birth
Enter Aadhar card number
Enter phone number
Enter e-mail id
Enter city
Enter passwrod
I agree all terms and conditions.
I have read all rules and regulations
Submit

7. Conclusion

The motive of this system is to built a program that customers can use easily book rail tickets.