

# **RAILWAY DATABASE MANAGEMENT SYSTEM**

***SUBMITTED BY- GROUP 22***

## **INTRODUCTION:**

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## **Title of Database:** Railway Database Management System

### **Scope of Database:**

- This project will provide information to the passenger about train arrival, departure, source, and destination details.
- Employee details such as PAN no, designation, contact details, age, and Department
- Parcel services will be provided to the passenger and also all the details regarding parcels like the status of a parcel.
- Lost and found details will be provided to the passenger like the location of the items( lost and found at which Station or Train), identification of an item, and keeping the record of everything.
- Passengers can book their tickets for the train by checking the availability of seats.
- All train schedules on a particular station will be available.
- Paramedical assistance details will be provided to the passengers.

Details of the database are provided below:

### **Description/Requirements:**

- Passenger details such as ID, Fname, Lname, DOB, Gender, Contact number., email, government ID, each passenger can book one or more tickets, and passengers gather booking details.
- Employee details such as EmployeeID, PAN no. , Fname, Lname, contact number, DOB, email can have multiple values. Each employee belongs to a designation one or more employee can work on the train and on the station.
- Each department has the designation of employees working it.

- Employees have a supervisor who keeps the check on employees.
- Booking details will give the details to passengers about the train source destination and seat availability.
- Ticket details contain ticketID, train\_ID, tran\_id, and PID. A ticket is generated on successful booking. A ticket has transaction details.
- Transaction Details will give the transaction ID, transaction date and time, transaction status, and the amount paid.
- Station Details Latitude of the station, station ID, station name, waiting room service availability, food service availability, and location. each station manages many trains and each train's arrival and departure time, the station has passengers.
- Station provides many services like parcel service, lost and found service, and medical services and they all cannot exist without a station.
- Parcel Service will give parcel id, source detail like sent time and departure location, and destination detail like receive time and arrival location.
- Lost and Found Details will give item id, item name, item description, status, and location details. A station provides lost and found details to passengers. The owner can collect the items from the station after the verification.
- Train details will be given from source to destination, arrival time, departure time, and seat availability, train ID, train name.

- Parcel Service can be booked from the parcel ID. One user can send multiple parcels. Each station provides parcel services.
- Medical service has patient id, patient name, [contact no. , address, description.

### **Queries that the database system should be able to answer:**

- Query to retrieve train name that will transport a parcel from source AHMEDABAD to destination GANDHINAGAR.
- Count the number of tickets for train id 12115 and display the name of the train.
- Count the employees and average salary of employees of station id 1 or 2 or 4.
- Find out employees of departments who draw more salary than average salary of all employees in that department.
- Show the minimum age of the employee and count number of employees whose age is greater than 18 and less than 60 counts should be at least one.
- List out the station name of those stations where lost items are not found, or food availability or waiting room availability is not there.
- Retrieve the transaction details and passenger details of the passenger who booked the ticket of train id 12155.

- Retrieve passenger name and all ticket details of passenger with the help of transaction details table and train table.
- Retrieve the first and last name of an employee who works on a train and whose name starts with "R" and is older than 20.
- Retrieve all the station names where patients are suffering from covid 19.