**Railway Reservation System**

**Introduction**

This database design provides information of train to the passengers. It includes information about the source and destination of the train, status of the train and passenger’s ticket, number of seats available, etc.

**Entity-Relationship Diagram**

The ER Diagram for the Railway Database was created using Lucid Chart. You can access the ER diagram here 

The diagram represents the attributes, their entities, and their relationships within the database. In this ER Diagram, there are four entities- Passenger, Booking, Train Status, and Train. Passenger includes different attributes that represent the information regarding the passenger using the train. Booking consists of the attributes that represent the ticket information and status of the passenger. Attributes of the train represent the information regarding the trains while attributes of Train Status provide detail information of a single train.

There are three relationships shown in the ER diagram. Train status representing a single status of the train is first relationship. Passenger booking the train and Booked tickets showing the status of that train are other relationships in the diagram.

**Database Schema**

The database schema is implemented and hosted on an Omega Server. Following instructions are used to create this database design:

1. Connect to Omega server.
2. Database (Project1.db) is created using sqlite3.
3. Tables and schema were created using CREATE TABLE functions.
4. Data was imported from csv manually using INSERT function.
5. SELECT, FROM, WHERE, and JOIN functions were implemented to retrieve the data from the database.

A screenshot of a computer program

Description automatically generated

Fig:1 list of passengers that were waitlisted

Fig:1 represents the retrieval of data where user was asked to list the passengers that were waitlisted.

**Contributors**

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**HONOR CODE**

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I promise that I will submit only work that I personally create or that I contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.