DBMS Project Report

Ashutosh Gera [2021026] | Atharv Goel [2021027]

February 10, 2023

Deadline 3: Database Schema, Integrity constraints and data insertion

Introduction

FloRide is designed to provide an efficient and user-friendly platform for booking cabs and managing trips. It has been implemented using a well-designed database schema with integrity constraints that ensure the accuracy and consistency of the data. The database has been populated with realistic data generated online, to provide a better understanding of the system's functionality and performance.

[Source for generating data: Mockaroo]

Database Schema

The database schema for the cab booking software has been designed to capture all the necessary information about cars, drivers, passengers, ratings, location, payments and bookings. The entities have been modelled as tables, with attributes representing the information to be stored. Relationships have been established between the tables to ensure the data is organized and easily accessible.

Integrity constraints

Integrity constraints include specifying the primary key and foreign key relationships between tables, setting default values and restricting null values. These constraints ensure that the data entered into the database is valid and consistent and help prevent errors arising from incorrect or missing data.

Data Population

We have populated our database with realistic data generated online, providing a better understanding of the system's functionality and performance. The data includes information about drivers, cars, passengers, bookings, reviews, payment and locations representing a variety of scenarios. The data provides a representative sample of the type of data the system is expected to handle in a real-world scenario.

Instructions to run

In order to run our database, do the following:

- Unzip the folder and open a terminal[e.g. bash] in it.
- Enter mysql server by running the command

```
mysql -u root -p
```

- Type the following command to create a database

```
CREATE DATABASE floride
```

- Run the following 2 commands in order to create schema and populate the database respectively:

```
source <Absolute file path>/schema_creation.sql
source <Absolute file path>/data_population.sql
```

- Voila! The database for **FloRide** has been populated and now you can view it however you want!

Thank you. Have a nice day :D