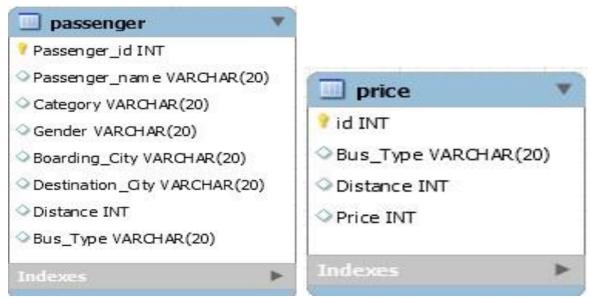# Travego Travellers

## Introduction

Let's assume that you have to keep the record of the passengers and price to travel between two cities by bus, for types (Sitting and Sleeper).

The focus of this project is to learn to write different types SQL statements to insert and retrieve data from a database. For database storage we will use MySQL, information related to MySQL and several commands have already been discussed in weekly notebooks. You can refer to these to gather hints on functionality.

## Program Organization

The simple program is structured in various layers.

1. To give an insight we have two tables **Passenger** and **Price.** Please find the more details in the attached ER diagram.



2. Following is the sample data. Please insert this data in the table **Passenger**. Do ensure that you have at least these data points available in the table

| Passenger_id | Passenger_name | Category | Gender | Boarding_City | Destination_City | Distance | Bus_Type |
|---|---|---|---|---|---|---|---|
| 1 | Sejal | AC | F | Bengaluru | Chennai | 350 | Sleeper |
| 2 | Anmol | Non-AC | M | Mumbai | Hyderabad | 700 | Sitting |
| 3 | Pallavi | AC | F | Panaji | Bengaluru | 600 | Sleeper |
| 4 | Khusboo | AC | F | Chennai | Mumbai | 1500 | Sleeper |
| 5 | Udit | Non-AC | M | Trivandrum | Panaji | 1000 | Sleeper |
| 6 | Ankur | AC | M | Nagpur | Hyderabad | 500 | Sitting |
| 7 | Hemant | Non-AC | M | Panaji | Mumbai | 700 | Sleeper |
| 8 | Manish | Non-AC | M | Hyderabad | Bengaluru | 500 | Sitting |
| 9 | Piyush | AC | M | Pune | Nagpur | 700 | Sitting |

Insert the following data in the table *Price*

| id | Bus_type | Distance | Price |
|---|---|---|---|
| 1 | Sleeper | 350 | 770 |
| 2 | Sleeper | 500 | 1100 |
| 3 | Sleeper | 600 | 1320 |
| 4 | Sleeper | 700 | 1540 |
| 5 | Sleeper | 1000 | 2200 |
| 6 | Sleeper | 1200 | 2640 |
| 7 | Sleeper | 1500 | 2700 |
| 8 | Sitting | 500 | 620 |
| 9 | Sitting | 600 | 744 |
| 10 | Sitting | 700 | 868 |
| 11 | Sitting | 1000 | 1240 |

| 12 | Sitting | 1200 | 1488 |
|----|---------|------|------|
| 13 | Sitting | 1500 | 1860 |

## Problem Statement

In this project you have to do the following activities…

- Create the two tables
- Insert data in these tables
- Retrieve the data from these tables based on the requirements mentioned below

1. (**Easy**) Creating the schema and required tables using MySQL workbench
   a. Create a schema named **Travego** and create the tables mentioned above with the mentioned column names. Also, declare the relevant datatypes for each feature/column in the dataset. (**5 marks**)
   b. Insert the data in the newly created tables. (**3 marks**)

2. (**Medium**) Perform read operation on the designed table created in the above task.
   a. How many female passengers traveled a minimum distance of 600 KMs? (**1 mark**)
   b. Write a query to display the passenger details whose travel distance is greater than 500 and who are traveling in a sleeper bus. (**2 marks**)
   c. Select passenger names whose names start with the character 'S'.(**2 marks**)
   d. Calculate the price charged for each passenger, displaying the Passenger name, Boarding City, Destination City, Bus type, and Price in the output. (**3 marks**)
   e. What are the passenger name(s) and the ticket price for those who traveled 1000 KMs Sitting in a bus? (**4 marks**)
   f. What will be the Sitting and Sleeper bus charge for Pallavi to travel from Bangalore to Panaji? (**5marks**)
   g. Alter the column category with the value "Non-AC" where the Bus_Type is sleeper (**2 marks**)
   h. Delete an entry from the table where the passenger name is Piyush and commit this change in the database. (**1 mark**)
   i. Truncate the table passenger and comment on the number of rows in the table (explain if required). (**1 mark**)
   j. Delete the table passenger from the database. (**1 mark**)

## Expected files

1. SQL scripts for Table creation and data insertion in the table. **Task-1**
2. SQL scripts for all the select queries. **Task-2**.

## Program Instructions

1. You need MySQL installed in your system to verify the scripts that you are writing. Do install **MySQL** and **MySQL Workbench**.