TRAVEL MANIA

PROJECT REPORT

The software is designed in Java with extensive use of MySQL and Object-Oriented Programming. The Java application interacts with JDBC API, which uses the JDBC Driver to connect to MySQL Database.

The software has been tested using the Junit 5 unit testing framework, which was integrated with Mockito. The classes and methods have been successfully tested, including the testing of void methods. The project is also backed by High-Level and Low-Level design.

The description of all the tables as well as the task output has been discussed below:

Database Name: Travel

No. of tables: 7

```
mysql> show tables;
+---------------------+
| Tables_in_travel    |
+---------------------+
| activity            |
| destination         |
| package_destinations |
| package_passengers  |
| passenger           |
| passenger_activities |
| travel_package      |
+---------------------+
```

Description of each table:

➢ **Travel Package table**

```
mysql> desc travel_package;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Package_Name     | varchar(25) | NO   | PRI | NULL    |       |
| Package_Capacity | int         | YES  |     | NULL    |       |
| occupied         | int         | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
```

➢ **Destinations table**

```
mysql> desc destination;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Destination_Name | varchar(25) | NO   | PRI | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
```

➢ **Package-Destinations table**

```
mysql> desc package_destinations;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| Package_Name | varchar(25) | NO   | MUL | NULL    |       |
| Dest_name    | varchar(25) | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
```

➢ **Activity table**

```
mysql> desc activity;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| Activity_Name | varchar(15)  | NO   | PRI | NULL    |       |
| Description   | varchar(100) | YES  |     | NULL    |       |
| Cost          | int          | YES  |     | NULL    |       |
| Act_Capacity  | int          | YES  |     | NULL    |       |
| Dest_Name     | varchar(25)  | YES  | MUL | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
5 rows in set (0.02 sec)
```

➢ **Passenger table**

```
mysql> desc passenger;
+------------------+-------------+------+-----+---------+----------------+
| Field            | Type        | Null | Key | Default | Extra          |
+------------------+-------------+------+-----+---------+----------------+
| Passenger_Number | int         | NO   | PRI | NULL    | auto_increment |
| Passenger_Name   | varchar(25) | YES  |     | NULL    |                |
| Status           | varchar(25) | YES  |     | NULL    |                |
| Balance          | int         | YES  |     | NULL    |                |
+------------------+-------------+------+-----+---------+----------------+
```

➢ **Package-Passengers table**

```
mysql> desc package_passengers;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Package_Name     | varchar(25) | NO   | MUL | NULL    |       |
| passenger_number | int         | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
```

➢ **Passenger-Activities table**

```
mysql> desc passenger_activities;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| passenger_number | int         | NO   |     | NULL    |       |
| activity_name    | varchar(25) | NO   |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
```

Dummy Data in each table:

➢ **Travel Package table**

```
mysql> select * from travel_Package;
+--------------+------------------+----------+
| Package_Name | Package_Capacity | occupied |
+--------------+------------------+----------+
| GreenEscapes |                3 |        2 |
| RoyaleRoute  |                3 |        2 |
+--------------+------------------+----------+
```

➢ **Destination table**

```
mysql> select * from destination;
+------------------+
| Destination_Name |
+------------------+
| Bangalore        |
| Darjeeling       |
| Delhi            |
| Mumbai           |
| Shimla           |
+------------------+
```

➢ **Package-Destinations table**

```
mysql> select * from package_destinations;
+--------------+------------+
| Package_Name | Dest_name  |
+--------------+------------+
| RoyaleRoute  | Delhi      |
| RoyaleRoute  | Mumbai     |
| GreenEscapes | Darjeeling |
| GreenEscapes | Delhi      |
| GreenEscapes | Bangalore  |
+--------------+------------+
```

➢ **Activity table**

```
mysql> select * from activity;
+---------------+--------------+------+--------------+------------+
| Activity_Name | Description  | Cost | Act_Capacity | Dest_Name  |
+---------------+--------------+------+--------------+------------+
| BungeeJumping | Description1 |  800 |            4 | Bangalore  |
| Camping       | Description2 |  500 |            1 | Darjeeling |
| Paragliding   | Desciption3  |  300 |            1 | Delhi      |
+---------------+--------------+------+--------------+------------+
```

➢ **Passenger table**

```
mysql> select * from passenger;
+-----------------+----------------+----------+---------+
| Passenger_Number | Passenger_Name | Status   | Balance |
+-----------------+----------------+----------+---------+
|               1 | Ram            | Gold     |     750 |
|               2 | Geeta          | Standard |     700 |
|               3 | Babita         | Premium  |    1023 |
|               4 | Shyam          | Standard |     100 |
+-----------------+----------------+----------+---------+
```

➢ **Package-Passengers table**

```
mysql> select * from package_passengers;
+--------------+------------------+
| Package_Name | passenger_number |
+--------------+------------------+
| RoyaleRoute  |                1 |
| RoyaleRoute  |                2 |
| GreenEscapes |                3 |
| GreenEscapes |                4 |
+--------------+------------------+
```

➢ **Passenger-Activities table**

```
mysql> select * from passenger_activities;
+------------------+---------------+
| passenger_number | activity_name |
+------------------+---------------+
|                1 | Camping       |
|                2 | Paragliding   |
|                3 | Paragliding   |
|                4 | BungeeJumping |
+------------------+---------------+
```

PROJECT ILLUSTRATION

Menu:

```
         Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number:
```

1. Add New Passenger

```
         Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number: 1

 Enter Passenger details

Enter Passenger Name: Himanshu

Enter status (Standard/Gold/Premium): Gold

Enter balance: 1100

  *Database Updated*

 Travel Packages-->

        GreenEscapes
  Package Capacity: 3
  Occupied: 2

  Available Destinations are

  Darjeeling
   Activities at this destination -->

   Activity Name: Camping
   Cost: 500
   Description2
   Seats available: 1
   Destination: Darjeeling

  Delhi
   Activities at this destination -->

   Activity Name: Paragliding
   Cost: 300
   Desciption3
   Seats available: 1
   Destination: Delhi

  Bangalore
   Activities at this destination -->

   Activity Name: BungeeJumping
   Cost: 800
   Description1
   Seats available: 4
   Destination: Bangalore


        RoyaleRoute
  Package Capacity: 3
  Occupied: 2

  Available Destinations are

  Delhi
   Activities at this destination -->

   Activity Name: Paragliding
   Cost: 300
   Desciption3
   Seats available: 1
   Destination: Delhi

  Mumbai
   (No activities available at this destination)

Choose travel package name: GreenEscapes

  *Database Updated*

  *Database Updated*

Choose the number of activities: 1

Choose activity: Camping

   Your remaining balance is 650

  *Database Updated*

  *Database Updated*

  *Database Updated*
```

Changes in database after addition of new passenger:

➢ **Passenger table**

```
mysql> select * from passenger;
+------------------+----------------+----------+---------+
| Passenger_Number | Passenger_Name | Status   | Balance |
+------------------+----------------+----------+---------+
|                1 | Ram            | Gold     |     750 |
|                2 | Geeta          | Standard |     700 |
|                3 | Babita         | Premium  |    1023 |
|                4 | Shyam          | Standard |     100 |
|                5 | Himanshu       | Gold     |     650 |
+------------------+----------------+----------+---------+
```

➢ **Travel Package table**

```
mysql> select * from travel_Package;
+--------------+------------------+----------+
| Package_Name | Package_Capacity | occupied |
+--------------+------------------+----------+
| GreenEscapes |                3 |        3 |
| RoyaleRoute  |                3 |        2 |
+--------------+------------------+----------+
```

➢ **Activity table**

```
mysql> select * from activity;
+--------------+--------------+------+--------------+------------+
| Activity_Name | Description  | Cost | Act_Capacity | Dest_Name  |
+--------------+--------------+------+--------------+------------+
| BungeeJumping | Description1 |  800 |            4 | Bangalore  |
| Camping       | Description2 |  500 |            0 | Darjeeling |
| Paragliding   | Desciption3  |  300 |            1 | Delhi      |
+--------------+--------------+------+--------------+------------+
```

➢ Package-Passengers table

```
mysql> select * from package_passengers;
+---------------+------------------+
| Package_Name  | passenger_number |
+---------------+------------------+
| RoyaleRoute   |                1 |
| RoyaleRoute   |                2 |
| GreenEscapes  |                3 |
| GreenEscapes  |                4 |
| GreenEscapes  |                5 |
+---------------+------------------+
```

➢ Passenger-Activities table

```
mysql> select * from passenger_activities;
+------------------+---------------+
| passenger_number | activity_name |
+------------------+---------------+
|                1 | Camping       |
|                2 | Paragliding   |
|                3 | Paragliding   |
|                4 | BungeeJumping |
|                5 | Camping       |
+------------------+---------------+
```

2. Print Itinerary of travel packages

```
        Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number: 2

 Travel Packages-->

        GreenEscapes

  Package seats full


        RoyaleRoute
  Package Capacity: 3
  Occupied: 2

 Available Destinations are

  Delhi
   Activities at this destination -->

   Activity Name: Paragliding
   Cost: 300
   Desciption3
   Seats available: 1
   Destination: Delhi


  Mumbai
   (No activities available at this destination)
```

3. Show passengers in each package

```
        Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number: 3

        GreenEscapes
  Package Capacity: 3
  Occupied: 3

    Passenger Number: 3
    Passenger Name: Babita


    Passenger Number: 4
    Passenger Name: Shyam


    Passenger Number: 5
    Passenger Name: Himanshu


        RoyaleRoute
  Package Capacity: 3
  Occupied: 2

    Passenger Number: 1
    Passenger Name: Ram


    Passenger Number: 2
    Passenger Name: Geeta
```

4. Show passenger details

```
        Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number: 4

        Passenger Details

  Passenger Number: 1
  Passenger Name: Ram
  Passenger status: Gold
  Passenger balance: 750
     1.Activity Name: Camping
       Destination: Darjeeling
       Amount Paid: 450

  Passenger Number: 2
  Passenger Name: Geeta
  Passenger status: Standard
  Passenger balance: 700
     1.Activity Name: Paragliding
       Destination: Delhi
       Amount Paid: 300

  Passenger Number: 3
  Passenger Name: Babita
  Passenger status: Premium
     1.Activity Name: Paragliding
       Destination: Delhi
       Amount Paid: 0

  Passenger Number: 4
  Passenger Name: Shyam
  Passenger status: Standard
  Passenger balance: 100
     1.Activity Name: BungeeJumping
       Destination: Bangalore
       Amount Paid: 800

  Passenger Number: 5
  Passenger Name: Himanshu
  Passenger status: Gold
  Passenger balance: 650
     1.Activity Name: Camping
       Destination: Darjeeling
       Amount Paid: 450
```

5. Show current activities available

```
          Menu
1.Add new passenger
2.Print Itinerary of travel packages
3.Show Passengers in each package
4.Show Passenger Details
5.Show current activities available

Enter your choice number: 5
List of Activities that still have spaces available


    Activity Name: BungeeJumping
    Cost: 800
    Description1
    Seats available: 4
    Destination: Bangalore

    Activity Name: Paragliding
    Cost: 300
    Desciption3
    Seats available: 1
    Destination: Delhi
```