

GENERAL OVRVIEW

1. In entry point of the program, user have to decide whether they are new user or exiting user. If they are existing user, then they have to enter user-ID to proceed further. Otherwise they must create an account first, and for every new user the program will generate a unique user-ID.
2. For creating account, email-ID must be unique. Means if the database contains a specific email, that email can not be used for creating new account. [Email is the primary key].
3. Once account is created, user have to login again with the user-ID and this time they are able to perform certain operations.
4. For performing each operations, user have to verify their password.
5. By choosing option '7' user can redirect to booking portal, where booking related operations can be performed.

[Booking portal operations]

- a. By pressing '1', user can see the details of all cars. For more details they have to press 'y'.
- b. User can book cars by selecting the option '2'. At first the list of all unreserved cars will be shown. User can select their preferred car from the list.

[Database holds a record in booking_details named 'STATUS' where the current status of the each and every booking is stored, and by restarting the program the booking status will be changed automatically according to the date.]

- c. User can return the car by pressing '3' no matter what the booking status is, but they have to pay according to it, if the status is 'OVERDUE' they have to pay some extra charges. With successful payment, booking status will be changed to 'CLEARED' by the system. In 'OVERDUE' cases it will be 'CLEARED(OVERDUE)'.

- d. By choosing '4' user can cancel their booking, but if the status is already 'OVERDUE', user cannot cancel their booking, they have to select option '3' to return the car. In normal cancellation case, some charges will be applied.

[In database, in car_details, car status will be changed automatically according to the booking portal operations]

6. User can delete their account also, but if the account is deleted, the specific user-ID, linked to that account will be invalid, so they cannot login with the same user-ID, but if status of any booking associated with this account is currently 'RESERVED' or 'ONGOING' or 'OVERDUE', account deletion can not be done.

**** In the database connector class**

Keep the database name same as car_rental_system. Make sure to write the correct user_name and password which you use to login in MySql

```
1 import java.sql.*;
2
3 public class database_connector {
4     Statement s;
5     PreparedStatement stmt;
6     Connection con;
7     ResultSet rs;
8     database_connector()
9     {
10         try
11         {
12             con = DriverManager.getConnection("url: jdbc:mysql://localhost:3306/car_rental_system", user: "root", password: "MySql@python123");
13             s = con.createStatement();
14         }
15         catch(Exception e)
16         {
17             System.out.println("-----");
18             System.out.println("Looks like server is busy..Please try later");
19             System.out.println("-----");
20         }
21     }
22 }
```

Annotations in the image:

- Database name: points to "url: jdbc:mysql://localhost:3306/car_rental_system"
- User name: points to user: "root"
- Password: points to password: "MySql@python123"