AMRITA VISHWA VIDYAPEETHAM DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING 19CSE204 – OBJECT ORIENTED PARADIGM GROUP PROJECT

CAR RENTAL SYSTEM

Overview:

Car rental system is an online system where customers can rent different kinds of cars of their interest. The main aim of this project is to design and develop a database for the car rental company to maintain the records of different types of information such as customer details, different cars details and it would be easy to keep track of different cars. This system simplifies the assignment of different cars and also increases the efficiency as it attracts many new customers.

This system makes the customers work to search for cars easy as all the details about the availability of different cars are available. This system also helps the car rental company to find the customers easily.

GROUP MEMBERS:

ROLL NO.	NAME	EMAIL-ID
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TEAM CONTRIBUTION:

RollNo/Name	Concept	Contributio n	Justify your contribution	Program Name
CB.EN.U4CSE1945 9 S.SHANTHAN	Class	Main	Main class calls the login method from login class and display the user menu if the login class validates the login or display the error message when failed.	Main.java
CB.EN.U4CSE1945 9 S.SHANTHAN	Methods	main	Main method this method connects to the database does implement all of the database operations.	
CB.EN.U4CSE1945 9 S.SHANTHAN	Constructor s	main	Initialises the all the variables in this class to null if the datatype is string and zero(0) if the datatype is int or double	
CB.EN.U4CSE1945 9 S.SHANTHAN	Static Concept	Loginbool, main	Main method itself is static and the login_bool is also a static variable which is present in login class and it is used to validate the login here in main method	
CB.EN.U4CSE1945 9 S.SHANTHAN	Inheritance —Type	Inherited from login	Class main is inherited from login class since it uses the method login which should restrict access to users	

CB.EN.U4CSE1945 9 S.SHANTHAN	Package	Com.amrita	All the classes present in the project are the part of the package com.amrita	
CB.EN.U4CSE1945 9 S.SHANTHAN	Exception handling	sqlexceptions	Expected SQLExcepti ons are mentioned in throws and try block captures the errors that might occur while the SQL statements getting executed.	

PROGRAM:

```
String AADHAAR = user input.nextLine();
query = "INSERT INTO " + table_name + " VALUES('" +
CUSTOMER_ID + "','" + PHONE_NUMBER + "','" + EMAIL + "','" + STREET + "','"
                          System.out.println("Enter FROM DATE ");
```

```
query = "insert into " + table_name + " values('" +
BOOKING_ID + "','" + CAR_ID + "','" + CUSTOMER_ID + "','" + FROM_DATE +
```

Rollo/Name	Concept	Contributio n	Justify your contribution	Progra m Name
CB.EN.U4CSE19453 R.ABHINAV	Class	signup	Sign up class gets username and password from the users and asks to validate by reentering the password. If it validates user credentials gets added to the database.	signup. java
CB.EN.U4CSE19453 R.ABHINAV	Methods	signup	signup method here all the interactions with the user are done using CLI and validations and data is queried to and froth the Mysql server which is the backend.	signup. java
CB.EN.U4CSE19453 R.ABHINAV	Constructor	signup	Default constructor to invoke be invoked on creation of object of signup class.	signup. java
CB.EN.U4CSE19453 R.ABHINAV	Inheritance	Inherited from Database Operations	Class signup is inherited from Database Operations class since it uses the method Insert which stores credentials of the user once he signed up	signup. java
CB.EN.U4CSE19453 R.ABHINAV	Package	com.amrita	Since to facilitate inheritance all the classes for this project are placed under this package.	signup. java
CB.EN.U4CSE19453 R.ABHINAV	Exception handling	try, throws	Expected SQLException s are mentioned in throws and try block captures the errors that might occur while the SQL statements getting executed.	signup. java

```
String exeQuery = "INSERT INTO credentials VALUES
```

RollNo/Name	Concept	Contribution	Justify your contribution	Program Name
CB.EN.U4CSE19449 P.KOUSHIK	Class	login	Login class performs all the operations such as showing the menu and then executing the code based on user's choice	login.java
CB.EN.U4CSE19449 P.KOUSHIK	Methods	login	Login method here displaying the menu and program in favour of user choice is done. If user chooses login it authenticates user using his username and password. If user doesn't have an account, he can choose signup to get signed up	login.java
CB.EN.U4CSE19449 P.KOUSHIK	Construc	login	Default constructor to invoke be invoked on creation of object of login class.	login.java
CB.EN.U4CSE19449 P.KOUSHIK	Inheritan ce	Inherited from signup	Class login is inherited from signup class since it uses the method signup in case if the user isn't signed up before	login.java

CB.EN.U4CSE19449 P.KOUSHIK	Package	com.amrita	Since to facilitate inheritance all the classes for this project are placed under this package.	login.java
CB.EN.U4CSE19449	Exceptio n	try, throws	Expected SQLExceptions are mentioned in	login.java
P.KOUSHIK	handling		throws and try block captures the errors that might occur while the SQL statements getting executed.	

PROGRAM:

```
// generating the select query
String query = "select * from credentials";
ResultSet resultset = statement.executeQuery(query);
```

Rollo/Name	Concept	Contribution	Justify your contribution
CB.EN.U4CSE19405 A.HEMANTH	Class	DB Operations	DB operations helps in connecting frontend with the database
CB.EN.U4CSE19405 A.HEMANTH	Methods	Update, select insert, delete	1.Update:update the database through the query. 2.select:displays the data from database 3.insert:adds data into the database 4.Delete:deletes the data from database
CB.EN.U4CSE19405 A.HEMANTH	Constructor	DB operations	Default constructor to invoke be invoked on creation of object of DB operations class.
CB.EN.U4CSE19405 A.HEMANTH	Inheritance	Base class for inheritance	It is the base class for inheritance of main class, signup class.
CB.EN.U4CSE19405 A.HEMANTH	Package	com.amrita	Since to facilitate inheritance all the classes for this project are placed under this package.
CB.EN.U4CSE19405 A.HEMANTH	Exception handling	try, throws	Expected SQLExceptions are mentioned in throws and try block captures the errors that might occur while the SQL statements getting executed.

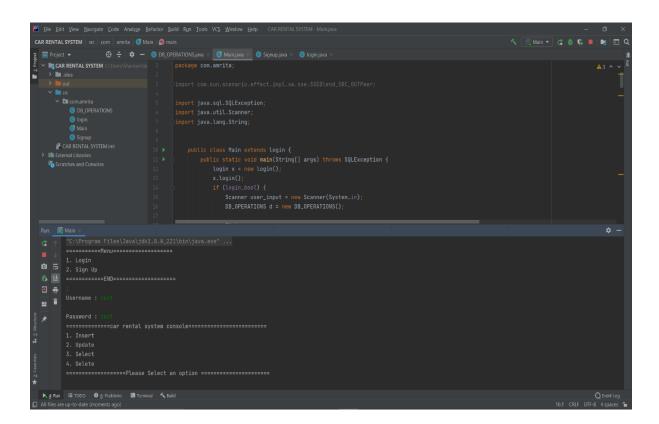
PROGRAM:

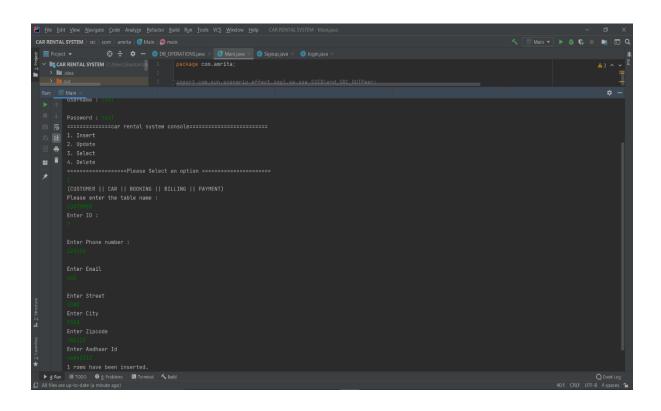
```
rows affected = statement.executeUpdate(query);
       connect.close();
    } catch (SQLException throwables) {
       Statement statement = connection.createStatement();
        throwables.printStackTrace();
public void Delete(String query) throws SQLException{
```

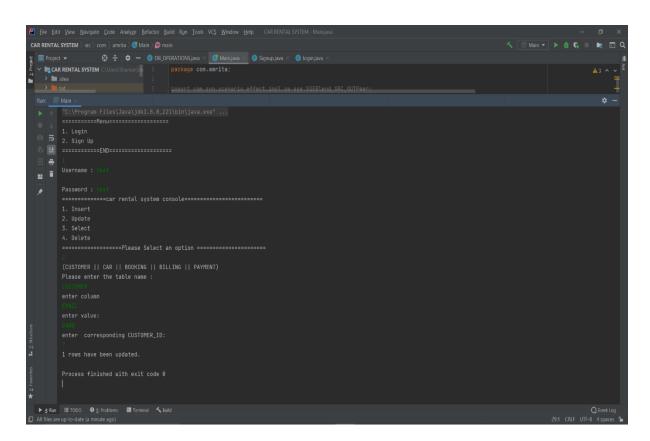
```
} catch (SQLException throwables) {
public void Select(String query) throws SQLException{
        ResultSet set = statement.executeQuery(query);
    } catch (SQLException throwables) {
```

OUTPUT

```
| Big Egt Yew Bawgue Code Analog Educar Baid Ran | Sode VC Work Week William School | Some |
```







```
☐ De fot jon buyen Cok Anthro Seton but fan jon VC Synone Beg Cok Anthro Seton but fan jon VC Synone Beg Cok Anthro Seton Set
```

PROJECT SOURCE CODE:

Drive Link:

https://drive.google.com/drive/folders/14PuLks3LWJMAUDDfUaDR 9V6E4JhfxVCZ?usp=sharing

-----THANK YOU-----