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**Project Name: AUTOMOBILE SHOWROOM MANAGEMENT**

**SYSTEM**

**Course name: OBJECT ORIENTED PROGRAMMING 1**

**Course Instructor: SHAZZAT HOSSAIN**

**Semester: FALL 2017-18**

**Date of Submission: 30 DECEMBER, 2017**

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**Target Users of this application:**

**->**Salespersons of a showroom (ex- Manager).

**Functionalities:**

1. **User Access:**

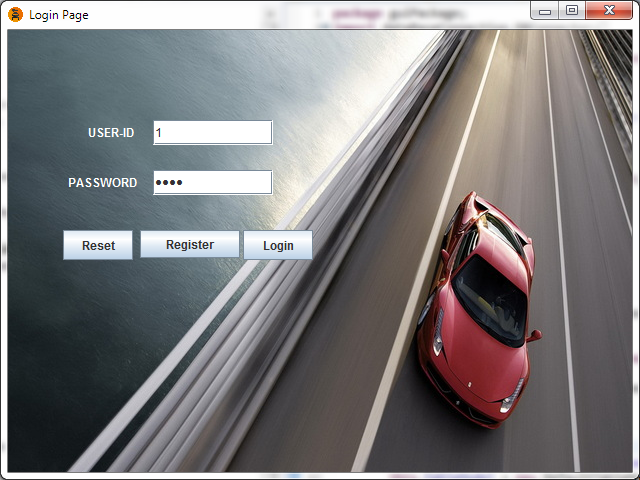
* **User can sign in to the system .**
* **User can register for access .**
* **User can sign out from the system .**

1. **User Control :**

* **Check inventory.**
* **Check order history.**
* **Check customer history.**
* **Create an order form.**
* **Generate a bill (which is saved in pdf format).**
* **Check revenue.**
* **User can sort multiple data from data table in ascending and descending order.**
* **User can search specific data(along with the row) from the table .**

**GUI DESIGN:**

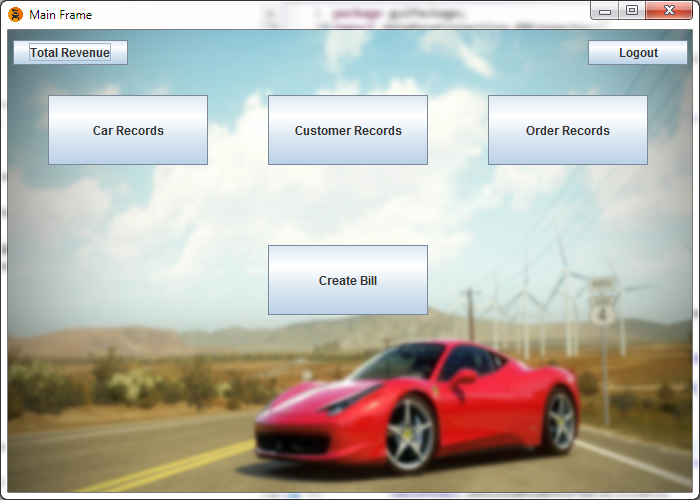
1. **Log In Page**

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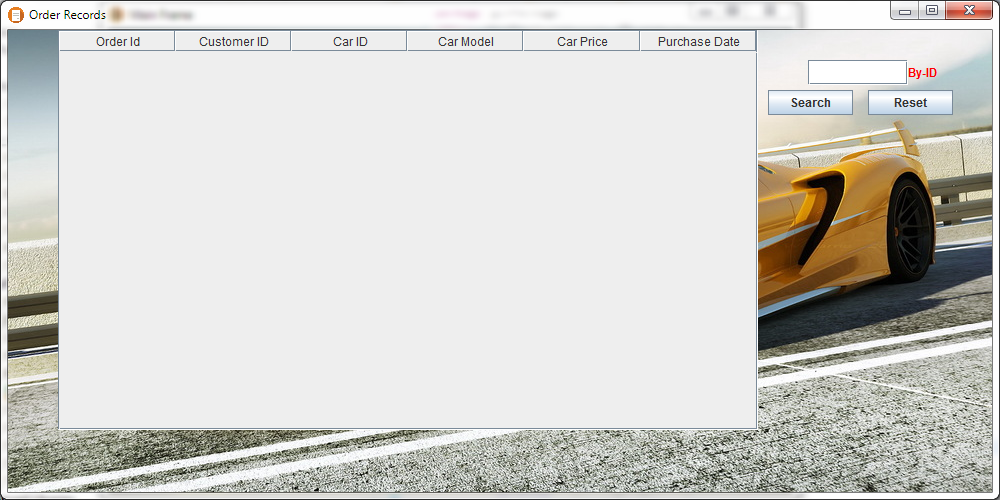
1. **Sign up Page**

****

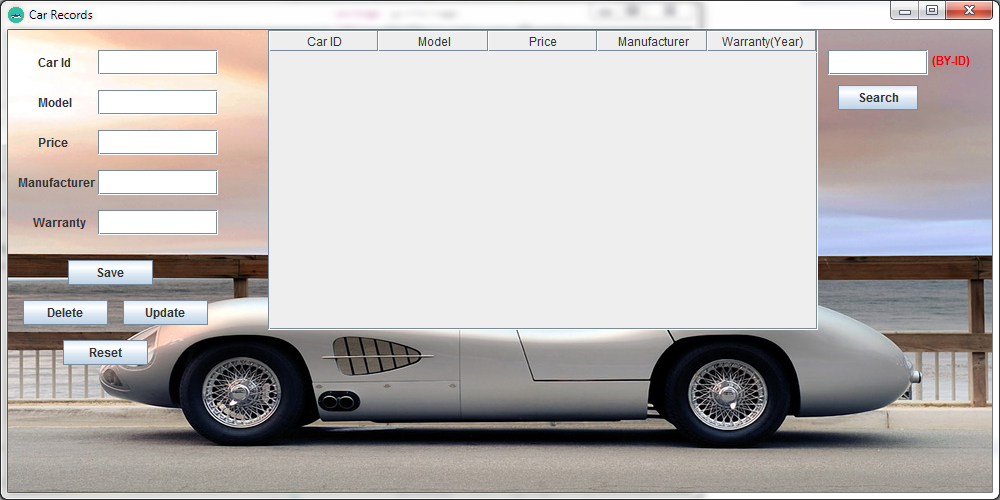
1. **Main Menu**

****

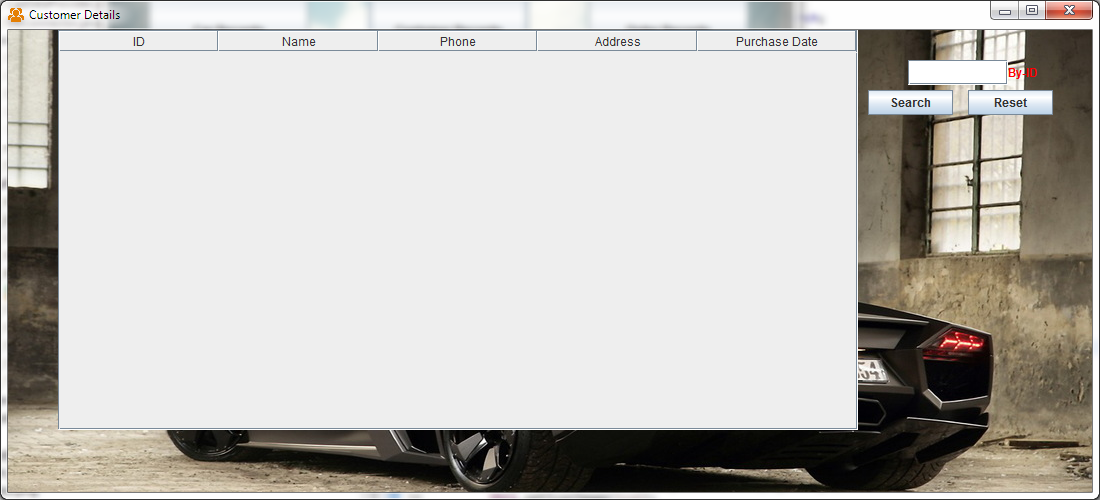
1. **Order Records**

****

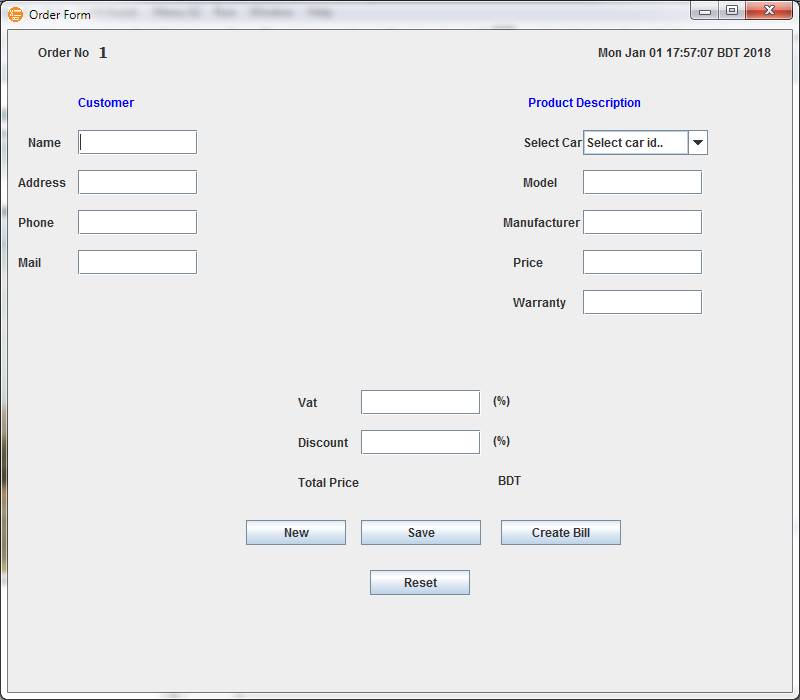
1. **Car records**

****

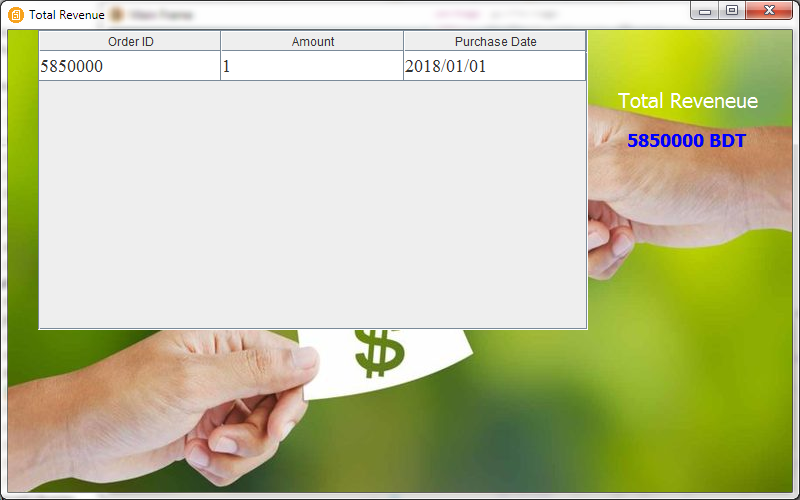
1. **Customer records**

****

1. **Order Form**

****

1. **Revenue**

****

**Exported Order Form(pdf Format):**

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**Proposed Classes for this application:**

**Car:**

Car class has id, model, price, manufacturer and warranty attributes.

**Customer:**

Customer has id, name, phone, address and purchase date attributes.

**Order:**

Order has id, customer id, car id, car model , car price and purchase date attributes where customer id , purchase date belong to CUSTOMER class and car id , model ,price belong to CAR class.

**Login**

It is a separate class from Car, Customer, Revenue and Order which is used only for user access control.

**Revenue:**

This class is connected to the ORDER class. It has Order ID, Amount, Purchase date attributes where Order Id belongs to ORDER class and Purchase date belongs to CUSTOMER class.

**Resources:**

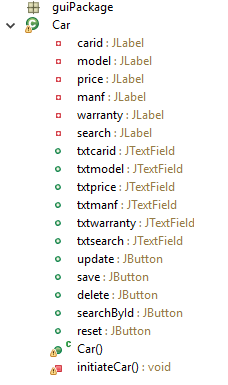
* IDE for Project : Eclipse , Intellij idea .
* External archives : mysql.jar , iTextpdf.jar .
* <https://erdplus.com/> for ER diagram .
* <https://creately.com/> for DB Relational schema .

**Project Structure:**

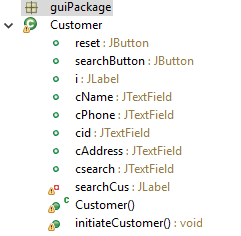
This project is divided into three packages :

**A.guiPackage:**

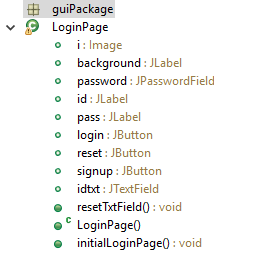
1.Car



2.Customer



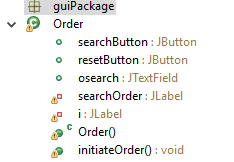
3.LoginPage



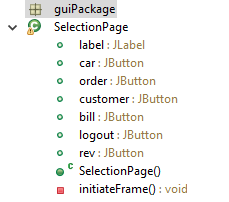
4.Main Frame



5.Order

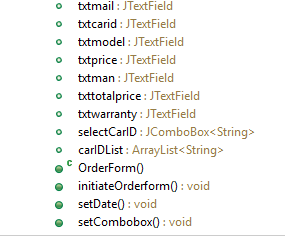


6.Selectionpage

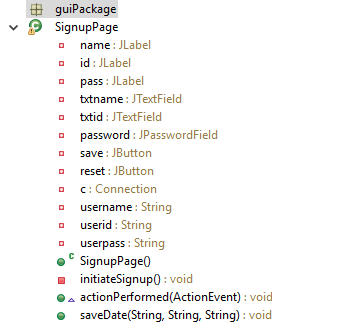


7.Order Form

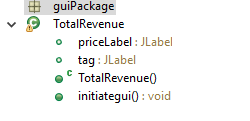




8.Sign Up Page



9.Total Revenue

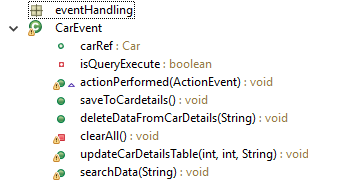


10.Main:

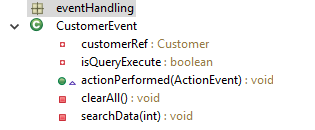
A Main class with main method to run the program in a single thread.

**B.Event Handling**

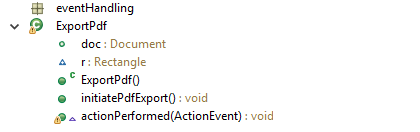
1.Car Event

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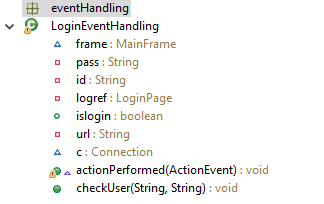
2.Customer Event

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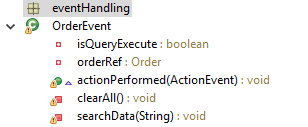
3.Expore Pdf

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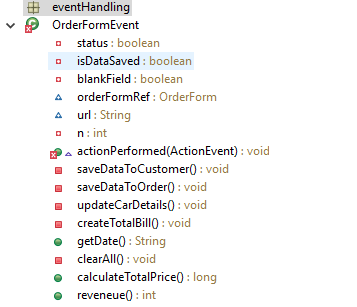
4.Login Event Handling

****

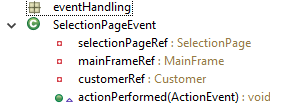
5.Order Event

****

6.Order Form Event

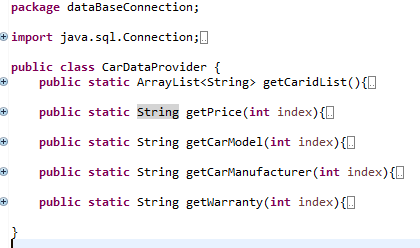
****

7.Selection Page Event

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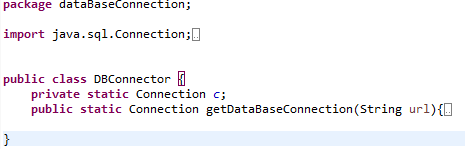
**C.Database connection**

1. CarDataProvider:

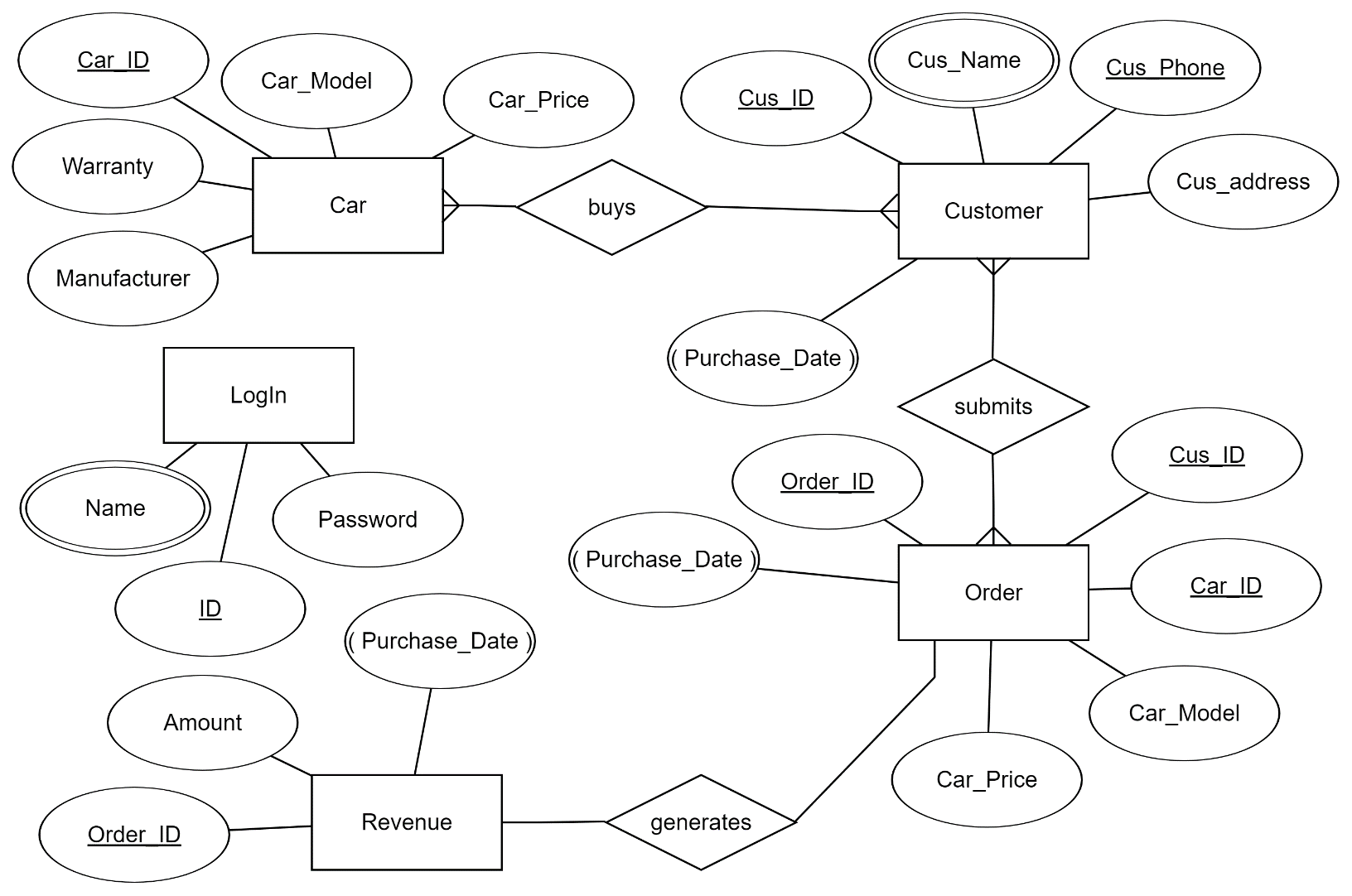


2.DBConnector

Class with necessary method to register driver .



**Entity-Relationship Diagram**



**DATABASE CONTENTS (TABLES):**

**CAR**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CAR\_ID | CAR MODEL | CAR PRICE | MANUFACTURER | WARRANTY |

**CUSTOMER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CUSTOMER ID | CUSTOMER NAME | CUSTOMER PHONE | CUSTOMER ADDRESS | PURCHASE DATE |

**ORDER**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ORDER ID | CUSTOMER ID | CAR ID | CAR MODEL | CAR PRICE | PURCHASE DATE |

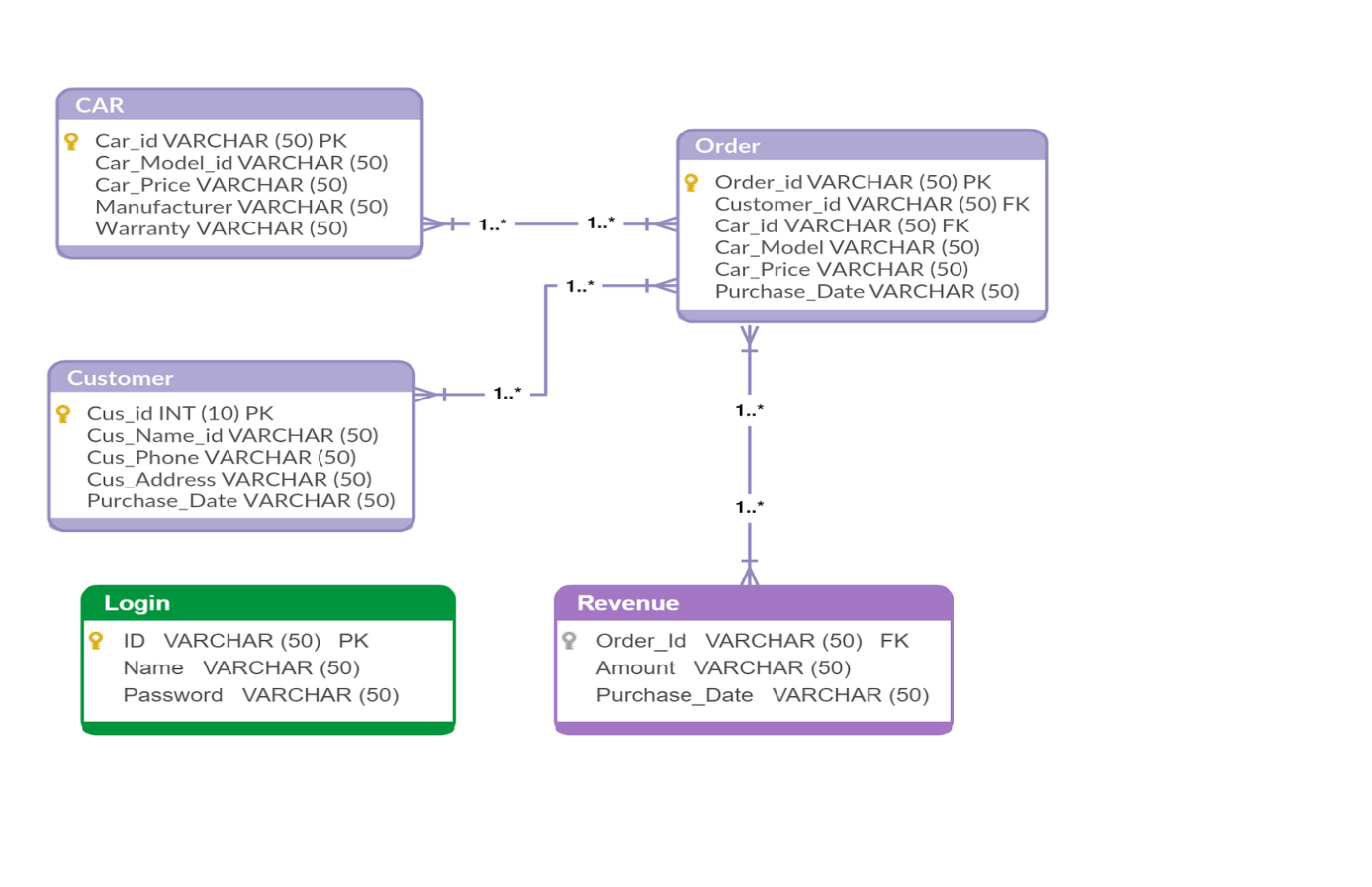
**LOGIN**

|  |  |  |
| --- | --- | --- |
| ID | NAME | PASSWORD |

**REVENUE**

|  |  |  |
| --- | --- | --- |
| ORDER ID | AMOUNT | PURCHASE DATE |

**Database Relationship Diagram:**

**Conclusion:**

Due to insufficient time there may be some bugs ,error (mainly in order Form)remained in the application and the application lacks of some efficient features .