**Car Rental System**

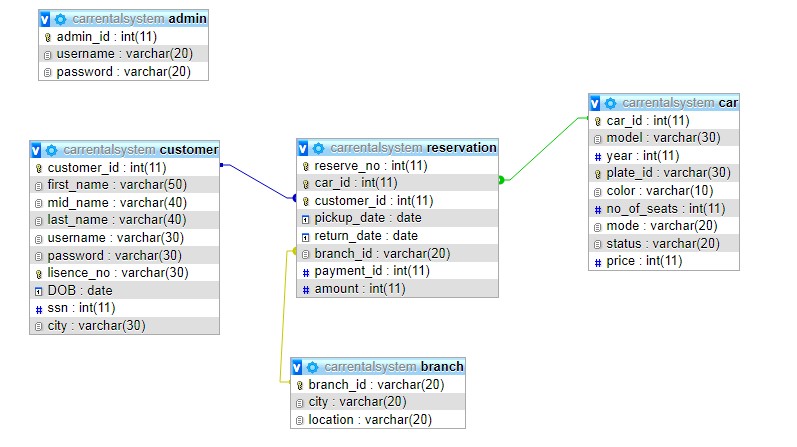
Nour Yasser 6604

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Mohamed Nouh 6355

**ERD**



**DDL:**

CREATE DATABASE CarRentalSystem;

USE CarRentalSystem;

CREATE TABLE customer (customer\_id int not null AUTO\_INCREMENT ,

first\_name varchar(50),

mid\_name varchar(40),

last\_name varchar(40),

username varchar(30),

password varchar(30),

lisence\_no varchar(30) UNIQUE,

DOB date,

ssn int,

city varchar(30),

PRIMARY KEY(customer\_id)

);

CREATE TABLE car (car\_id INT not null AUTO\_INCREMENT,

model varchar(30),

year INT,

plate\_id varchar(30) UNIQUE,

color varchar(10),

no\_of\_seats INT,

mode varchar(20),

status varchar(20),

PRIMARY KEY(car\_id)

);

CREATE TABLE reservation (reserve\_no INT not null AUTO\_INCREMENT UNIQUE,

car\_id INT,

customer\_id INT,

pickup\_date date,

return\_date date,

branch\_id INT,

Amount double,

PRIMARY KEY (car\_id, customer\_id)

);

CREATE TABLE admin (admin\_id INT not null AUTO\_INCREMENT ,

username varchar(20),

password varchar(20),

PRIMARY KEY(admin\_id)

);

CREATE TABLE branch(branch\_id INT not null AUTO\_INCREMENT,

city varchar(20),

location CHARACTER,

PRIMARY KEY (branch\_id)

);

ALTER TABLE reservation ADD FOREIGN KEY (car\_id) REFERENCES car(car\_id);

ALTER TABLE reservation ADD FOREIGN KEY (customer\_id) REFERENCES customer(customer\_id);

ALTER TABLE reservation ADD FOREIGN KEY (branch\_id) REFERENCES branch(branch\_id);

**Features**

* **System Admin**
  + Register new cars to the system and adding its specifications
  + Apply advanced search for any car information, customer information, or reservations.
  + Generate reports for states of cars on a specific day, reservations on a specific period, reservations of a specific customer.
* **System User (Customer)**
  + Create account on the system to make reservations
  + Search for cars using any car specification
  + Make car reservations based on the customer’s requirements
  + Availability of online payment.

**Screens**

Login

Customer or admin uses his or her username or password to login to the system.

A picture containing graphical user interface

Description automatically generated

Registration

A new customer creates a new account by adding his or her personal information.

Graphical user interface, application

Description automatically generated

Search (Customer)

Customer can search for cars based on his or her preferences such as number of seats, car’s color, model, and mode (manual or automatic).

A picture containing indoor

Description automatically generated

Reservation

Customer can reserve an available car based on his or her requirements specified. A customer chooses the pickup, return dates and pickup location.

A screenshot of a computer

Description automatically generated with medium confidence

Transition Screen

This screen allows the customer to decide whether to logout or proceed to pay the reservation amount.

Shape

Description automatically generated with medium confidence

Payment

Process the payment transaction where the customer chooses the payment method whether Visa or cash.

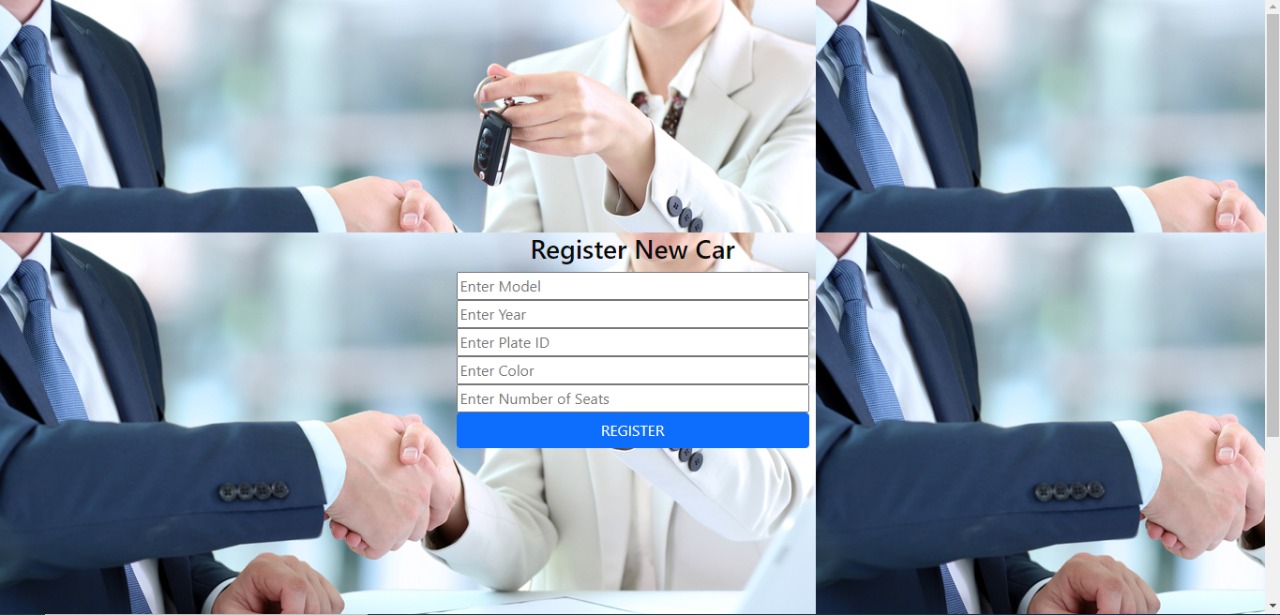
Graphical user interface

Description automatically generated

**ADMIN**

Register New Car

Admin can add a new car by specifying all car information including year, model, number of seats, plate id and color.



Search (Admin)

Admin can search by all car information including model, color, year and plate id. Admin can search for reservations on a specific period and car states on a specific day. Also search for customer information and reservations.

