# Database final project
## CAR RENTAL SYSTEM

Mohannad Bashar | 6656
Youssef Victor | 6668
Ahmed Abdulkabier | 6669
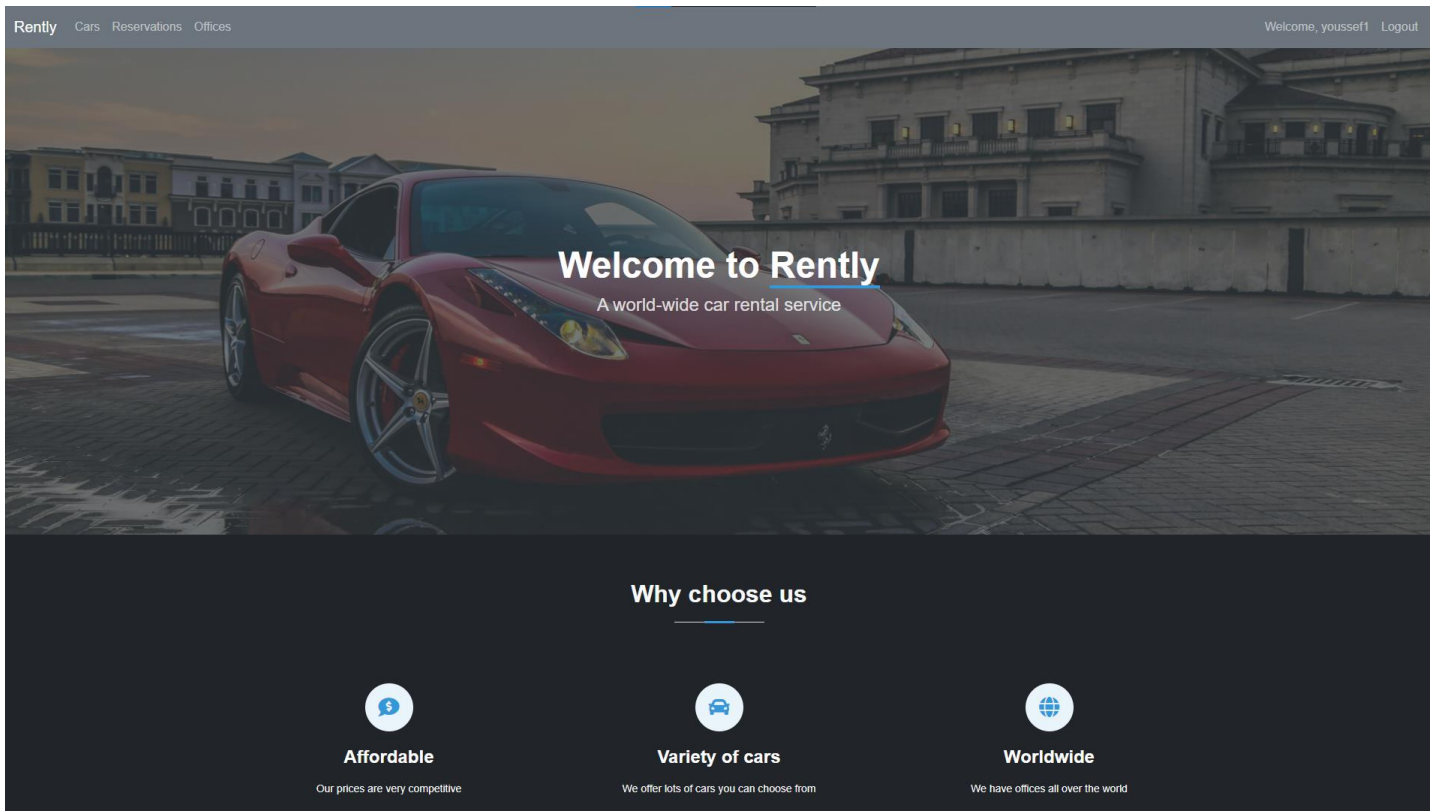Mohamed Medhat Zayton | 6670

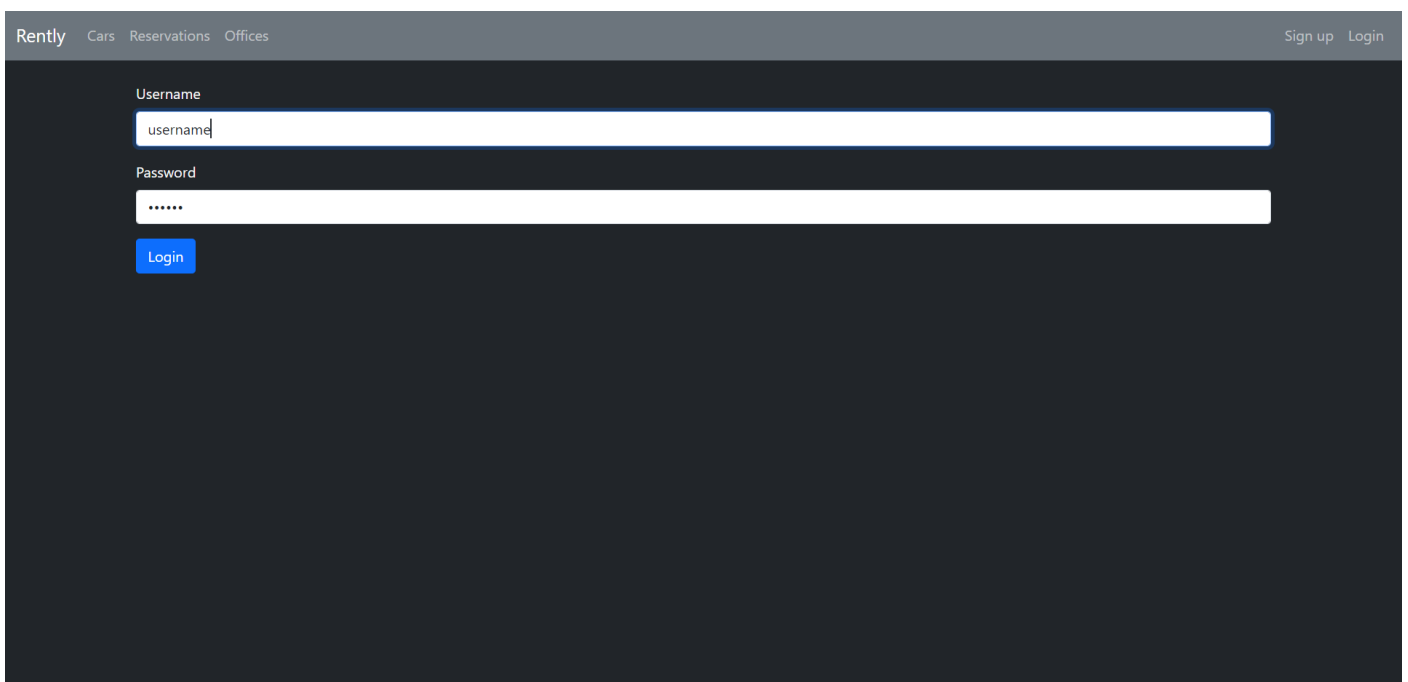# Business logic

The application flow goes as follows:

- Customers are able to sign up and login into the application.

- They can view all the cars in the system.

- They can also search with specific car attributes.

- They can reserve the car they like, if it's available.

- Then, when the customer goes to the office and take the car, an admin in the office will mark the car as "picked up".

- When the customer returns the car back to the office, an admin will mark it as "returned". A car won't be available for renting if it's picked up but not yet returned.

- An admin can record a reservation payment anytime.

- Each car is associated with an office.

- Each car has a status, active or out of service.

- An active car is available for rental unless it's already picked up and not yet returned.

- An out of service car is in "maintenance" mode, hence can't be reserved.

- Customers can search in cars, offices, and their own reservations.

- An admin can search in cars, offices, and all reservations.

- An admin can add/edit/search cars, add/edit/search offices, search customers, and mark reservations as picked up, returned, and paid.

- An admin can view some reports:

  - Show all reservations within a specified period.

  - Show all reservations of any car within a specified period

  - Show status of all cars on a specific day (active/out of service)

  - Show all reservations of specific customer

  - Show daily payments within a specific period

# APPLICATION SCREENS

## Home page:



## Login page:

## Signup page:

Rently    Cars   Reservations   Offices      Sign up   Login

**Username**

username

**First name**

user

**Last name**

name

**Email address**

user@email.com

**Password**

•••

**Password confirmation**

•••

Sign up

## Cars page:

### Cars

Plate id

Model

Color

Year

Status

Any

Is reserved

Any

Office name

Office Location

Search

| Plate | Model | Color | Year | Office Name | Office Location | Status | Is reserved | |
|-------|-------|-------|------|-------------|-----------------|--------|-------------|---|
| 556 | KIA Cerato | red | 2020 | Gleem | Gleem | Active | No | Reserve |
| 889 | subaru suv | white | 2018 | Gleem | Gleem | Active | Yes | Reserve |
| 992 | ford | red | 2022 | Gleem | Gleem | Active | No | Reserve |
| 1234 | Ford | black | 2024 | Gleem | Gleem | Active | Yes | Reserve |
| 2090 | dlkfg | lskdfjhgslk | 2000 | Gleem | Gleem | Out of service | No | Reserve |
| 6669 | TESLA | BLACK | 2023 | Gleem | Gleem | Active | No | Reserve |
| 777777 | Fiat | red | 2018 | Gleem | Gleem | Active | Yes | Reserve |

## Signup page:

## Reservations page:

# Reservations

Car plate id

Rental date

mm/dd/yyyy

Search

| Id | Rental date | Pickup date | Return date | Car plate id | Payment date | Payment amount |
|----|-------------|-------------|-------------|--------------|--------------|----------------|
| 4  | Jan. 10, 2022, 12:45 a.m. | None | None | 556 | None | None |
| 5  | Jan. 10, 2022, 12:45 a.m. | None | None | 6669 | None | None |

## Offices page:

# Offices

Office id

Office name

Office location

Search

| Office id | Office name | Office location |
|-----------|-------------|-----------------|
| 1 | Gleem | Gleem |
| 2 | youssef's office | LORAN |
| 3 | zyton's office | SPORTING |

## Customers page: (admin only)

Search Id

Search Username

Search First Name

Search Last Name

Search Email

Search

| Id | Last login | Is admin | Username | First name | Last name | Email | Date joined |
|----|-----------|----------|----------|-----------|-----------|-------|-------------|
| 1 | Jan. 5, 2022, 1:16 p.m. | False | ahmadabdulkabier | ahmad | hassan | ahmedabdelkabier7@gmail.com | Jan. 5, 2022, 1:16 p.m. |
| 2 | Jan. 9, 2022, 10:47 p.m. | True | admin | | | admin@gmail.com | Jan. 8, 2022, 2:29 p.m. |
| 3 | Jan. 9, 2022, 10:44 p.m. | False | youssef | YOUSSEF | victor | test@gmail.com | Jan. 8, 2022, 5:41 p.m. |

## Reports pages: (admin only)

### REPORTS

Show all reservations within a specified period

Show all reservations of any car within a specified period

Show status of all cars on a specific day

Show all reservations of specific customer

Show daily payments within a specific period

## Periodic Reservations Includes Cars And Customers (admin only):

Rently   Cars   Reservations   Offices   Customers   Report                                      Welcome, admin   Logout

## Periodic Reservations Includes Car And Customers

From date

| mm/dd/yyyy |
| --- |

To date

| mm/dd/yyyy |
| --- |

Search

| Id | Rental date | Pickup date | Return date | Car plate id | Customer id | Payment date | Payment amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Jan. 5, 2022, 5:52 p.m. | None | None | 1234 | 1 | None | None |
| 2 | Jan. 5, 2022, 5:59 p.m. | None | None | None | 1 | None | None |
| 3 | Jan. 8, 2022, 4:57 p.m. | None | None | 1234 | 2 | None | None |

## Cars Reservations Report(admin only):

Rently   Cars   Reservations   Offices   Customers   Report                                      Welcome, admin   Logout

## Cars Reservations Reports

From date

| mm/dd/yyyy |
| --- |

To date

| mm/dd/yyyy |
| --- |

Search

| Id | Rental date | Pickup date | Return date | Car plate id | Payment date | Payment amount |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Jan. 5, 2022, 5:52 p.m. | None | None | 1234 | None | None |
| 2 | Jan. 5, 2022, 5:59 p.m. | None | None | None | None | None |

## Status of all cars in a specific day (admin only):



| Plate Id | Date | Status |
|---|---|---|
| 8252 | Jan. 10, 2022 | Active |

## All reservations of a specific customer (admin only):



| Username | First Name Date | Last Name | Email | Plate ID | Model |
|---|---|---|---|---|---|
| admin | | | admin@gmail.com | 1234 | Ford |

## Daily payments with a specific period (admin only):

Rently    Cars   Reservations   Offices   Customers   Report          Welcome, admin   Logout

### Payment

**From**

| mm/dd/yyyy | 🗓 |

**To**

| mm/dd/yyyy | 🗓 |

Search

| Payment Date | Payment Amount |
|---|---|
| Jan. 10, 2022 | 6862 |

## Navigation bar of admin user:

Rently    Cars   Reservations   Offices   Customers   Report          Welcome, admin   Logout

## Navigation bar of normal user:

Rently    Cars   Reservations   Offices          Welcome, youssef   Logout

# ERD: