**Data Base Final Project**

**Team**

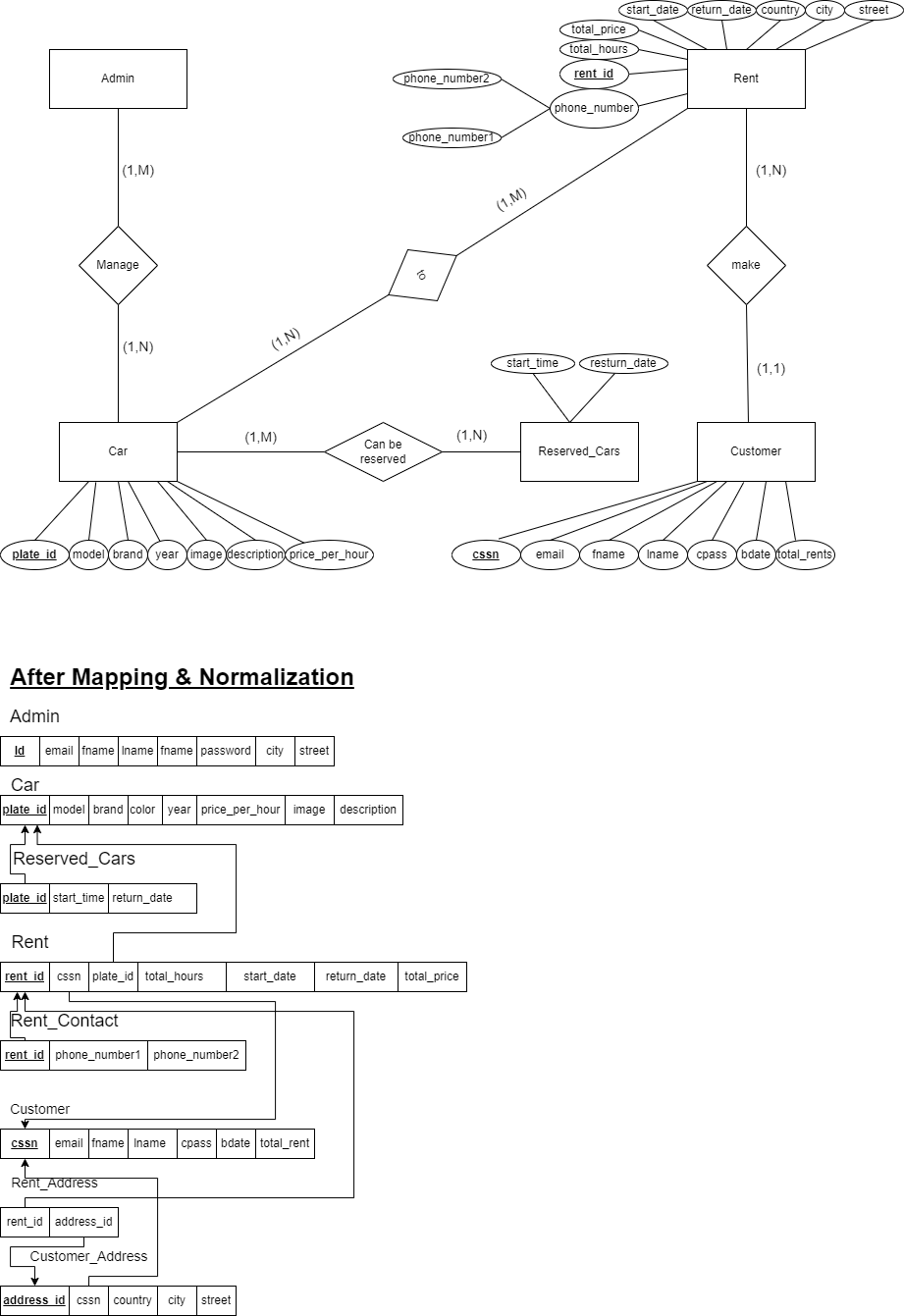
**1)** Ahmed Abdelrahman 2205008 (Frontend + ERD)

**2)** Mark Magdy 2205040 (Backend + Database design)

**3)** Arsany Osama 2205122 (Backend + Report)

**Project link :**

https://drive.google.com/drive/folders/1UZnR6GgLfQ8TzfzgfSM6ptxOSOoYRHzE?usp=drive\_link



**DDL :**DROP DATABASE IF EXISTS car\_rental\_system;

CREATE DATABASE car\_rental\_system;

USE car\_rental\_system;

CREATE TABLE admin (

id INT(10) PRIMARY KEY,

email VARCHAR(255) NOT NULL,

fname VARCHAR(30) NOT NULL,

lname VARCHAR(30) NOT NULL,

password VARCHAR(255) NOT NULL,

city VARCHAR(200) NOT NULL,

street VARCHAR(300) NOT NULL

);

CREATE TABLE car (

plate\_id INT(10) PRIMARY KEY,

model VARCHAR(100) NOT NULL,

color VARCHAR(100) NOT NULL,

brand VARCHAR(100) NOT NULL,

year INT(4) NOT NULL,

image VARCHAR(600) NOT NULL,

description VARCHAR(300) NOT NULL,

price\_per\_hour FLOAT(10, 2)

);

CREATE TABLE reserved\_cars(

plate\_id ,/INT(10) ,

start\_time DATE NOT NULL ,

return\_date DATE NOT NULL

);

CREATE TABLE rent (

rent\_id INT(10) AUTO\_INCREMENT PRIMARY KEY,

cssn VARCHAR(30),

plate\_id INT(10),

total\_hours INT(5) NOT NULL,

start\_date DATE NOT NULL,

return\_date DATE NOT NULL,

total\_price FLOAT(10, 2) NOT NULL

);

CREATE TABLE rent\_contact (

rent\_id INT(10) PRIMARY KEY,

phone\_number1 VARCHAR(12) NOT NULL,

phone\_number2 VARCHAR(12)

);

CREATE TABLE customer (

cssn VARCHAR(30) PRIMARY KEY,

email VARCHAR(255) NOT NULL UNIQUE,

fname VARCHAR(255) NOT NULL,

lname VARCHAR(255) NOT NULL,

cpass VARCHAR(255) NOT NULL,

bdate DATE NOT NULL,

total\_rent INT(4) NOT NULL

);

CREATE TABLE rent\_address(

rent\_id INT(10),

address\_id INT(10)

);

CREATE TABLE customer\_address (

address\_id INT(10) AUTO\_INCREMENT PRIMARY KEY,

cssn VARCHAR(30),

country VARCHAR(30) NOT NULL,

city VARCHAR(200) NOT NULL,

street VARCHAR(300) NOT NULL

);

ALTER TABLE rent\_address ADD CONSTRAINT fk\_rent\_address\_rent\_id FOREIGN KEY (rent\_id) REFERENCES rent (rent\_id) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE rent\_address ADD CONSTRAINT fk\_rent\_address\_address\_id FOREIGN KEY (address\_id) REFERENCES customer\_address (address\_id) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE reserved\_cars ADD CONSTRAINT fk\_reserved\_cars\_plate\_id FOREIGN KEY (plate\_id) REFERENCES car (plate\_id) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE rent ADD CONSTRAINT fk\_rent\_cssn FOREIGN KEY (cssn) REFERENCES customer (cssn) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE rent ADD CONSTRAINT fk\_rent\_plate\_id FOREIGN KEY (plate\_id) REFERENCES car (plate\_id) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE customer\_address ADD CONSTRAINT fk\_customer\_address\_cssn FOREIGN KEY (cssn) REFERENCES customer (cssn) ON UPDATE CASCADE ON DELETE CASCADE;

ALTER TABLE rent\_contact ADD CONSTRAINT fk\_rent\_contact\_rent\_id FOREIGN KEY (rent\_id) REFERENCES rent (rent\_id) ON UPDATE CASCADE ON DELETE CASCADE;