VaCarTion

- You can check the live demo of the system here (https://car-rental-system-2022.herokuapp.com/)

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Overview

A car rental system which enables customers to rent cars they need and manage their reservations with the option of paying later. The car agencies are allowed to register on the system and add their cars to the system. The system admin can manage the whole system. The system is built using Node.js and Express.js. The database is built using MySQL.

Dependencies

- Node.js (https://nodejs.org/en/)

- Express.js (https://expressjs.com/)

- MySQL (https://www.mysql.com/)

- EJS (https://ejs.co/)

- Bcrypt (https://www.npmjs.com/package/bcrypt)

- Dotenv (https://www.npmjs.com/package/dotenv)

- Nodemailer (https://nodemailer.com/about/)

- Jsonwebtoken (https://www.npmjs.com/package/jsonwebtoken)

- Cookie-parser (https://www.npmjs.com/package/cookie-parser)

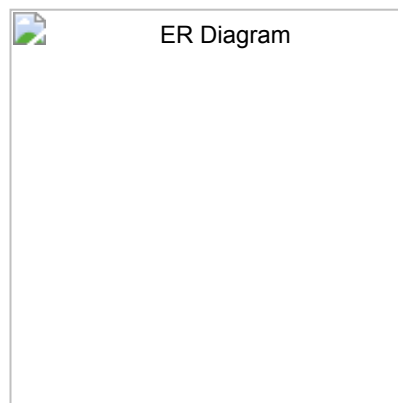- To install all the dependencies, run the following command in the terminal:

```
npm install
```

Database Schema

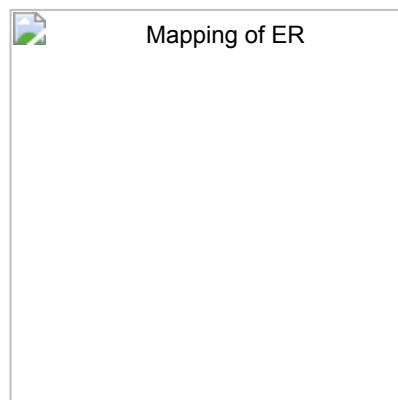## DDL

- You can find the create your database schema by running the Data Definition script in Database Schema (https://github.com/yousefkotp/Car-Rental-System/blob/main/sql/DDL.sql)

ER Diagram

ER Diagram

Mapping of ER Diagram

Mapping of ER

Authentication and Authorization

- The system uses JSON Web Tokens (https://jwt.io/) for authentication and authorization.

- The system uses cookie-parser (https://www.npmjs.com/package/cookie-parser) to store the access token in the cookies.

Deployment

1- Create a database with the explained database schema and ER diagram

2- Configure the .env file and set the following variables:

```
- DB_HOST
- DB_USER
- DB_PORT
- DB_PASS
- DB_NAME
- ACCESS_TOKEN_SECRET -> Secret key for generating access tokens
- EMAIL -> Email address from which you want to send the emails
- PASSWORD -> Password of the email address
```

3- Make sure you have installed all the dependencies by running the following command in the terminal:

```
npm install
```

4- Run the following command in the terminal to start the server:
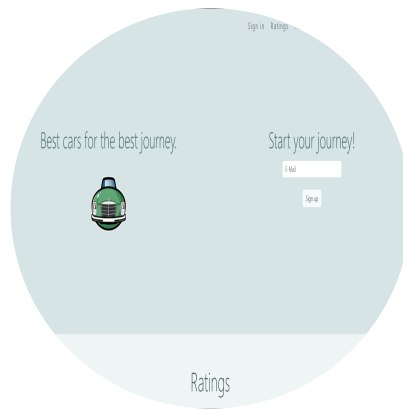
```
npm start
```

5- Open the browser and go to the following link:

```
http://localhost:3000
```

- **Note:** If you want to run the server on a different port, you can change the port number in index.js file

Screenshots

Landing Page

Best cars for the best journey.

Start your journey!

E-Mail

Sign in

Ratings

Office Agent Dashboard

Limozin Gold

Your current reservations

Res NO.	Plate ID	Customer Name	Res Date	Pickup Date	Return Date	Total Revenue
1	1234678	Yousef Kotp	2022-12-30	2022-12-30	2023-1-2	40

Your current cars

Add Car

ID	Status	Registration Date	Make	Model	Year	Price/Day
	Available	2022-12-30	A4	Audi	2019	10

Customer Dashboard

Welcome, Yousef Kotp

Your current Reservations

New Reservation

Reservation ID	Car ID	Pickup Date	Return Date	Model	Make	Year	Total Cost	Payment Date
1	1234678	2022-12-30	2023-1-2	Audi	A4	2019	40	Pay
2	9678902	2023-1-1	2023-1-5	BMW	X6	2015	125	2022-12-30

Reservation Page

Contributers

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