Car Rentals

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INTRODUCTION

PURPOSE

A new up and coming car rental service is wishing to have a user interface that will allow their customers to view the models, descriptions and prices of different cars available. The user has the ability to register and log in to the Web App and add their location to pick-up the car.

INTENDED AUDIENCE AND PERTINENT SECTIONS

Several different types of stakeholders can be noted when it comes to our software. Customers are the main stakeholders, and with a mobile/web car rental service, one can find the convenience of obtaining a car with circumstances ranging from their current vehicle breaking down to needing a means of transport during vacation. This puts an extreme time saving benefit of the customer having to search around to even find a car rental building. With the car rental service, they will help you locate the store as well as even take the car to you, if the customer so chooses.

PROJECT SCOPE

With this company in need of a better system, we felt it was our obligation to help them in their time of need. To develop such a system that would not only ease the burden on the company's customers, but the company itself. Our team has an immense amount of knowledge when it comes to problem solving, programming, and communication. Not only would we strive to give the car rental service everything they desired, but we will continue to make sure the software is at its very best and beyond.

DESCRIPTION

PRODUCT PERSPECTIVE

The project will create a flexible way to rent a car, by enabling the user to locate the place of receipt and delivery of the vehicle. So let suppose that you are travelling to new country, instead of take taxi from the airport, you can previously rent a car that have the specifications you need and pick it up from the airport.

FEATURES

- Map to determine the location to pick-up and drop down the car.
- Filter to help the user to have more control over the car specifications that he want to rent.
- Reservation form to pick date and time.
- Photo for each car.
- Reservation cancellation.

USER OVERVIEW

A person who is adult, have driving license, and want to rent a car.

OPERATING ENVIRONMENT

On any type of web browser.

DOCUMENTATION

The code will uploaded on git hub.

Technologies & languages

The website will be created using React js, bootstrap, HTML and CSS for the front-end. On the server-side, it will use PHP with laravel framework. Finally, mysql for the database.

SYSTEM FEATURES

SYSTEM FEATURE 1

DESCRIPTION AND PRIORITY	Register and login for users.
FUNCTIONAL REQUIREMENTS	Larvel Authentication system.

SYSTEM FEATURE 2

DESCRIPTION AND PRIORITY	Filter for cars.
FUNCTIONAL REQUIREMENTS	Queries on the database to get the required result

SYSTEM FEATURE 3

DESCRIPTION AND PRIORITY	Location locater.

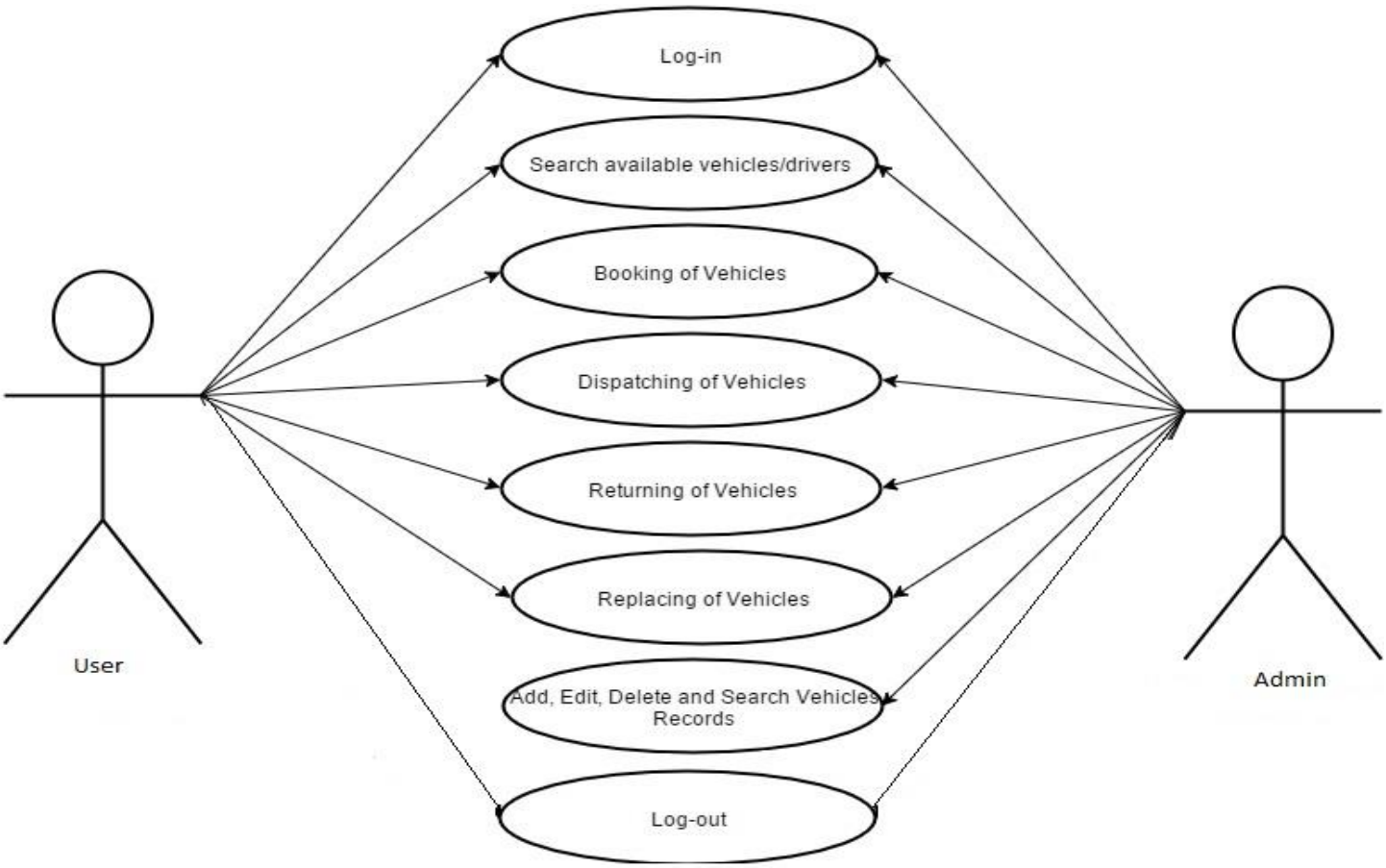
FUNCTIONAL REQUIREMENTS	Input the location.

REQUIREMENTS OF EXTERNAL INTERFACE

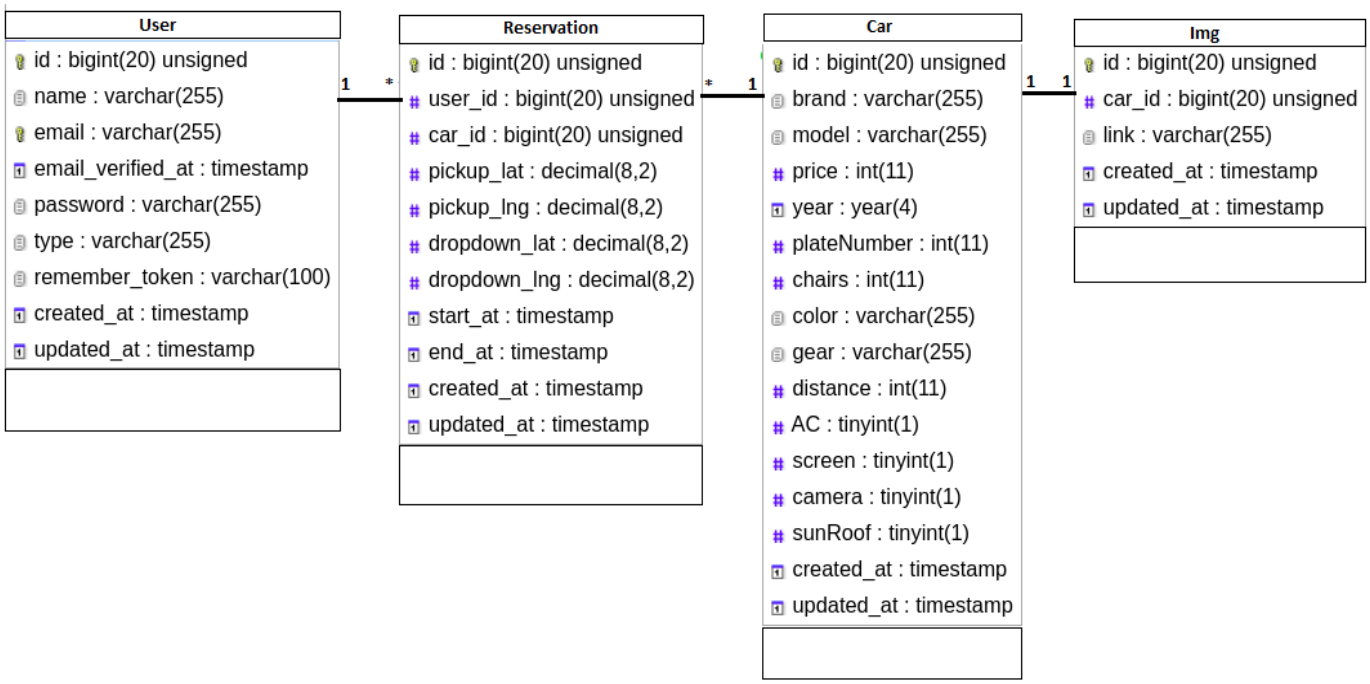
USER INTERFACES

The user interface that will allow their customers to view the models, descriptions and prices of different cars available.

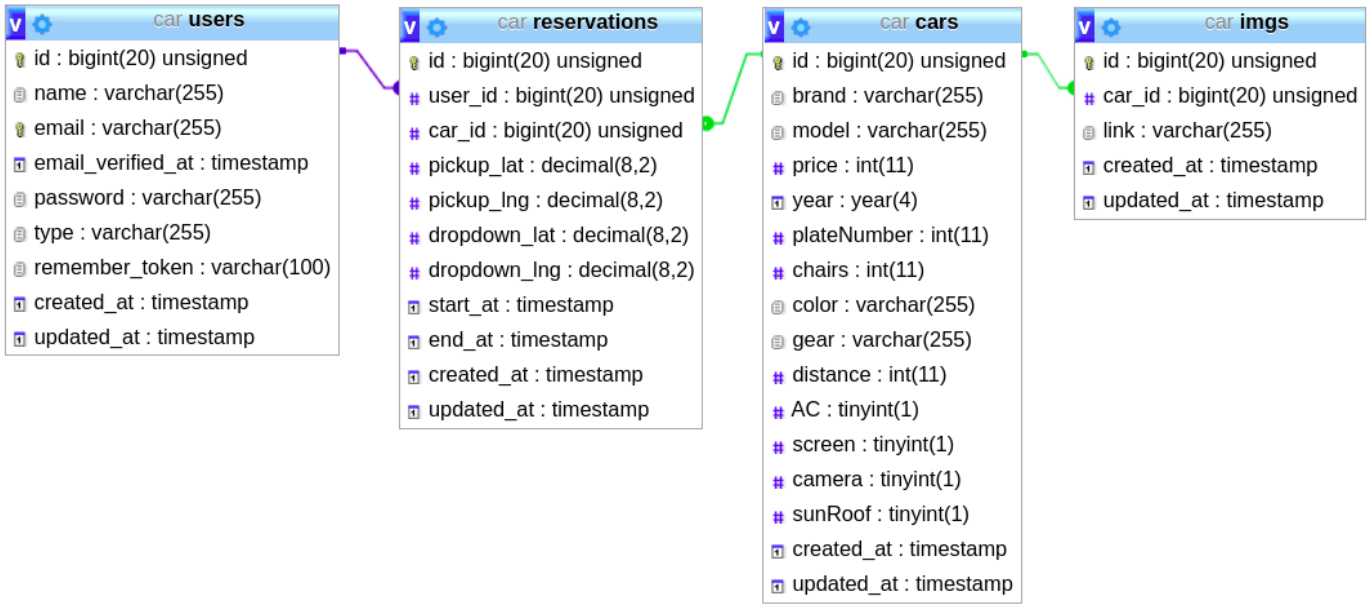
Use Case Diagram



Class Model



Database Design



SOFTWARE INTERFACES

● View all available rental cars

○ Connects with the database through laravel eloquent to call all car objects and display them accordingly.

● Search for desired car by model, seating capacity, and cost

○ A search bar will be implemented on the website that will search the site based on the input.

● Select their desired rental car

○ A button will be displayed under the rental car previews that will allow for the selection

● Allow for registration

○ registration display form.

● Allow the customer to log in

○ log in display form.

ADDITIONAL NONFUNCTIONAL REQUIREMENTS

PERFORMANCE

● Ability to maintain mass amount of customers on the website at once without crashing.

● Speedy performance / transmission of data.

● Have a quick recovery time if anything were to go wrong

● Display accurately and efficiently on all devices (responsive view)

SECURITY

● Secure any transmissions of private information between the customer and the company.

- Prevent any potential threats such as SQL injections through the forms or search boxes.
- Prevent third party users at administration level.
- Prevent false email inputs from being used when registering.

SOFTWARE QUALITY

- Maintain a user friendly environment that is visually appealing.
- Easy to see and use navigation.
- Maintain readable content.
- Searching cars should be easy to people who have special requirements.

Conclusion

problem that undergo for Car Rental was a lack of real time car renting with location for their customers. They wanted a website that would allow for users to purchase their service with ease and admiration. Customers should have been able to rent and view vehicles with the feature to locate their place.