Problem description:

Smart Car Rentals System: Online car rental Reservation system.

We need to specify the requirements of a new system called Smart Car Rentals that allows customers to rent cars online, pick and return to our physical location, this way you do not have to go to the physical location/store before making a reservation or car rentage.

Customers can register on the system.

Registered customers can make reservation and rent car on the on the system.

Customers can pay for services/rentals in two different ways:

- a. Credit/Debit card
- b. bank transfer

If the customer pays with credit/debit card, the system will use an external system called stripe.com. Stripe.com is a system that can be called through webservices and offers the following services:

- 1. validate credit/debit card
- 2. handle the payment

If Stripe.com is not available, then we don't accept card payment.

If the customer wants to pay with a bank transfer, the system will collect the bank information from the customer, and a Smart Cart Rental employee will perform the actual bank transfer with the online bank application of their local bank. If the bank transfer succeeded, the employee will record this in the Smart Car Rental system.

After a successful transaction/payment for the selected car, the customer is issued the car key at the pickup location for a given period.

Customer must have a valid driver's license.

Each rental has a pickup date and return date.

Customer can rent only one car at a time.

Customer can see fleet of our cars on the system.

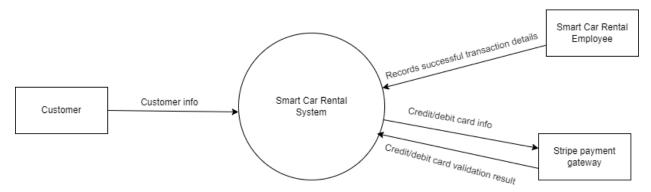
Customer can select and make reservation of our available cars.

Customer can search for a particular brand or model of cars on the system.

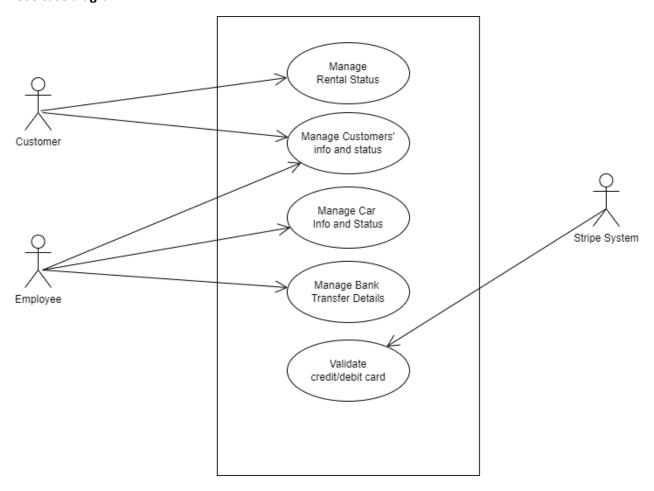
The system keeps track of all our cars currently rented and not rented.

It is possible to extend the return date of the rented car for additional fee.

Context Diagram



Use case diagram



Git Repository:

https://github.com/Akogwu/CarRentalSystem