

Online Car Rental System

Quick car reservation for customers and a thorough business management solution for car rental owners.



Problem Statement

Car reservation and business management is complex and ineffective to manually track the rental records.

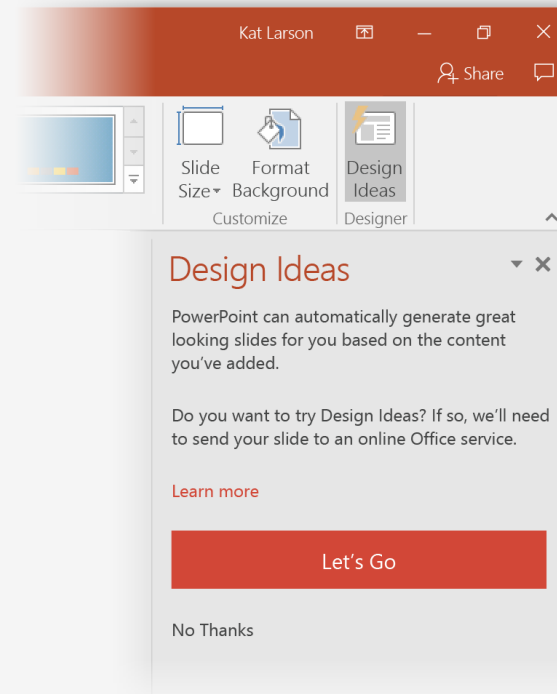
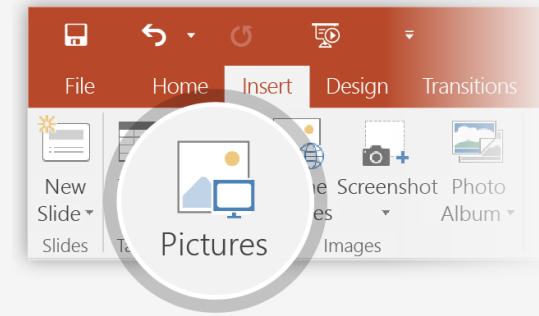
- Cash based payment records bookkeeping.
- Manual car inventory management
- Walk-in car reservation by customers
- Know Your Customer (KYC) management

Solution: An online web application to solve all the above problem.

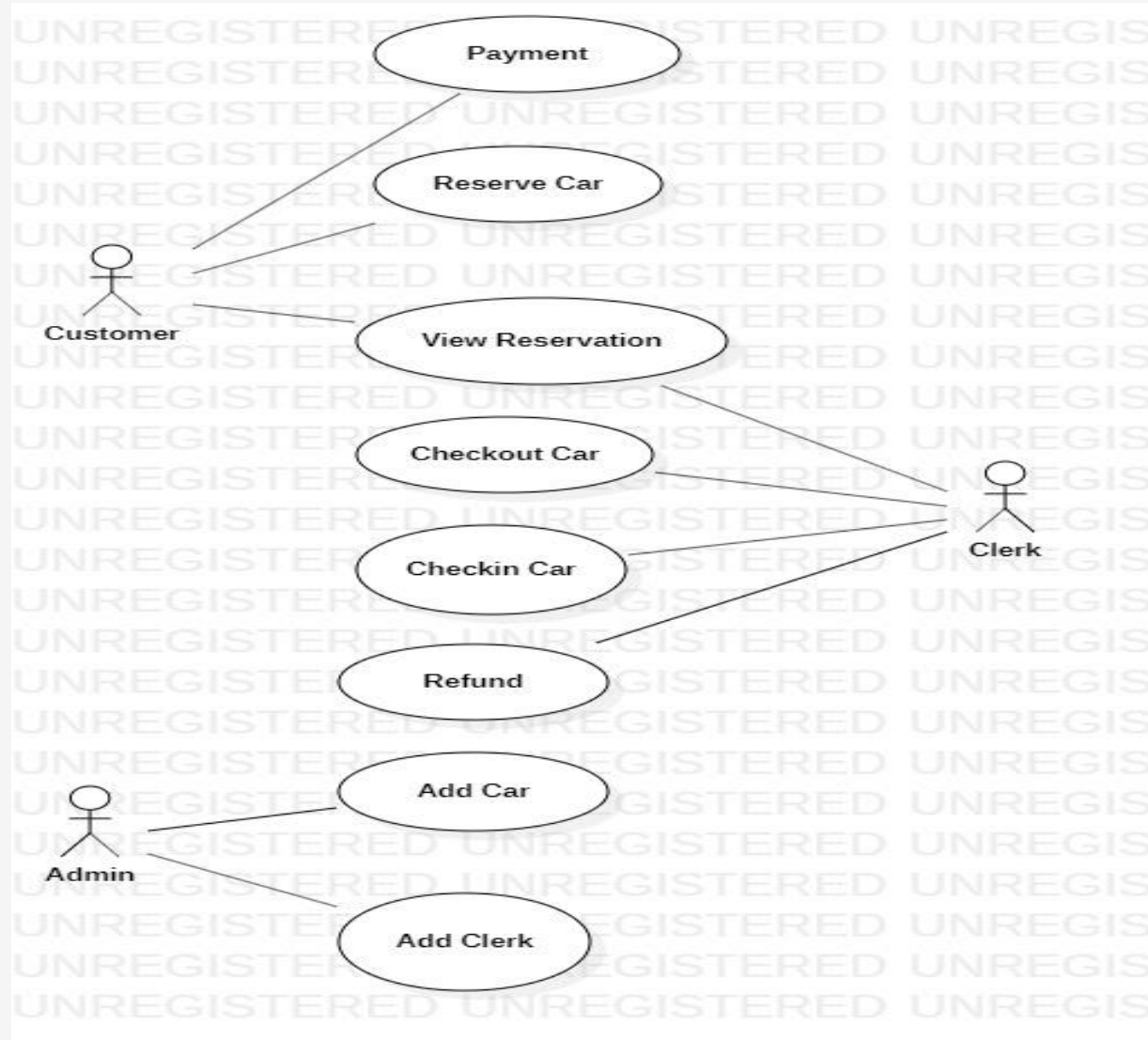


Key Features

- 1 Car Reservation & Payment
- 2 Car Inventory Management (Car check-in & checkout)
- 3 Reporting
- 4 KYC



Use case Diagram



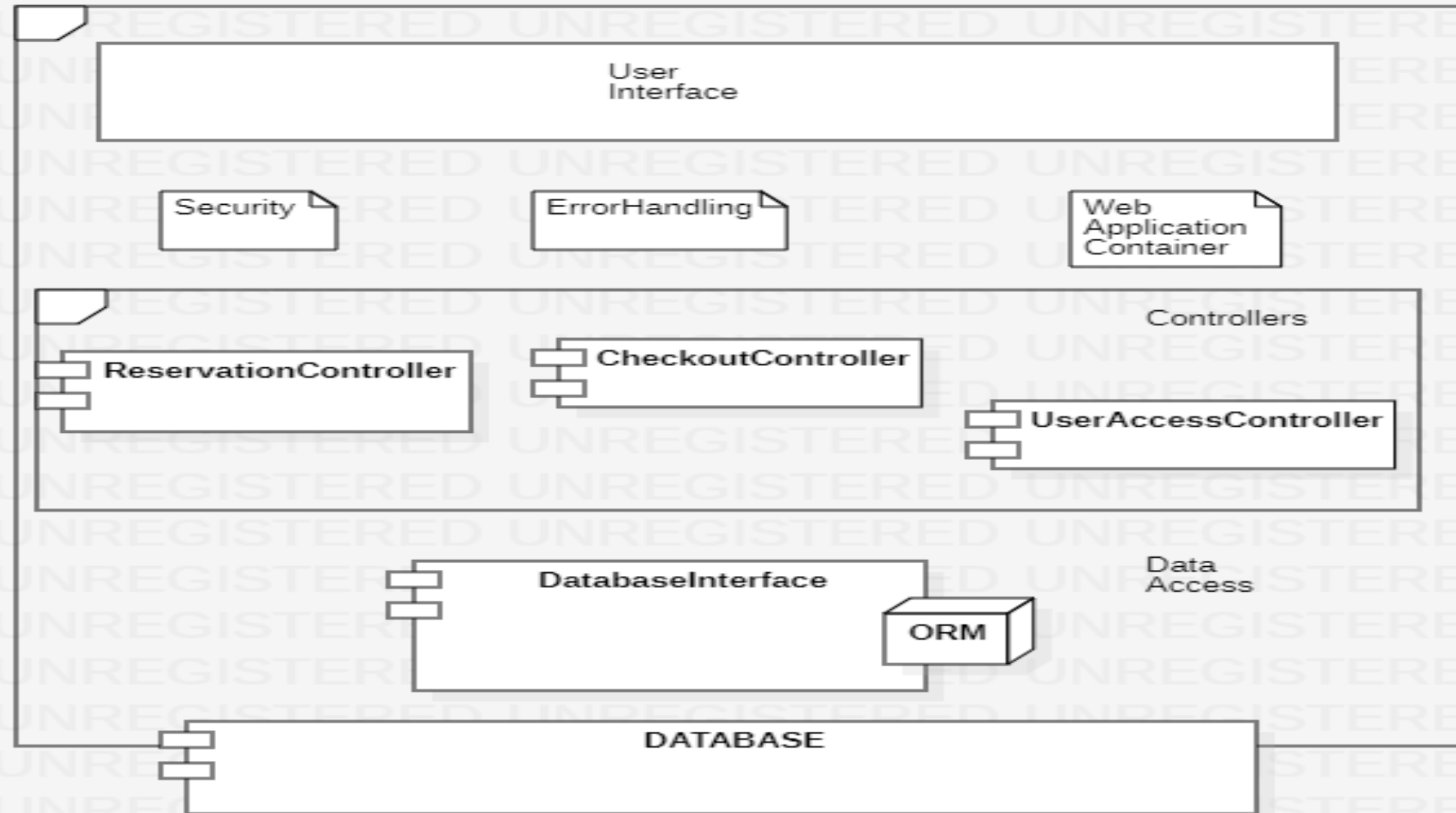
Use case Description 1: Reserve Car

Use Case Number: 4		
Name: Car reservation CRUD		
Brief Description: Create, read, delete and update reservation		
Actors: Customer		
Precondition: To read, delete and update car reservation, customer must login		
Flow of Events:		
4. Basic Flows		
1.1.0 Reserve Car		
Step	User Actions	System Actions
1.	The customer loads the available cars	The system displays the available cars
2.	The customer selects the car from the list	The system displays the details of the selected car and load the reservation form.
3.	Customer fills reservation & payment form and submits for the system to save.	The system saves the reservations and processes payment.
Post conditions		
The payment is processed and the reservation is saved in the system		
The Clerk is notified about the new reservation. Customer is notified about the payment and reservation status.		
Business Rules		
The same car cannot be reserved more than once on the same date and time.		

Use case Description 2: Checkout Car

Use Case Number: 5		
Name: Car checkout		
Brief Description: Checking out the reserved car		
Actors: Clerk		
Precondition: The car must be reserved, and customer must present the valid reservation ID, Clerk must be logged in		
Flow of Events:		
1. Basic Flows		
3.1.0 Checkout car		
Step	User Actions	System Actions
1	The Clerk loads the Reservation Search Form	The system displays the reservation search form.
2	Clerk enters the reservation ID and submit search form.	The system verifies that the reservation ID is valid and load reservation details.
	Clerk clicks the button of checking out the car	The system flags the car as checked out.
post conditions		
The car is flagged as checked out.		
Business Rules		
Car cannot be checked more than once at time.		

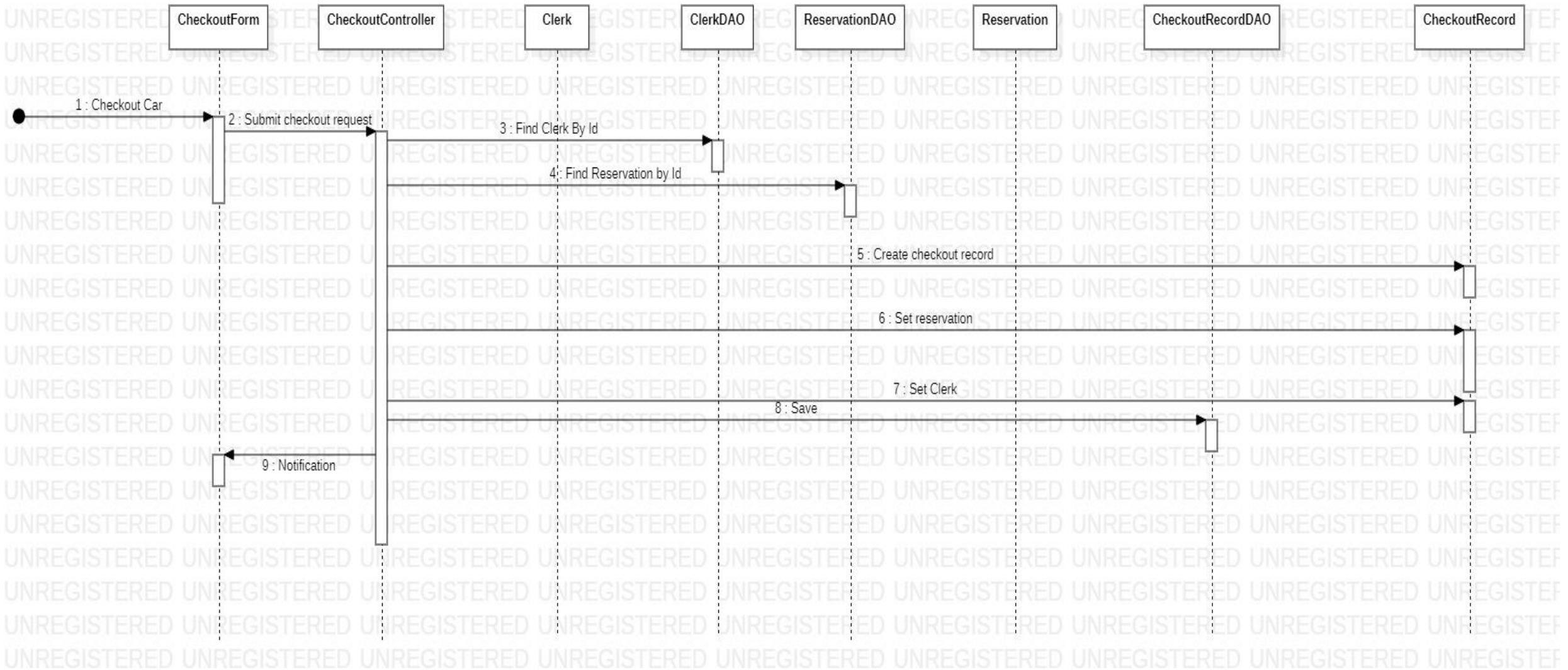
Architecture Diagram



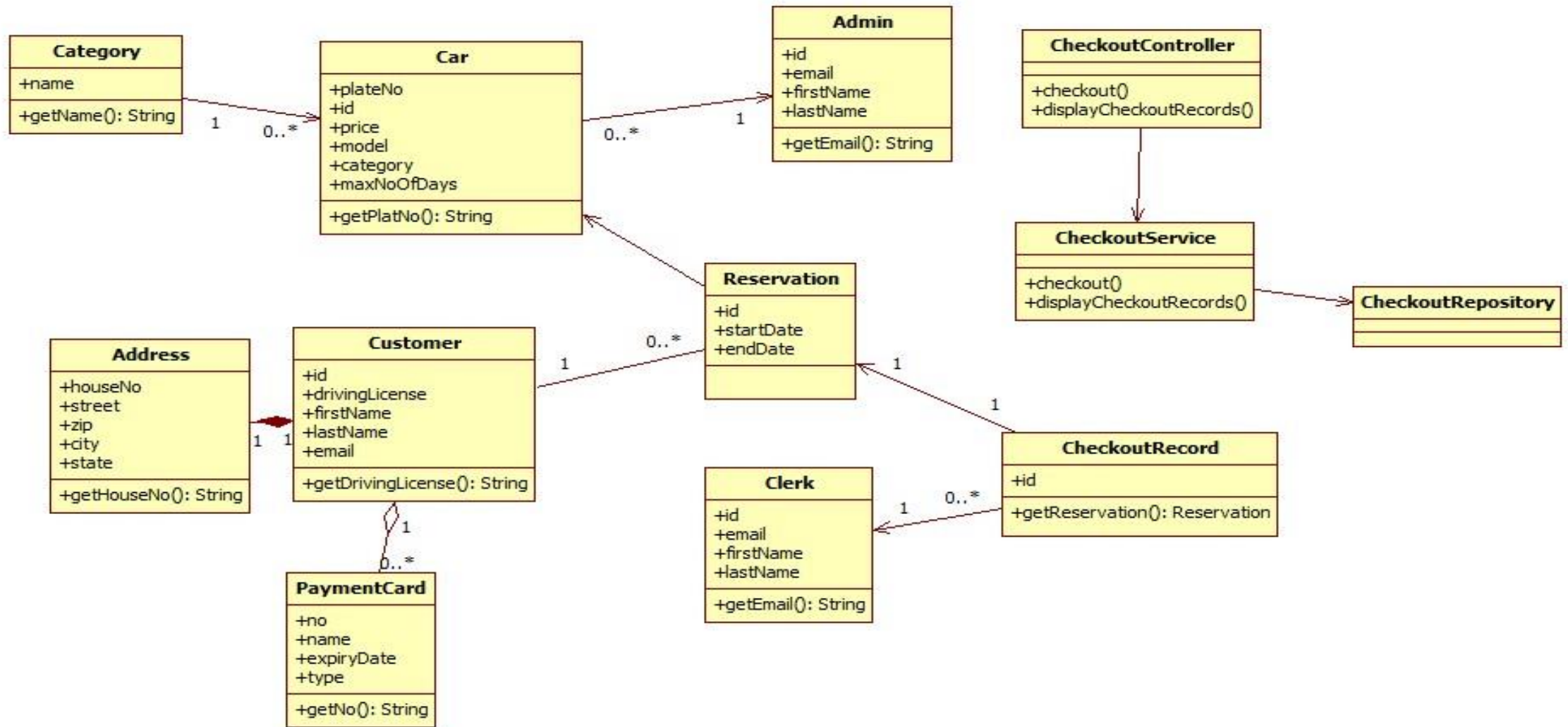
Key Abstractions

- | | | |
|-------------------|--------------------|---------------|
| 1 Customer | 2 Customer | 3 Account |
| 4 Car category | 5 Check-out record | 6 Admin |
| 7 Check-in record | 8 Car catalog | 9 Credit Card |
| 10 Clerk | | |

Sequence Diagram: Checkout Car



Class Diagram



THE END

