

Made By Alishba Basharat

Rental car E-commerce website



Introduction

This document provides a focused overview of the user workflow and technical processes for the Rental Car E-Commerce website.
Key User Workflow

Homepage:

Users browse rental cars with filters for category, price range, and rental duration.

Car Details:

Users view car details like name, category, price, features (e.g., GPS, Hybrid), and availability.



Adding to Cart:

Users add cars to the cart after signing in or registering.

Checkout Process:

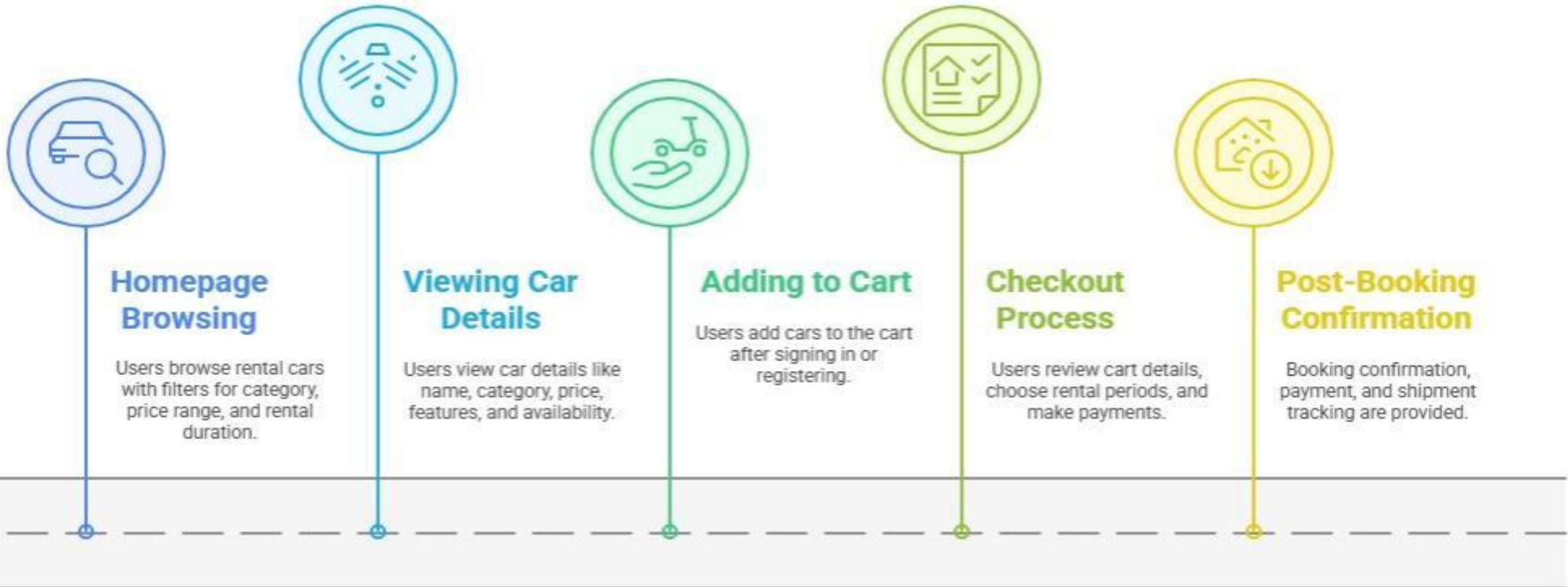
Users review cart details, choose rental periods, and make payments.

Post-Booking:

Booking confirmation, payment, and shipment tracking are provided.



Car Rental User Workflow



Backend Workflow

Sanity CMS:

Stores car details, bookings, and customer data.

Payment Gateway:

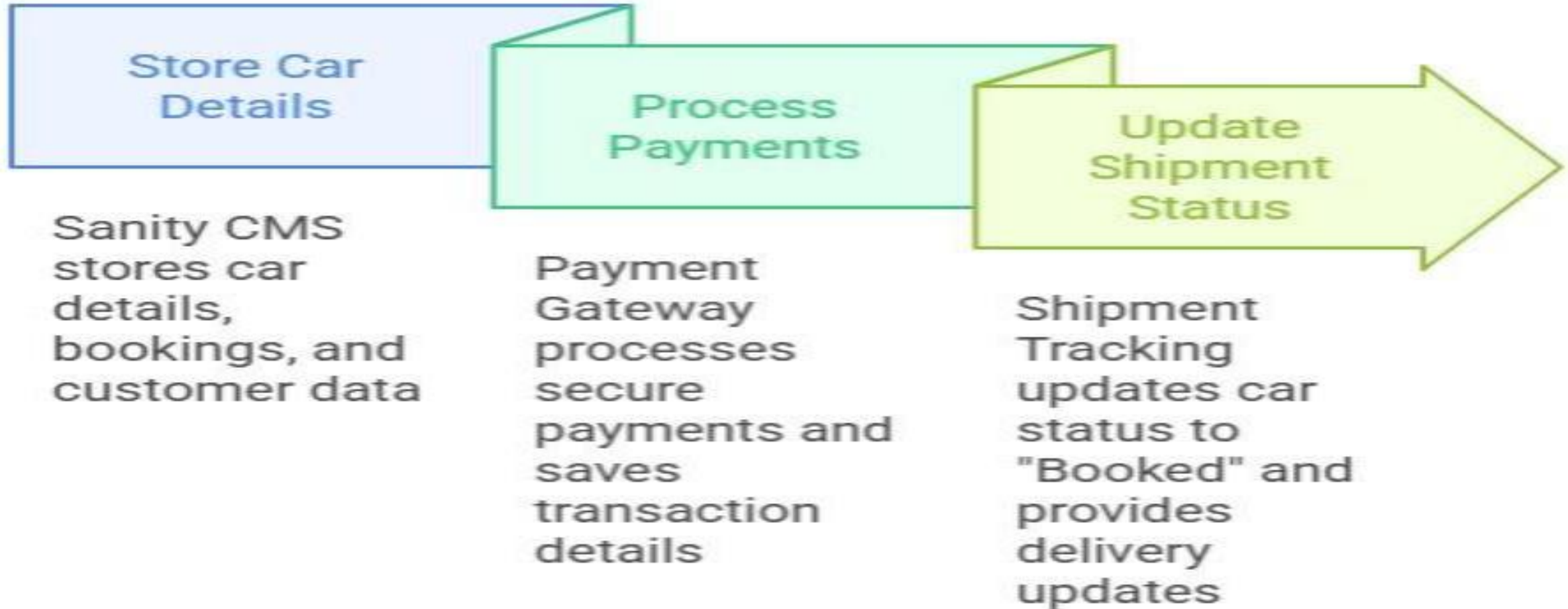
Processes secure payments and saves transaction details.

Shipment Tracking:

Updates car status to “Booked” and provides delivery updates.



Car Rental Backend Workflow



System Architecture

Overview:

Frontend:

User interface built with React/Next.js.

Handles browsing, booking, and user interactions.

Sanity CMS:

Manages all car-related and customer data.

APIs:

Includes payment, shipment tracking, and car availability services.



High-Level Architecture

[User Interface (Frontend - React/Next.js)]

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[Sanity CMS - Content Management System]

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[Car Availability API]

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[Third-Party APIs: Payment Gateway, AI Recommendations, Shipment]

Page Development



- Homepage Creation
- Car Listing Page
- Details Page

Frontend Development



Project Setup



- React/Next.js Setup
- Tailwind CSS Integration



Functionality Implementation

- Cart Functionality
- Checkout Process

- Technical Roadmap

- Frontend

Setup React/Next.js project with Tailwind CSS.
Build homepage, car listing, and details pages.
Create cart and checkout functionality.

- Backend

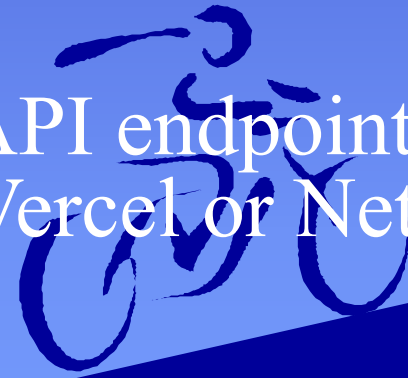
- Configure Sanity CMS schemas for cars and bookings.

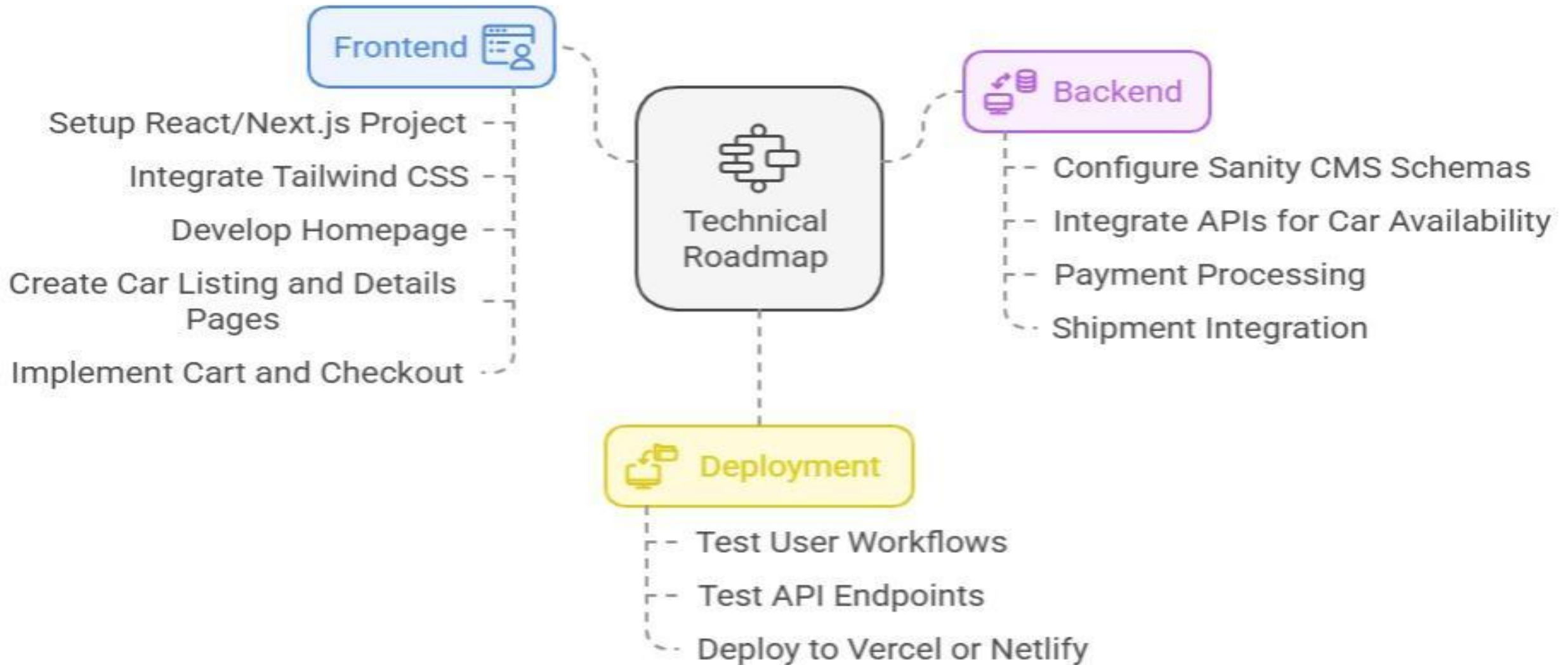
Integrate APIs for car availability, payments, and shipment.

Deployment

Test user workflows and API endpoints.

Deploy to platforms like Vercel or Netlify.





Key API Endpoints

Endpoint	Method	Purpose
GET /cars	GET	Fetch all cars
GET /cars/:id	GET	Fetch specific car
POST /bookings	POST	Create a booking
POST /payments	POST	Process payment
GET /shipment/:id	GET	Fetch shipment details

Sanity Schema Examples

```
Cars Schema : export default {  
  name: 'car',  
  type: 'document',  
  fields: [  
    { name: 'name', type: 'string', title: 'Car Name' },  
    { name: 'price', type: 'number', title: 'Price' },  
    { name: 'availability', type: 'boolean', title: 'Availability' },  
  ],  
}
```



```
Customer Schema : export default {  
  name: 'customer',  
  type: 'document',  
  fields: [  
    { name: 'name', type: 'string', title: 'Customer Name' },  
    { name: 'email', type: 'string', title: 'Email Address' },  
    { name: 'phone', type: 'string', title: 'Phone Number' },  
    { name: 'address', type: 'string', title: 'Address' },  
    { name: 'drivingLicense', type: 'string', title: 'Driving  
License Number' },
```

This document provides a concise roadmap for implementing a user-friendly and scalable Rental Car E-Commerce platform.

