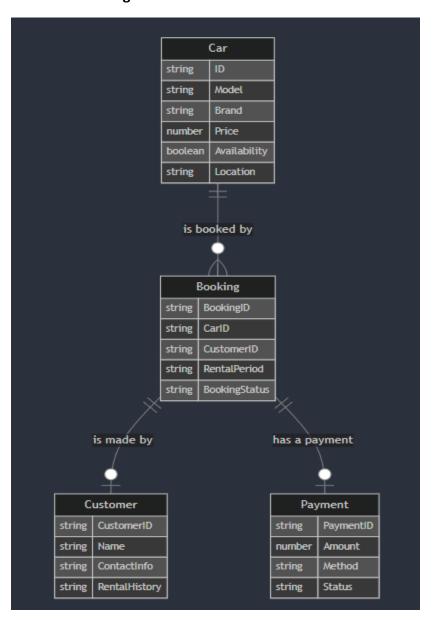


Marketplace Type: 1) Market place Type: Rental E-Commerce (Car Rental) 2) Purpose: To provide a Platform Where Uses Can Lent Cars Tox Short-term Use. 2) Business Goals: 1) Problem: Simplify the Car Sental Process for Customers, Providing easy Car Gookings online. 2) Target Rudience: Locals and tourists looking 7 Car rentals. 3) Products / Bervices: Various types of Car Lox rent, booking System (ox different dates, payment integration-4) Unique / patures: Real- Time Car availability, Competitive Pricing User-friendly interface. 3) Pata Schema (Enlities) Here's a Simplified Structure for your Car rental market Place. 1) Cars: 1D, Name, Model Availability, Price, Type, Sedans Sur, Sport, etc. 2) Oxders: Oxder 12, Car 11 Linked to Cars Customer 11 Linked to Customers, Rental Duration, total Price. 3) Clistomers: Clistomers 1D, Name, Email, Contact info-4) Payments: Payments 1D, Order 1D linked to Order Payments Status, Amount Relation Chips: Kelation Ships: 1) Cars: are linked to orders a Car Can be restal by multiple Oxder.

2) Oxders: are linked to Osstomers an Oxder Belongs to a Customer. 3) Oxders: are linked to Payments an Oxder has a Payment.
to Count unked to Costomers an Order belongs
a) Av. (a:
3) Orders. are linked to Payments an Order has a Payment.
wal tia ar
1) Next (15 Vetup:
For the data Schema in your Project: Dyou Would Typically Store this data in a data base Mongo DB, my SQL, etc.
1) you would typically Store this data in a data have
Mongo DB, my SBL, etc.
2) Use Next is API routes for backend 1000-time? H.
Bookings Payments Cor unitability
3) The I wantend will displate the
Bookings Payments Car availability. 3) The Grontend Will display the available Cars allow Customers to book them, and Shows booking details.
stories so when shows booking details.
5) Simple Diasam.
5) Simple Digram:
[Court Detail [Who] /No. 11 Court]
[Cars](Rental in)[Oxders](Placed by)[customos] [Paid by) [Payments]
- (Paid by)
Payments
1) Cars: are available, for rent, linked to Uxolers.
8) Orders: are made by Customers. 3) Orders: house associated Pouments.
3) Vocalers. Mave associated payments.

Data Schema Diagram:



Provided Schema Diagram:

	Car			
string	ID			
string	Name			
string	Brand			
string	Туре			
string	FuelCapacity			
string	Transmission			
string	SeatingCapacity			
string	PricePerDay			
string	OriginalPrice			
array	Tags			
image	Image			



Marketplace Technical Foundation – GoRent Wheels

Hackathon Day 2: Planning the Technical Foundation

Day 2 Goal

The primary goal of Day 2 is to transition from business-oriented planning of Day 1 to the technical preparation required to build your marketplace. Today, you will create a high-level technical plan, including system architecture, workflows, and API requirements, which will act as a blueprint for the implementation phase. This planning stage is directly connected to the business goals defined on Day 1, ensuring that your technical solutions align with the marketplace's purpose and provide a strong foundation for success.

This step ensures alignment with business goals while leveraging tools like Sanity CMS and third-party APIs to simplify backend requirements and focus on delivering a scalable and effective solution. This structured approach mirrors industry best practices and ensures you are prepared to launch a functional marketplace within the hackathon timeline.

Recap of Day 1: Business Focus

Achievements:

• Business Goals Defined:

- o Problem identified: Simplify car rental process for customers.
- o Target audience: Locals and tourists needing temporary car rentals.
- Unique Value Proposition (UVP): Easy car bookings with real-time availability.

Data Schema Drafted:

Entities and Relationships:

- Cars: ID, Name, Model, Availability, Price, Type.
- Orders: Order ID, Car ID, Customer ID, Rental Duration, Total Price.
- Customers: Customer ID, Name, Email, Contact Info.
- Payments: Payment ID, Order ID, Payment Status, Amount.

• Single Focus:

 Concentrated on business requirements without technical distractions to establish a solid foundation.

Day 2 Activities: Transitioning to Technical Planning

1. Define Technical Requirements

Frontend Requirements:

- Build a user-friendly interface for seamless car browsing.
- Ensure responsive design optimized for both mobile and desktop users.
- Include the following essential pages:
 - Home
 - Car Listings
 - Car Details
 - Booking
 - Payment
 - Order Confirmation
- Tech Stack:
 - Next.js: For a fast, SEO-friendly, and scalable frontend framework.
 - Tailwind CSS: For building modern and responsive designs quickly.

Sanity CMS as Backend:

- Use Sanity CMS to manage:
 - o Product data (car details, availability, etc.).
 - Customer details.
 - Order records.
- Design schemas tailored to business goals for entities like cars, customers, and orders.

Third-Party APIs Integration:

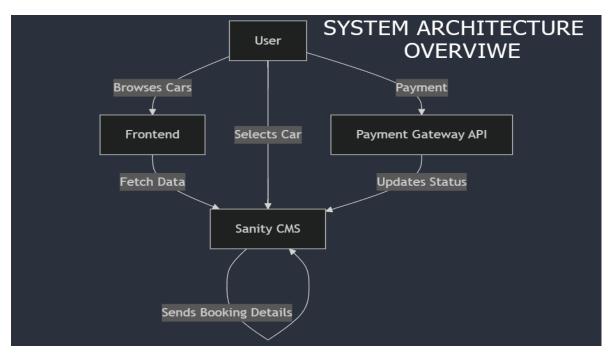
- APIs for the following functionalities:
 - Payment Gateway: To process payments securely.
 - Real-Time Car Availability Updates: Ensure up-to-date inventory for car rentals.
 - Shipment Tracking (if applicable): For tracking order-related shipments or services.

Additional Features:

- Shipment Tracking: Provide live status updates for shipments (if part of service delivery).
- Payment Gateway: Integrate a reliable payment service (e.g., Stripe, PayPal) for secure and smooth transactions.

2. Design System Architecture

System Architecture Overview:



Example Architecture Workflow:

- A user browses cars on the frontend.
- The frontend requests car details from Sanity CMS via Product Data API.
- User books a car; order details are sent to Sanity CMS.
- Payment is processed through a gateway, and confirmation is stored in CMS.
- Real-time car availability is updated.

3. Plan API Requirements

• /cars (GET)

Description: Fetch available cars from Sanity.

Sample Response:

ID: 1, Name: Sedan, Price: 100

• /orders (POST)

o Description: Create a new order in Sanity.

o Payload:

Customer ID: 1, Car ID: 2, Rental Duration: 3 days

o Sample Response:

Order ID: 123, Status: Success

• /payments (POST)

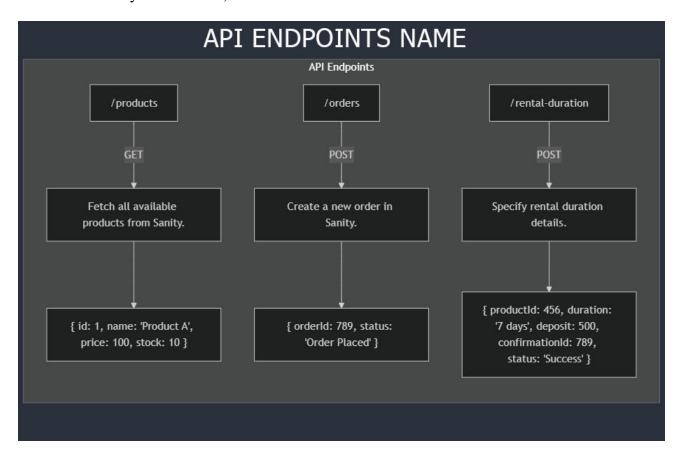
o Description: Process payment for an order.

o Payload:

Order ID: 123, Amount: 5000

o Sample Response:

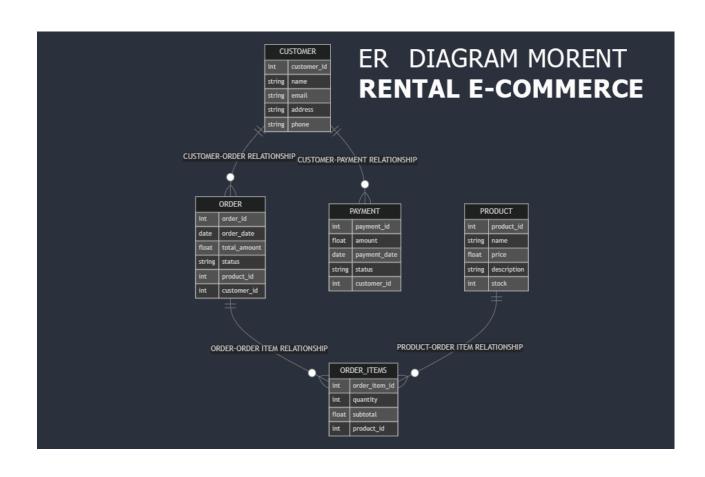
Payment ID: 456, Status: Paid



Endpoint	Method	Purpose	Example Response	Parameters
/cars	GET	Fetch cars data	[{"id": 1, "name": "Toyota", "price": 50}]	None
/cars	POST	Add a new car to the system	{"status": "Car added successfully"}	{ "name": "Toyota", "price": 50, "type": "SUV" }
/cars/:id	РИТ	Update cardetails	{"status": "Car updated successfully"}	{ "name": "Toyota Corolla", "price": 60 }
/cars/:id	DELETE	Remove a car from the system	{"status": "Car deleted successfully"}	None
/book-car	POST	Save a car booking	{"status": "Booking successful"}	{"carld": 1, "customerld": 101, "rentalDuration": "3 days" }
/book-car/:id	РИТ	Update a booking	{"status": "Booking updated successfully"}	{ "rentalDuration": "5 days" }
/book-car/:id	DELETE	Cancel a booking	{"status": "Booking cancelled"}	None
/process-payment	POST	Process payment for a booking	{"paymentId": "xyz123", "status": "success"}	{ "orderld": 123, "amount": 150 }
/payments/:id	РИТ	Update payment status	{"status": "Payment updated successfully"}	{ "paymentStatus": "completed" }
/payments/:id	DELETE	Remove payment details	("status": "Payment deleted")	None

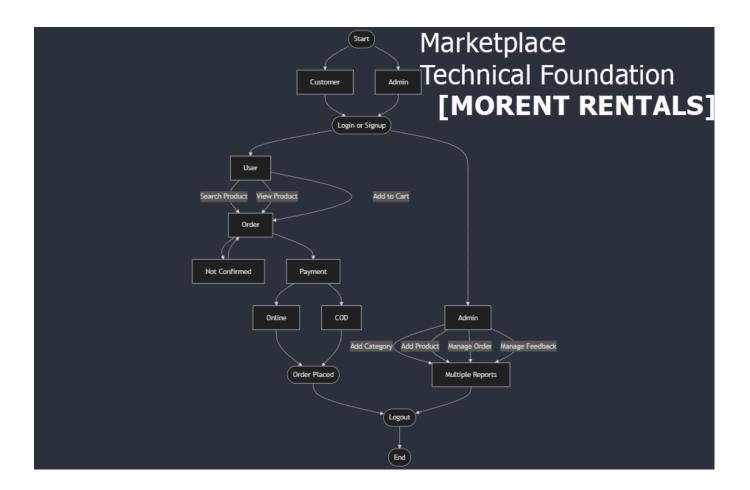
4. ER Diagram

Entity-Relationship Diagram for GoRent Wheels:



5. User Workflow

Workflow Diagram:



Key Outcomes

By the end of Day 2, you will have:

• Aligned Technical Plan:

Comprehensive plan reflecting marketplace requirements.

• System Architecture:

Detailed diagram of interactions and workflows.

• API Documentation:

Endpoints with methods, payloads, and responses.

Sanity Schemas:

Schemas for key entities (cars, customers, orders).

Collaborative Input:

Peer feedback incorporated.

• Portfolio-Ready Submission:

o A professional document showcasing your technical skills.

Industry Best Practices

• Plan Before Coding:

Avoid rework by creating a clear roadmap.

• Use Tools Effectively:

o Leverage Sanity CMS for content management and APIs for integration.

• Focus on User Experience:

Design seamless and intuitive workflows.

• Collaborate Actively:

o Incorporate team and mentor feedback.

Submission Guidelines

Title:

o "Marketplace Technical Foundation - Morent Rentals"

Structure:

- o Repository with a "Documentation" folder.
- o Include diagrams, schemas, and API details.

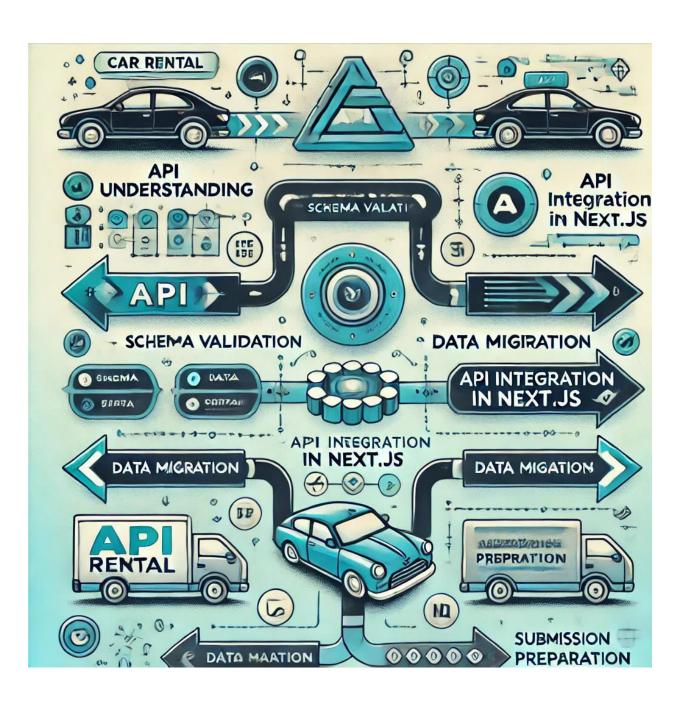
File Naming:

Example: SystemArchitecture_Day2.pdf, SanitySchema.js.

Review and Submit:

- Ensure clarity and accuracy.
- o Incorporate feedback from peers or mentors.







Installation NEXT.JS and Setup New Project:

```
Increase thindows (Version 18.0-21906.1)
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```

Problem facing to install Santy

```
Highermost Windows (Version 10.4.21906.1)

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(G) Microsoft Components. All 1586t reserved.

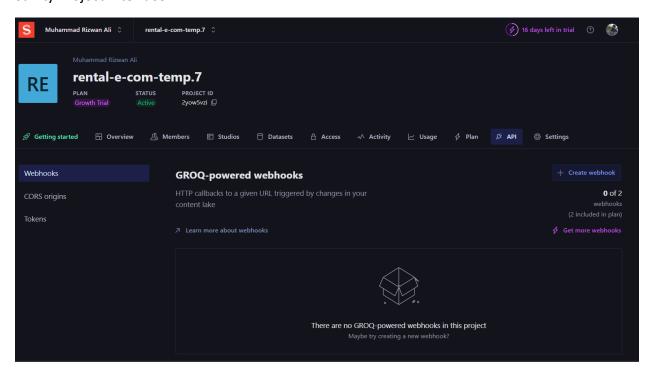
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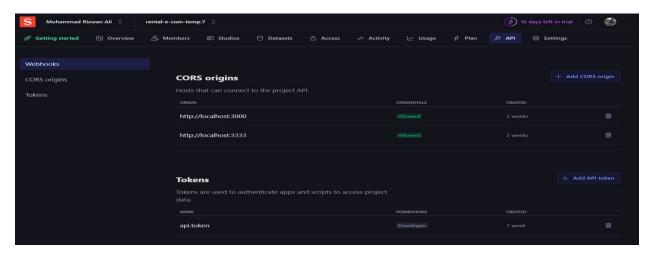
Install Sanity Successfully

```
:\Milestone3\hackathon 3\rental-e-com.day3>npm create sanity@latest
You are logged in as mrizwanali6@gmail.com using Google
     Fetching existing projects
     Create a new project or select an existing one rental-e-com.day3 (9hcu6acv)
     Select dataset to use production
     Would you like to add configuration files for a Sanity project in this Next.js folder? Yes
          It looks like you are using Next.js 15 and React 19
         Please read our compatibility guide.
         https://www.sanity.io/help/react-19
    Do you want to use TypeScript? Yes
Would you like an embedded Sanity Studio? Yes
What route do you want to use for the Studio? /studio
File \src\app\studio\[[...tool]]\page.tsx already exists. Do you want to overwrite it? Yes
File \src\app\studio\[[...tool]]\page.tsx already exists. Do you want to overwrite it? Yes
File \sanity.config.ts already exists. Do you want to overwrite it? Yes
File \sanity.cli.ts already exists. Do you want to overwrite it? Yes
Select project template to use Clean project with no predefined schema types
File \src\sanity\env.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\lib\client.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\lib\live.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\lib\limage.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\schemaTypes\index.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\schemaTypes\index.ts already exists. Do you want to overwrite it? Yes
File \src\sanity\schemaTypes\index.ts already exists. Do you want to overwrite it? Yes
Would you like to add the project ID and dataset to your .env.local file? Yes
Running 'npm install --legacy-peer-deps --save @sanity/vision@3 sanity@3 @sanity/image-url@1 styled-components@6'
up to date, audited 1290 packages in 15s
246 packages are looking for funding
  run `npm fund` for details
 found 0 vulnerabilities
added 16 packages, and audited 1306 packages in 23s
246 packages are looking for funding
     run `npm fund` for details
 found 0 vulnerabilities
   Success! Your Sanity configuration files has been added to this project
D:\Milestone3\hackathon 3\rental-e-com.day3>
```

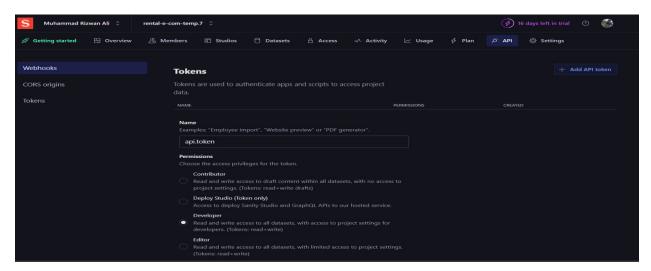
Sanity Project Interface



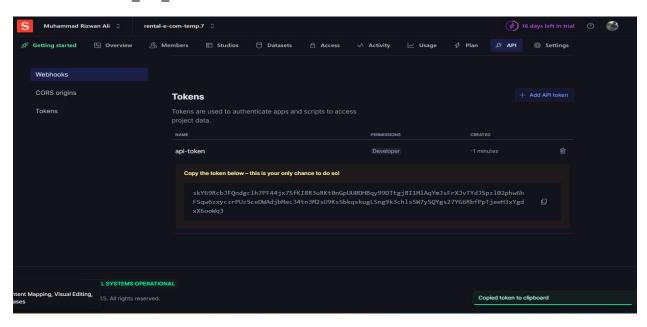
CORS origins



Tokens Generate prosses



Generated SANITY_API_TOKEN:



Set .env.local

Create Schema Types

```
### Reminder
### R
```

Index file Updated

```
indexts x

src > sanity > schemaTypes > indexts > ...

import { type SchemaTypeDefinition } from "sanity";

import banner from "../schemas/banner";

import car from "../schemas/car";

export const schema: { types: SchemaTypeDefinition[] } = {

types: [banner, car],
};
```

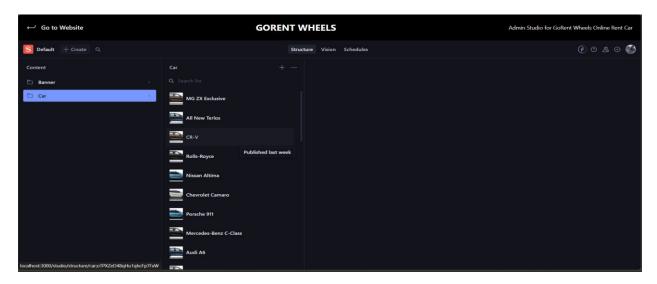
Create scripts/importTemplate7Data.mjs



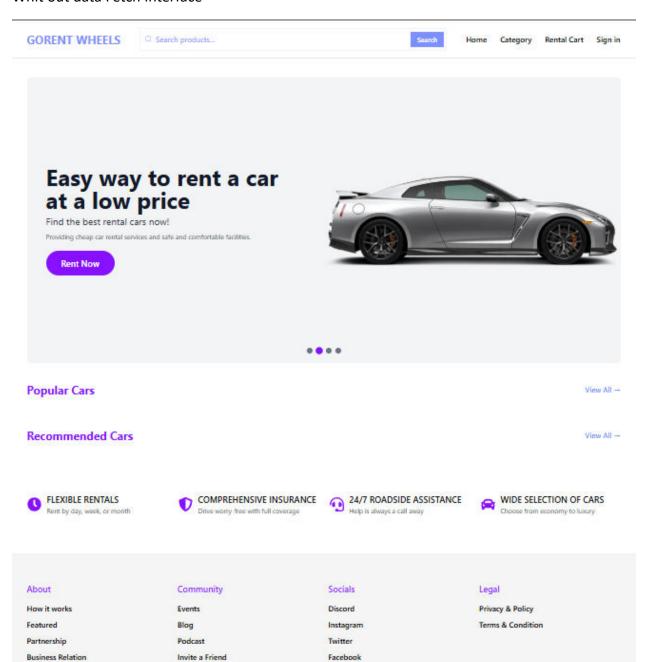
Enter importTemplate7Data.mjs Data:

Define importTemplate7Data.mjs Data

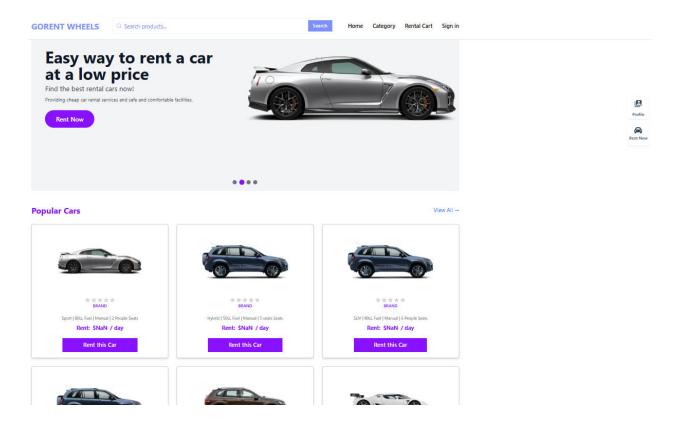
Fetch all data in sanity studio



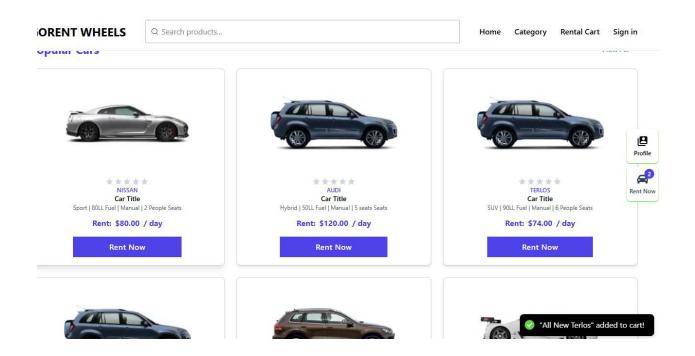




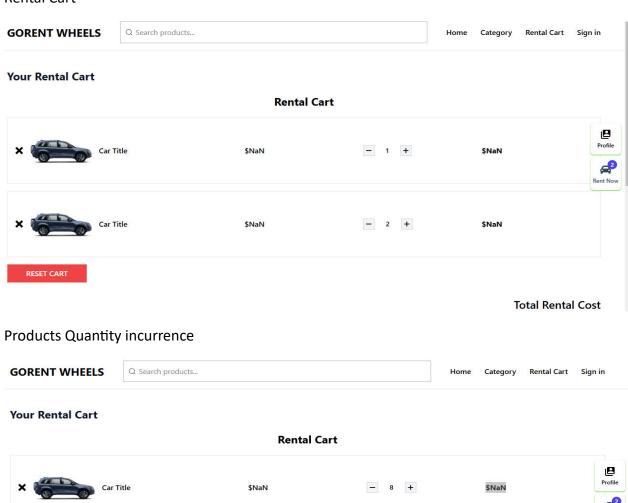
Whit data Fetch Interface



Rent Now Working

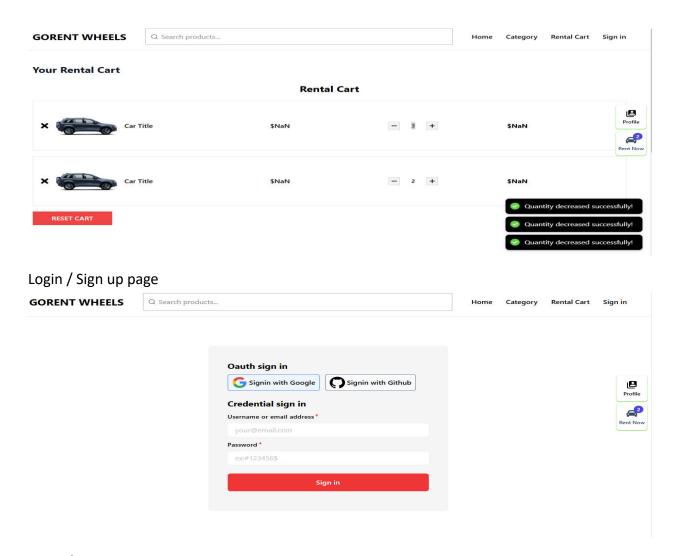


Rental Cart

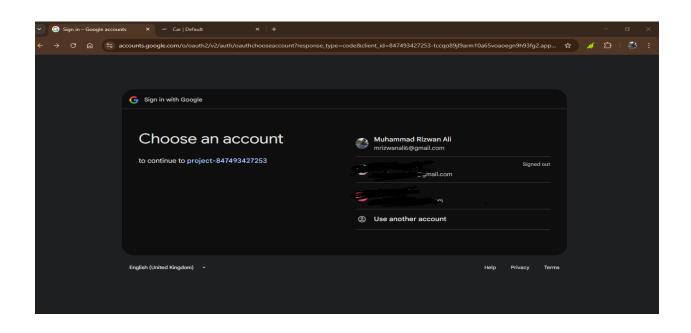




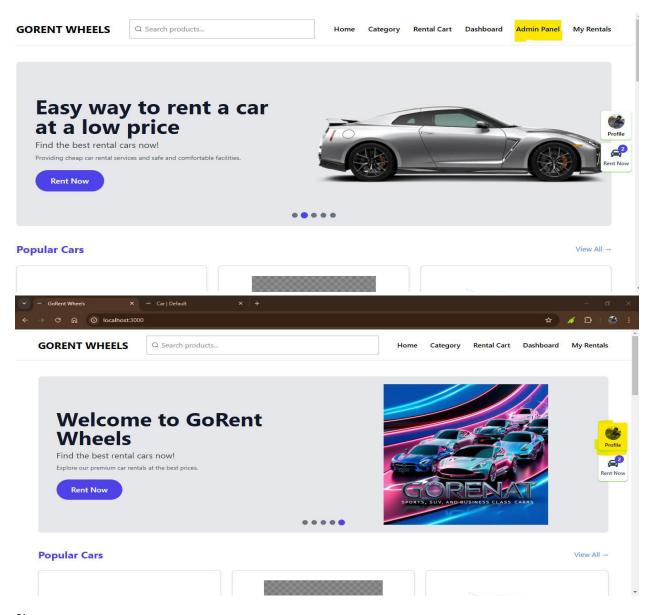
Products Quantity decrease



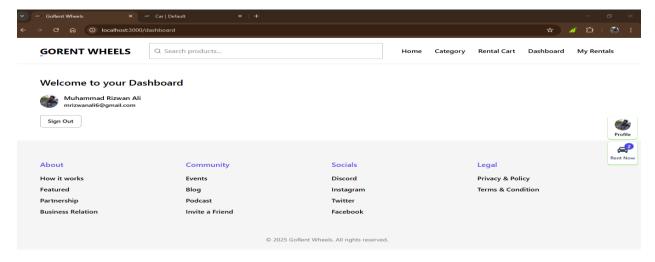
Login / Sign up whit Google



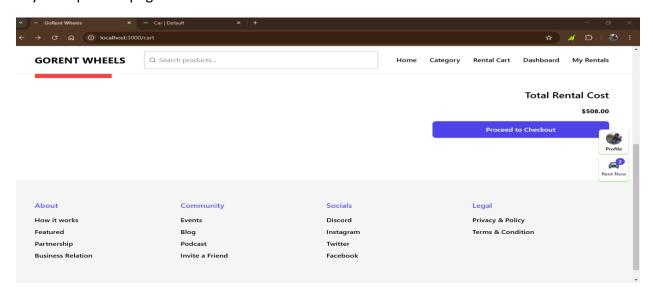
Login icon profile



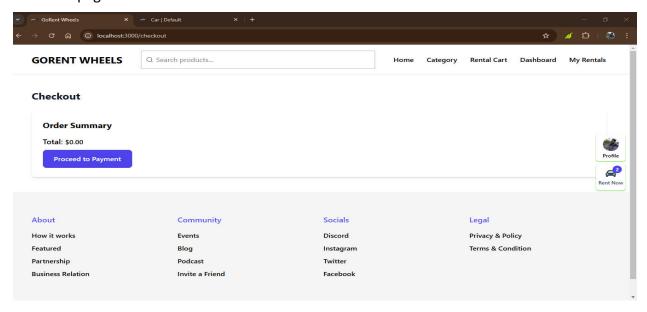
Sign out page



Payment process page



Checkout page



GoRent Wheels - Your Ultimate Car Rental Solution

Why GoRent Wheels Was Created?

GoRent Wheels was built to provide a seamless and reliable car rental experience. Whether for business, travel, or daily commuting, we aim to make car rentals hassle-free, affordable, and accessible across Pakistan.

How It Works?

Users can browse available cars, select pickup and drop-off locations, and choose rental durations. With an easy checkout process and secure payments, renting a car has never been easier.

Future Possibilities

- Expansion to More Cities: Covering more locations for wider accessibility.
- Membership Plans: Special discounts for frequent renters.
- Advanced AI Recommendations: Smart suggestions based on user preferences.
- Mobile App Development: A dedicated app for even smoother booking.

GoRent Wheels is revolutionizing car rentals—making travel more convenient, flexible, and affordable!

GoRent Wheels - Technology & Integration Overview

Authentication & Authorization

We use **Google Authentication** via **Firebase** to ensure a secure and seamless sign-in experience. This allows users to log in using their Google accounts, ensuring fast access without needing separate credentials.

Payment Gateway Integration

For secure and reliable transactions, we have integrated **Stripe** as our payment gateway. This enables smooth and encrypted online payments, supporting multiple payment methods for user convenience.

State Management & Component Integration

- Redux Toolkit Manages cart state efficiently, ensuring smooth rental booking functionality.
- Next.js & React Used for component-based architecture, improving performance and modularity.

- Tailwind CSS & Styled Components Enhances UI/UX with modern and responsive design.
- Framer Motion Adds animations for a smooth user experience.

GoRent Wheels is built with the latest technologies to provide a fast, secure, and user-friendly car rental experience!

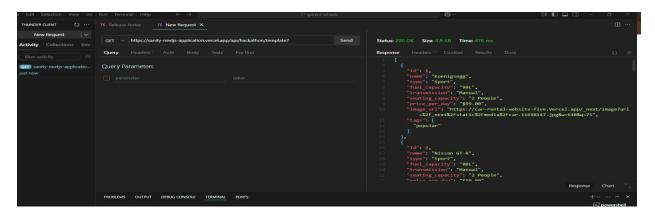
Conclusion

GoRent Wheels is a **user-friendly, scalable, and efficient** car rental platform designed for seamless booking and secure transactions. With **Google Firebase authentication**, users can log in effortlessly, while **Stripe integration** ensures safe and hassle-free payments. The platform leverages **Next.js**, **Redux Toolkit**, **and Tailwind CSS** to provide a fast, responsive, and visually appealing experience.

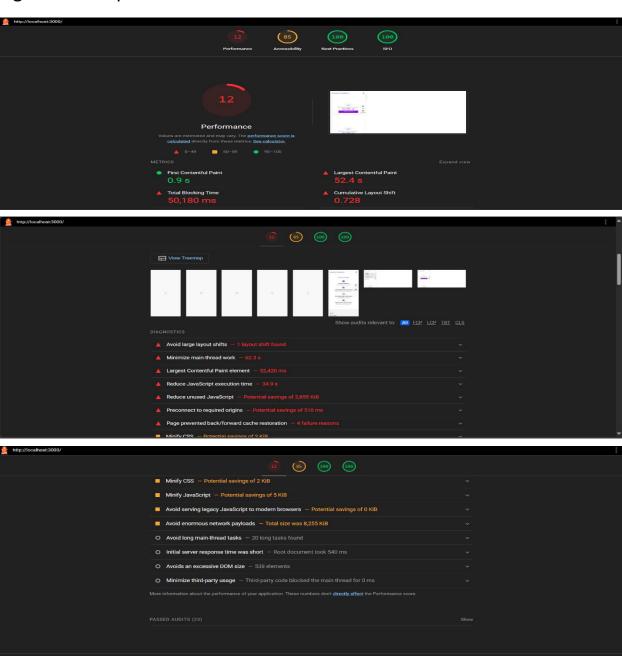
Built with scalability in mind, GoRent Wheels is optimized for future growth, making it easy to expand features, integrate new functionalities, and enhance user experience. Whether for short-term rentals or long journeys, this platform ensures a **smooth, reliable, and modern** car rental experience!

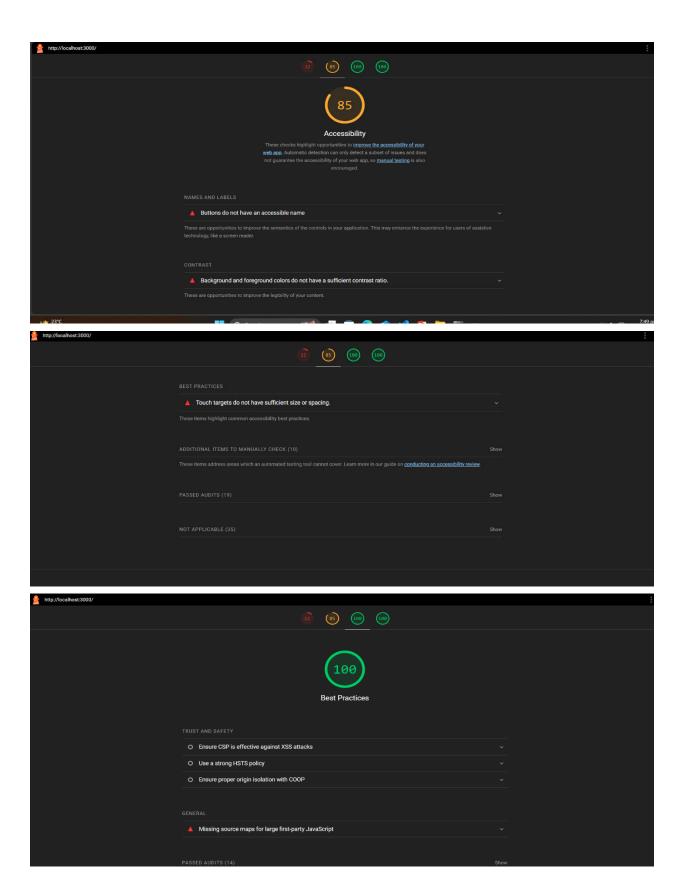


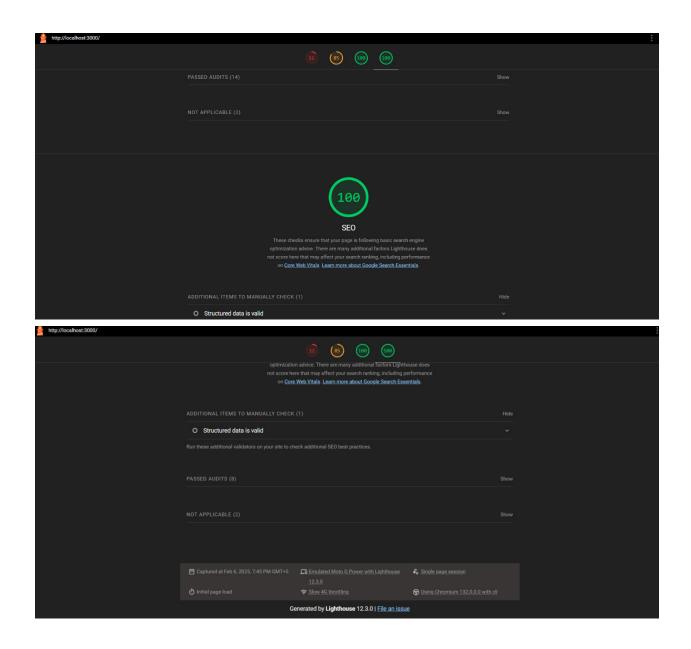
Thunder client Report



Lighthouse report

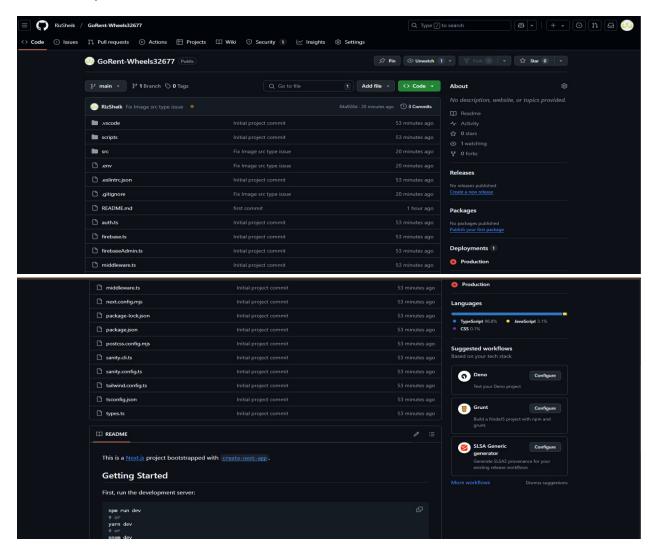




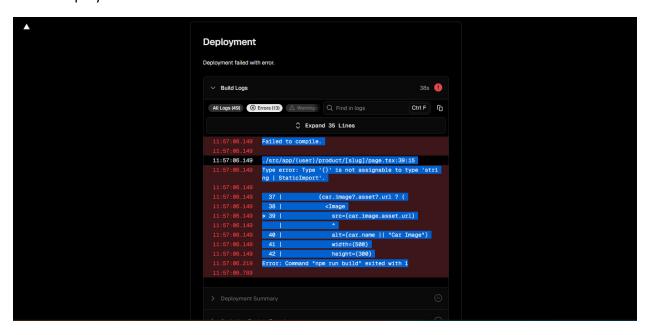




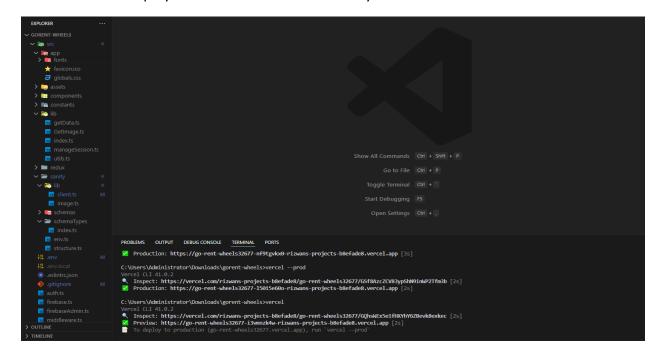
GitHub Repo Push Data



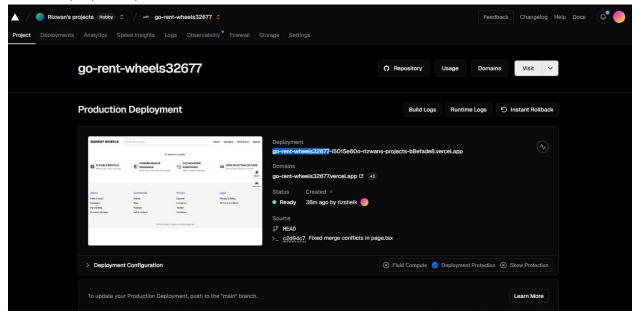
Vercel Deploy Data Error



Fix all Error and Deploy Vercel in VS. Code Successfully



Vercel Deploy Sanity issue



```
C:\Users\Administrator\Downloads\gorent-wheels>sanity debug
User:
  ID: 'pxvGFjvUM'
  Name: 'Muhammad Rizwan Ali'
  Email: 'mrizwanali6@gmail.com'
  Roles: [ 'administrator' ]
Project:
  ID: '2yow5vzi'
  Display name: 'rental-e-com-temp.7'
  Studio URL: null
Authentication:
  User type: 'normal'
  Auth token: '<redacted>'
  (run with --secrets to reveal token)
Global config (C:\Users\Administrator\.config\sanity\config.json):
    telemetryDisclosed: 1735553594889,
    cliLastUpdateCheck: 1739011091370,
    telemetryConsent: {
      value: { type: 'telemetry', status: 'granted' },
      updatedAt: 1738902562639
    cliHasUpdate: '3.74.1'
Project config (sanity.cli.ts):
  { api: { projectId: '2yow5vzi', dataset: 'production' } }
Package versions:
  @sanity/cli (global) 3.71.0 (latest: 3.74.1)
 @sanity/image-url 1.1.0 (up to date)
@sanity/vision 3.72.1 (latest: 3.74.1)
  sanity
                       3.72.1 (latest: 3.74.1)
```

Git link: https://github.com/RizSheik/GoRent-Wheels32677.git vercel link: https://go-rent-wheels32677.vercel.app/

Testing Report link:

https://drive.google.com/drive/folders/12zdXitqnYsNqyzjiPVdjkw9oJFtX4EaD?usp=drive_link