Hackathon Day 4

Implementation Report (Rental E-Commerce)

Objective

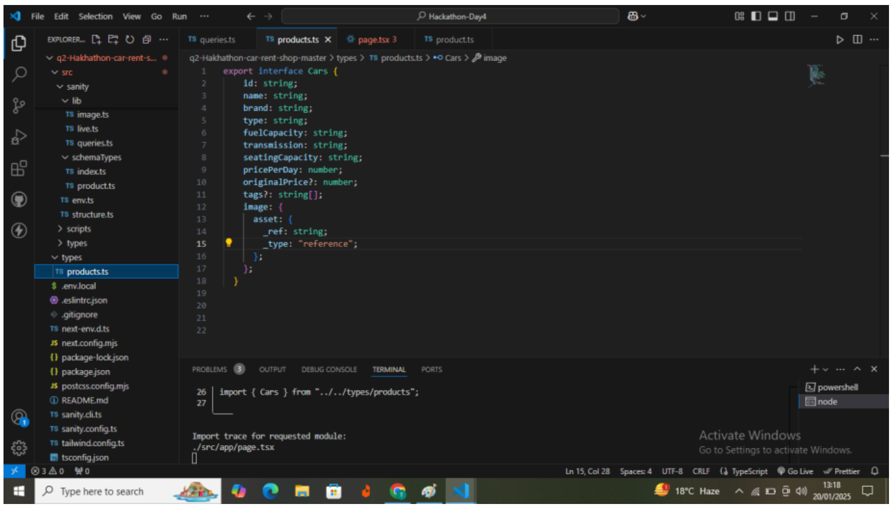
Day 4 focused on building dynamic frontend components for the Furniro Marketplace. The goal was to display data dynamically fetched from Sanity CMS and APIs, emphasizing reusable components, state management, and responsive design principles.

Product Listing Component

- **Description:**

  Rendered a dynamic grid of product cards displaying:

  - Product Name
  - Price
  - Image
  - Stock Status



```ts
export interface Cars {
    id: string;
    name: string;
    brand: string;
    type: string;
    fuelCapacity: string;
    transmission: string;
    seatingCapacity: string;
    pricePerDay: number;
    originalPrice?: number;
    tags?: string[];
    image: {
      asset: {
        _ref: string;
        _type: "reference";
      };
    };
  }
```

```
26 | import { Cars } from "../../types/products";
27 |

Import trace for requested module:
./src/app/page.tsx
```

  - Next.js for rendering components.
  - Tailwind CSS for styling.
  - Data fetched dynamically using Sanity CMS API.

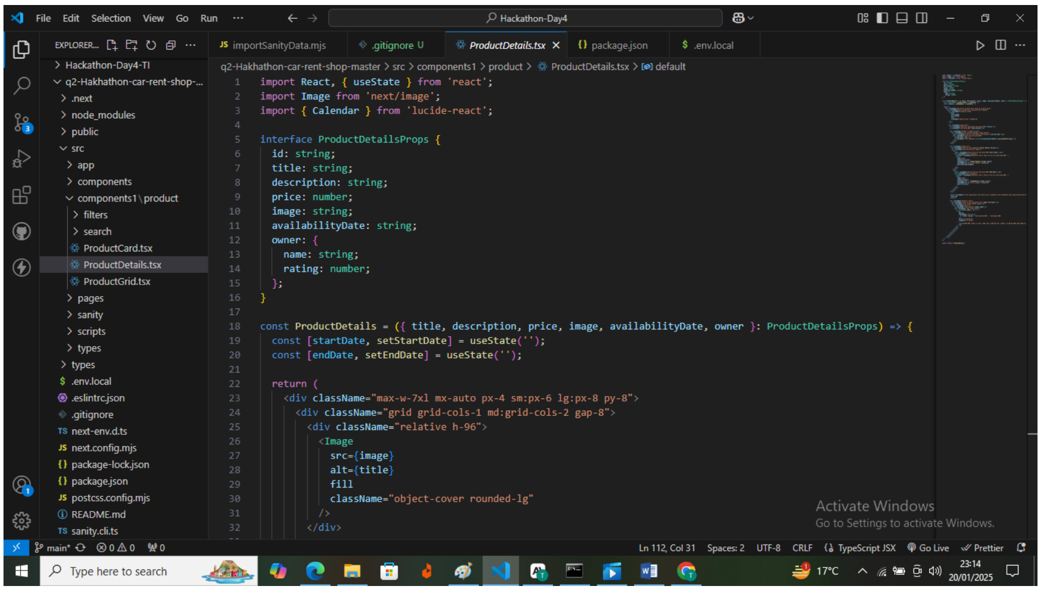
- **Challenges & Solutions:**

  Addressed performance issues by implementing lazy loading for product images.

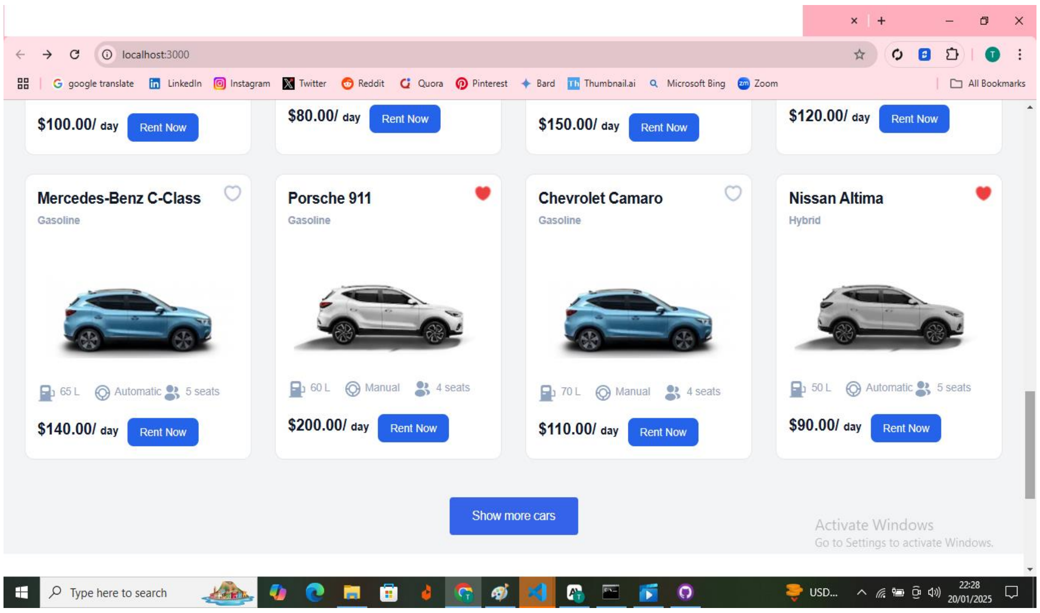
Product Detail Component

- **Description**
- Developed individual product detail pages with dynamic routing.

- Fields included: Product description, price, sizes, and colours.



```tsx
import React, { useState } from 'react';
import Image from 'next/image';
import { Calendar } from 'lucide-react';

interface ProductDetailsProps {
  id: string;
  title: string;
  description: string;
  price: number;
  image: string;
  availabilityDate: string;
  owner: {
    name: string;
    rating: number;
  };
}

const ProductDetails = ({ title, description, price, image, availabilityDate, owner }: ProductDetailsProps) => {
  const [startDate, setStartDate] = useState('');
  const [endDate, setEndDate] = useState('');

  return (
    <div className="max-w-7xl mx-auto px-4 sm:px-6 lg:px-8 py-8">
      <div className="grid grid-cols-1 md:grid-cols-2 gap-8">
        <div className="relative h-96">
          <Image
            src={image}
            alt={title}
            fill
            className="object-cover rounded-lg"
          />
        </div>
```



$100.00/ day Rent Now
$80.00/ day Rent Now
$150.00/ day Rent Now
$120.00/ day Rent Now

Mercedes-Benz C-Class
Gasoline
65 L Automatic 5 seats
$140.00/ day Rent Now

Porsche 911
Gasoline
60 L Manual 4 seats
$200.00/ day Rent Now

Chevrolet Camaro
Gasoline
70 L Manual 4 seats
$110.00/ day Rent Now

Nissan Altima
Hybrid
50 L Automatic 5 seats
$90.00/ day Rent Now

Show more cars

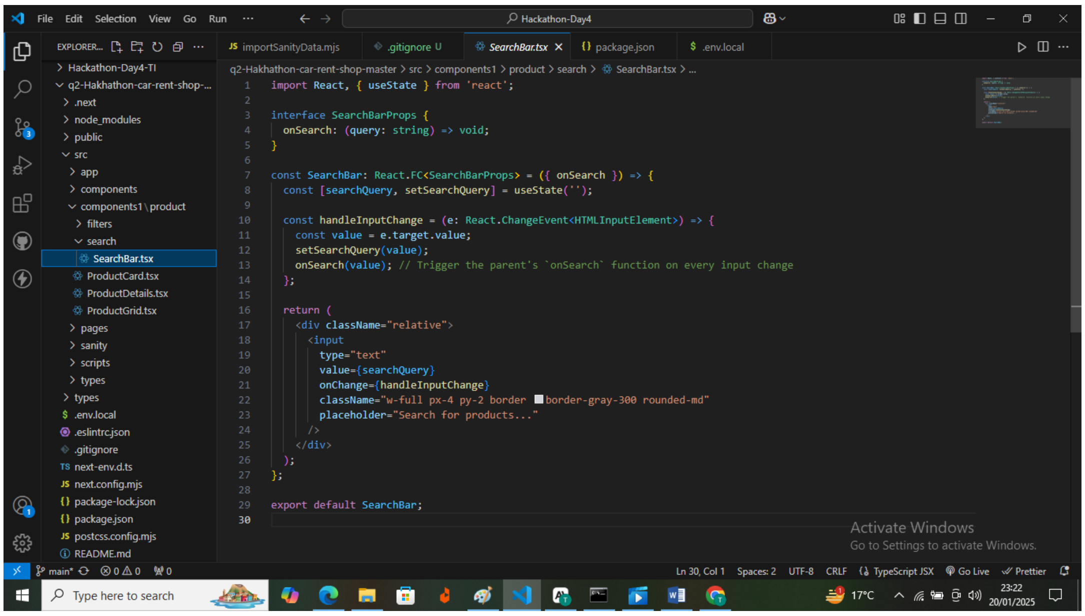
Search Bar

- **Functionality:**

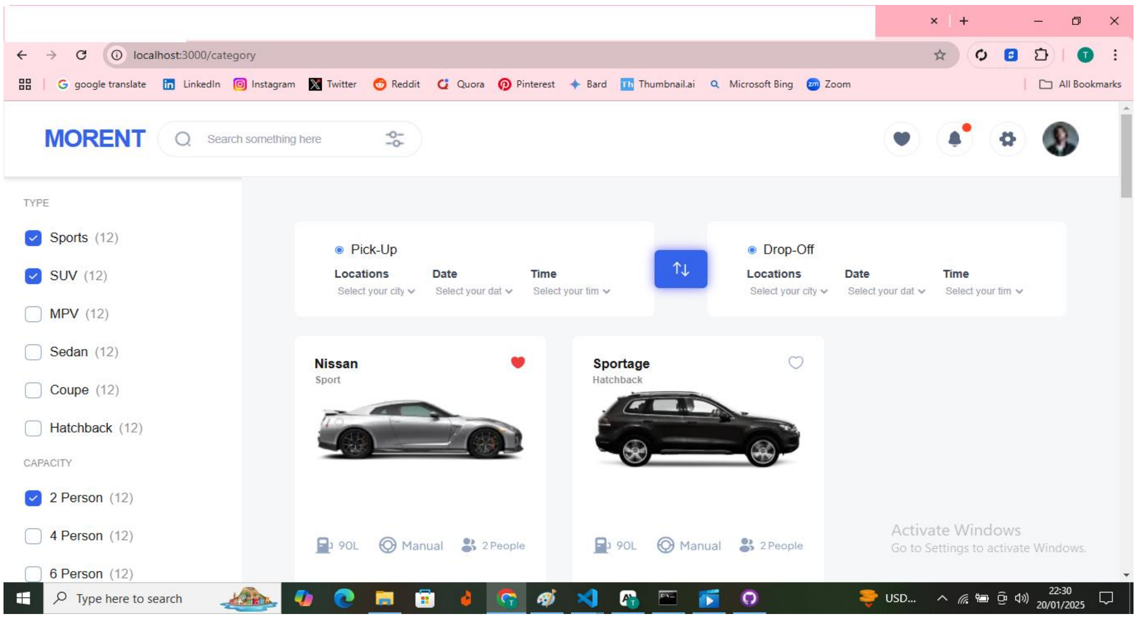
  Implemented a search feature to filter products by name or tags.

- **Solution:**

  Used React state for real-time updates.

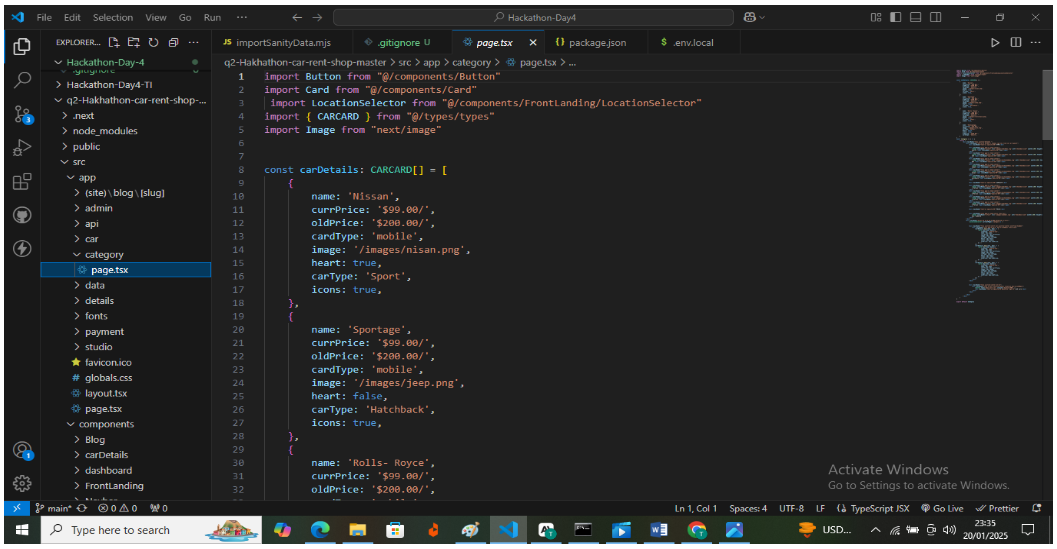

q2-Hakhathon-car-rent-shop-master > src > components1 > product > search > SearchBar.tsx > ...

```tsx
import React, { useState } from 'react';

interface SearchBarProps {
  onSearch: (query: string) => void;
}

const SearchBar: React.FC<SearchBarProps> = ({ onSearch }) => {
  const [searchQuery, setSearchQuery] = useState('');

  const handleInputChange = (e: React.ChangeEvent<HTMLInputElement>) => {
    const value = e.target.value;
    setSearchQuery(value);
    onSearch(value); // Trigger the parent's `onSearch` function on every input change
  };

  return (
    <div className="relative">
      <input
        type="text"
        value={searchQuery}
        onChange={handleInputChange}
        className="w-full px-4 py-2 border border-gray-300 rounded-md"
        placeholder="Search for products..."
      />
    </div>
  );
};

export default SearchBar;
```

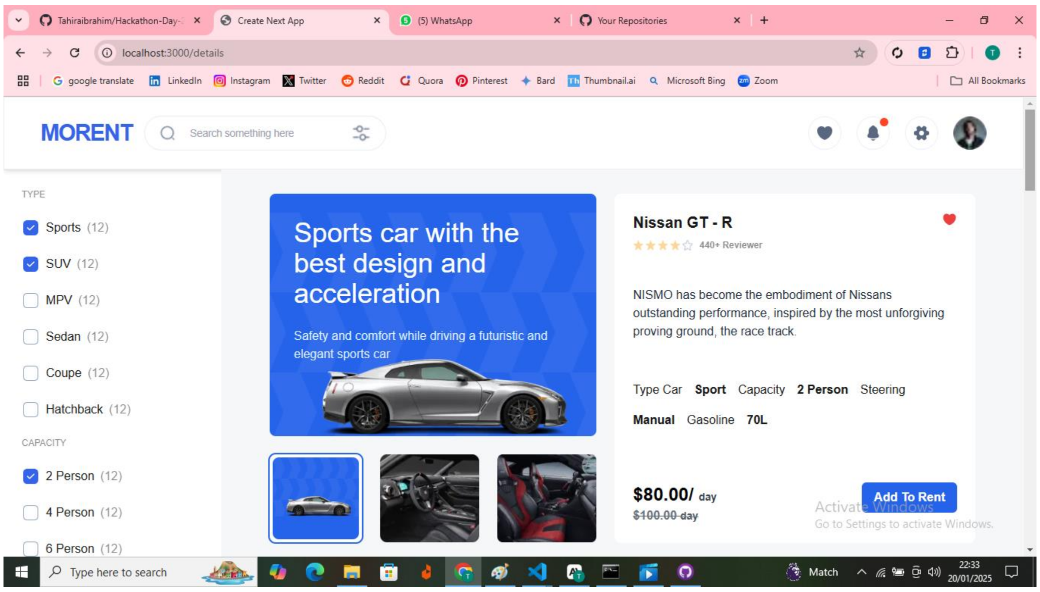


Category Components:

- **Features:**
  - Displayed dynamic categories from Sanity CMS.
  - Enabled filtering of products by selected category.



```
import Button from "@/components/Button"
import Card from "@/components/Card"
 import LocationSelector from "@/components/FrontLanding/LocationSelector"
import { CARCARD } from "@/types/types"
import Image from "next/image"


const carDetails: CARCARD[] = [
    {
        name: 'Nissan',
        currPrice: '$99.00/',
        oldPrice: '$200.00/',
        cardType: 'mobile',
        image: '/images/nisan.png',
        heart: true,
        carType: 'Sport',
        icons: true,
    },
    {
        name: 'Sportage',
        currPrice: '$99.00/',
        oldPrice: '$200.00/',
        cardType: 'mobile',
        image: '/images/jeep.png',
        heart: false,
        carType: 'Hatchback',
        icons: true,
    },
    {
        name: 'Rolls- Royce',
        currPrice: '$99.00/',
        oldPrice: '$200.00/',
```



MORENT

TYPE
- [x] Sports (12)
- [x] SUV (12)
- [ ] MPV (12)
- [ ] Sedan (12)
- [ ] Coupe (12)
- [ ] Hatchback (12)

CAPACITY
- [x] 2 Person (12)
- [ ] 4 Person (12)
- [ ] 6 Person (12)

Sports car with the best design and acceleration

Safety and comfort while driving a futuristic and elegant sports car

Nissan GT - R

440+ Reviewer

NISMO has become the embodiment of Nissans outstanding performance, inspired by the most unforgiving proving ground, the race track.

Type Car **Sport** Capacity **2 Person** Steering **Manual** Gasoline **70L**

$80.00/ day
~~$100.00 day~~

Add To Rent

Cart Component:

Description:

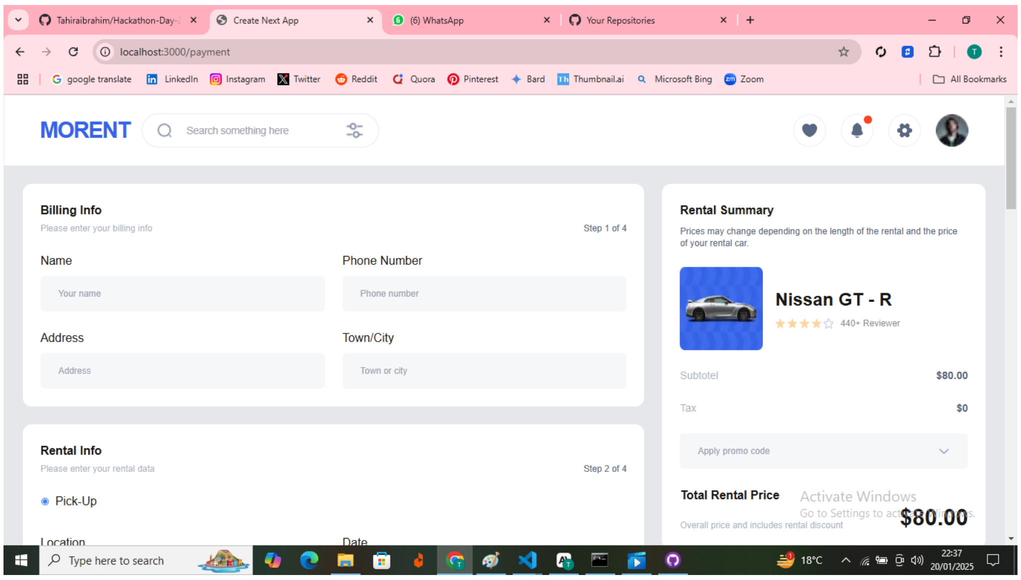
- Created a cart that displayed:
- Items added, quantities, and total price.

Implementation:

- Used React Context API for global state management.

Responsive Designs:

- Ensured all components adapted seamlessly to various screen sizes using Tailwind CSS.


MORENT

Billing Info

Please enter your billing info

Step 1 of 4

Name	Phone Number
Your name	Phone number
Address	Town/City
Address	Town or city

Rental Info

Please enter your rental data

Step 2 of 4

Pick-Up

Location

Date

Rental Summary

Prices may change depending on the length of the rental and the price of your rental car.

Nissan GT - R

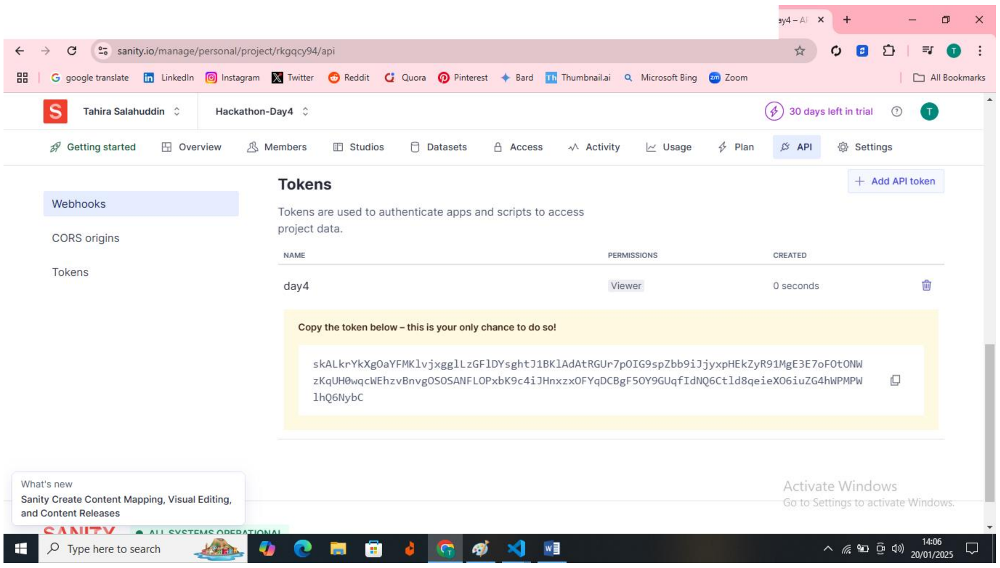
440+ Reviewer

Subtotel	$80.00
Tax	$0

Apply promo code

Total Rental Price $80.00

Overall price and includes rental discount


sanity.io/manage/personal/project/rkgqcy94/api

Tahira Salahuddin · Hackathon-Day4 · 30 days left in trial

Getting started · Overview · Members · Studios · Datasets · Access · Activity · Usage · Plan · API · Settings

Webhooks · CORS origins · Tokens

Tokens

Add API token

Tokens are used to authenticate apps and scripts to access project data.

NAME	PERMISSIONS	CREATED
day4	Viewer	0 seconds

Copy the token below – this is your only chance to do so!

```
skALkrYkXgOaYFMKlvjxgglLzGFlDYsghtJ1BKlAdAtRGUr7pOIG9spZbb9iJjyxpHEkZyR91MgE3E7oFOtONW
zKqUH0wqcWEhzvBnvgOSOSANFLOPxbK9c4iJHnxzxOFYqDCBgF5OY9GUqfIdNQ6Ctld8qeieXO6iuZG4hWPMPW
lhQ6NybC
```

What's new

Sanity Create Content Mapping, Visual Editing, and Content Releases

Frontend Best Practices:

Modular Component Design:

- Built reusable components (e.g., Product Card, Search Bar).

State Management:

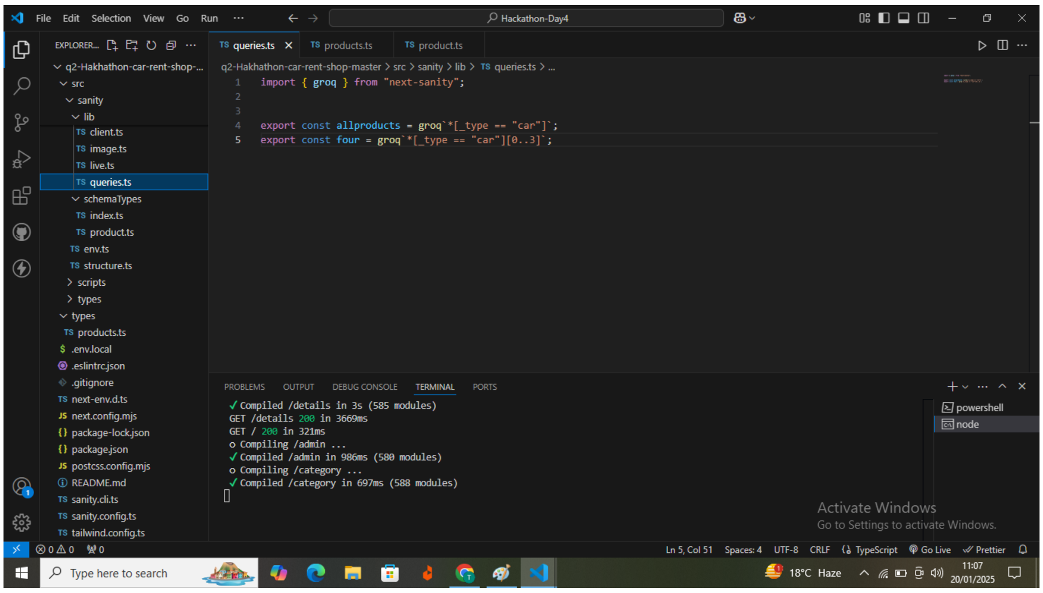
- Used React Context for global state and use State for local component state.

Performance Optimization:

- Implemented lazy loading and pagination for large datasets.

Challenges Faced

1. **Dynamic Data Integration:**


```ts
import { groq } from "next-sanity";


export const allproducts = groq`*[_type == "car"]`;
export const four = groq`*[_type == "car"][0..3]`;
```

```
✓ Compiled /details in 3s (585 modules)
GET /details 200 in 3669ms
GET / 200 in 321ms
o Compiling /admin ...
✓ Compiled /admin in 986ms (580 modules)
o Compiling /category ...
✓ Compiled /category in 697ms (588 modules)
```

Issue:

- API response delays.

Solution:

- Used loading placeholders to improve user experience.

2. **Responsive Layout Issues:**

Solution:

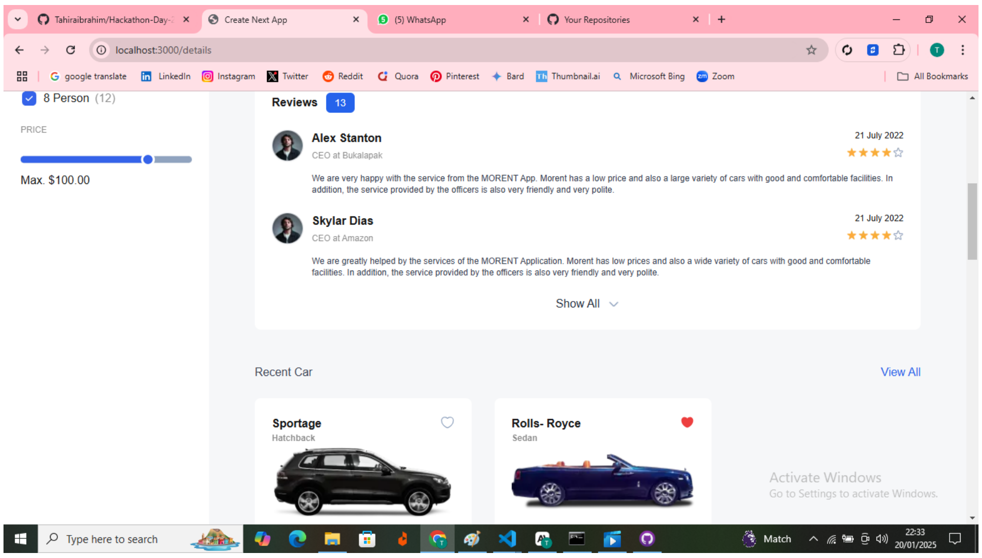
- Refined Tailwind CSS classes for better mobile and desktop views.

3. **State Management Complexity**

Solution:

- Adopted Context API to centralize state handling.

Reviews



8 Person (12)

PRICE

Max. $100.00

Reviews 13

Alex Stanton — CEO at Bukalapak — 21 July 2022 ★★★★☆

We are very happy with the service from the MORENT App. Morent has a low price and also a large variety of cars with good and comfortable facilities. In addition, the service provided by the officers is also very friendly and very polite.

Skylar Dias — CEO at Amazon — 21 July 2022 ★★★★☆

We are greatly helped by the services of the MORENT Application. Morent has low prices and also a wide variety of cars with good and comfortable facilities. In addition, the service provided by the officers is also very friendly and very polite.

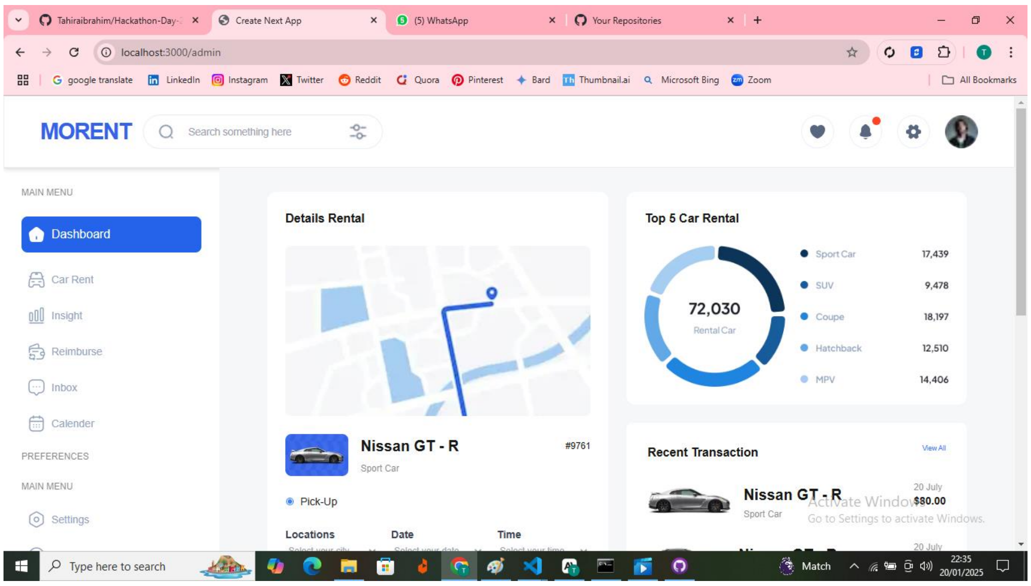
Show All

Recent Car — View All

Sportage Hatchback

Rolls- Royce Sedan

Rental Details



Details Rental

Nissan GT - R #9761
Sport Car

Pick-Up

Locations | Date | Time

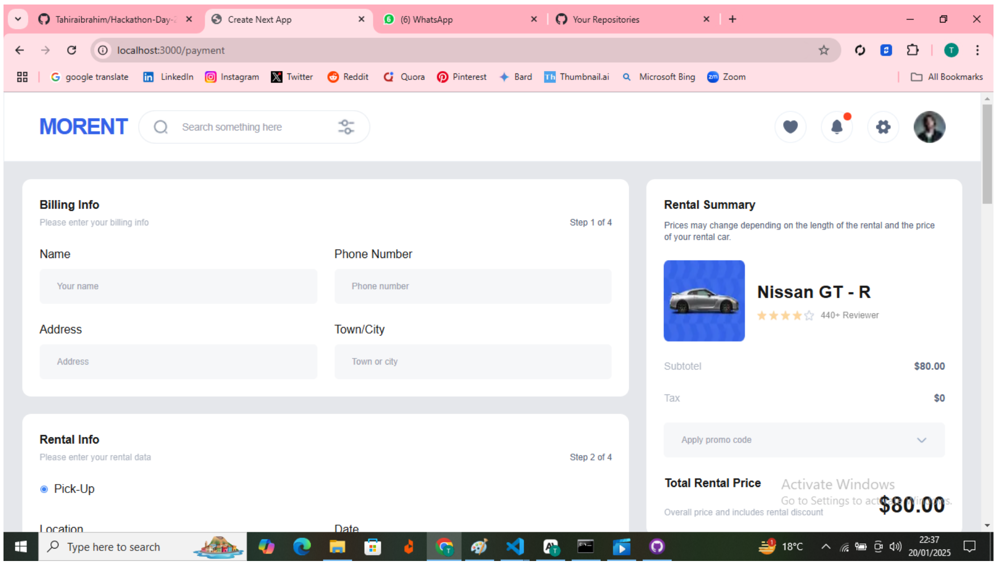
Top 5 Car Rental

72,030 Rental Car

● Sport Car	17,439
● SUV	9,478
● Coupe	18,197
● Hatchback	12,510
● MPV	14,406

Recent Transaction — View All

Nissan GT - R Sport Car — 20 July $80.00



Billing Info
Please enter your billing info — Step 1 of 4

Name	Phone Number
Your name	Phone number
Address	Town/City
Address	Town or city

Rental Info
Please enter your rental data — Step 2 of 4

Pick-Up

Location | Date

Rental Summary
Prices may change depending on the length of the rental and the price of your rental car.

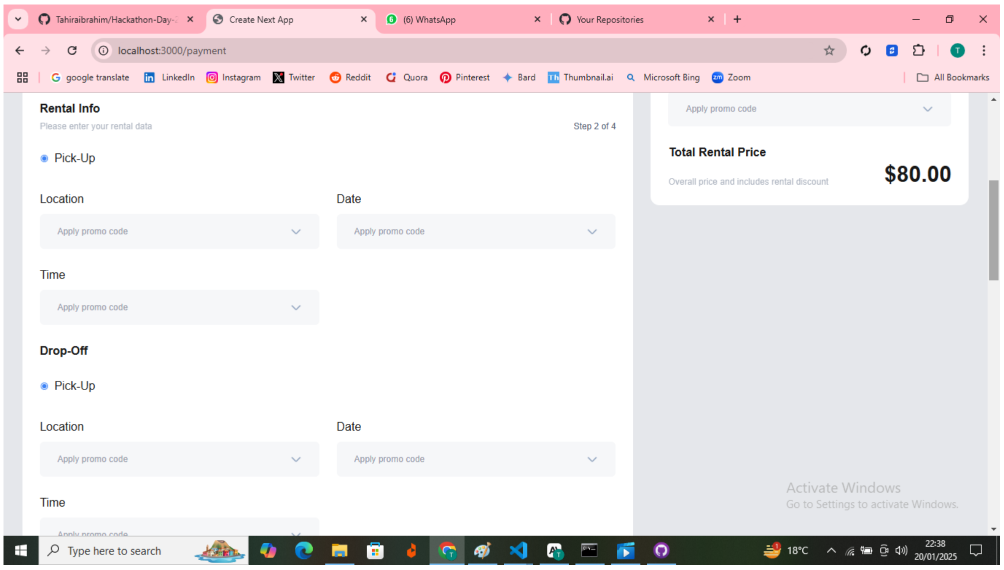
Nissan GT - R ★★★★☆ 440+ Reviewer

Subtotel	$80.00
Tax	$0

Apply promo code

Total Rental Price $80.00
Overall price and includes rental discount

Rental Info



Rental Info

Please enter your rental data

Step 2 of 4

Pick-Up

Location	Date
Apply promo code	Apply promo code

Time

Apply promo code

Drop-Off

Pick-Up

Location	Date
Apply promo code	Apply promo code

Time

Apply promo code

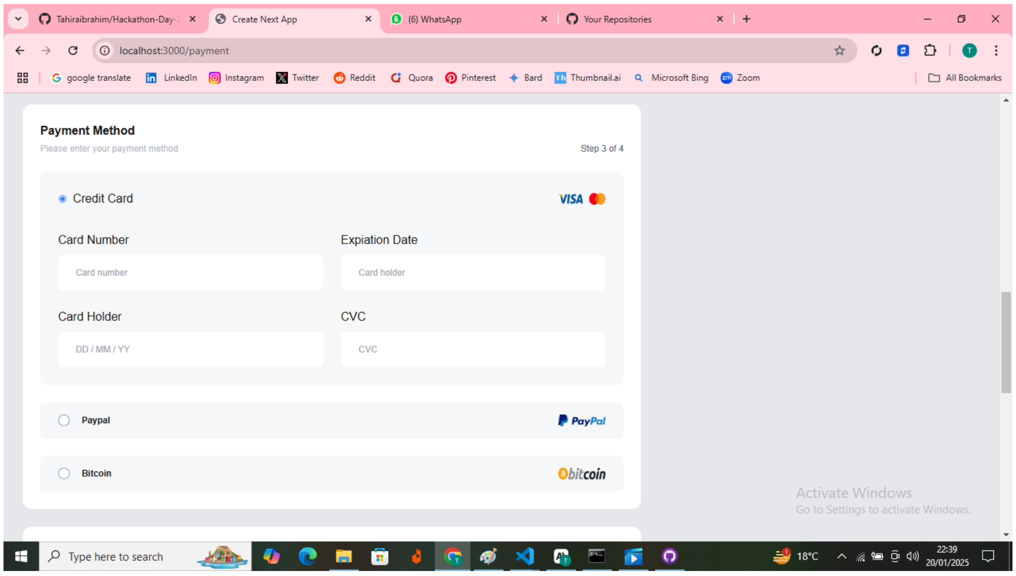
Apply promo code

Total Rental Price

Overall price and includes rental discount

$80.00

Payment Method



Payment Method

Please enter your payment method

Step 3 of 4

Credit Card

VISA

Card Number	Expiation Date
Card number	Card holder

Card Holder	CVC
DD / MM / YY	CVC

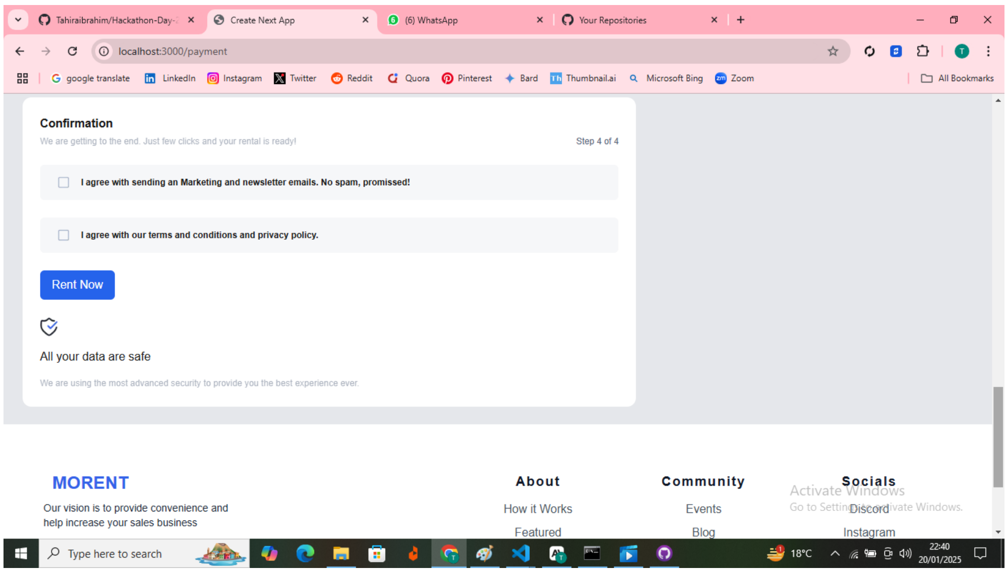
Paypal

PayPal

Bitcoin

bitcoin

Conformation



Confirmation

We are getting to the end. Just few clicks and your rental is ready!

Step 4 of 4

- [ ] I agree with sending an Marketing and newsletter emails. No spam, promissed!
- [ ] I agree with our terms and conditions and privacy policy.

Rent Now

All your data are safe

We are using the most advanced security to provide you the best experience ever.

MORENT

Our vision is to provide convenience and help increase your sales business

About	Community	Socials
How it Works	Events	Discord
Featured	Blog	Instagram

Conclusion:

Day 4 demonstrated the importance of dynamic and reusable components in building scalable web applications. The implementation aligns with real-world standards and showcases a strong foundation for the marketplace project.