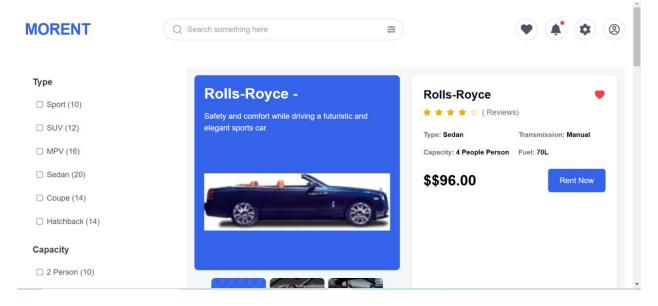
Day 5: Testing, Error Handling, and Backend Integration — [by: AHMED RAZA]

1. Objective

The primary aim of Day 5 was to refine the back-end processes of the car rental platform. This involved improving real-time data management, implementing effective error-handling strategies, and integrating Stripe for seamless payment transactions. Additionally, thorough testing was performed to ensure the platform remains stable and provides a smooth user experience.

2. Testing

- ❖ **Frontend Testing:** The header includes essential element such as the logo, account access and wish list for login user. The navigation menu for proper functionality The banner and product carousels display and navigate correctly.
- **Dynamic frontend:** dynamic detail pages for each cars or a vehicles

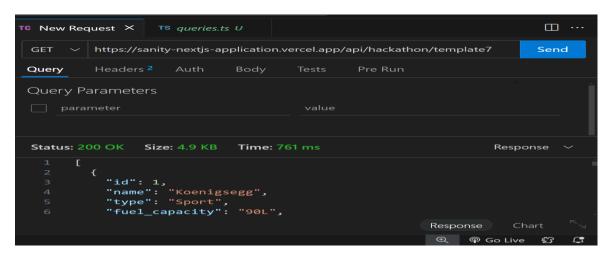


- ❖ Integration Testing: Ensured seamless communication between the front end and backend, specifically in handling data and API requests.
- ❖ Clerk authentication: sign in through different way like a google, email and Facebook etc.
- **Payment System Testing:** Evaluated the Stripe integration by testing transaction processes and handling failed payment scenarios.

3. Error Handling Implementation

• Frontend Error Management:

- o Displays user-friendly messages when API requests fail.
- Ensures form submission of rent and payment only proceed when all required fields are completed.
- o My data is perfectly fetch from API & and the callback UI works perfectly



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4. Back end Integration Refinement

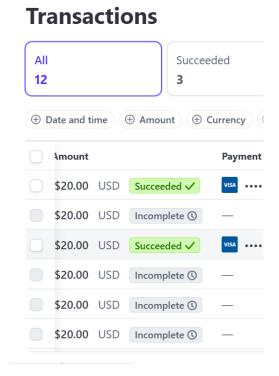
• Real-Time Data Management:

 Backend dynamically updates car availability, pricing, and booking slots using Sanity CMS, ensuring the front end always displays the latest data without requiring manual updates.

```
TS queries.ts U X
TC New Request *
sanity > lib > TS queries.ts > [∅] getCarsQuery
       export const getCarsQuery = `*[_type == "car"]{
            _id,
            name,
            brand,
            type,
            fuelCapacity,
            transmission,
   8
            seatingCapacity,
            pricePerDay,
            originalPrice,
            tags,
            "imageUrl": image.asset->url
```

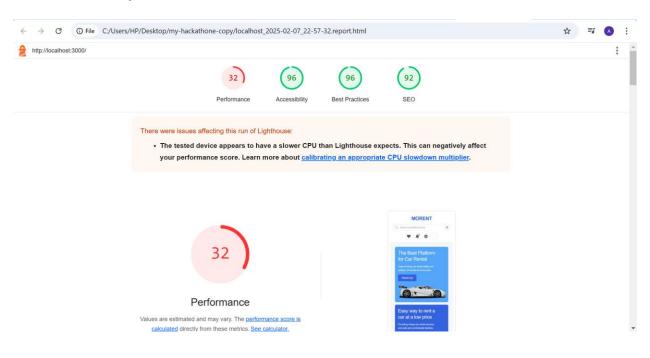
• Stripe Payment Integration:

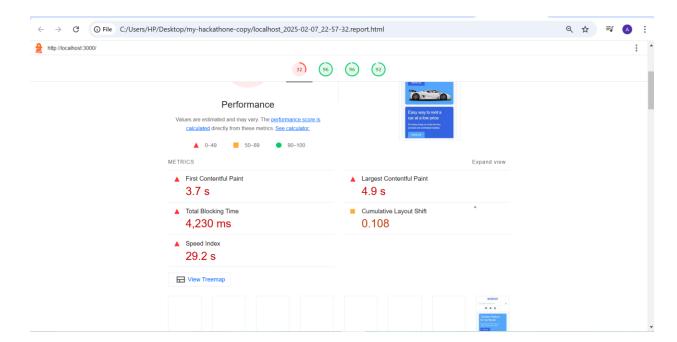
 Payments are securely processed through Stripe, verifying transactions before confirming bookings.

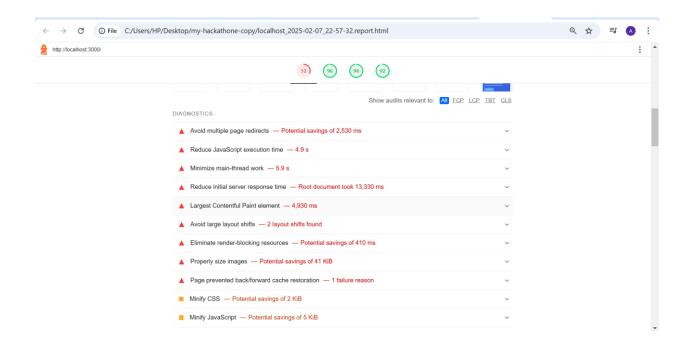


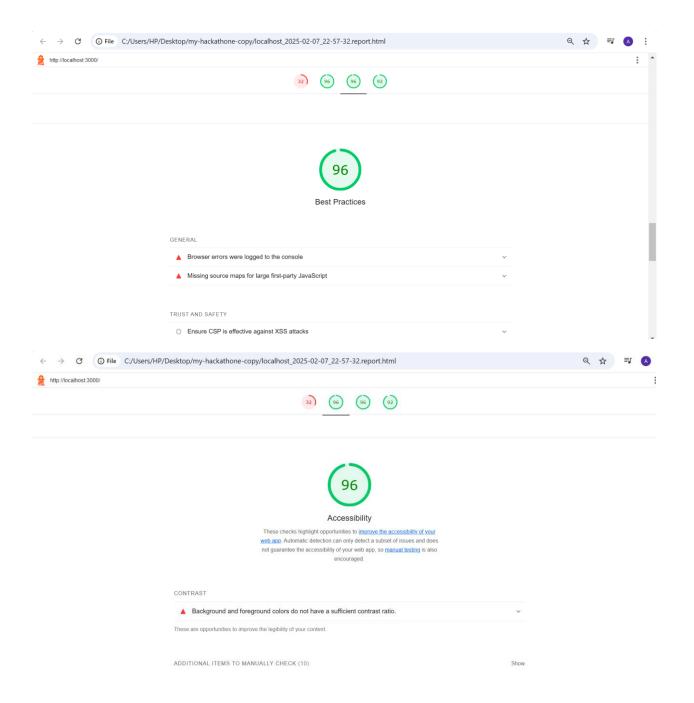
 Errors like insufficient funds or incorrect card details are captured, providing users with appropriate feedback.

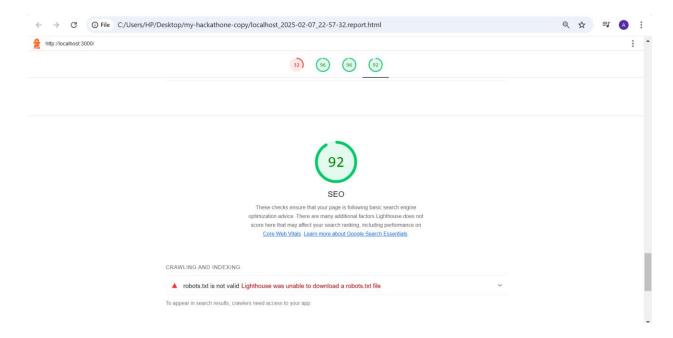
5. Performance Optimization:



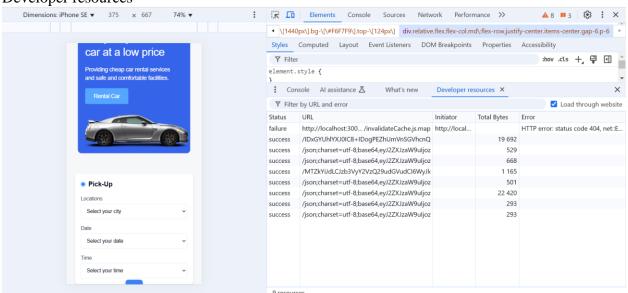




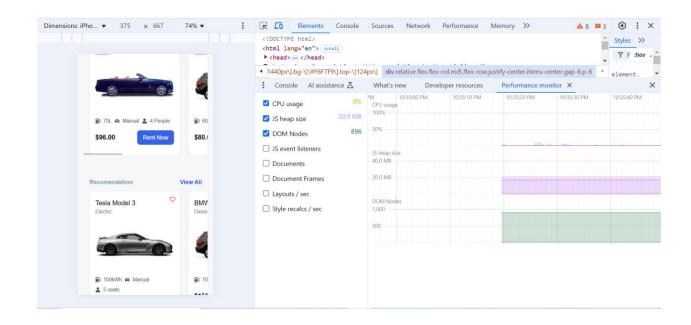




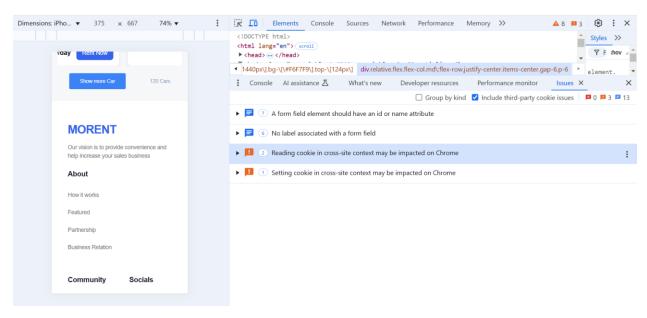
Developer resources



Performance monitor:



Issues:



Security:

