

Hackathon

Day 6 - Report

Prepared By

ABDUL RAHMAN MOIN

Day-6

Deployment Preparation and Staging Environment Setup

Lighthouse Analysis (Desktop)

The image shows a PageSpeed Insights report for the URL <https://morent-car-rental-ar.vercel.app/>

Here's a breakdown of the information shown:

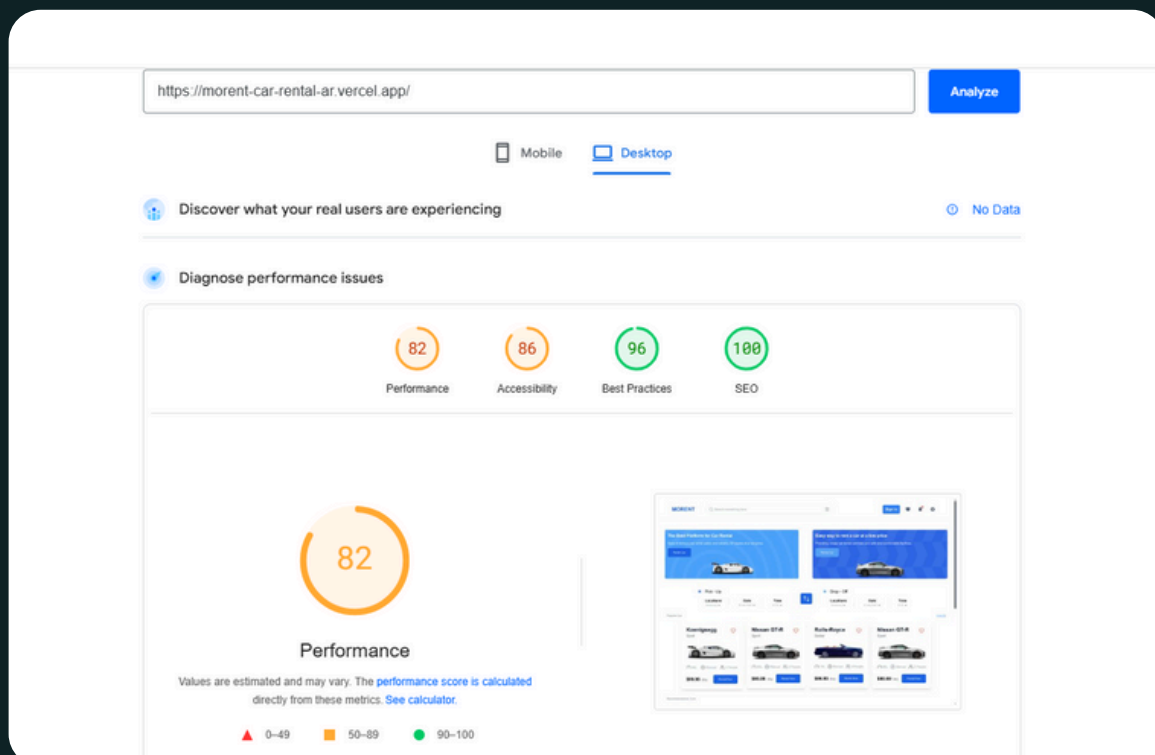
Overall Performance:

Performance: 82/100

Accessibility: 86/100

Best Practices: 96/100

SEO: 100/100



Lighthouse Analysis (Mobile)

The image shows a PageSpeed Insights report for the URL <https://morent-car-rental-ar.vercel.app/>

Here's a breakdown of the information shown:

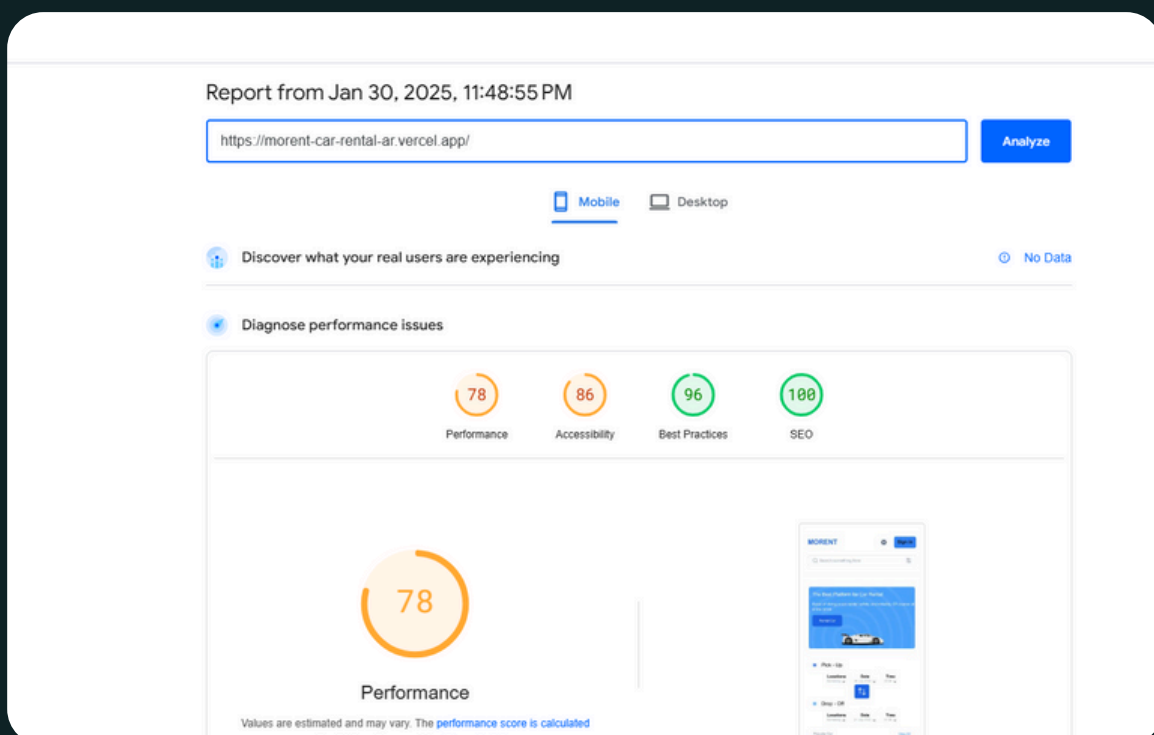
Overall Performance:

Performance: 78/100

Accessibility: 86/100

Best Practices: 96/100

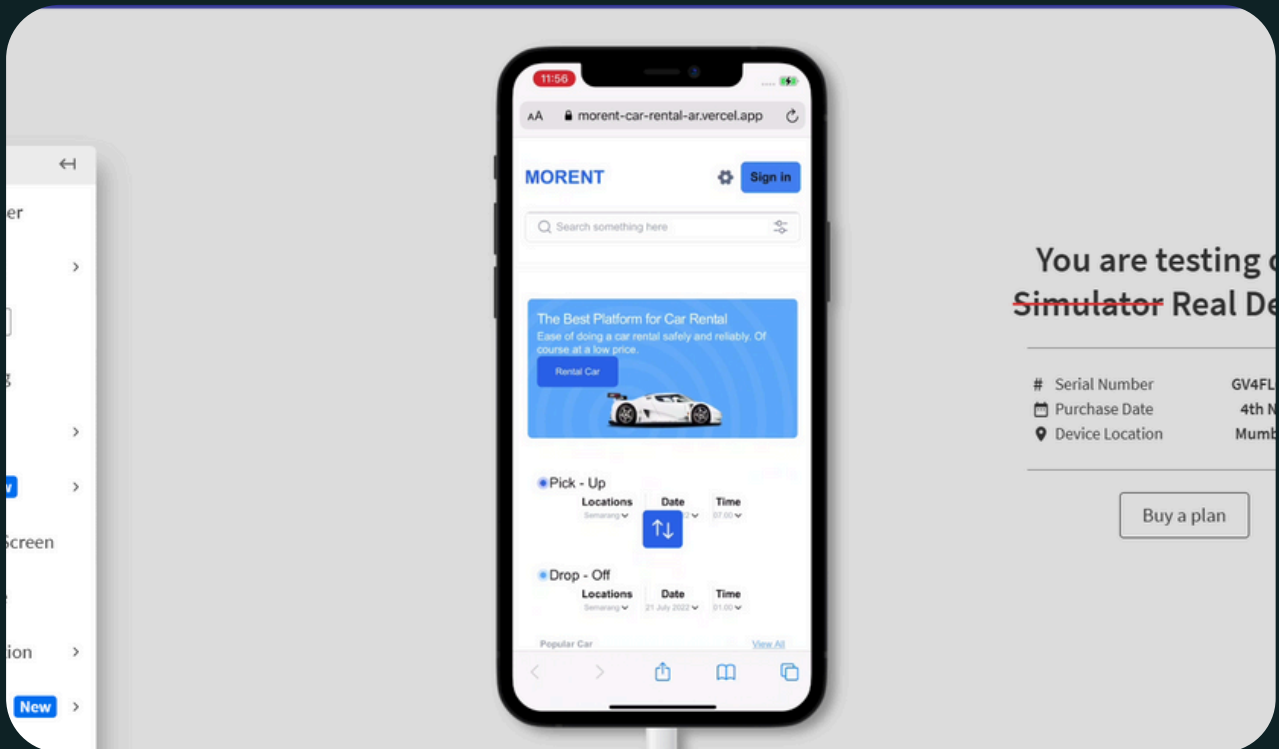
SEO: 100/100



Testing on BrowserStack

To ensure a smooth user experience across different devices and screen sizes, I conducted comprehensive testing using BrowserStack:

- Tested the responsiveness of the website across multiple screen sizes, including mobile, tablet, and desktop views.
- Verified that key functionalities such as authentication, booking flow, and checkout work consistently across devices.
- Ensured proper layout adjustments and UI rendering across different operating systems and browsers



Test Cases Executed:

- **Product Listing Page Validation:** Ensured that all products were displayed correctly on the product listing page. The test confirmed that items loaded as expected without missing images or incorrect details.
- **API Error Handling:** Simulated API failures to check whether proper error messages and fallback UI were shown. The system handled errors gracefully with informative messages.
- **Categorization Functionality:** Tested category selection by displaying the correct items when filtering. Verified that selecting multiple categories showed the corresponding results, and clearing the selection reset the view.
- **Search Functionality:** Entered search queries and validated that relevant results were displayed dynamically based on user input.
- **Mobile Responsiveness:** Resized the browser and tested on mobile devices to ensure the layout adjusted properly, maintaining usability across different screen sizes.
- **Authentication via Clerk:** Verified login and registration using email/password and Google sign-in. Ensured seamless authentication with appropriate user session handling.
- **Payment Integration via Stripe:** Processed test transactions to confirm successful payments and verify correct handling of success and failure messages.

Conclusion:

Day 6 was a critical phase in preparing the marketplace for deployment. Setting up a staging environment ensured that the application was tested in a production-like setting, allowing for early detection and resolution of potential issues. Through environment variable configuration, performance testing, and documentation updates, the project was refined for a seamless and secure deployment. With all systems optimized and thoroughly validated, the marketplace is now fully staged, organized, and ready for production deployment.