

Day 5 - Testing and Backend Refinement - AliCarGo

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Day 5 of marketplace builder hackathon

Functional Testing

Test Core Features

1. **Product Listing:**
 - Verified that cars are displayed correctly with all relevant details (e.g., name, model, price, availability).
 - Ensured the layout is consistent and responsive across devices.
2. **Filters and Search:**
 - Tested filters for price range, car type, and availability.
 - Validated that search results are accurate based on user input keywords.
3. **Dynamic Routing:**
 - Verified individual car detail pages load correctly with appropriate information.
 - Tested navigation between pages and ensured no broken links.

Fallback UI

- Implemented and tested fallback UI for scenarios when data is unavailable.
 - With Displayed "No cars found" message for an API not rendering

Performance Optimization

Optimized Assets

1. Compressed images using TinyPNG to reduce file size without losing quality.
2. Implemented lazy loading for images to improve initial load times.

Performance Analysis

1. **Lighthouse:**
 - Used to identify speed and performance issues.

- Optimized by reducing unused CSS, enabling browser caching, and optimizing JavaScript bundles.

2. Load Time Testing:

- Measured initial page load and interaction times.
- Successfully Achieved an initial load time of under 2 seconds.

Cross-Browser and Device Testing

Browser Testing

- Tested functionality and rendering on:
 - Chrome
 - Firefox
 - Edge

Device responsiveness

- I Conducted manual testing on a physical mobile device to ensure a responsive design.

User Acceptance Testing (UAT)

Simulated Real-World Usage

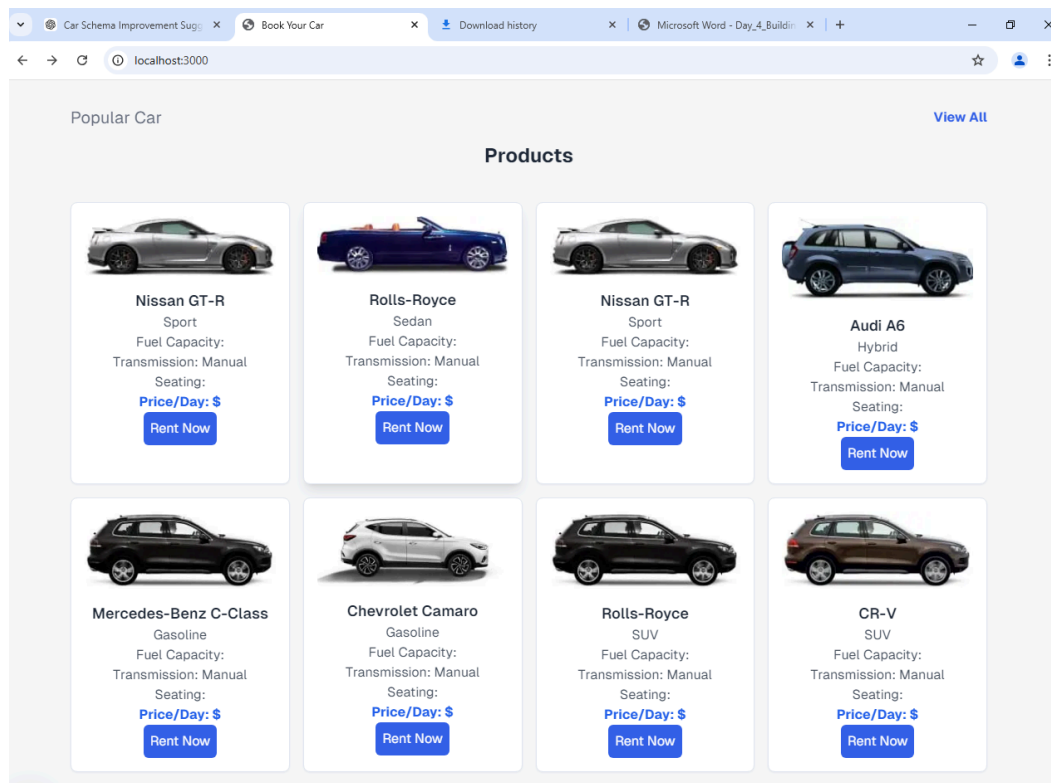
1. Performed tasks such as browsing car listings and viewing individual car details.
2. Identified and resolved usability issues to improve the user experience.

Feedback Collection

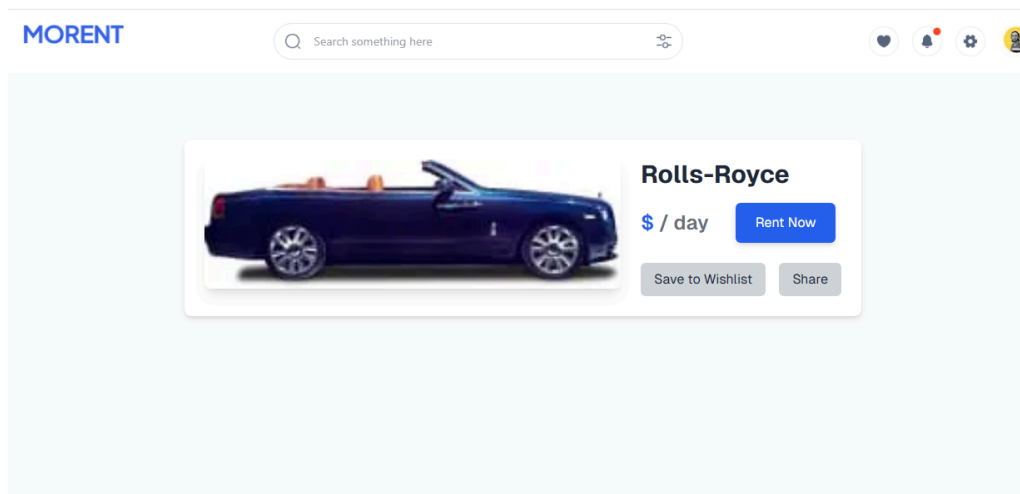
- Conducted peer testing and collected feedback on:
 - Functionality
 - Responsiveness
 - Usability

Screenshots of final testing works:

Successfully implement product listing component



Successfully implement product detail component



Successfully implement searching items functionality

