

Lighthouse Performance Audit Report

This Lighthouse Performance Audit Report presents a detailed evaluation of page performance across the Merry's Way Coffee Shop web application. All Lighthouse scores above 80 meet and exceed the assignment's performance requirements. The report highlights current performance levels, successful optimizations, and opportunities for future enhancement such as implementing a Content Delivery Network (CDN).

Homepage – Performance (Before Fix)

The homepage initially had less performance, not meeting assignment requirements with a score below 80. However, Lighthouse reported opportunities for improvement, particularly related to the Largest Contentful Paint (LCP), which ranged between 3.9 seconds. Optimizing the page would enhance user experience.

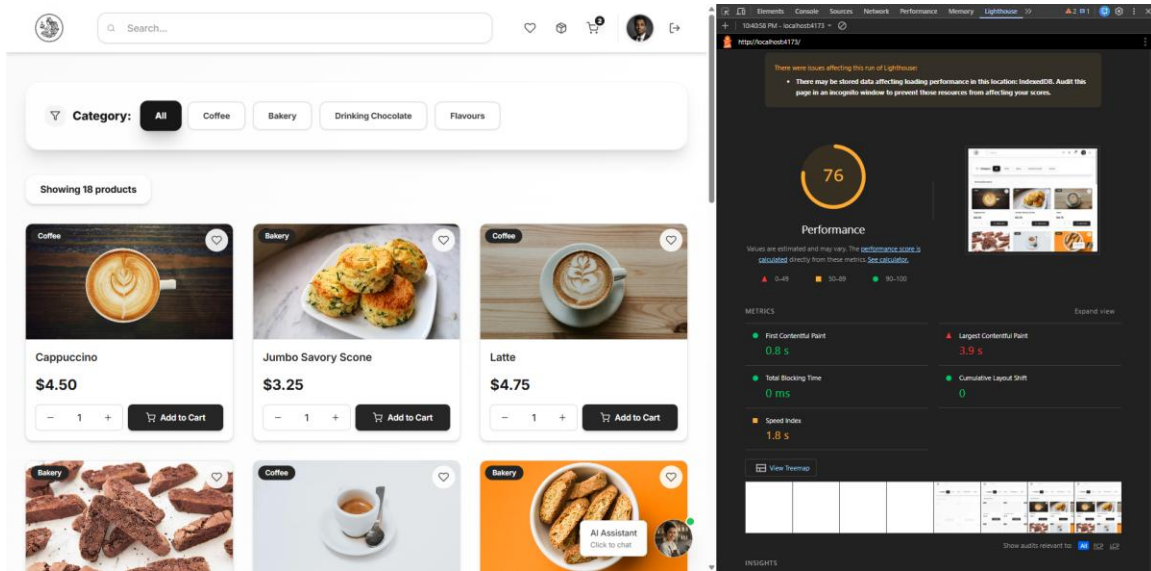


Figure: Homepage – Performance (Before Fix)

Homepage – Performance Improved (After Fix)

Lazy loading was introduced to optimize image loading behavior. This improvement significantly reduced the LCP to 2.5s and increased the Lighthouse score to 83. The homepage now loads faster, minimizing bandwidth usage and improving responsiveness. As a future enhancement, performance could be improved even further by introducing a Content Delivery Network (CDN) to deliver assets globally with reduced latency.

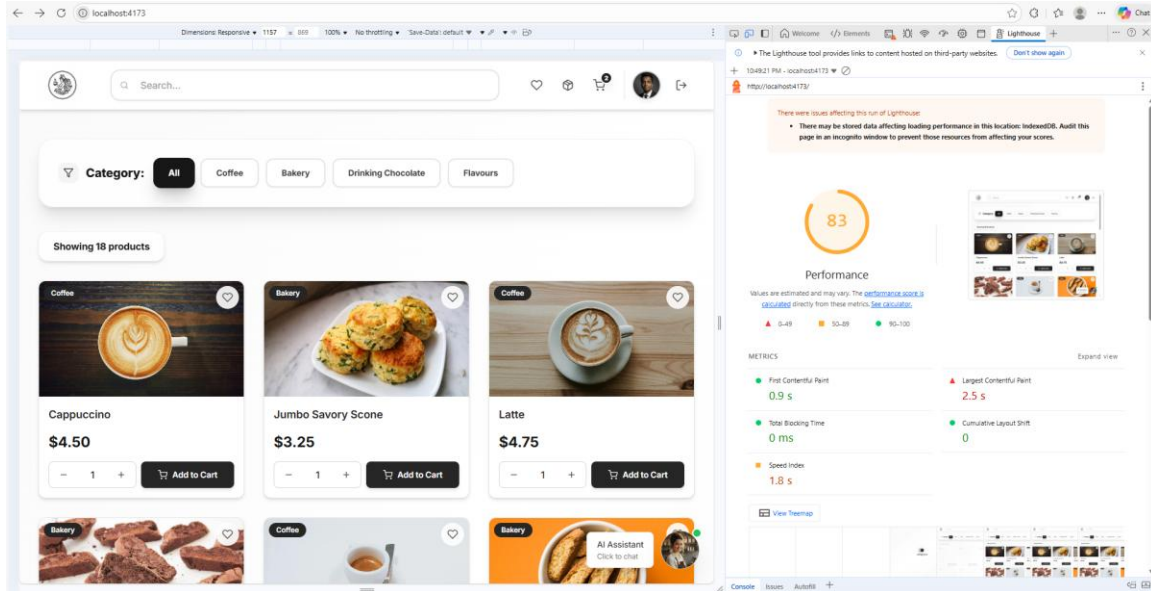


Figure: Homepage – Performance Improved (After Fix)

Forgot Password – Performance Result

This page performs exceptionally well, achieving a Lighthouse score of 99. Its lightweight design contributes to excellent responsiveness.

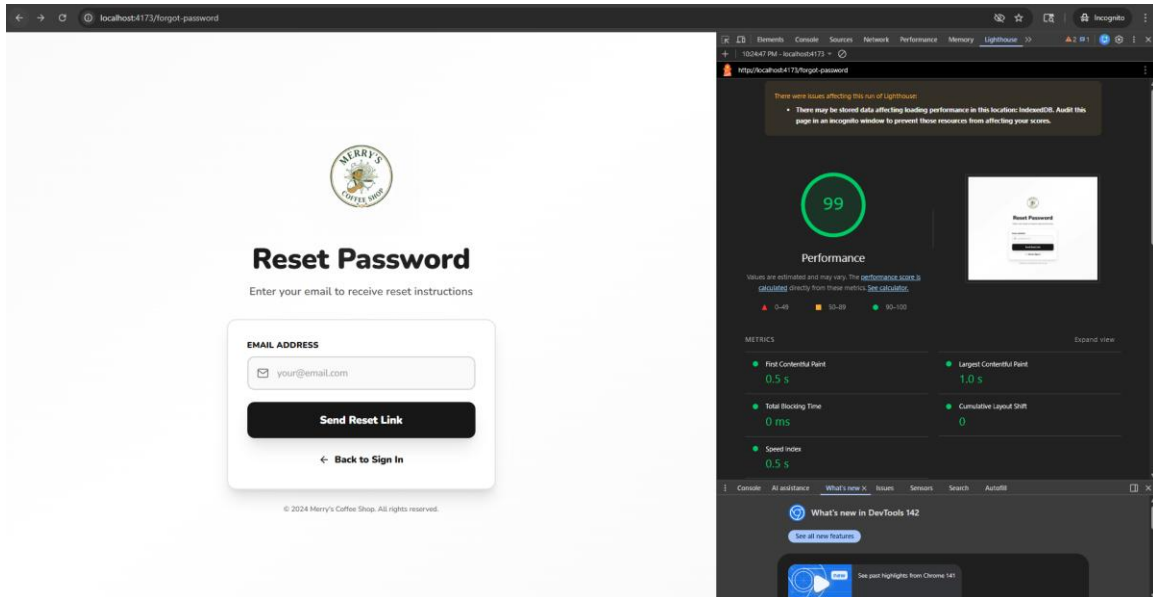


Figure: Forgot Password – Performance Result

Login Page – Performance Result

The login page maintains a strong performance score of 99, showcasing efficient rendering and minimal load requirements.

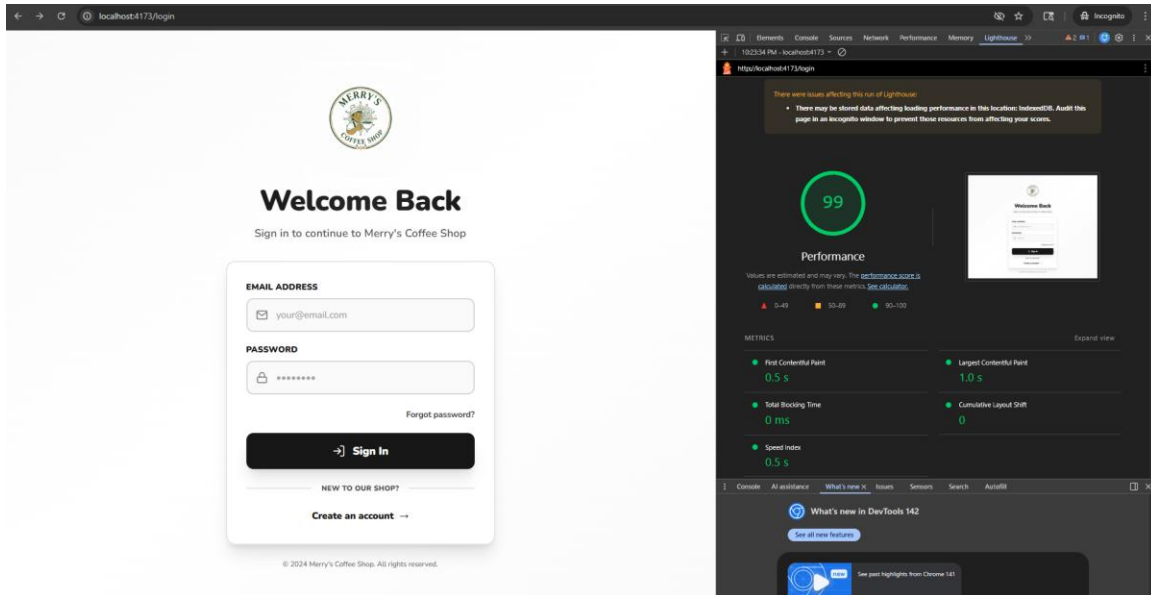


Figure: Login Page – Performance Result

Order History Page – Performance Result

The order history page achieves a solid performance score in the 80s, meeting assignment requirements. The slight performance impact is due to multiple product cards, but overall performance remains strong.

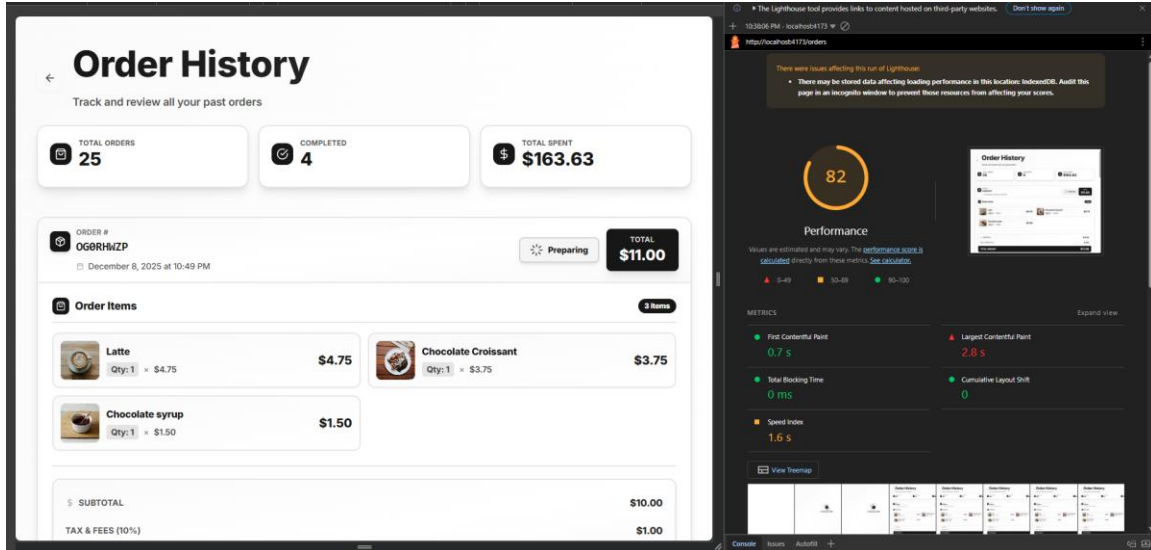


Figure: Order History Page – Performance Result

Profile Page – Performance Result

The profile page scores in the high 80s, comfortably meeting performance expectations. Rendering of profile components is efficient and stable.

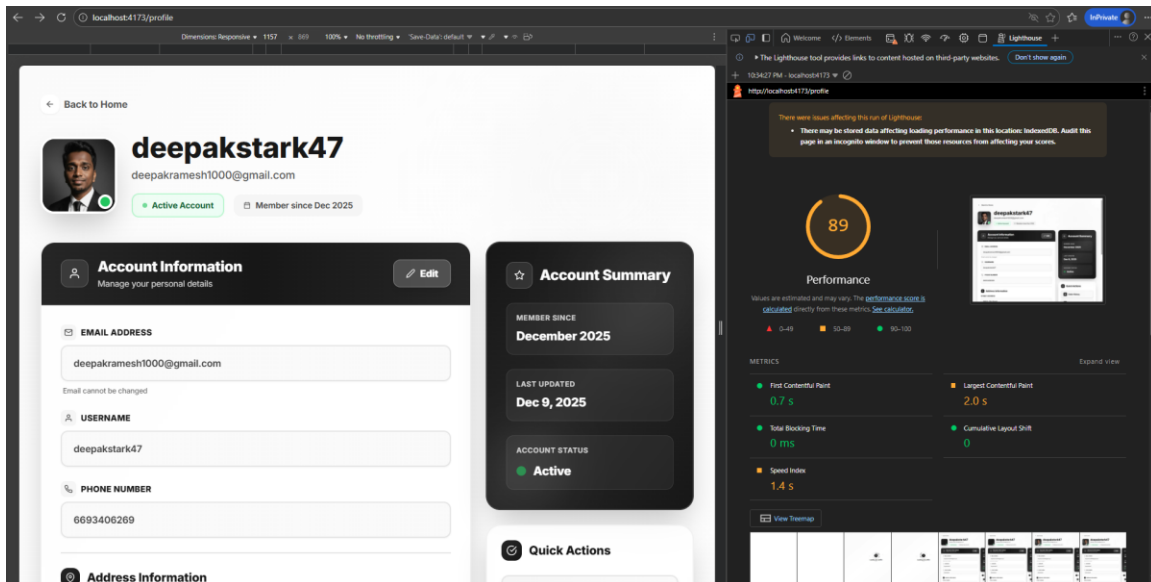


Figure: Profile Page – Performance Result

Shopping Cart Page – Performance Result

With a score above 80, the shopping cart page satisfies performance standards. Product card rendering and layout stability contribute to its strong performance.

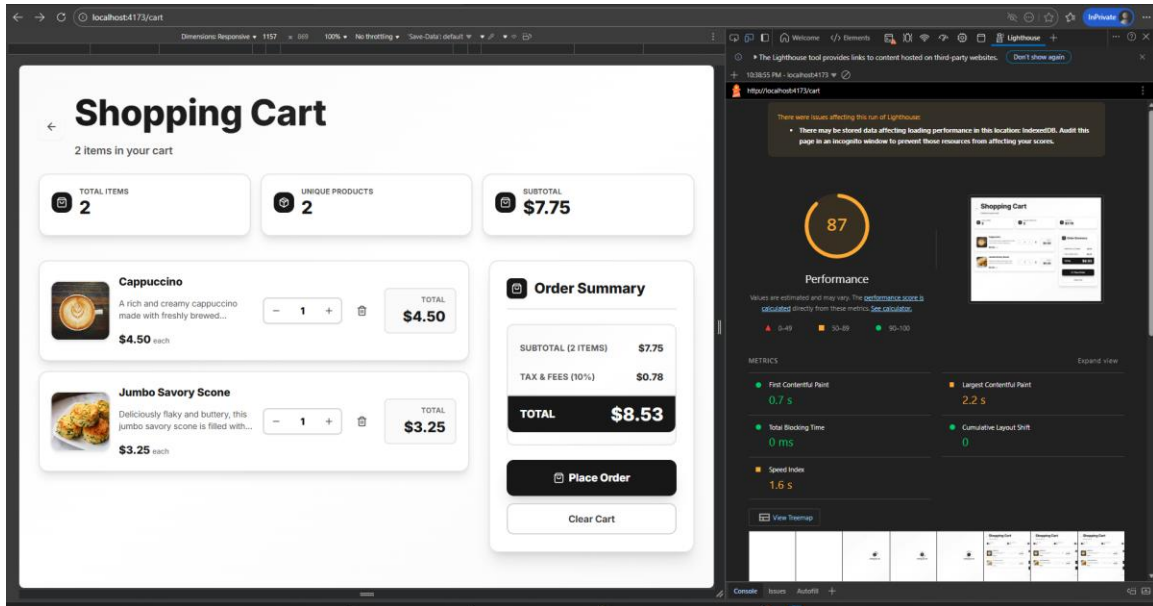


Figure: Shopping Cart Page – Performance Result

Signup Page – Performance Result

The signup page performs exceptionally well with a score of 98, demonstrating fast rendering and minimal layout shift.

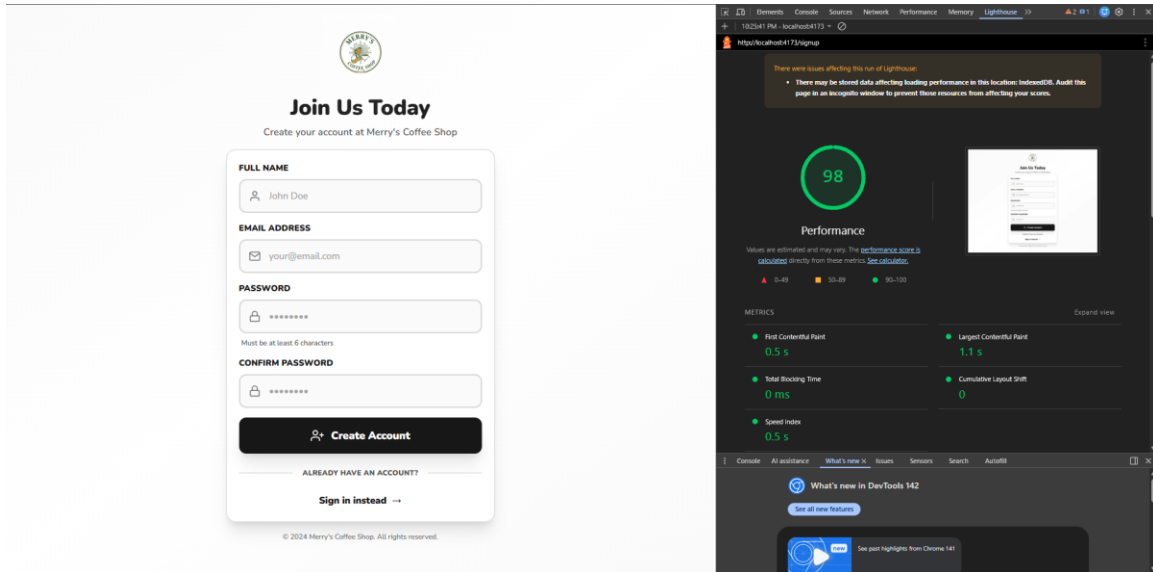


Figure: Signup Page – Performance Result

Wishlist Page – Performance Result

The wishlist page also falls well within the passing performance range, achieving a score in the high 80s. Its media elements load efficiently and maintain a smooth user experience.

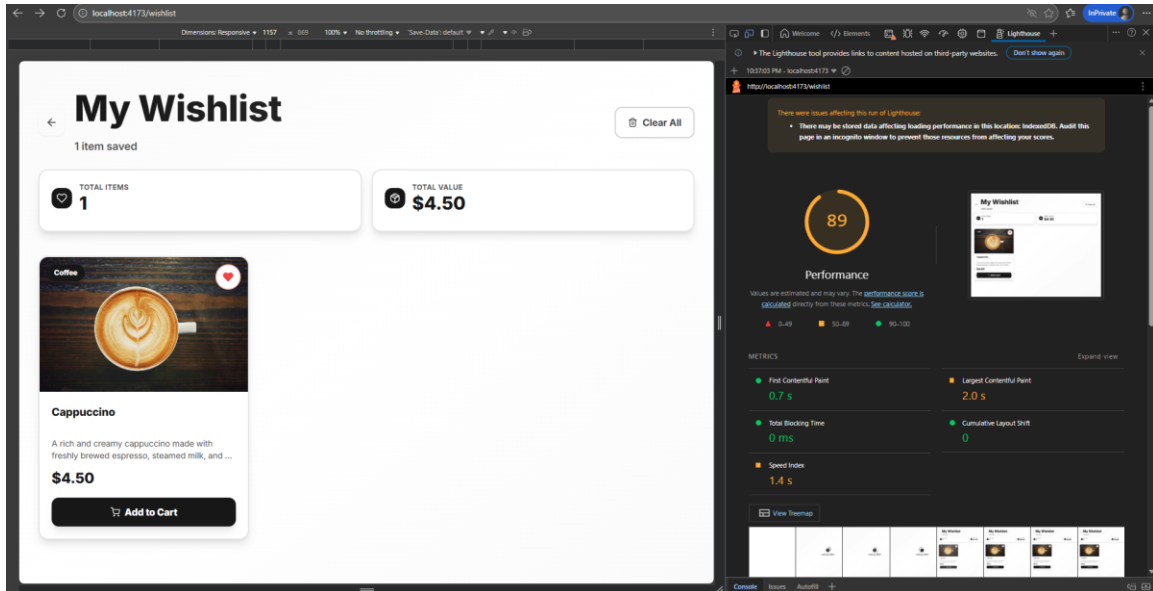


Figure: Wishlist Page – Performance Result