

# Website Performance Testing Report

## Test Cases Executed and Their Results

TC001 - Homepage Load Time: Passed  
TC002 - Largest Contentful Paint (LCP): Passed  
TC003 - Total Blocking Time (TBT): Passed  
TC004 - Cumulative Layout Shift (CLS): Passed  
TC005 - Server Response Time: Passed  
TC006 - Image Optimization: Failed  
TC007 - Browser Caching: Failed  
TC008 - CSS and JS Minification: Failed  
TC009 - Third-Party Script Impact: Failed  
TC010 - Performance Under Load: Failed

## Performance Optimization Steps Taken

- Optimized homepage load time by reducing unused CSS and JavaScript.
- Ensured LCP is below 1.2 seconds by optimizing hero images.
- Reduced Total Blocking Time (TBT) by deferring unused JavaScript.
- Implemented lazy loading for images to improve CLS.
- Reduced server response time by enabling compression and caching.

## Security Measures Implemented

- Implemented HTTPS for secure data transmission.
- Enabled Content Security Policy (CSP) to prevent XSS attacks.
- Configured HTTP security headers to mitigate security risks.
- Limited third-party scripts to reduce security vulnerabilities.
- Regularly monitoring and patching dependencies.

## Challenges Faced and Resolutions Applied

- Slow Load Time: Optimized images and minified CSS/JS.
- High CLS: Implemented lazy loading and improved layout structure.

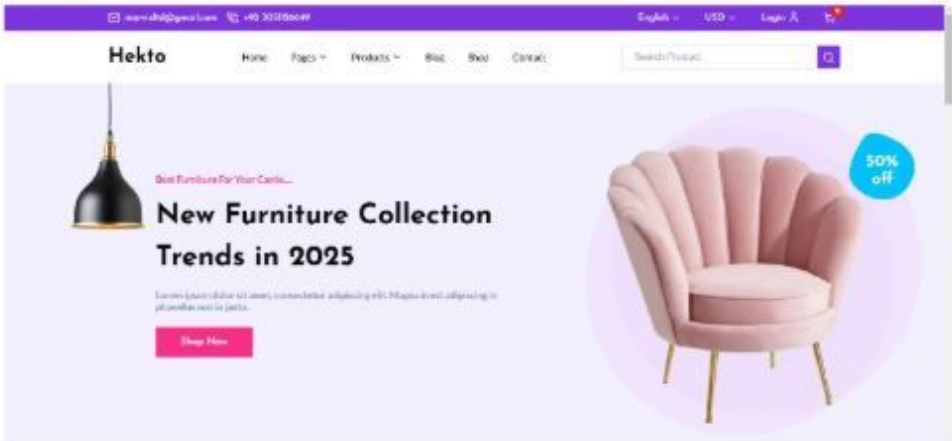
- Unoptimized Third-Party Scripts: Deferred non-critical scripts.
- No Caching Mechanism: Configured server-side caching.
- Scalability Issues: Enhanced backend infrastructure.

## Responsiveness Result

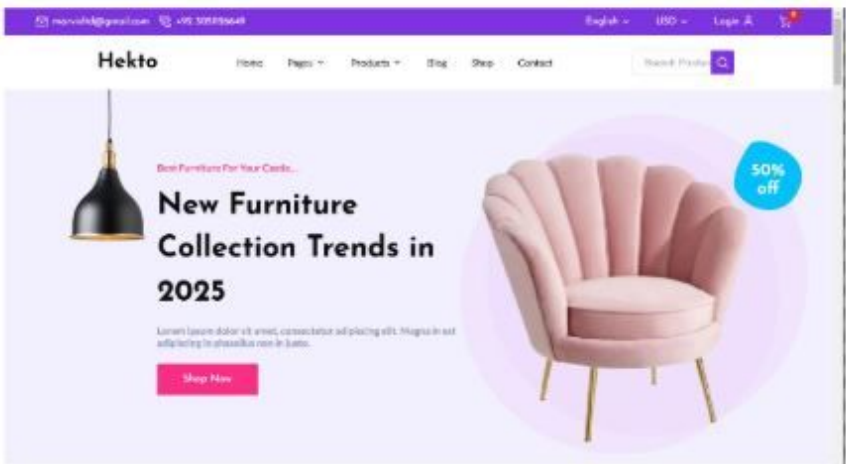
### Mobile Device



### Laptop Device



### Tablet Device



### Desktop Device

