



Sem.II 2023/2024

SECV2223 - WEB PROGRAMMING

Section 06

Report

<Comparative Evaluation of Websites>

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Team Members:

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Introduction:

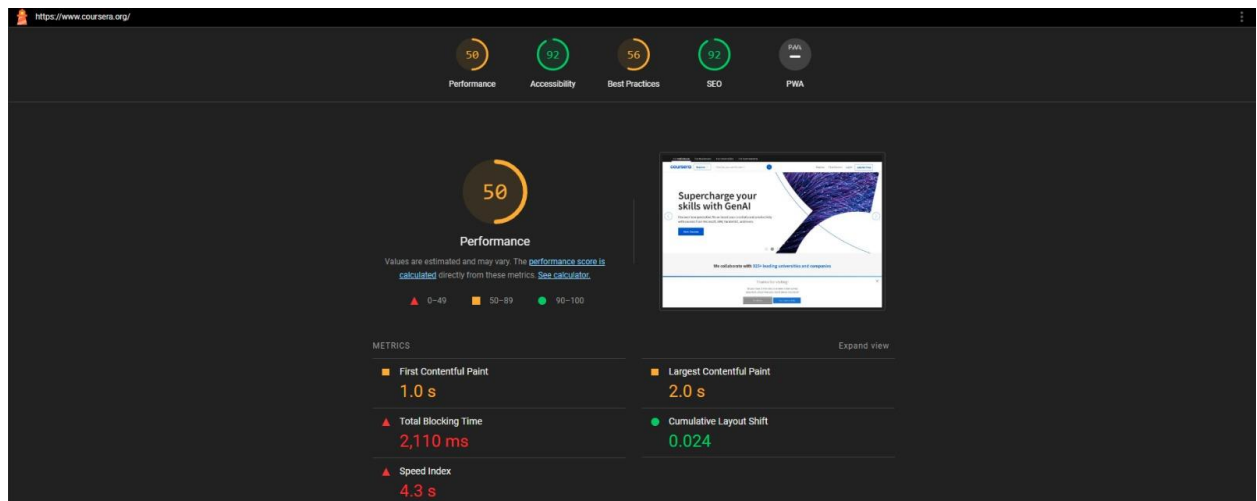
Online learning platforms are essential tools for providing accessible education globally. This study analyzes six prominent platforms—Coursera, edX, Udemy, Pluralsight, Khan Academy, and LinkedIn Learning—across performance, accessibility, best practices, and SEO. Through this evaluation, we aim to identify areas for improvement and offer recommendations to enhance user experience and website efficiency.

Method:

We utilized tools like Lighthouse and WebPageTest for performance analysis, automated testing tools for accessibility, and SEO assessment based on metadata and content quality. Best practices adherence was assessed through coding standards and resource loading analysis.

Results:

1. Coursera

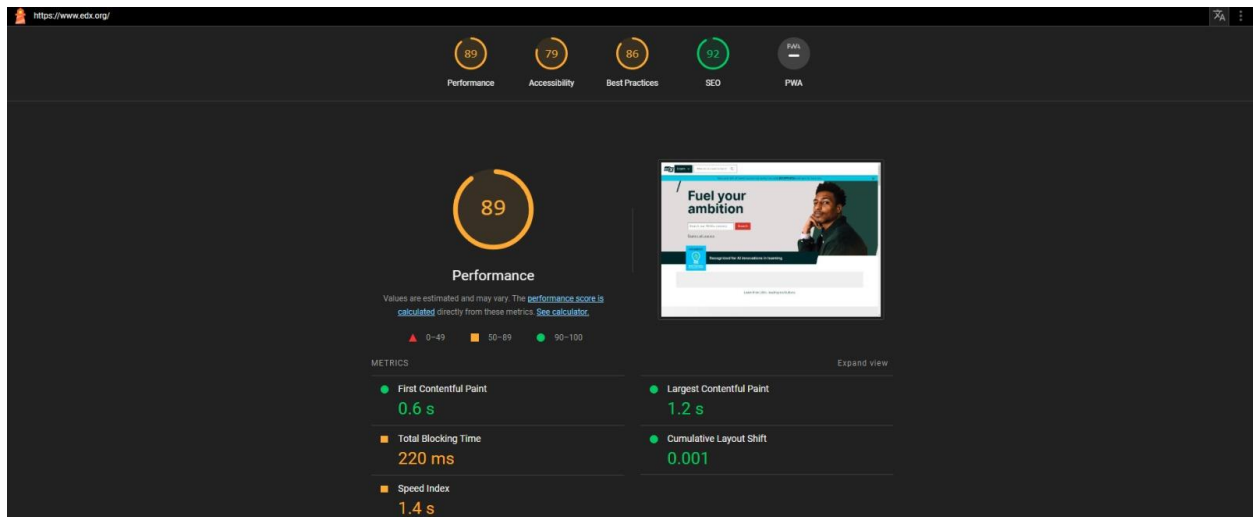


Strengths: High accessibility (92), SEO (92).

Weaknesses: Third-Party Code Impact, Initial Server Response Time, DOM Size.

Recommendations: Optimize Third-Party Code, Improve Server Response Time, DOM Optimization.

2. edX:

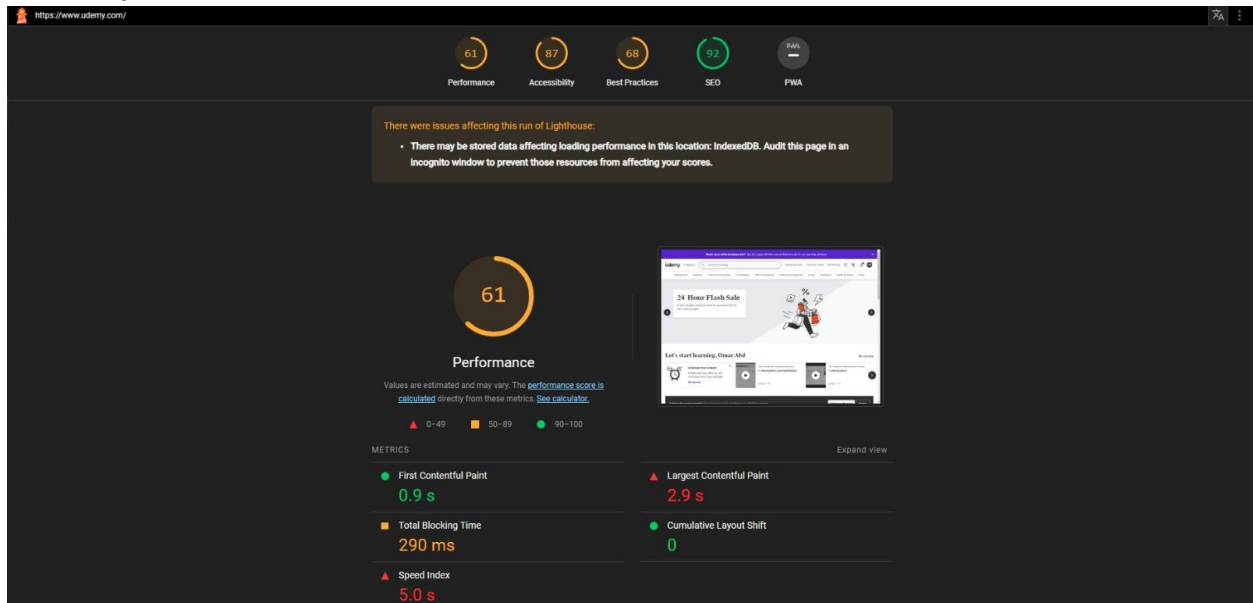


Strengths: Quick Server Response (410 ms), High SEO (92), Decent Accessibility (79).

Weaknesses: Excessive DOM Size, Unused JavaScript and CSS.

Recommendations: Optimize JavaScript and CSS, Image Optimization, Accessibility Audit.

3. Udemy:

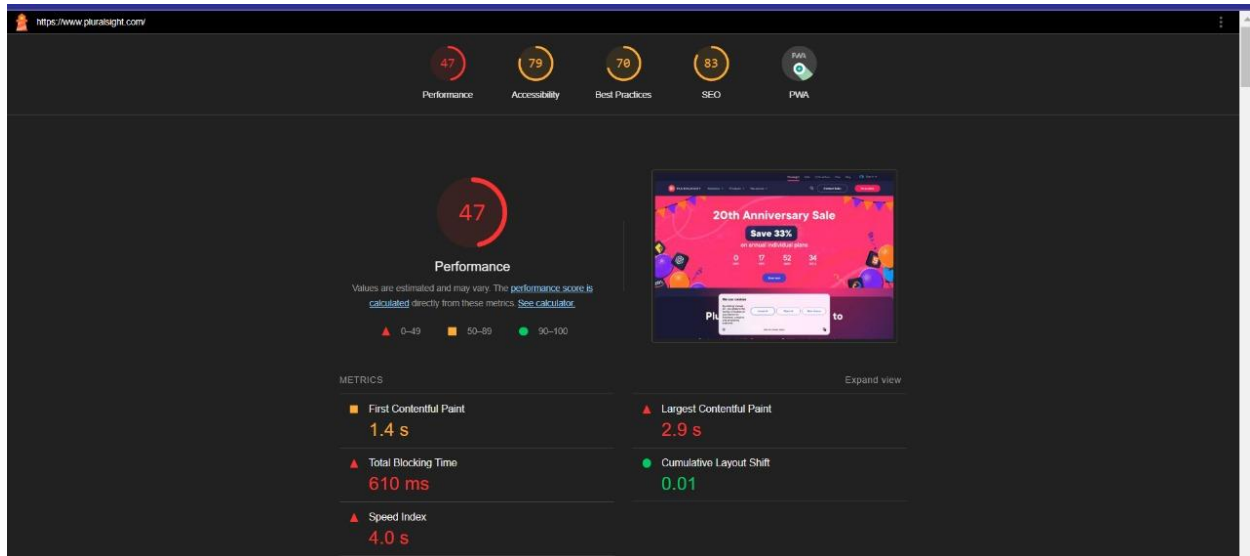


Strengths: Quick Server Response (840 ms), High SEO (92).

Weaknesses: Large Contentful Paint Time, Excessive DOM Size.

Recommendations: Optimize Resource Loading, DOM Complexity Reduction.

4. Pluralsight:

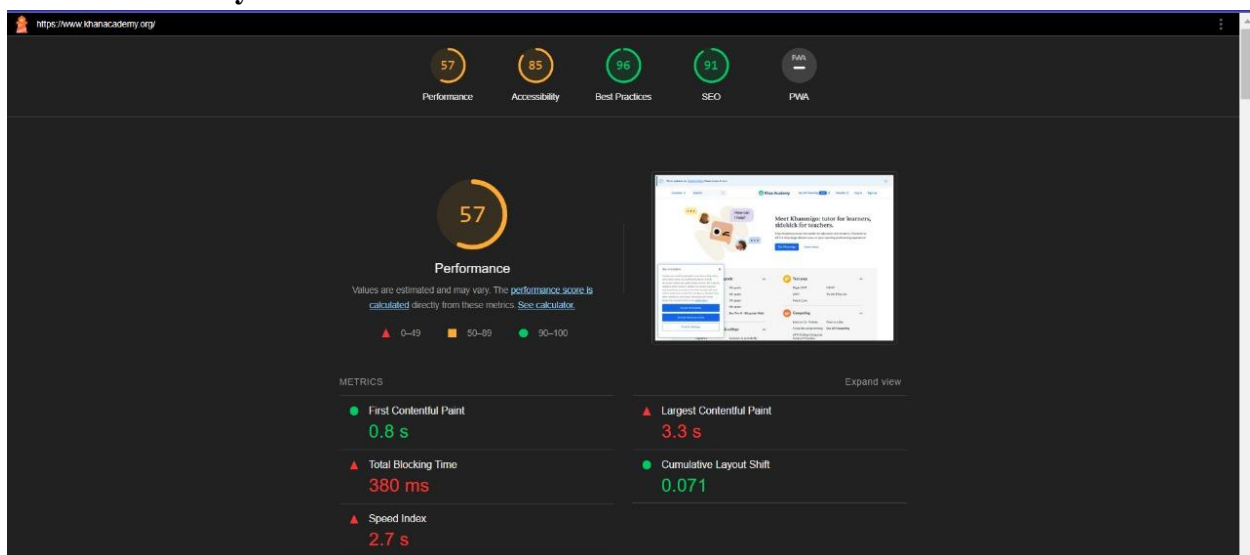


Strengths: Accessibility (79), SEO (83).

Weaknesses: Performance (47), Slow LCP Element.

Recommendations: Prioritize Performance, Optimize Resources.

5. Khan Academy:

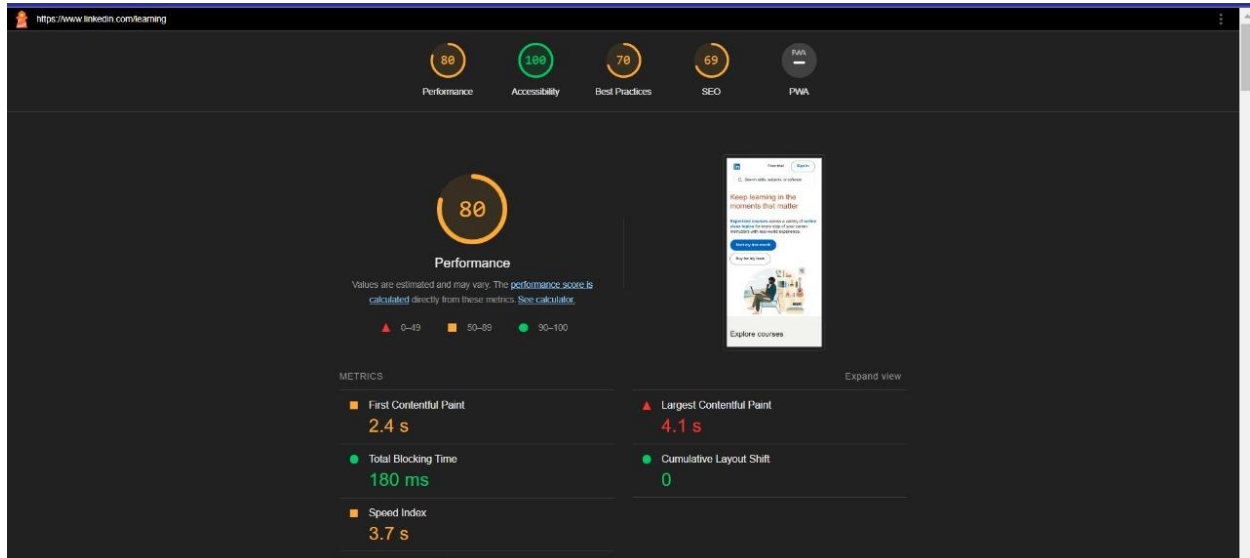


Strengths: Short Server Response Time (140 ms), Good Accessibility, Best Practices, and SEO.

Weaknesses: Large Contentful Paint Time, Excessive DOM Size.

Recommendations: Optimize Resource Loading, Minimize unused CSS and JavaScript.

6. LinkedIn:



Strengths: Accessibility (100), Performance (80).

Weaknesses: Render-blocking resources, Unused CSS and JavaScript.

Recommendations: Optimize Resources, Server Response Time.

Discussion:

Continuous optimization is crucial for improving user experience and website efficiency. Strategies like reducing unused resources and optimizing server response time are essential for enhancing accessibility and adhering to best practices.

Conclusion:

In conclusion, this study highlights the performance and optimization opportunities of leading online learning platforms. By implementing recommended strategies, these platforms can enhance user experience, accessibility, and overall website efficiency.