

BACHELOR OF COMPUTER SCIENCE (BIOINFORMATIC)

SECV2223 WEB PROGRAMMING

SESSION 2024/2025 - SEMESTER 02 Section 01

ASSIGNMENT 2: Reflection

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Reflection on design process and improvements made based on audit results

I conducted a Google Lighthouse assessment after creating my personal portfolio website to evaluate its SEO, best practices, accessibility, and performance. The outcomes validated some of the design decisions and offered insightful input that directed enhancements.

Performance (96%)

The high performance score of 96% suggested quick loading times. The audit did, however, recommend further image size optimisation. In order to improve load times, particularly on mobile devices, I used srcset to integrate responsive images and compress images.

Accessibility (100%)

It was quite an achievement to receive a perfect score of 100% for accessibility. To make sure the website is accessible to all users, including those with disabilities, I concentrated on semantic HTML, alternate language for images, and appropriate contrast ratios.

Best Practices (100%)

I was reassured that the website adhered to contemporary development standards by its perfect score in best practices. In order to preserve security and performance, I made sure that HTTPS connections were safe, steered clear of outdated functionality, and appropriately structured JavaScript.

SEO (91%)

There was room for improvement, such as improving meta descriptions and making sure all images had the appropriate alt attributes, even if the SEO score of 91% was good. To increase search engine exposure, I made improvements to the internal connecting structure and modified meta tags.

Conclusion

I was able to maintain a high level for accessibility and best practices while improving the website's performance and SEO thanks to the Lighthouse audit's invaluable findings. The site is now quicker, easier to use, and more search engine friendly thanks to these enhancements.