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Fit sphere

Performance report

1. **Introduction**

For this report, I compared the performance of my individual project to an existing real-world website with similar features. To achieve this, I used Google Lighthouse to generate performance reports and analyze how both websites are performing.

1. **Google Lighthouse Overview**

I’m going to show you both result overviews from the two reports.

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*(Individual project performance overview)*

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*(SSC performance)*

The performance comparison between my individual project and a similar real-world website using Google Lighthouse showed significant differences. My project scored 55 in performance, higher than the SSC website's score of 34, indicating better optimization and faster load times. In terms of accessibility, my project achieved a perfect score of 100, surpassing the SSC website's score of 86. For best practices, my project scored 52, slightly lower than the website's 74. SEO scores were 80 for my project and 70 for the comparison website, showing better search engine optimization for my project. Regarding PWA capabilities, my project scored 29, while the SSC website did not assess PWA features. These insights emphasize the strengths of my project in performance, accessibility, and SEO, while suggesting areas for improvement in best practices and further enhancement of PWA capabilities.

1. **Green Web Foundation Overview**

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*(SSC website)*

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*(Individual project)*

The green hosting analysis for both my project and a comparable real-world website reveal contrasting environmental impacts. The comparison website, dms.studentensportcentrumeindhoven.nl, is hosted on a green server, as evidenced by the certification indicating it uses environmentally friendly practices. In contrast, my project, hosted locally at localhost:5173, lacks such certification and evidence of green hosting. This disparity highlights the importance of considering sustainable hosting solutions to reduce carbon footprints and promote environmental responsibility in web development. Transitioning to a green hosting provider can be a significant step towards achieving more eco-friendly web practices.

1. **Website Carbon Calculator**

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*(SSC website; check the full report* [*here*](https://www.websitecarbon.com/website/dms-studentensportcentrumeindhoven-nl-products-bookable-product-schedule/)*)*

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*(Individual project)*

The carbon impact analysis for the webpage dms.studentensportcentrumeindhoven.nl indicates a significant environmental concern, as it received a carbon rating of F. This rating means the webpage is dirtier than 85% of all web pages globally, highlighting high carbon emissions from its hosting and operation. Unfortunately, I was unable to perform a similar carbon impact analysis for my own website due to technical issues. This underscores the importance of regular environmental assessments and adopting sustainable practices to reduce the carbon footprint of web services.

1. **Insights**

After analyzing the performance reports, I learned that users are generally unwilling to wait for a site to load; most of them will simply leave if it takes too long. To address this issue and keep users engaged, I started incorporating loading components from the Material UI framework into my website. These animated loading components help to make the waiting time more tolerable, encouraging users to stay a bit longer. Additionally, I identified that the slowest load times were associated with external resources, which significantly delayed the overall loading process. By focusing on optimizing these external loads, I aim to improve the site's performance and user experience.