



ADVANCING E-COMMERCE FOR IMPROVING SLOW PAGE RELOADS

UNDERGRADUATE THESIS
Submitted as one of the requirements to obtain
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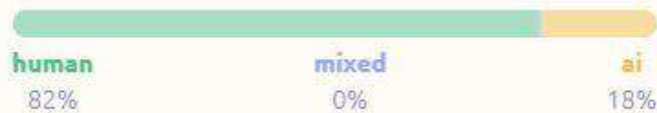


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ABSTRACT

In the rapidly growing e-commerce landscape, the speed and efficiency of web interactions are paramount to user satisfaction and business success.

This capstone project addresses the important issue of slow page reloads, which significantly impacts user experience and conversion rates.

By leveraging cutting-edge web technologies and user-centered design approaches, we aim to develop a web application powered by Next.js that ensures fast and seamless interactions as well as improves overall usability. Our solution focuses on several key aspects. First, we integrate clear progress indicators and streamlined payment steps to reduce friction in the purchasing process. Second, we offer multiple payment options, improving flexibility and reducing payment abandonment. Third, one-click shopping integration simplifies transactions, serving loyal customers by leveraging securely stored payment information. Additionally, we are exploring the potential of Progressive Web Apps (PWA) to deliver native app-like experiences directly through the web browser, ensuring seamless user interaction. While not the main focus, community reviews and suggestions are also taken into account, with a moderation system to maintain the quality of user-generated content. A core element of our approach is a focus on iterative improvements through user feedback. Regularly scheduled feedback collection mechanisms, agile development approaches, and transparent communication with users about implemented changes ensure that the platform continuously evolves to meet needs and expectations of the user.

By combining these elements, the proposed solution aims to create a highly responsive, efficient and user-friendly e-commerce platform. This project aims to not only solve the immediate problem

of slow page reloads, but also set a new standard for the online shopping experience through continuous refinement and improvement of the user experience. The expected result will be a powerful and innovative platform that significantly improves user satisfaction and drives business success in the competitive e-commerce landscape.

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