Construction of a Bookstore Website for Minh Sang Bookstore

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***Abstract*—This thesis focuses on the development of a website for Minh Sang Bookstore, a Vietnamese bookstore. The author, a software engineering student, utilized ReactJs, NodeJs, and Express Framework to create a dynamic and user-friendly interface. The project involved designing the system architecture, implementing database management, and creating a product listing and order placement functionality. The website successfully displayed products and allowed customers to place orders, but it remained a demo and lacked extensive payment methods. The author gained experience in web development tools and techniques, but acknowledged the limitations of the project.**

***Index Terms*—ReactJs, NodeJs, Express Framework, MySQL, web design, database**

I. Introduction

The thesis aims to develop a website for Minh Sang Bookstore, a Vietnamese bookstore, to enhance its online presence and customer engagement. The author, a software engineering student, used ReactJs, NodeJs, and Express Framework to build the website. The project also involved database design and user interface development. The author conducted research on web design tools and analyzed user requirements to ensure the website met the needs of both customers and the bookstore management [1]. Related earlier ICTU undergraduate theses provide context for this English summary [3], [4]. Published books on the methods and subject of this project provide context for this English summary [5], [6].

II. Methods

The methods included researching web design tools, analyzing user requirements, and designing the system architecture. The author used StarUML, Figma, and DevTool for design and development, and implemented ReactJs, NodeJs, and MySQL for the website's functionality. The project involved creating a dynamic web page layout, organizing a database to store product information, and implementing user-friendly interfaces for product listings and order placement. The author also tested the website to ensure it met the specified requirements [1].

III. Results

The results showed that the author successfully developed a website with dynamic web pages, database organization, and user-friendly interfaces. The website could list products and allow customers to place orders. However, the project was limited to a demo and did not include extensive payment methods. The website was tested using a sample dataset, and the author documented the findings to ensure the website functioned as intended. The project demonstrated the ability to create a functional website for a bookstore, but the lack of payment methods limited its practical application [1].

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IV. Discussion

The limitations of the project included its status as a demo and the lack of multiple payment options. The author suggested future work to expand the application, enhance system security, improve performance, and integrate additional payment features. The project provided valuable experience in web development tools and techniques, but the author acknowledged that the project was not fully operational. The author proposed integrating more advanced payment methods and improving the overall user experience to make the website more practical for real-world use [1]. Earlier ICTU undergraduate work by Trần Thanh Tú addressed online retail websites [2].

V. Conclusion

The author concluded that the project provided valuable experience in web development tools and techniques. Despite the limitations, the project demonstrated the ability to create a functional website for a bookstore. The author suggested future work to address the limitations and improve the website's functionality. The project highlighted the importance of integrating more advanced features to make the website more practical for real-world use [1].

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