Construction of an Online Clothing Store Website Using Reactjs for Hoang Minh Store

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***Abstract*—This thesis details the construction of a website for an online clothing store using Reactjs, specifically for the Hoang Minh store. The project involved developing both the user interface and the server, with the user interface displaying product information, search functionality, and order placement. The server was designed to connect to a MySQL database, handling data requests and returning them to the user interface. The work utilized Nodejs and Expressjs for server-side development, and Visual Studio Code for development. The project successfully built a user-friendly interface for browsing and purchasing products, while the server ensured efficient data handling and storage. The thesis provides a comprehensive overview of e-commerce, highlighting the benefits of using Reactjs and Nodejs for web development.**

***Index Terms*—Reactjs, Nodejs, Expressjs, MySQL, e-commerce, website**

I. Introduction

The thesis provides an overview of e-commerce, defining it as the use of electronic means to conduct commercial activities. It highlights the benefits of e-commerce, such as increased profit opportunities and reduced operational costs. The project focuses on developing a website for the Hoang Minh store using Reactjs for the user interface and Nodejs with Expressjs for the server. The development process involved creating use cases, sequence diagrams, and class diagrams to ensure a comprehensive system design. The project aimed to provide a user-friendly interface for browsing and purchasing products, while the server ensured efficient data handling and storage [1]. Related earlier ICTU undergraduate theses provide context for this English summary [7], [8], [9]. Published books on the methods and subject of this project provide context for this English summary [10].

II. Methods

The methods section covers the theoretical foundations of e-commerce, including definitions and benefits. It also details the use of Nodejs, Visual Studio Code, and Reactjs for the project. The design process involved creating use cases, sequence diagrams, and class diagrams to ensure a comprehensive system design. The project utilized Nodejs for server-side development, with Expressjs as the framework. Reactjs was used for the user interface, providing a dynamic and interactive web application. The development process included creating a MySQL database to store product information and handling data requests from the user interface [1].

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III. Results

The project successfully developed both the user interface and the server. The user interface allowed customers to view product details, search for products, and place orders. The server was designed to interact with a MySQL database, handling data requests and returning them to the user interface. The project utilized Nodejs and Expressjs for server-side development, and Visual Studio Code for development. The use of Reactjs for the user interface provided a dynamic and interactive web application, while the server ensured efficient data handling and storage. The project did not include any measured evaluation of the website's performance or user experience [1].

IV. Discussion

The thesis discusses the advantages of using Nodejs for server-side development, such as its event-driven, non-blocking I/O model and the ability to share code between the client and server. It also mentions the use of Reactjs for the user interface, highlighting its benefits in creating dynamic and interactive web applications. The project successfully built a website for the Hoang Minh store using Reactjs for the user interface and Nodejs with Expressjs for the server. The website provided customers with a user-friendly interface for browsing and purchasing products, while the server ensured efficient data handling and storage [1]. Earlier ICTU undergraduate work by Trần Thanh Tú addressed online clothing sales [6].

V. Conclusion

The project successfully built a website for the Hoang Minh store using Reactjs for the user interface and Nodejs with Expressjs for the server. The website provided customers with a user-friendly interface for browsing and purchasing products, while the server ensured efficient data handling and storage. The project utilized Nodejs and Expressjs for server-side development, and Visual Studio Code for development. The use of Reactjs for the user interface provided a dynamic and interactive web application, while the server ensured efficient data handling and storage. The project did not include any measured evaluation of the website's performance or user experience [1].

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