A Shoe Sales Website Using React, Redux, Express, and MongoDB

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***Abstract*—This undergraduate thesis investigates an online shoe-sales website built with React, Redux, Express, and MongoDB. An online shoe store needs a responsive product interface and reliable customer and administrator workflows. The student develops a JavaScript application with a React client, Redux state management, an Express server, and MongoDB data storage, then documents the customer and manager interfaces. The conclusion reports basic store features for customers and managers. It acknowledges missing employee functions, incomplete manager controls, absent profile editing, unresolved security work, and possible remaining errors. The source does not document live sales, verified payment processing, a security audit, or measured response time under traffic. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—React, Redux, Express, MongoDB, shoe sales**

I. Introduction

An online shoe store needs a responsive product interface and reliable customer and administrator workflows. This thesis investigates an online shoe-sales website built with React, Redux, Express, and MongoDB. It begins from a practical engineering need and explains the technologies and workflow chosen for the case. The objective is to document a student implementation or comparative investigation, together with the evidence available in the manuscript. Broader operational or economic effects require separate measurements and are not assumed from the existence of a prototype [1]. Earlier ICTU student work on related designs is included here for context [2], [3], [4], [5], [6], [7], [8], [9], [10]. These contextual works were selected for this English summary; they are not asserted to appear in the original thesis bibliography.

II. Methods

The student develops a JavaScript application with a React client, Redux state management, an Express server, and MongoDB data storage, then documents the customer and manager interfaces. The source is summarized through its stated design, implementation material, examples, and conclusion. Features shown in the manuscript are distinguished from proposals for later development. This review does not add a new experiment, fill missing measurements with estimates, or treat a planned capability as an observed result. The source thesis remains the provenance for the reported work [1].

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III. Results

The conclusion reports basic store features for customers and managers. It acknowledges missing employee functions, incomplete manager controls, absent profile editing, unresolved security work, and possible remaining errors. The report's screens, configurations, examples, or measurements constitute the evidence for this summary. A capability described only as a design intention is not counted as a validated operational outcome. No additional performance, adoption, financial, or safety figure has been introduced here. The result is interpreted within the scope of the student's documented setup [1].

IV. Discussion

The source does not document live sales, verified payment processing, a security audit, or measured response time under traffic. Further work could complete role-specific controls and profile editing, then test order consistency, security, and performance with realistic data. These limitations affect how the evidence should be read. The current manuscript can support understanding of the design and reported demonstration, while independent tests would be needed for stronger claims. Any later deployment should document its environment and separate observed outcomes from intended benefits [1].

V. Conclusion

The thesis documents an online shoe-sales website built with React, Redux, Express, and MongoDB. The conclusion reports basic store features for customers and managers. It acknowledges missing employee functions, incomplete manager controls, absent profile editing, unresolved security work, and possible remaining errors. The source does not document live sales, verified payment processing, a security audit, or measured response time under traffic. Further work could complete role-specific controls and profile editing, then test order consistency, security, and performance with realistic data. Accordingly, the present contribution is a source-grounded account of the student work and its tested or illustrated scope. Claims about broader effectiveness should be assessed in later work using explicit evaluation conditions [1].

References

[1] Đỗ Hải Đăng, ”A Shoe Sales Website Using React, Redux, Express, and MongoDB,” internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2024.

[2] Kiều Hoàng Phúc, ”Construction of an Online Clothing Store Website Using Reactjs for Hoang Minh Store,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.

[3] Nguyễn Đức Tuyên, ”Construction of an Online Shoe Sales Website Based on the MVC Model,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.

[4] Ngô Quang Việt, ”Construction of a Shoe Sales Website for Duck Shop,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2022.

[5] Lô Khánh Hòa, ”Construction of an Online Clothing Store Website for Ilike Store,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.

[6] Nguyễn Đức Duy, ”Study of Laravel, VueJS, React, Docker, GitHub and Development of an Admin Module for Shopify App EComposer – Landing Page Builder,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.

[7] Phùng Công Đoàn, ”Development of an Electronics Sales Website Using Spring Boot,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.

[8] Ngọ Văn Tùng, ”Construction of an Online Shopping Website for a Furniture Store,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.

[9] Trần Thanh Tú, ”Clothing Sales Website for Ha My Store in Thai Nguyen,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2014.

[10] Trần Duy Nam, ”Construction of an Online Shopping Website for Makima Fashion Store with a Korean Style,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.