A Next.js Website for the Huy Cuong Aquarium Store

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***Abstract*—This undergraduate thesis investigates a Next.js storefront for the Huy Cuong aquarium store. An aquarium retailer needs product presentation, searching, cart management, and a clear path toward ordering. The author studies Next.js, analyzes the sales-site requirements, and develops a web interface with administrative content management, product search, a cart, and a checkout flow. The thesis includes system design and application screens. The conclusion reports a basic functional storefront with administrator controls and customer interactions. It describes checkout, but does not document an independently verified real-money payment settlement or sustained operation by the store. The author identifies detailed reporting, delivery charges by region, and broader device and browser presentation as future work. The source has no measured business impact, load benchmark, or payment-security audit. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—Next.js, aquarium store, e-commerce, shopping cart**

I. Introduction

An aquarium retailer needs product presentation, searching, cart management, and a clear path toward ordering. This thesis investigates a Next.js storefront for the Huy Cuong aquarium store. 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]. Related published studies provide context for the subject and methods [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 author studies Next.js, analyzes the sales-site requirements, and develops a web interface with administrative content management, product search, a cart, and a checkout flow. The thesis includes system design and application screens. 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 a basic functional storefront with administrator controls and customer interactions. It describes checkout, but does not document an independently verified real-money payment settlement or sustained operation by the store. 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 author identifies detailed reporting, delivery charges by region, and broader device and browser presentation as future work. The source has no measured business impact, load benchmark, or payment-security audit. A later store pilot could verify stock data, order completion, payment handling, delivery rules, and staff workflows under realistic use. 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 a Next.js storefront for the Huy Cuong aquarium store. The conclusion reports a basic functional storefront with administrator controls and customer interactions. It describes checkout, but does not document an independently verified real-money payment settlement or sustained operation by the store. The author identifies detailed reporting, delivery charges by region, and broader device and browser presentation as future work. The source has no measured business impact, load benchmark, or payment-security audit. A later store pilot could verify stock data, order

completion, payment handling, delivery rules, and staff workflows under realistic use. 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] Tạ Văn Tuấn, ”A Next.js Website for the Huy Cuong Aquarium Store,” 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] 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.

[4] 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.

[5] Lưu Xuân Chiến, ”Construction of a Bookstore Website for Minh Sang Bookstore,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.

[6] Đinh Tiến Tùng, ”Construction of an E-commerce Website for Laptop Sales for Hoang Anh-Bac Giang Store,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.

[7] Nguyễn Như Nguyên, ”Construction of an Online Phone and Accessories Sales Website for F5 Mobile Store,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.

[8] B. Navya, ”Shopping Cart,” International Journal for Research in Applied Science and Engineering Technology, 2020. doi:10.22214/ijraset.2020.7014.

[9] Eddy Sukamto et al., ”Design and Build Online Store Website bicycle store KawanKita,” Journal of Business and Technology, 2023. doi:10.24167/jbt.v3i2.10193.

[10] Nurmayanti Mahi et al., ”Implementasi E-Commerce Berbasis Website pada Toko Warren Store Palopo,” Dewantara Journal of Technology, 2022. doi:10.59563/djtech.v3i1.150.