Construction of a Sales Website for Hung Phat Furniture & Equipment Co., Ltd

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***Abstract*—This thesis focuses on the construction of a sales website for Hung Phat Furniture & Equipment Co., Ltd, a Vietnamese company. The study introduces the concept and characteristics of websites and e-commerce, emphasizing their importance in modern business operations. The website allows customers to register, browse products, add items to a shopping cart, and contact the system administrators. The development process utilized UML (Unified Modeling Language) for system analysis and design, including use case diagrams, class diagrams, and activity diagrams. The website's functionalities include customer registration, product browsing, and adding items to a shopping cart. However, some functionalities are incomplete and require further development. The thesis outlines the challenges faced during the development process, such as limited experience and time constraints, and suggests future improvements, including enhancing the system's functionality, improving security, and integrating with financial institutions for online payments.**

***Index Terms*—website, e-commerce, UML, system design, Hung Phat Furniture & Equipment**

I. Introduction

The thesis introduces the concept and characteristics of websites and e-commerce, emphasizing their importance in modern business operations. Websites serve as virtual stores for businesses, providing 24/7 access to customers worldwide. The study aims to design and develop a sales website for Hung Phat Furniture & Equipment Co., Ltd, a Vietnamese company, to enhance its online presence and customer engagement. The website will allow customers to register, browse products, and add items to a shopping cart, thereby facilitating a seamless online shopping experience. The project also aims to provide a platform for customers to contact the administrators, ensuring customer support and feedback [1]. Related earlier ICTU undergraduate theses provide context for this English summary [7], [8]. Published books on the methods and subject of this project provide context for this English summary [9], [10].

II. Methods

The methods section covers the analysis and design of the e-commerce system using UML (Unified Modeling Language). The study identifies system actors, use case diagrams, class diagrams, and activity diagrams to model the system's behavior and structure. The use of UML helps in the systematic design and development of the website, ensuring that all functionalities are well-defined and integrated. The process involved the identification of key actors such as customers and administrators, and the creation of use case diagrams to describe the interactions between these actors and the system. Class diagrams were used to define the classes and their relationships, while activity diagrams provided a visual representation of the workflows within the system [1].

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III. Results

The results include the development of a website that allows customers to register, browse products, and add items to a shopping cart. The system also provides a platform for customers to contact the administrators. However, the thesis notes that some functionalities are incomplete and require further development. The website's functionalities include customer registration, product browsing, and adding items to a shopping cart. The use of UML diagrams facilitated the systematic design and development of the website, ensuring that all functionalities are well-defined and integrated. However, due to limited experience and time constraints, some functionalities such as online payment integration and advanced search features are not fully implemented [1].

IV. Discussion

The discussion section outlines the challenges faced during the development process, such as limited experience and time constraints. The study highlights the importance of e-commerce and the role of websites in modern business. The website's functionalities, including customer registration, product browsing, and adding items to a shopping cart, are successfully implemented. However, the thesis suggests that future improvements are necessary, including enhancing the system's functionality, improving security, and integrating with financial institutions for online payments. The limitations of the current system include the absence of advanced search features and online payment integration, which are essential for a fully functional e-commerce platform [1]. Earlier ICTU undergraduate work by Phạm Tuấn Hải addressed online retail website architecture [6].

V. Conclusion

The conclusion reiterates the importance of e-commerce and the role of websites in modern business. The study acknowledges the limitations of the current system and suggests

areas for future development. The website's functionalities, including customer registration, product browsing, and adding items to a shopping cart, are successfully implemented. However, the thesis notes that some functionalities are incomplete and require further development. The study emphasizes the need for future improvements, including enhancing the system's functionality, improving security, and integrating with financial institutions for online payments [1].

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