Construction of an Online Store Website for an Electrical Appliance Shop

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***Abstract*—This thesis explores the development of an online store website for an electrical appliance shop, focusing on the theoretical and practical aspects of e-commerce. The author conducted a survey, analyzed the system, and designed the website using PHP and MySQL. The study highlights the benefits of e-commerce and the challenges faced in its implementation, such as payment issues and security concerns. The author hopes to improve the website in the future to better serve the market. The website was built with a focus on user interface and database design, but the author acknowledges limitations in payment and security features due to time and knowledge constraints. The project was guided by the teacher, T.s Nguyễn Văn Tảo, and the author suggests future improvements to address these limitations.**

***Index Terms*—e-commerce, PHP, MySQL, UML, online store, website**

I. Introduction

The thesis introduces the concept of e-commerce and its significance in the market, especially in Vietnam. The author discusses the current state of e-commerce in Vietnam, highlighting the challenges such as infrastructure and legal issues. The author aims to build an online store website to help people shop more conveniently and efficiently. The project was guided by the teacher, T.s Nguyễn Văn Tảo, and the author acknowledges the need for further development to address issues like payment and security. The study focuses on the practical implementation of e-commerce, emphasizing the importance of user interface and database design. [1]

II. Methods

The methods section covers the survey, system analysis, and UML design. The author used PHP and MySQL for the website development and created various UML diagrams to detail the system's functionality. The survey involved collecting data from the electrical appliance shop and potential customers to understand their needs and preferences. System analysis included defining the requirements and detailing the system's input and output. UML diagrams were used to visualize the system's architecture, including use case diagrams, class diagrams, and activity diagrams. The author also designed the user interface and database schema to ensure a seamless user experience and efficient data management. [1]

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III. Results

The website was built with a focus on user interface and database design. The author implemented various functions, including product listings, search functionality, and user registration. However, the author acknowledges limitations in payment and security features due to time and knowledge constraints. The website was tested with a small group of users, and feedback was collected to improve the user experience. The author suggests future improvements to address these limitations, such as integrating secure payment gateways and enhancing security measures. [1]

IV. Discussion

The thesis discusses the benefits of e-commerce and the challenges faced, such as payment and security issues. The author suggests future improvements to address these limitations. The study highlights the importance of user interface and database design in the success of an e-commerce website. The author emphasizes the need for further development to ensure a secure and efficient online shopping experience. The project was guided by the teacher, T.s Nguyễn Văn Tảo, and the author acknowledges the need for additional resources to fully implement the proposed improvements. [1]

V. Conclusion

The author successfully built a relatively complete online store website for an electrical appliance shop, covering aspects such as product listings, search functionality, and user registration. However, the project faced limitations in payment and security features due to time and knowledge constraints. The website was guided by the teacher, T.s Nguyễn Văn Tảo, and the author acknowledges the need for further development to address these issues. The study provides valuable insights into the practical implementation of e-commerce and the challenges faced in its development. The author hopes to improve the website in the future to better serve the market, emphasizing the importance of enhancing payment and security features to ensure a secure and efficient online shopping experience. [1]

References

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