Development of a Product Website for Co Tra Eatery in Thai Nguyen

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***Abstract*—This thesis focuses on the development of a product introduction website for Mrs. Tra's restaurant in Thai Nguyen City. The author conducted a thorough analysis of the business processes and operations of the website, creating use case diagrams, activity diagrams, sequence diagrams, and class diagrams. The database was designed to meet the restaurant's requirements. Despite time and knowledge limitations, the system successfully implemented core functionalities, but lacked password reset features. The author acknowledges the significant support from their teachers and Ms. Nguyen Thu Huong, who provided substantial guidance during the project. The system was functional, user-friendly, and comprehensive in its features, but faced limitations in fully implementing all required functionalities.**

***Index Terms*—website, product introduction, use case, database, UML, MVC**

I. Introduction

The thesis aims to develop a website to promote products for Mrs. Tra's restaurant in Thai Nguyen City. The author acknowledges the support of their teachers and the guidance of Ms. Nguyen Thu Huong, who provided significant assistance during the project. The author emphasizes the importance of the guidance received and the challenges faced due to limited time and knowledge. The project's success is attributed to the support and mentorship received, highlighting the importance of such support in the completion of the thesis [1]. Published books on the methods and subject of this project provide context for this English summary [8], [9].

II. Methods

The methods involved analyzing and understanding the business processes and operations of the website. Use case diagrams, activity diagrams, sequence diagrams, and class diagrams were created to document the system's behavior. The database was designed to meet the restaurant's requirements. The author utilized UML (Unified Modeling Language) to create these diagrams, ensuring a clear and structured approach to the project. The author also applied the Model-View-Controller (MVC) architectural pattern to ensure a modular and maintainable system [1].

III. Results

The thesis successfully analyzed and clarified the business processes and operations of the website. Use case diagrams, activity diagrams, sequence diagrams, and class diagrams were created. The database was designed to be both reasonable and optimized. However, due to time and knowledge limitations, the system did not fully implement all required functionalities, such as password reset. The implemented system was functional, user-friendly, and comprehensive in its features, meeting the restaurant's requirements. The author conducted a preliminary evaluation of the system, which demonstrated its ability to effectively promote the restaurant's products [1].

IV. Discussion

The author acknowledges that the project faced limitations due to time and knowledge, which prevented the full implementation of certain functionalities. The author expresses a desire for further assistance to improve and complete the project. The limitations highlighted the need for more time and deeper knowledge to fully develop the system. The author also reflects on the importance of continuous learning and improvement in the field of web development [1]. Earlier ICTU undergraduate work by Trần Thanh Tú addressed online retail websites [7].

V. Conclusion

The thesis concludes that the author gained valuable knowledge and experience through the project. Despite the limitations, the system successfully met the restaurant's requirements, was functional, user-friendly, and comprehensive in its features. The author expresses gratitude to their teachers and Ms. Nguyen Thu Huong for their support and guidance. The project demonstrated the feasibility of developing a product introduction website for small businesses, highlighting the importance of structured analysis and design in web development [1].

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