Construction of an Online English Learning and Exam Practice Website Using Laravel Framework

Hoàng Văn Kiên
Thai Nguyen University of Information and Communication Technology
Thai Nguyen University, Thai Nguyen, Vietnam
dtc16hd4801030050@ictu.edu.vn

***Abstract*—This thesis presents the construction of an online English learning and exam practice website using the Laravel framework. The author, a student from the Software Engineering program, describes the development process and limitations encountered during the project. The work includes a detailed explanation of PHP, MySQL, and the Model-View-Controller (MVC) architecture, as well as the Laravel framework. The project faced challenges due to limited practical experience and unfamiliarity with certain programming tools. The website includes features such as user registration, login, and access to practice materials, but the author acknowledges that the system is not without limitations, citing practical experience and unfamiliarity with certain tools as challenges.**

***Index Terms*—Laravel, PHP, MySQL, MVC, Online Learning, Web Development**

I. Introduction

The thesis introduces the construction of an online platform for English learning and exam practice using the Laravel framework. The project aims to provide a comprehensive learning environment for students to practice and improve their English skills. The author, a student in the Software Engineering program, outlines the background and objectives of the project, emphasizing the use of PHP, MySQL, and the MVC architecture. The project faced several challenges, including the student's limited practical experience and unfamiliarity with certain programming tools, which impacted the development process [1]. Related earlier ICTU undergraduate theses provide context for this English summary [2]. Published books on the methods and subject of this project provide context for this English summary [3], [4], [5].

II. Methods

The author provides a comprehensive explanation of the PHP language, MySQL database, and the Laravel framework, including its structure and components. The methods section covers the theoretical foundations and practical implementation of the website. The project involved designing and implementing various features such as user registration, login, and access to practice materials. The author used official documentation and community groups as primary resources for learning and implementing the Laravel framework. However, the student's limited experience with certain tools and programming concepts posed significant challenges during the development process [1].

Supervisor: Nguyễn Văn Núi, Thai Nguyen University of Information and Communication Technology (nvnui@ictu.edu.vn).

III. Results

The project resulted in the development of an online English learning and exam practice website. The website includes features such as user registration, login, and access to practice materials. However, the author acknowledges that the system is not without limitations, citing practical experience and unfamiliarity with certain tools as challenges. The website was developed using the Laravel framework, which provided a structured approach to web development. The author did not conduct any measured evaluation of the system's effectiveness or performance, focusing instead on the development process and the challenges faced during the project [1].

IV. Discussion

The discussion focuses on the limitations of the project, such as the lack of practical experience and the need for further development. The author mentions the use of various online resources for the project, including official documentation and community groups. The author also highlights the importance of practical experience and continuous learning in software development. The project faced several challenges, including the student's limited practical experience and unfamiliarity with certain programming tools, which impacted the development process. The author suggests that future work could involve addressing these limitations and improving the system's functionality and user experience [1].

V. Conclusion

The author concludes that the project was completed despite the challenges. The work highlights the importance of practical experience and continuous learning in software development. The project resulted in the development of an online English learning and exam practice website, but the author acknowledges that the system is not without limitations. The student's limited experience with certain tools and programming concepts posed significant challenges during the development process. The author suggests that future work could involve addressing these limitations and improving the system's functionality and user experience [1].

References

[1] Hoàng Văn Kiên, "Construction of an Online English Learning and Exam Practice Website Using Laravel Framework," internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2021.

[2] ICTU Student 223, "Construction of an Online Learning Website Based on the Open Source Moodle System," internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2010.

[3] L. Welling and L. Thomson, PHP and MySQL Web Development, 3rd ed. Sams, 2004. ISBN 9780672326721.
[4] M. E. Davis and J. A. Phillips, Learning PHP and MySQL. O'Reilly Media, 2006. ISBN 9780596101107.
[5] A. Silberschatz, H. F. Korth, and S. Sudarshan, Database System Concepts, 5th ed. McGraw-Hill, 2005. ISBN 9780072958867.