Construction of an Online Food Ordering Application

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***Abstract*—This thesis presents the development of an online food ordering application named FoodOrder. The application leverages React Native for cross-platform optimization and Spring Boot for backend management. The project aims to provide a user-friendly interface for customers and ease of use for restaurant management. The application was successfully developed, allowing restaurants to manage orders easily and providing a user-friendly interface for customers. The application uses React Native, enabling optimization across multiple platforms. Future work includes enhancing reporting, implementing online payments, and improving search functionality. Despite the successful development, the project faced some limitations due to time constraints. The application was tested and found to be functional, but no specific performance metrics were provided.**

***Index Terms*—React Native, Spring Boot, Hibernate, Redux, Online Food Ordering**

I. Introduction

The thesis introduces the development of an online food ordering application, emphasizing the use of React Native for cross-platform compatibility and Spring Boot for backend management. The project aims to provide a user-friendly interface for customers and ease of use for restaurant management. The application was developed as part of a final undergraduate project, with the goal of creating a practical solution for both customers and restaurants. The development process involved the use of various technologies, including Hibernate for database management and Redux for state management. The project faced some challenges due to time constraints, but the application was completed within the given timeframe [1]. Published articles on the methods and subject of this project provide context for this English summary [3], [4], [5], [6], [7], [8]. Published books on the methods and subject of this project provide context for this English summary [9].

II. Methods

The application was developed using React Native for the frontend and Spring Boot for the backend. The project utilized Hibernate for database management and Redux for state management. The development process involved designing the application architecture, implementing the frontend using React Native, and setting up the backend with Spring Boot. The application was tested to ensure that it met the basic requirements for both customers and restaurants. The testing process included functional testing to verify that the application could handle basic operations such as placing orders and managing orders from the restaurant side [1].

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III. Results

The application was successfully developed, allowing restaurants to manage orders easily and providing a user-friendly interface for customers. The application uses React Native, enabling optimization across multiple platforms. The application was tested and found to be functional, but no specific performance metrics were provided. The application was designed to be user-friendly for customers and easy to manage for restaurants. The application was tested to ensure that it could handle basic operations such as placing orders and managing orders from the restaurant side. The application was found to be functional, but no detailed evaluation was conducted to measure its effectiveness or performance [1].

IV. Discussion

Despite the successful development, the project faced some limitations due to time constraints. The application was tested and found to be functional, but no specific performance metrics were provided. The project acknowledged the need for further improvements, including enhancing reporting, implementing online payments, and improving search functionality. The application was designed to be user-friendly for customers and easy to manage for restaurants, but the lack of detailed evaluation means that its practical effectiveness cannot be fully assessed. The project sought feedback for future development and acknowledged the need for further improvements [1].

V. Conclusion

The application achieved several goals, including ease of use for both restaurants and customers. However, the project acknowledges the need for further improvements and seeks feedback for future development. The application was designed to be user-friendly for customers and easy to manage for restaurants, but the lack of detailed evaluation means that its practical effectiveness cannot be fully assessed. The project faced some limitations due to time constraints, but the application was completed within the given timeframe and found to be functional. The project sought feedback for future development and acknowledged the need for further improvements [1].

References

[1] Nguyễn Văn Hưng, ”Construction of an Online Food Ordering Application,” internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2021.

[2] Giáo trình Java cơ bản (ĐH Công nghệ – ĐHQG HN)
[3] Oshonik Kamble, ”Online Food Ordering System,” IJARCCE, vol. 8, no. 5, pp. 14-16, 2019. DOI: 10.17148/ijarcce.2019.8503.
[4] Himani Sharma, Amanpreet Kang, ”Online Food Ordering - Serving Food Conveniently,” Prastuti: Journal of Management & Research, vol. 4, no. 1, pp. 8-14, 2015. DOI: 10.51976/gla.prastuti.v4i1.411502.
[5] Desislava Grozdeva, ”Online Food Ordering Business Models,” Izvestia Journal of the Union of Scientists - Varna. Economic Sciences Series, vol. 8, no. 2, pp. 47-55, 2019. DOI: 10.36997/ijusv-ess/2019.8.2.47.
[6] Arfa hassan, Shazia Saqib, ”Automated Food Ordering System,” Lahore Garrison University Research Journal of Computer Science and Information Technology, vol. 2, no. 4, pp. 21-30, 2018. DOI: 10.54692/lgurjcsit.2018.020457.
[7] Aishwarya K V, Aishwarya Chavan, Sedjwick Drego, Akshay Chavan, Prof. Bastawade P.P, ”Food Ordering Restaurant Android Application,” IJARCCE, vol. 6, no. 3, pp. 368-372, 2017. DOI: 10.17148/ijarcce.2017.6384.
[8] Sainath Reddy K, Chaitanya KGK, ”An Online Food Court Ordering System,” Journal of Information Technology & Software Engineering, vol. 6, no. 4, 2016. DOI: 10.4172/2165-7866.1000183.
[9] A. Silberschatz, H. F. Korth, and S. Sudarshan, Database System Concepts, 5th ed. McGraw-Hill, 2005. ISBN 9780072958867.