

Universiti Teknologi MARA

Qr- Based Book Cafe Ordering System

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**Thesis submitted in fulfilment of the requirements for the degree of
Bachelor of Information Technology (Hons.)
Faculty of Computer and Mathematical Sciences**

February 2025

ABSTRACT

The QR-Based Book Cafe Ordering System was developed to enhance efficiency, improve customer experience, and provide data-driven insights within a book cafe environment. Traditional manual systems for food ordering and book borrowing often result in delays, mismanagement, and a lack of real-time updates, leading to operational inefficiencies and customer dissatisfaction. To address these challenges, this system integrates QR code technology, allowing customers to browse menus, place orders, and manage book borrowing seamlessly through their mobile devices. The system automates key processes, reducing the need for staff intervention and providing managers with real-time operational data, such as order trends, borrowing statistics, and inventory levels. The development followed the Waterfall Model, beginning with requirement gathering, system design, implementation, testing, and maintenance. The system was built using PHP, MySQL, and Python, ensuring a robust and scalable architecture. Usability testing and heuristic evaluations were conducted to assess the system's effectiveness. Results indicate that the QR-Based Book Cafe Ordering System significantly improves efficiency, reduces service time, and enhances customer satisfaction by streamlining transactions and providing real-time updates. The digital transformation of book cafes enhances user convenience and positions them as innovative establishments aligned with modern expectations. Future improvements may include AI-driven recommendations, and cloud-based analytics for enhanced decision-making.

ACKNOWLEDGEMENT

Self-first and foremost, I would like to express my deepest gratitude to Dr. Wan Fariza Wan Abdul Rahman, my supervisor who has been around for the whole project development journey for providing me with unconditional supports, guidance, and expertise. She has provided me with valuable insights, constructive feedback, and she has been patient with me, as I used her helpful feedback to guide the direction of this thesis, and pushed me to try and do better than I had before. I am extremely grateful to her for her mentorship because had she not done that, this thesis wouldn't have been possible and I wouldn't have been able reach this point academically.

I would also like to thank those colleagues and friends who are always there with me to encourage, support and cheer me all along the silent way. The positive energy, brainstorming, intuitions, etc. of all have been the sort of thing that keeps you going through tough times. I specially thank them for their advice which enabled me to pass through the difficulties in the research and development stage.

Moreover, I would like to acknowledge Universiti Teknologi MARA (UiTM) for their generous resources and the pleasant academic setting which enabled me to do this research. The university has been supporting me, providing facilities and expertise so necessary to succeed in this particular project.

Finally, I would like to thank myself for enduring because this thesis was hard work, perseverance and dedication. I have learnt greatly from the initial conceptualization, design to the final implementation. Beyond simply improving my technical and analytical abilities, this experience has also taught me the lesson of determination and of a self-motivated mentality. But it has been a rewarding journey and I am thankful to the each and every lesson I learnt.

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CHAPTER 1

INTRODUCTION

The first chapter investigates what drove the researchers to build their QR-Based Book Cafe Ordering System. The introduction describes the vital role played by book cafes which combine features of both library services and coffee establishments. The chapter examines the process-related challenges in book cafes by analysing their manual deficiencies when facilitating book checkout and food ordering transactions. This discussion emphasizes the critical need to use QR (Quick Response) code technology for creating solutions to existing operational shortcomings. The initial chapter presents the research project's main points which include the problem definition as well as the research questions and project goals alongside the study boundaries and its importance to readers. The research uses QR code technology to achieve operational efficiency and customer satisfaction while developing better management tools for book cafes.

1.1 Background Study

Book cafes have gained increasing popularity in modern times because they let bibliophiles read while enjoying their preferred drink. Book cafe establishments deliver combines the academic library environment with the comfortable culture reserved for coffee shops while focusing on literature. This examination explores the diverse features of book cafes beginning with their historical development while recognizing the advantages these spaces provide to authors and readers within modern sensory media conditions. Commissioned research by Sarfarazayenish (2023) shows book cafes provide reasonable prices for both beverages and food so people can dine during their reading time at these book cafes. Book cafes serve dual purposes where customers may browse books to buy alongside the opportunity to drink coffee or tea while eating a snack. Their relaxed atmosphere creates spaces that people love for studying and working as well as reading books (Sarfarazayenish, 2023). The initial book cafes