UNDERGRADUEATE THESIS

A WEB-BASED WEDDING PLANNER INFORMATION SYSTEM USING THE BOYER-MOORE ALGORITHM (CASE STUDY: WIJAYA WEDDING, SURABAYA)

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APPROVAL SHEET

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DECLARATION OF ORIGINALITY

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I hereby declare that this thesis does not contain any portions of other academic works that have been submitted for the purpose of obtaining an academic degree at any institution of higher education, nor does it contain any works or opinions that have been written or published by other individuals or institutions, except those that are cited in writing in this document and listed in full in the bibliography.

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ABSTRACT

Student Name / NPM	:	Moch Nasichun Amin / 19081010008
Thesis Title	:	A Web-Based Wedding Planner Information System using the Boyer-Moore Algorithm (Case Study: Wijaya Wedding, Surabaya)
Advisor	:	Made Hanindia Prami Swari, S.Kom., M.Cs. Afina Lina Nurlaili, S.Kom., M.Kom.

The rapid development of information technology has encouraged various service sectors to transform into digital systems, including the wedding organizer industry. Wijaya Wedding Surabaya still faces challenges in promotion, package searching, and booking processes that are conducted conventionally, resulting in limited access to information for customers and less optimal data management. Therefore, a website-based information system is needed to facilitate the process of obtaining information and booking wedding packages effectively and efficiently. This study aims to design and develop a web-based Wedding organizer Information System for Wijaya Wedding Surabaya by implementing the Boyer-Moore *algorithm in the wedding package search feature. The system development method used in this research is the* Waterfall *model, which consists of requirement analysis, system design, implementation, testing, and maintenance stages. The system was developed using the* Yii2 *framework,* PHP *programming language,* MySQL *database, and* React JS *to support the user interface. The* Boyer-Moore *algorithm was implemented to improve the speed and efficiency of searching wedding packages based on user-entered keywords. The developed system provides various features, including wedding package management, package searching, package booking, transaction management, booking history, and an administrator dashboard. System testing was conducted through functional testing and usability testing using the System Usability Scale (SUS) method to ensure that all features function according to user requirements. The results of this study indicate that the web-based Wedding organizer Information System is capable of helping customers obtain wedding package information more quickly and easily while assisting Wijaya Wedding in managing data and transactions in an integrated manner. The implementation of the* Boyer-Moore *algorithm in the search feature also provides a more effective and responsive searching process, thereby improving the quality of service provided to users*

.

Keywords: *Boyer-Moore, MySQL, Information Systems, Wedding organizer, Website, Waterfall, Yii2.*

FOREWORD

Praise and thanks be to Allah SWT for all His mercy, guidance, and blessings, which have enabled the author to successfully complete this thesis titled "**Web-Based Information System for Wedding Planner Using the Boyer-Moore Algorithm (Case Study: Wijaya Wedding, Surabaya)**". This thesis was prepared as one of the requirements for obtaining a Bachelor of Computer Science degree from the Informatics Study Program, Faculty of Computer Science, Universitas Pembangunan Nasional "Veteran" East Java. During the process of writing this thesis, the author realized that many people provided assistance, support, motivation, and guidance, enabling this research to be completed. Therefore, the author would like to take this opportunity to express his deepest gratitude to:

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The author acknowledges that this thesis still has limitations and is far from perfect. Therefore, constructive criticism and suggestions are greatly appreciated to help improve and further develop future research. May this thesis be of benefit to the author, the readers, and the advancement of science, particularly in the field of information technology.

Surabaya, June 12, 2026

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