

CHAPTER V

CONCLUSION

5.1 Conclusion

Based on the results of the design, implementation, and testing of the Web-Based Wedding Organizer Information System Using the Boyer-Moore Algorithm at Wijaya Wedding in Surabaya, it can be concluded that:

1. A web-based *Wedding Organizer* Information System was successfully designed and developed using the Waterfall software development method, incorporating the Boyer-Moore algorithm into the *wedding* package search feature. The developed system provides many key functions, including user registration, login, package search, package booking, package data management, transaction management, and an admin dashboard that can support Wijaya Wedding's business processes digitally and in an integrated manner.
2. Based on the result of functional testing, all system features are operating in accordance with the previously defined requirements. Based on black box testing on both the administrator and user sides, all function including package management, hotel management, transactions, registration, login, package search, booking, payment, and transaction history are functioning properly without any functional errors or bugs that interfere with system operations.
3. The implementation of the Boyer-Moore algorithm in the package search feature, as well as usability testing, yielded excellent results. The Boyer-Moore algorithm is capable of producing a fast, accurate, and stable package search process across various amounts of package data. Additionally, test results using the System Usability Scale (SUS) method yielded an average score of 93, which falls into the Excellent category with a Grade A. This indicates that the system is easy to use, well-received by users, and provides an excellent user experience.

5.2 Suggestions

Although the system has been operating well, there are still several aspects that can be improved for future research and system development, including:

1. The system can be expanded by integrating an online payment feature (*payment gateway*) to enable transactions to proceed automatically without manual confirmation from an administrator
2. Addition of automatic notification features via email and WhatsApp to provide customers with real-time updates on their order status.
3. Development of a mobile app (Android/iOS) so that users can access the service more conveniently via their smartphones.
4. The inclusion of other search methods or performance comparisons with other string matching algorithms, such as Knuth-Morris-Pratt (KMP) or brute force, for further research on algorithm efficiency.
5. Improvements to system security features such as password encryption, protection against SQL injection attacks, and user access rights management to ensure data security.