

CHAPTER V

CLOSING

5.1 Conclusion

Based on the results of this study, the Legal Internship and Thesis Information System (SIMAS-HU) was successfully designed and developed as a web-based application to support the internship/PKL and undergraduate thesis title submission process at the Faculty of Law. The implementation of the Aho-Corasick, BM25, and SBERT algorithms in the title search feature significantly improved the quality of internship/PKL and thesis title retrieval. Based on the Black Box Testing results, all system features functioned according to the specified requirements, and all testing scenarios were successfully fulfilled. The User Acceptance Testing (UAT) results indicate a very high level of user acceptance, with an average student satisfaction score of 95%, while the remaining user groups were also rated within the excellent category. The evaluation of the search feature, conducted using 36 queries on a dataset of 695 internship/PKL and undergraduate thesis titles, achieved a Recall@1 of 55.6%, Recall@3 of 72.2%, Recall@5 of 77.8%, Recall@10 of 80.5%, MRR@10 of 64.7%, and nDCG@10 of 68.6%. These results demonstrate that the system is capable of retrieving most relevant documents within the top-ranked search results while providing a good ranking order based on document relevance

5.2 Future Recommendations

Based on the findings of this study, future improvements to the search feature may include the implementation of alternative ranking methods to enhance the system's ability to retrieve relevant documents, thereby improving the Recall, MRR, and nDCG scores. The dataset can also be expanded to provide a more comprehensive evaluation of the system's performance. In addition, future research may compare the combination of Aho-Corasick, BM25, and SBERT with more advanced retrieval methods to determine the approach that delivers the best search performance.