ABSTRACT

IMPLEMENTATION OF FUZZY MAMDANI FOR A BOOK RECOMMENDATION SYSTEM AT THE IIB DARMAJAYA LIBRARY

By:
PUTRI GUSTINA

The IIB Darmajaya Library has a vast collection of books, which often makes it difficult for users to find appropriate titles. This study applied the Fuzzy Mamdani method to develop a book recommendation system based on category, difficulty level, and the user's study program. The method was chosen for its ability to handle data uncertainty and provide more accurate recommendations. The system was developed using PHP, Laravel, and MariaDB. Testing results showed that the system was able to provide relevant recommendations and facilitated book searches. Although effective, the system still faced challenges in handling large datasets. Future developments may include integration with a digital library system and analysis of borrowing history.

Keywords: Fuzzy Mamdani, Recommendation System, Library