RECOMMENDATION OF BOARDING HOUSE SELECTION IN SLEMAN DISTRICT USING TECHNIQUE FOR ORDER PREFERENCE BY SIMILARITY TO IDEAL SOLUTION (TOPSIS) METHOD.

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ABSTRACT

Students and tenants often encounter challenges when searching for boarding houses that meet their needs in Sleman Regency, primarily due to the many options available, each with varying prices, facilities, and locations. The absence of structured information complicates effectively comparing alternatives, forcing users to visit boarding houses in person, which can be time-consuming and costly. This study aims to streamline finding suitable accommodations while enhancing user satisfaction when selecting the appropriate boarding house. The developed system employs the TOPSIS method, which provides recommendations based on key criteria such as price, facilities, distance, security, and transportation access. The research data encompasses 50 boarding houses distributed throughout the Sleman area, categorized into three types: male boarding houses, female boarding houses, and mixed boarding houses, to cater to diverse user needs. The results of the Black Box test indicate that all primary features of the system—including login, logout, account deletion, alternative data management, and recommendation calculations using the TOPSIS method—function correctly, with the system operating at 100% efficiency. The system's calculation of preference values has been shown to align with manual calculations, thereby substantiating the accurate implementation of the TOPSIS algorithm. The system has been designed to provide users with a convenient method for selecting boarding houses that align with their preferences, thereby enhancing the efficiency and speed of the search process. The findings of this study are anticipated to offer a substantial contribution to the decision-making process in selecting boarding houses in Sleman Regency.

Keywords: Decision Support System, Boarding House Recommendation, TOPSIS Method