ABSTRACT

K-MEANS OPTIMIZATION USING GENETIC ALGORITHM FOR POPULARITY CLUSTERING WEBTOONS

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Webtoon, a popular digital comic platform in Indonesia, provides a feature of klastering comics based on title, rating, and genre to make it easier for users to find comics according to their interests. Klastering techniques, such as the K-Means Algorithm, are used for this purpose. However, K-Means has a weakness in determining the centroid value, which can affect the quality of klastering. This weakness can be overcome with Genetic Algorithm to improve the quality of comic klastering in Webtoon. The analysis results show that both algorithms are effective in klastering with different characteristics. K-Means + Genetic Algorithm with 2 klasters produces better klasters with a lower Davies-Bouldin Index value, which is 0.38368. Klastering with 2 klasters provides a simple overview of Webtoon popularity, while klastering with 3 klasters provides a more detailed understanding by considering Rating and Subscribers.

Keywords: *Webtoon, Klastering, K-Means, Genetic Algorithm*