Abstract

Recommendation system that aims to make it easier for users to get information or items in accordance with their preferences has been implemented in various areas, the most famous areas using the recommendation system concept one of which is used in the film recommendation system. In making the recommendation system using a variety of techniques and methods to be able to produce a good recommendation system. One technique used in the recommendation system is collaborative filtering with a user-based approach. This technique is based on the value of similarity between users which is a reference in recommending items to users. There are so many methods that can be used to calculate the value of similarity, 2 methods that have been studied produce a good recommendation system, namely the pearson correlation method and cosine similarity. In this study the two methods are compared to find which method of similarity is better to be used in the film recommendation system. The comparison metric used is the accuracy of the Root Mean Squared Error (RMSE) metric. The results of the comparison of the two methods show the accuracy of the RMSE Pearson correlation = 1.0206 and the accuracy value of the RMSE cosine similarity = 1.0211. This means that the predictive value of the rating and the RMSE value generated by the Pearson correlation method is slightly better, with only 1.206 at odds with the original rating value.

Keywords: recommendation system, pearson correlation, cosine similarity, user-based collaborative filtering.