Abstract

The amount of information available on the Internet either in a format such as text, video, or audio growing rapidly. This causes the user's difficulty in obtaining the required information. One solution to simplify user searches in obtaining the information needed is a recommender system. Recommender system is an application that can provide recommendations in the form of predictive rating of an item based on user characteristic equation in providing information.

This final project analyzing the item-based collaborative filtering in recommender systems, which apply the weighted sum method. The purpose of this thesis is to analyze the accuracy of the prediction results generated by the recommender system. The parameters used in this analysis is the ratio of training / test sets, top-N neighbor size and type of similarity measure is evaluated using Mean Absolute Error calculation.

The results show that the accuracy of the prediction results produced by the method of weighted sum does not always increase with the size of the top-N neighbor. The higher the ratio of training / test set, the higher the accuracy of prediction. Type similarity measure also affects the accuracy of the prediction, using adjusted cosine-based similarity on the weighted sum method produces a better prediction accuracy than the use of correlation-based similarity.

Keywords: recommender system, item-based collaborative filtering, weighted sum method.