Abstract

Recommender system is an application that can give a recommendation in term of rating prediction of an item, based on the similarity of user characteristic in giving information.

In this final project, the implementation and the analysis of the user-based collaborative filtering recommender system, which applies CorrCF algorithm and RecTree method, is performed. Initially, CorrCF algorithm and RecTree method is implemented into the recommender system. Then, the analysis is carried out to the speed and the accuracy of rating prediction result that is given by the recommender system. Comparison parameter on training set and set test is used in the analysis.

In the RecTree method, active user history and the existence of other similar users which have rated items, determine the result of a predicted rating for the active user. The accuracy of prediction, which is resulted by both algorithm, increases with the increase of the number of data in the training set.

Time needed by the RecTree method is much faster than CorrCF algorithm to determine prediction. In addition, with appropriate selection of parameter β then the accuracy produced by the RecTree method is better than the CorrCF algorithm which is shown by the MAE value generated by RecTree method is smaller than generated by CorrCF algorithm.

Kata kunci: *recommender system, collaborative filtering, CorrCF algorithm, RecTree method*