Abstract

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 was implementing and analyzing the item-based collaborative filtering recommender systems, which apply Bipolar Slope One algorithm. This final project gave rating to analyze prediction accuracy generated by the recommender system after Bipolar Slope One algorithm implemented in the test parameters used here are the MAE, time and memory used. In addition, this Final Project also analyzes the suitability of the recommendations with the type or content of the items recommended.

Prediction accuracy was generated by the algorithm Bipolar Slope One will increase with the increasing number of rating contained in the matrix of user items. The result of the recommendations on the Slope One algorithm Bipolar indicate a mismatch between the type of item recommendation with the type of items that have been rated by the active user. This is due to the prediction of ratings on Bipolar Slope One algorithm does not consider the type or content of the items, but more attention to the similarity of the pattern of ratings.

Keywords: recommender systems, collaborative filtering, Bipolar Slope One algorithm.