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 Incremental Collaborative Filtering (ICF) algorithm, is performed. This final project will analyze speed and accuracy of predictions generated by ICF. The parameters used in the analysis is the parameter α as the coeficient of parameter increments, sparsity rate, and matrix size users-items.

Prediction generated by ICF algorithm is better than the classic collaborative filtering. This is due to the influence of old similarity value to the value of new similiarity and its modifications to Pearson's correlation similarity with the addition of coeficient increment and e, f, g, increment's value..

Keyword: *recommender system, collaborative filtering, Increment Collaborative Filtering*