Abstract

Recently, recommender system has been gaining attention because its ability to reduce overload information and increase customer satisfaction. In recommender system, metode that mostly used is collaborative filtering or content based to predict new item based on user preference. Beside that, new method that combine two previous methods also widely used to solve the disadvantages of them that is called hybrid recommender system, one of the examples is Content-Boosted Collaborative Filtering (CBCF).

This final project implements and analyzes Clustered Pearson Predictor using K-Means algorithm in Content-Boosted Collaborative Filtering (CBCF) that combines content based filtering and collaborative filtering. The purpose of K-Means algorithm implementation in Content-Boosted Collaborative Filtering is to achieve scalability by clustering users, so that the entire data set has been reduced to a much smaller number of data. The parameters that used in testing are the number of clusters, the number of neighborhood, and sparsity rate (missing rate).

The results of testing showed that the increasing of neighborhood's number will make the accuracy of prediction decrease. The best performance happened when using optimal value for cluster. Recommendations result using CPP CBCF method in recommender system shows the compatibility between the item genre from result of recommendation with item genre that has been rated by active user.

Keywords: *recommender system, collaborative filtering, content based, content-based collaborative filtering, K-Means clustering.*