

ABSTRACT

Association rules is a technique in data mining which is used to find the rule of association between itemset combination. Basically, association rules only able to provide rule to itemset which is binary / boolean where the concept of truth is expressed in two conditions that are right and wrong, or 0 and 1, or yes and no. in fact, if it is viewed in real condition, many cases which is based on intuitive of humanity where the condition is not only two. To handle that, fuzzy theory is the right way to be applied in forming of association rules so it can provides optimal result on the data of the extracted information.

One of applications which apply association technique is recommender system. This thesis implement and analysis fuzzy association rules to recommender system based content filtering. The case will be researched is item of film from dataset Movielens. This system will do the mining process of combination genre film from each film that have been watched by user. Because recommender system will be used based on content filtering, so transaction which is used in rules mining to itemset is films that have been watched or liked by one user without considering films which have been watched by other users. Rules are generated on the data training are form of genre association that will be benchmark of recommendation to the item of film in data testing.

The test result on data testing that show performance of the system can be proved with precision, recall, and f-measure that optimum. In this case, the verification process highly correlated by the support and confidence which affects to rules that generated by system.

Keyword : *fuzzy association rules, recommender system, content filtering, precision, recall, f-measure, support, confidence.*