Abstract

Data mining is a process to find facts from data pattern on a database. In data mining, there are some methods to solve the problems, which are classification, clustering, association rule, regression, sequential pattern and many more. This final project explains about clustering which is one of many methods in data mining that using fuzzy to determine membership degree of data.

Clustering is a the process of grouping data into classes or clusters so that data in same cluster has a high degree of similaraty with others but has differences from data in other clusters. Clustering can be divided into two categories which are Hierarchial Clustering and Partitional Clustering. In this final project, we used two algorithm of Partitional Clustering, that algorithms can group data in a number of k cluster based on user input, they are Fuzzy C-Means and Hyperspherical Fuzzy C-Means.

Fuzzy C-Means and Hyperspherical Fuzzy C-Means are algorithm in fuzzy clustering. Fuzzy clustering has properties that can grouping data into more than one cluster. Based on that fuzzy clustering's property, this algorithm are used to solve the problem of multi-label data which enable one data can be include into more than one label.

Keywords : *data mining, fuzzy clustering, multi-label*