Abstract

Currently, there are a lot of useless data left in the Faculty of Informatics Engineering IT Telkom, for example history of final assignment presentation. While such data can be used for the purposes of academic information, such as for competence classification of the final assignment title based on the data. Then, the determination of the competence of the titles can used to create scheduling of final assignment presentation.

This final assignment implement a data mining technique using Naïve Bayes to get competence classification of the final assignment title (testing data) based on training data, such as history of final assignment presentation containing the title of final assignment with its suitable competence. Classification title competencies can be further used in the creating of final assignment presentation scheduling, that is to find 1st testers of final assignment presentation so they'll have the same competence with title tested by using fuzzy method to find the value of each candidate's eligibility.

The results of observation and testing using history data proved that Naïve Bayes is suitable for use in the competence classification of the title of final assignment with accuracy range at 50%-95%. The accuracy of the classification results using Naïve Bayes was strongly influenced by data patterns, such as the proportion of each data classification and selection of key terms. The use of fuzzy method for scheduling of final assignment presentation produces optimal results and satisfy the hard constraint, though there is a soft constraint violations, that is lecturer workload.

Keyword: Naïve Bayes, training data, testing data, penjadwalan sidang, hard constraint, soft constraint, fuzzy