Abstract

Learning Management System (LMS) is a place to manage online learning and facilitate interaction in the teaching and learning process. LMS can be used by instructors to find out student activities or interactions with courses taken (learning behavior). Every person has a different method of understanding learning, therefore it is necessary to know the learning styles they have so that they can be applied in learning. One of the supporting factors of learning success is to use appropriate learning styles so that the information received can be conveyed properly and clearly. For this reason, a system is needed to identify learning styles. This study builds a learning style detection system based on learning behavior at Telkom University LMS using the Naive Bayes classification method. The learning style model used as a learning style reference is the Felder-Silverman learning Style Model. The Index of Learning Style questionnaire is used to determine the target class of learning styles that will be used in the naïve bayes classification. Naive Bayes was chosen as a method of classifying learning styles because in previous studies [1] making comparisons using the Bayesian Network method, J48, Naive Bayes Tree yielded accuracy that was superior to the other three methods. Testing accuracy in this study uses different k-fold values, so for 60.71% processing dimensions with 9-fold cross validation, perception 78.12% with 8-fold cross validation, 85.71% input with 10-fold cross validation, and understanding 53.33% with 7-fold cross validation.

Keywords: learning style, , learning management system, Naive Bayes