Abstract

Learning a science with peer learners has a positive impact on the learning process because it not only provides useful information, but also shares the learning experience. Peer helper is a learner who can help colleagues in solving problems in learning. Requirements that must be possessed by peer helper is to have knowledge on subjects that are being studied and have the desire to share knowledge with peer learners. The problem that occurs when learning is that learners do not know who to ask, because they can not identify other learners who have extensive knowledge. Therefore looking for peer helper is a problem that exist in peer learning. The social interaction found in ubiquitous learning (u-learning) occurs in the form of interactions performed on the online discussion forum contained in u-learning. This final project has carried out the study and implementation of Naïve Bayes method to identify peer helper based on his participation in online discussion forum. The recommended peer helper is obtained based on the classification result of the learner who has the label to be recommended as peer helper. Because the participant's data is not labeled vet, the test done in this research is to compare the accuracy of classification with two different ways of labeling data by using Expectation-Maximization (EM) clustering algorithm and by manual labeling done by the instructor. The results of the test obtained the accuracy of performing the data labeling menually for the classification obtaining the highest accuracy. The next test to determine the effect of peer helper is to know whether learners make access to peer helper that has been recommended. The results of the test stated that 28 out of 62 learners made access to peerhelper recommendations on the u-learning discussion forum.

Keywords: peer helper, online discussion forum, ubiquitous learning, naïve bayes