Abstract

In e-learning there is a concept of distance learning called the Personal Learning Environment (PLE). PLE is an e-learning concept that allows users to manage their own learning environment, both in terms of content and process. Additionally, PLE allows students who are registered as users in this environment to share or interact for learning needs.

However, PLE which is included in distance learning also has a problem. The problem is excessive information in the e-learning environment and finding the right learning content for students. To deal with these problems, a learning content recommendation system can be created for students. There is one recommendation system that has been widely used, called Collaborative Filtering (CF). CF is a method for filtering information by collecting judgments and combine it with the same information needs or interests of other users.

This study intends to build the concept of PLE distance learning by applying the CF recommendation system to find learning content that is appropriate to the needs of students. In addition, the PLE will be evaluated so that the quality of the system can be identified. Then evaluate whether the recommendation system is good or not by calculating the error mean using the Mean Absolute Error.

Keywords: Personal Learning Environment, recommendation system, Collaborative Filtering