

ABSTRACT

The development of technology in the modern era and globalization has had a lot of influence on life, one of the example is the concept of learning through electronic media such as social electronic learning (social e-learning). This concept makes the village community to be aware to apply it. Unfortunately, lack of information about social learning in village, causing many village communities have not been able to utilize their social skills.

The concept of smart village can be interpreted as an integration between technology and information in village community life, that expected to be able innovative village development. This concept also could develop the potential of the village to improve the economy in the village, because with the existence of electronic learning applications, people in the village will be able to learn from it contents and also they can utilize their skills into a content for social learning activities. The purpose of social e-learning application that will be built by applying Artificial Intelligence is to let the village communities to access social e-learning easier.

To develop an application, an appropriate application development method is needed. One of the development methods is by applying Artificial Intelligence to develop a menu search ranking module using PageRank method in social electronic learning applications. Because to be able to find the ranking of many articles based on words in the search menu ranking module, you can use the PageRank method. Electronic learning applications are developed by using Java Enterprise Edition tools as programming language.

The architecture used in the social e-learning application is multi-tier, which is, web server tier, database server tier, and client tier. The research method for development are using a prototype design model, which aims at systems that are developed become faster than traditional methods and have lower costs. The result of this research is the application of social electronic learning with searching module. It focuses only on developing searching rankings and displaying relevance score, so that users have no trouble choosing the target word from the many available articles because they can choose the article based on the relevance score that social electronic learning applications have.

Keywords— Social e-Learning, Artificial Intelligence, PageRank, Relevance Score.