Abstract

Ubiquitous learning is the evolution of e-learning that uses ubiquitous adaptation of computing. Ubiquitous learning has a context-aware that is the container of some context. Some of the historical context and personal context. Historical context contains information about past user experience, while personal context contains information about the learning goals and prior knowledge of pre-test results. Both these contexts will be combined to obtain the recommendation of the appropriate learning material. Recommendations given material when finished doing the pre-test and learning, so learning that already carried out will be the history of the user. The system also provides learning goals to provide recommendations with appropriate learning material according to the wishes of the user. In designing the material recommendations to use knowledge-based semantic content recommendation for interoperability knowledge. Scenario testing is done there are three, i.e., comparing the results of pre-and post test-test to find out the level of knowledge of the user, performs a check of the last material learned the user input, and performs learning goal on the system. Results from testing the system shows that the value of pre-test students increase when post-test, it proved that the material is recommended when the learning process takes place right and appropriate. On features of learning goals also provide the appropriate learning material with a target of learning from users. The conclusion of this research is to provide learning materials in accordance with the recommendation of the level of knowledge of the user, in accordance with the user's history, and provide a learning goal so that users can learn more specifics that can help the learning process of the user.

Keywords : Ubiquitous learning, context-aware, historical context, personal context, semantic content recommendation