International J. of Engg. Research & Indu. Appls. (IJERIA).
ISSN 0974-1518, Vol.5, No. IV (November 2012), pp. 311-327

SEMANTIC ADAPTABLE MOBILE LEARNING ENVIRONMENT

MOHAMMED A. RAZEK

[1]Research and Development Department, Deanship of Distance Learning, King Abdulaziz University, Kingdom of Saudi Arabia, P.O. Box 80254.
[2]Math. & Computer Science Department, Faculty of Science, Azhar university, Nasr City,11884,Cairo,Egypt.
{maabdulrazek1@kau.edu.sa,abdelram@azhar.edu.eg}

Abstract

In recent years, m-learning systems have been improved by combining learning policies with individual users' abilities, needs, and performances to present an adaptive learning. However, each individual has his/her single way of learning, there is also a lack of pedagogical infrastructure for mobile learning. For those reasons, adaptive mobile learning can personalize courses to meet individual needs. We present the evaluation of a prototype tool called the Adaptive Mobile Learning System, which seeks to support students with a learning object, which is based on their needs. In the paper, we used clustering methods to common classes among 630 participants. Experimental results indicated that the proposed system presents an efficient and effective mobile learning environment by adaptively recommending learning objects for individual learners.

Keywords: Mobile Learning Application, Adaptive learning, User Modeling, Adaptation and Personalization, Pedagogical Agent, Machine Learning.