An Extendable Software Architecture for Personalized E-Learning systems

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Abstract

In this paper an extendable e-learning software architecture which supports personalized learning paths is presented. Any e-learning software which is designed based on this architecture can benefit from the loosely coupled interconnection among three main components of a personalized e-learning software: Workflow Management Engine (WFME),
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Recommender Component (RC) and Learner Interaction Component (LIC). By following this architecture the personalization method of the e-learning system which is implemented by RC component is very easy (open) to extend or change regarding the needs or strategies of a specific e-learning system. To achieve this, in this paper an FSP based method is proposed for designing a reusable WFME component. This component can be reused in any e-learning software which follows the proposed architecture.

Reference

- Oracle ilearning, http://iLearning.oracle.com
- Blackboard, http://www.blackboard.com

Index Terms

Computer Science  Software Engineering
Key words

E-Learning systems  Workflow management system
Personalization  FSP language