

A Web Based Intelligent Tutoring System(WBITS)

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Abstract

This paper presents the architecture of a web-based intelligent tutoring system that can be applied to a number of different scientific or literature courses in different domains. The proposed architecture takes the advantages of the web based systems generally and many advantages of building tutoring systems that are based on the web. The proposed web based Intelligent Tutoring System (IITS) integrates a domain knowledge base system, database system, a student model, a course model, an instructor model, and a user interface model.

The proposed architecture is a multi tiered architecture and it consists of the following main components: the user interface on the client side through the web browser, a user interface manager on the web server, the student model, course model, instructor model on the application server, database management server and knowledge management system server. The proposed architecture is adopting very important concepts in educational systems including applying adaptive hypermedia in student and instructor interface, evaluating the student capabilities and adapt the teaching strategy to the student's level, using different teaching and evaluation strategies, case based learning, and multiple tests form generator and other important concepts making this proposed system a compatible, flexible, adaptable intelligent tutoring system.

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