Enhanced Online Learning Using Structured Wiki

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ABSTRACT

Summary - Objectives

This work describes ongoing research on using structured wikis to enhance learning. It is well known that learning is altogether different from teaching from a conceptual standpoint. Current models from universities and organizations convey a framework of teaching not different from what has been practiced in classrooms. The work in progress proposes a novel, tools-based approach for structuring online content via graphical wikis by placing students at the core of its purpose.

ARCHITECTURAL COMPONENTS OF THE SYSTEM

- Collaborative style wiki for adding graphical nodes for representing knowledge units and evaluation modules.
- Collaborative style wiki for adding linkages between knowledge and evaluation units to represent flow of learning.
- A NoSQL database that delivers and stores the collaborative style structured wikis to and from a browser.

RESULTS

Loyola BS Computer Science map is built. Furthermore, each course contains links and metadata information (prerequisites, post-tests, etc). The tree URL is available to anyone interested in pursuing knowledge in the area of their choice. The links are appropriately connected to the relevant nodes and the nodes are hyper-linked to the appropriate resources (files, URL, or publicly available videos).

CONCLUSION & FUTURE WORK

To develop a platform for voluntary expert curators in various disciplines to structure online content for enhanced learning using the software architecture described earlier.

TOOLS, SOFTWARE

Vue Content Mapping Application, HTML5, CSS3, and web videos

REFERENCES

http://twiki.org/cgi-bin/view/Codev/StructuredWiki#Power_of_Structured_Wikis

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