Online Indexed Reflection/Collection

Student Notebook Structure

GRADUATE PROJECT

By

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http://www.sci.tamucc.edu/~yo67434/snotebook.html

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ABSTRACT

This project is the development of an online, indexed, reflection/collection, Student Notebook structure that provides a space for students to record their thoughts, add lecture notes and link entries to related sections using bidirectional links. The Notebook is an organizational resource for the students that can be posted online for others to share. The Notebook provides an interactive Web-database containing the resources that can be searched by the keyword to display information.
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1. BACKGROUND AND RATIONALE

Software components for distance and just-in-time learning are increasingly common methods of encouraging reuse to facilitate the software development process. Reuse of components has been part of software engineering goals from the earliest days of computers. Educators, both teachers and technologists, have long been concerned with issues of reuse -- using teaching materials in widely different contexts, and flexibility -- to tailor educational materials to the needs of individual students. That approach treats the World Wide Web (WWW or Web) as a distribution medium, with a focus on providing reusable structures for embedding educational materials.

Education must be relevant to the needs of the students. An automated, online Student Notebook is an important tool to help the student study. Just as an old-fashioned paper notebook, from which the name "Notebook" derives, an online Notebook contains notes that the students write down. These notes help students in reviewing content from lectures and preparing for examinations. Also, this type of notebook can be kept in a personal library for future reference, which aids students on a day-to-day basis, one of the Notebook's primary functions.

A reflection/collection structure is one that provides an area for the students to gather information to consider or analyze over an indeterminate period of time. The reflection/collection, indexed Student Notebook can be used not only to develop personal study and research, but also to develop teaching and learning skills. It is essentially equivalent to a paper notebook, but instead of recording information on paper, the information is recorded on system-stored notebook "pages" that can be read and searched just like in a paper notebook. Instead of writing with a pen, adding to the Notebook or reading from it is done through a computer. Although it varies in "looks and feel" from a paper notebook, all basic functions are present. In addition, it allows easier adding of information, accessing of other resources and sharing of ideas with other students and instructors. It can be a valuable organizational tool to manage portfolio resources for students.

The Notebook is a repository for objects that help students study. Combining it with the Web is an ideal means for storing and displaying course and notes information. Thus, the advantages of using this Notebook show that it is always available for writing, editing and
reading; it allows querying/searching its index by keywords; it includes hyperlinks to other courses and references; and helps to develop tools for students to communicate.

I choose this project as my graduate project because Dr. Patterson-McNeill thinks that the students, especially the distance and continuing education students need Web tools to help them study and communicate with other students. It is not convenient or cost effective to use long distance phone service, therefore the Web is the clear choice of communication for them. It is very useful to develop a Web tool for the students. Also, my three-years medical school teaching experience, plus long-term student's life helps me to understand exactly how to provide this structure with fully functional components, and how to take advantage of the potential for using lecture materials in a nonlinear, self-paced fashion.