Abstract: Developing Interactive, Web-based Courseware

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Abstract

This paper describes our company's ongoing efforts to adapt mathematics text-books for online delivery. We show how the textbooks, written primarily in LATEX, have been adapted for web delivery using IBM's techexplorer browser plug-in, and enhanced using an extensive set of interactive Java applets. To complement these textbooks, we are developing an online study, homework, and testing system for mathematics that combines techexplorer, PHP (a free, open-source hypertext pre-processor), mySQL (an open-source database application), and application links to computer algebra systems. Our ultimate goal is to provide a comprehensive environment for delivering math courseware online.



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