

COURSE EDITOR
WEB AUTHORIZING TOOL FOR AN ELEARNING
SYSTEM



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WEB AUTHORIZING TOOL FOR AN E-LEARNING
SYSTEM



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This dissertation was submitted to the

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I hereby declare that the work included in this dissertation has not been submitted in part or whole for any other academic qualification at any institution.

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Abstract

MathML is a new effective public standard language for encoding mathematical expressions on the web. In order to foster the adoption of MathML in World Wide Web, MathML software needs to be freely available for users. MathML software products which exist today are very limited and most of the time shipped as an expensive commercial product which hinders the use of MathML by wide computer user community.

The Goal of this current research is to implement an open source, easy to use web authoring tool which helps teachers in creating scientific course materials with mathematical content. The Proposed tool can directly create the web content from MS Word documents. This avoids rather than spending time, energy and money in using complicated web authoring tools. This generated web content with MathML is published in a browser in a neutral way allowing a large audience to be reached.

The generated content is also conforms to the SCORM (Shareable Content Object Reference Model) specification, allowing them to be easily deployed in SCORM compliant Learning Management Systems.

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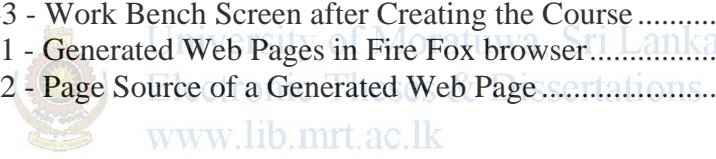
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Symbols, Notations, Abbreviations and Acronyms

Term	Explanation
ADL	Advanced Distributed Learning
API	Application Programming Interface
COM	Component Object Model
CSS	Cascading Style Sheets
ECMA	European Computer Manufacturers Association
FOSS	Free and Open Source Software
HTML	Hyper Text Markup Language
IDE	Integrated Development Environment
IE	Microsoft Internet Explorer
LMS	Learning Management Systems
MathML	Mathematical Markup Language
MS	Microsoft
MSDN	Microsoft Developer Network
OMML	Office Math Markup Language
OPC	Open Packaging Convention
PDF	Portable Document Format
RTE	Run Time Environment
SCO	Sharable Content Object
SCORM	Shareable Content Object Reference Model
TOC	Table of Contents
UML	Unified Modeling Language
URI	Uniform Resource Identifier
VLE	Virtual Learning Environment
W3C	World Wide Web Consortium
XHTML	eXtensible Hyper Text Markup language
XML	eXtensible Markup Language
XPath	XML Path Language
XSL	eXtensible Style sheet Language
XSLT	XSL Transformations