

UNIVERSITI TEKNOLOGI MARA

**DEVELOPING A GENERAL SCHEMA OF
REUSABLE LEARNING OBJECTS FOR LEARNING
MANAGEMENT SYSTEM**

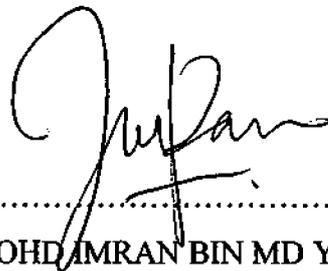
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Thesis submitted in fulfillment of the requirements for
Bachelor of Science (Hons) Information System Engineering
Faculty of Information Technology And
Quantitative Science

MAY 2007

DECLARATION

This declaration is to clarify that all of the submitted contents of this thesis are original of my own work excluding those, which have been, admitted specifically in the references. All of the contents of this thesis have been submitted as a part of partial fulfillment of BSc. (Hons.) in Information System Engineering program. I hereby declare that this is work of my own and except for summaries, literature reviews, which have been acknowledged.



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2005616690

MAY 2007

ACKNOWLEDGEMENT

In the name of ALLAH, who is the Most Gracious, Most Merciful and HIM alone is worthy of all praise. To HIM all praise go and to HIM all the thankfulness of giving me the opportunity to live day in and day out.

It is with great honor to have the opportunity to express my highest gratitude towards to my supervisor, En Saharbudin Naim for giving me the encouragement and mostly support throughout the duration of this study. All the hours spent in lessons were highly remembered as experiences to guide more for my future. Without the expertise from him, this study would not be successful as I hoped it will be.

A lot of thanks also to my fellow friends who are involved directly or indirectly in this project who shared and discuss expertise and experiences with me. Most of their opinions and suggestions are valuable to me in order to enhance my project quality. Lastly, thanks to all the people who have directly and indirectly contributed to this project.

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Abstract

E-Learning has become more and more popular since the introduction of the World Wide Web. The emergence of a huge number of Learning Management Systems shows that E-learning growing rapidly due to huge support by online and computer users. The number of different Learning Management Systems causes a need to standardize the learning content development in order for the content to be reusable. SCORM standard helps resolve this issue by providing the specification of learning content development that are called as learning objects in SCORM, which is a small chunk digital resource that can be reused to support learning and are represented by a metadata file in XML format using IEEE LOM metadata standards. Problem arises once more as the IEEE LOM standard are too complex and too detail making it hard for content authors to develop a learning object and this issue required an analysis of what are the most general annotation . Thus, this project will address this problem by developing a general schema of a learning object metadata file that can be followed as a guideline in developing a learning object metadata file. Furthermore, this research will also develop a system that uses the schema to automatically generate the metadata file for a learning object. The schema will serve as a guideline for content authors to develop a learning object while the system that will be developed can be used by authors with no metadata building background to create learning object and its metadata file.