# Universiti Teknologi MARA

# Enhancement of Data Retrieval Performance for i-Learn Web Analytic System

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# DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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# ABSTRACT

In the modern computing, database is one of the important aspects of it. Every system is using database whether it is small or complex. Database stores data and the system can modify it according to the needs such as insert, delete or update data. The volume of the data stored in a database is various between each database. It is ranging from several data and up to hundred thousands and even millions of data per database especially or the web based system.

The web based system is usually used by anyone at everywhere in every time in the world. Web based system such as www.lelong.com.my for example record each day activities done by the user. This makes the database become very large as data was continuously inserted. So the performance of the database must be good enough to ensure the data processing doesn't take too much time.

i-Learn system is a web based system developed for Mara University of Technology e-learning system. Each transaction made in this system is recorded and that's make its database's size increasing each time a single transaction is made. I-Learn system has a subsystem named i-Learn Web Analytic System that generate report of the activities made in the system by user for the administrator. As the database is very big with millions of data, the performance of the database must be good so that the report generating time can be reduced. This research will identify the available methods to enhance the database performance and implement it to the i-Learn Web Analytic System to enhance the performance of its database.