

Universiti Teknologi MARA

**Development of Web Based Tutorial System
using Fuzzy Expert**

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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

Nowadays, education is the most important for everyone because it is the essential for economic growth and happiness live. Web based tutorial system is one of the environment that create from the WWW, and it has been forming one of the fastest growing area in education technologies. Beside that web based tutorial system is expected to be used by very different group and level of users with minimal assistance from human teachers. The objective of this project are to develop the intelligent tutorial system that can used to classify the range of student performance, then provide them a set of quizzes base on their performance in the last quizzes. However, comparing to the real live classroom, web based tutorial system provide an alternative to private tutoring at anytime and anywhere where internet is provided, but it still have shortcoming such as lack of presentation and feedback. Therefore web based tutorial system with using fuzzy expert had been introduce to solve this problem. Fuzzy expert is the combination of fuzzy logic and expert system. When the expert system is used in the web based tutorial system because had more beneficial such as allows user to ask questions on how, why and what and also was able to give reasons toward the given answers. This fuzzy logic element has been employed in this web based tutorial system which able to define student achievement is according to student's quizzes performance. Therefore, by using this fuzzy expert in this web based tutorial system it will become more useful and flexible in defining appropriate question for student base to their performance.

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