

**A WEB BASED FUZZY EXPERT SYSTEM  
FOR DIAGNOSIS LEVEL OF DYSLEXIA**

By

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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**

Dyslexia means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity. It affect large portion of population in Malaysia but it is still not known. If dyslexia is not detected at early stages it will be hard for the dyslexic to survive. A web based Fuzzy Inference System was developed to aid in the diagnosis of dyslexia level for ages 7 to 12 years old. The system will produce the level of dyslexia for a person from test conducted through the system. The Mamdani fuzzy model has been employed to implement the inference system. The criteria of fuzzy input make it useful in determining the level of dyslexia. From testing that has been done, it was found that the system can produce accurate and appropriate result. It can be said that the system have the capability to replace the expert or provide assistance to other tutor when expert not available. The system meets its objective to give user information of the level of dyslexia they faces. It can be concluded that fuzzy logic is a suitable approach for this type of problem.

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