

UNIVERSITI TEKNOLOGI MARA

**DETECTING THE PROBABILITY OF DIABETIC
RETINOPATHY**

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea 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

Diabetic Retinopathy (DR) has become a common disease that caused blindness or vision impairment especially to diabetic patients. The problem of Diabetic Retinopathy patients only able to detect the disease by having a check-up which eye screening may cost a price at a certain high range which it has been estimates the lowest is at RM1,984. The purpose of this project is to develop a system to help in detecting the possibility of having Diabetic Retinopathy using rule-based system on web-based application. The researcher apply rule bases from fuzzy logic algorithm to determine the possibility outcomes of the disease by using 4-phased design and development research which consists of planning phase, design phase, development phase and documentation phase. In the conclusion, the development of rule-based system should help patients to find the probability in getting the eye disease.

Keyword: diabetes, diabetic retinopathy, fuzzy logic, rule-based system

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