

**Universiti Teknologi MARA**

**Agent Checker Mobile Apps for G6PD Deficiency  
Children using Rule-Based Technique**

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**Thesis submitted in fulfilment of the requirements for Bachelor of  
Computer Science (Hons.)  
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## **SUPERVISOR APPROVAL**

### **AGENT CHECKER MOBILE APPS FOR G6PD DEFICIENCY CHILDREN USING RULE-BASED TECHNIQUE**

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The thesis was prepared under the supervision of the project supervisor, Dr. Khyrina Airin Fariza binti Abu Samah. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Computer Science (Hons.).

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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**

Glucose 6-Phosphate Dehydrogenase (G6PD) is an enzyme in the body that helps the red blood cells in carrying out oxygen from the lungs to throughout the body. G6PD deficiency can occur when inherited from their parents since the babies are born. This deficiency does not have any medicines to cure it, but they need to avoid certain foods and drugs that may lead to lack of red blood cells in the body which is known as haemolytic anaemia. Unfortunately, people lack of knowledge of G6PD deficiency, especially for types of food and drug to avoid for G6PD deficiency patients. Therefore, system about G6PD deficiency for children is developed in mobile platform that entitled as Agent Checker Mobile Apps for G6PD Deficiency Children using Rule-Based Technique. In addition, this system will be implemented Rule-Based as a technique to accomplish the objectives of the system such as to design a mobile application which check the trigger ingredients of foods and drugs for G6PD deficiency children, to develop a mobile application which check the trigger ingredients of foods and drugs for G6PD deficiency children by using rule-based technique and to test the functionality of the mobile application. Apart from that, Mobile Application Development Life Cycle model (MADLC) is used as the methodology of the system. Last but not least, all the objectives have been matched and supported with the system. Then, this mobile application also will help the parents as the user to be consider more about G6PD deficiency towards their children.

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