# Universiti Teknologi MARA

# Dyscalculia Learning System Using Mobile Application

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Thesis submitted in fulfillment of the requirements for Bachelor of Computer Science (Hons) Computer Science Faculty of Computer and Mathematical Sciences

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#### **SUPERVISOR'S APPROVAL**

### DYSCALCULIA LEARNING SYSTEM USING MOBILE APPLICATION

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This thesis was prepared under the direction of thesis supervisor, Dr. Puteri Nor Hashimah Bt Megat Abdul Rahman. 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 Science (Hons) Computer Science.

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### STUDENT'S 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

The main propose of this project is to develop a mobile application for Dyscalculia children who have problem in recognizing numbers. This application is to help Dyscalculia children in personal practice other than attending a class. Based on the literature review, most of mobile application for Dyscalculia in iOS platform, while in Android platform there are many application only focus on screening test for Dyscalculia rather than helping them. Most of the Dyslexia disorders are children but adult also can have this disorder. Because of that, this application is focus on Dyscalculia children. This project evaluated the student's performance by using Wilcoxon Signed Rank Test to determine the significant of Dyscalculia Application. After analysis process is done, most of the Dyscalculia children show the improvement. In order to collect user response towards Dyscalculia application, Feedback Survey has been distributed to teachers, Dyscalculia children and parents. It has shown most of the respondent said Dyscalculia application is suitable for Dyscalculia children. Hence, from the observations made the Dyscalculia Learning system application using the Android platform s a success. However, there are some suggestions for future work of the application such as to have more features in the Learn module and Quiz module, as well as to create a database in order to keep quiz results which can be printed as well as viewed by parents and teachers.