

Universiti Teknologi MARA

**Mobile Application Learning
Programme to Learn Fundamental of
Data Structure using Gagne's Learning
Style**

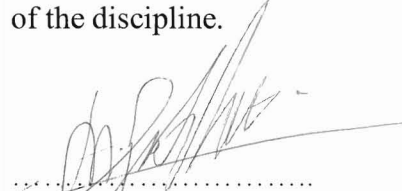
Muhammad Syafiq Izzuddin Bin Bahrin

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for Bachelor of Computer Science (Hons.) Faculty
of Computer and Mathematical Sciences**

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STUDENT'S DECLARATION

I certify that this report 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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MUHAMMAD SYAFIQ IZZUDDIN BIN BAHRIN
2014864918

JULY 24, 2017

ABSTRACT

Nowadays, the need to implement multimedia in education is becoming more important. It is also seen as an effective way for learning and teaching. Besides, most of the studies declared that a major drawback for beginner programmer is having weak skills on planning and outline. This android-based mobile application is design for learners who want to learn about fundamental of data structure especially for Computer Science students. Topics covered in this mobile apps are Array list, Linked List, Queue and Stack. This development creates On-The- Go learning. It is also can be use as lecture note since the contents in this mobile app follows syllabus in CSC438. To develop this mobile apps, a research methodology is being applied which consists of analysis phase, design phase, develop phase, implement phase and evaluate phase. During design, Gagne's learning theory was implemented to enhanced the effectiveness of learning. As for development of this application, Android Studio tool has been used while the programming language involved will be JAVA.

Keyword: Gagne Learning Theory, mobile application, Android-based.

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