

**Universiti Teknologi MARA**

**Game-Based Learning Application For  
High School History Lesson of Rentap**

Syed Muhammad Nairn bin Syed Idris

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

December 2013

## ACKNOWLEDGEMENT

Allhamdullilah, praise and thank to Allah because of His Almighty and His utmost blessings, I was able to finish this project within the time duration given. Firstly, my special thanks to my supervisor, Dr. Marina Ismail because of his guidance as well as the knowledge and support to me in completing my project. Without my supervisor guidance and knowledge, my project will not be able to accomplish successfully.

Special appreciation also goes to my beloved parents in supporting me in term of morals and money in order to complete my project. Besides that, their caring also help me to accomplish my project.

Last but not least, I would like to give my gratitude to my dearest friends. With their supports and assistances helped me to accomplish my research in the time duration given. I would also like to thanks to all that are not listed above for their help, support, and encourage me until this project is completed.

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## Abstract

In order to excel in school or university, students need to understand all the subject that they learnt in university or school. To do this, the student must maintain a level of enthusiasm and discipline to learn all the required skills to master certain subject. However, history subject has always been one of the least favourite subjects for secondary school students. Game-based learning is considered as an alternative in this research to overcome the problem of the demotivation of learning history. Only the history of Rentap is taken specifically to make the research feasible since making the game for all the historical figure is too time consuming. The motivational value of a game is studied, along with the ways to incorporate those values into the game-based learning application developed in the research. The effective ways to teach facts of history to the player while playing the game is explored as well. The research overcome those problem by making the game-based learning application a battle-focused gameplay, with the student need to know and understand the facts of Rentap in order to progress through the game. This can be implemented by asking the players the question of Rentap after each battle to receive the battle rewards. The storyline of the application also been loosely followed the Rentap facts and instead more humorous and light-hearted so that the players will has a more satisfying game experience. The application is then will be tested to a group of Form 2 student. A series of question will be asked to the students before and after the students has tested the application to ensure the effectiveness of the application. The results shows a significant improvement between pre-test and post-test. This shows that the system successfully completed its objective.