

**UNIVERSITI TEKNOLOGI MARA**

**PHYSIOLOGICAL MEASUREMENT:  
ASSESSING USER EXPERIENCE WHILE  
PLAYING COMPUTER GAMES**

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IT Project submitted in partial fulfilment/in fulfilment of the  
requirements for the degree of

**Master of Science (Information Technology)**

**Faculty of Computer & Mathematical Sciences**

**February 2013**

## ABSTRACT

Computer games is a popular entertainment activity and the main purpose of people to playing computer games is to get positive experience. User experience obtained while playing computer games usually formed personal and unique signature which mainly influenced by their emotions during the gameplay. With the introduction of physiological techniques such as skin conductance measurement, it is possible to assess user experience while playing computer games. Hence, the purpose of this study is to identify user experience attributes and assess user experience using physiological measurement while playing Bejeweled<sup>®</sup> 2 games. The main method applied in this study is an experimental method. There are two main measurements examined in this study which consist of numbers of peak frequency and the pattern of peak frequency in participants skin conductance graph. From the results, it shows that high numbers of peak frequency show high arousal value which represent either positive or negative experience. The measurement is supported by participants' self-reports which captured user experience attributes while playing games. This study also provides the understanding between subjective user experience attributes and their physiological data measurement.

## ACKNOWLEDGEMENT



Firstly, I would like to express my gratitude to Almighty God as for His Supremacy and Merciful led me the way to the completion of this thesis, Physiological Measurement: Assessing User Experience While Playing Computer Games. Only after a thorough hard work and practices that He has given me, this thesis could be done well.

Upon completing this project, I would like to take this opportunity to express my deep gratitude to all people who have involved in assisting me completing this thesis. I would like to thank to Dr Wan Adilah Wan Adnan who have provided the support and advice, encourage me to be enthusiastic and optimistic in completing this thesis, for her patient guidance, enthusiastic encouragement and useful critiques of this research work.

My grateful thanks also go to the rest of MSc. Information Technology lecturers who help me along my Master studies from first semester until final semester. I am also would like to thank to all participants who willing and giving their cooperation to be part of the research. I am also would like to thank my friends and coursemates especially to those who gave me support and guidance in completing this IT Project report. The moment in the whole semesters during our Master studies brought us together and yet makes us value our friendship and respect for each other.

I would also like to extend my thanks to my parents, Budiman Abpa and Binah Salliuuh and also my family for being so supportive, always encourage me and believing in me to pursue my dream.

Thank you, people.

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