UNIVERSITI TEKNOLOGI MARA

PHYSIOLOGICAL MEASUREMENT: ASSESSING USER EXPERIENCE WHILE PLAYING COMPUTER GAMES

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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® 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.

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