### UNIVERSITI TEKNOLOGI MARA

# PLAYABILITY EVALUATION OF CASUAL GAME AMONG OLDER ADULTS

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IT Project submitted in partial fulfillment of the requirements for the degree of Master of Science in Information Technology

**Faculty of Computer and Mathematical Sciences** 

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#### **AUTHOR'S DECLARATION**

I declare that the work in this IT Project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as reference work. This IT Project has not been submitted to any other academic institution on non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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#### **ABSTRACT**

World population is aging, and one of the strategies to mitigate older adults' restrictions due to aging is to encourage them to play digital games. However, most of the current digital games targeted adolescents and young adults, neglecting older adults. A good playability game is important to ensure that it could provide fun and entertainment, and most importantly it must satisfies their needs. There are a lot of studies done on the evaluation of video game playability, but none has been carried out in Malaysia that specifically focuses on older adults. Hence, this study intends to evaluate the playability of a casual game among older adults by analyzing their experience and satisfaction in playing the game. The objectives of the study are (a) to identify older adults motives for playing games; and (b) to evaluate playability of a casual game based on older adults experience. This qualitative study was conducted among five older adults aged between 56 and 63 by using playtesting, observation and interview methods. The findings show that their motivation can be categorized into (a) individual needs to gain cognitive benefits, combat loneliness and relief stress and (b) game-related that refers to their motivation to enjoy the novel features of the game. The findings reveal that learnability, immersion, socialization, emotion and satisfaction attributes of the game have influenced their experience in playing the casual game. The socialization attributes of the game were less valuable as they The findings show that they were satisfied with the fun prefer to play alone. experience and the attractiveness of the game, but they were disappointed with the time bar problem. The findings from this study could provide opportunities for the game developers to innovate and create competitive advantage in gaming industry and consequently help older adults in improving their quality of life.

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