UNIVERSITY TEKNOLOGI MARA

EDUCATIONAL GAME AS INTERACTIVE LEARNING FOR HURRICANE SAFETY

MOHAMMAD SYAHMI BIN ROSLI

BACHELOR OF SCIENCE COMPUTER (Hons.)

JULY 2017

University Teknologi MARA

Educational Game as Interactive Learning for Hurricane Safety

Mohammad Syahmi bin Rosli

Supervisor:
Nur Nabilah binti Abu Manghor

July 2017

SUPERVISOR APPROVAL

EDUCATIONAL GAME AS INTERACTIVE LEARNING OF HURRICANE SAFETY

By

MOHAMMAD SYAHMI BIN ROSLI
2015664206

This thesis was prepared under the supervision of the project supervisor, Madam Nabilah binti Abu Mangshor. It was submitted to the Faculty of Science Computer and Mathematical and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Science Computer (Hons.).

Approved by

………………………………………
Madam Nabilah binti Abu Mangshor
Project Supervisor

JULY 24, 2017

STUDENT DECLARATION

I certifiy that this thesis and the project to which it refers is the product of my own work and that any idea or quotation form the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

…………………………….

MOHAMMAD SYAHMI BIN ROSLI

2015664206

JULY 24, 2017

ABSTRACT

Natural disaster currently is rampant due to global warming. The frequencies of natural disaster occurring becoming more common. The World Meteorological Organization mentioned that about 90 percent from every natural disaster are extreme meteorological hazards like hurricane and tropical. Currently, the disaster safety learning in Malaysia only covers flood, earthquake, and fire. There is none on hurricane safety learning because there is no hurricane yet to hit Malaysia. Due to that, Malaysians are still lack in preparedness for emergencies and disasters and there is only a few games that teach natural disaster safety. In addition, the development and researches of the instructional games based on a natural disaster situation are still lacking. To overcome the problem, the development of game about hurricane safety for Malaysian using game-based learning (GBL) is proposed. The methodology used for this project is Game Development Life Cycle (GDLC). The phases involve in GDLC are, initiation, pre-production, production, testing, beta testing and release phase. This project is up to beta phase and not covered to release phase. A usability testing was conducted to test the effectiveness and satisfaction of this project end-product towards 10 participants and those participants are Malaysians age 15 and above. In conclusion, the learning hurricane safety using Educational Game as interactive learning shows a promising result. From the usability testing conducted, 90% of the participants able learn hurricane disaster safety through educational game as interactive learning and all of them are satisfied with the game.