

ACTION-ADVENTURE GAMES ON TRASH DISPOSAL AWARENESS



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS LAPORAN

JUDUL: ACTION-ADVENTURE GAMES ON TRASH DISPOSAL AWARENESS

SESI PENGAJIAN: [2020/ 2021]

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ACTION-ADVENTURE GAMES ON TRASH DISPOSAL AWARENESS

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This report is submitted in partial fulfillment of the requirements for the Bachelor of [Information Technology (Games Technology)] with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

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I hereby declare that I have read this project report and found
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DEDICATION

This research is dedicated to my supervisor Dr. Hamzah Asyrani Bin Sulaiman who always supported, inspired, and guided me in this process and the committee who kept me on track.

I also dedicated this thesis to my lovely parents who helped me in all things great and small and supported me in completing my research.



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Thank you for all your concern.



ABSTRACT

This project is an Action-adventure game named Untrashed! was developed to teach all the individuals about how important trash disposal awareness is in the form of video games. This game was created to introduce a different way to raise awareness towards the younger generations allowing them to engage both in entertainment and educational content. Nowadays, the younger generations do not care about the importance of trash awareness, as they become clueless and have no idea about recycling. Thus, the outcome for this project is to raise awareness towards the importance of trash disposal.



ABSTRAK

Projek ini adalah permainan aksi-pengembaraan Bernama Untrashed! yang dibangunkan untuk mengajar semua individu tentang betapa pentingnya kesedaran pembuangan sampah dalam bentuk permainan video. Permainan ini diciptakan untuk memperkenalkan cara yang berbeza untuk meningkatkan kesedaran terhadap generasi muda yang memungkinkan mereka untuk terlibat dalam hiburan dan kandungan pendidikan. Pada masa kini, generasi muda tidak mengambil berat tentang pentingnya kesedaran sampah, kerana mereka tidak tahu dan tidak tahu mengenai kitar semula. Oleh itu, hasil projek ini adalah untuk meningkatkan kesedaran mengenai pentingnya pembuangan sampah.

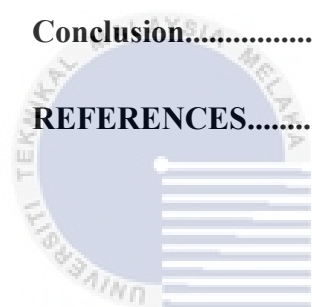


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LIST OF ABBREVIATIONS

FYP	-	Final Year Project
UI	-	User Interface
GUI	-	Game User Interface
2D	-	2-Dimensional
3D	-	3-Dimensional
FPS	-	First-Person Shooter
AI	-	Artificial Intelligence
BGM	-	Background Music
Q&A	-	Question and Answer
GDLC	-	Game Development Life Cycle

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CHAPTER 1: INTRODUCTION

1.1 Project Background

This project is an Action-adventure game named Untrashed! An Action-adventure is a video game genre that incorporates aspects from both action and adventure games. Because of its enormous scope, it is possibly the most diverse video game genre. It can include a wide range of games that are better divided into specific genres.

This project is about an adventure game where the user or player is required to clean up the city that is full of trash. People in the city does not care about throwing trash into the dustbin anymore thus you are required to clean up the mess within the time given for each level. If the player could not clean up the mess within the time given, the trash will be a huge giant trash monster which you need to defeat to clean up the mess again but with a shorter time limit. The game will be finished if the player succeeds in cleaning all the areas in the city. This game will be developed using Unity Engine. The game's target audience is more focused on younger generations and children.

This project is inspired by the game called 'Island Saver' and 'Viscera Cleanup Details'. The difference is this project teaches the players about maintaining cleanliness and the importance of recycling. Information will be given to the players through the loading screen to provide players know the rules and what to do in the game. The objective of this project is to make sure all the areas are clean without any trash.

Untrashed! is a simple game that was made to raise awareness among all individuals, from younger generations to adults, because there are not many games that educate us how to keep our surroundings clean nowadays, and this game allows the player to experience how to do so.

1.2 Problem Statement

The environment in which we live is critical to our survival. People who are unconcerned with the environment just do not realize how vital it is to all of us, even if it does not directly affect them. The more individuals who are unconcerned about our environment, the more contaminated it will become.

This project has the potential to teach our younger generations about recycling and cleanliness. Having experience while playing the game will also draw many players who will learn the necessity of keeping the environment clean while having fun.

1.3 Objectives

- i. To observe the elements and requirements of action-adventure games for trash disposal awareness.
- ii. To develop an action-adventure games based on the identified elements and requirement.
- iii. To analyze the level of awareness gained from the people that plays the game.

1.4 Goals and Genre

The goal of this game is to deliver educational and entertaining information to younger generations about the necessity of keeping the environment clean, the importance of recycling, and the importance of preserving cleanliness.

The game is an action-adventure with a theme of a littered city and a trash-filled environment, as well as some fantasy elements.

1.5 Game Features

This project is targeting on younger generations between 8 to 15 years old where mostly people around this age can understand the rules of the game and can interact according to the simple rules were given. Furthermore, this project also focused on children because the aim of this project is to know whether the target audience will gain information about maintaining cleanliness and recycling or not.

To advance to the next level, players must achieve their objectives. After the player completes a level, that level will be unlocked. After completing all the levels in the game, the player can play it again, but to unlock mini games, players must look for secret mini game features on one level.

The mini game for this game is look like basketball games in which they must throw trash into the designated recycle bin to obtain a score.

1.6 Conclusion

In conclusion, this chapter states the report's introduction, which includes the project's background, problem statement, objectives, goals and genre and game features for this game.

With this teaching method, it will make use of the positive qualities of this game to pass on information to the younger generations. It gives a new lease on life by turning it into a fun, exciting game without the need for tedious courses.



CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter will go through the game's genre, a list of existing games that are related to the project, a comparison of the existing games, and the project methodology used to develop the project.

2.2 Genre

The game genre for this game is Action-adventure game. Action-adventure is a video game genre that incorporates aspects from both action and adventure games. Because of its enormous scope, it is possibly the most diverse video game genre. It can include a wide range of games that are better divided into specific genres.

Action-adventure gamers are better learners who have improved because of playing action-adventures games. 50 hours of action gameplay over nine weeks may turn non-gamers into gamers. Surprisingly, the rise in performance lasted a long time, with improvements visible months to years later. (Melina Unchaper, 2016)

There are many debates in the gaming community and the media about what exactly constitutes an action-adventure game. Some people consider action games to be a distinct genre, while others consider them to be situational problem-solving games with physical difficulties or time

constraints. Due to its wider scope, the word "action-adventures" is frequently used to refer to a specific subgenre.

2.3 Existing Games

The next subsections provide explanation about existing games in Action-adventure genre which are Island Savers and Phasmophobia since there are not many games that based on Action-Adventure Educational game.

i. Island Saver



Figure 2.1 Island Saver

Island Saver is a free-to-play action-adventure game produced by National Westminster Bank and developed by Scottish studio Stormcloud Games. Island Saver is a video game where player is required to save Savvy Islands from pollution. The game's objective is to traverse an island. New areas can be unlocked by spending in-game coins. The player learns about the fundamentals of using a bank account, in addition to related topics such as paying taxes. Two downloadable expansions are available with the proceeds going towards the charities SpecialEffect and Young Money.

ii. Phasmophobia



Figure 2.2 Phasmophobia

Kinetic Games produced and published Phasmophobia, an indie horror game. In September 2020, the game was released in early access on Steam for Microsoft Windows, featuring virtual reality support. Phasmophobia is a video game in which players can join up with up to three other players to investigate haunted areas filled with ghosts, spirits, and other paranormal events as a team of paranormal detectives.

2.3.1 Comparison of Existing Games

	Island Saver	Phasmophobia
Gameplay	The game's objective is to traverse an island. The player learns about the fundamentals of using a bank account, in addition to related topics such as the concept of paying taxes. Two downloadable expansions are available with the proceeds going	The game features 14 different ghost types, each of which behave differently. The player takes control of one ghost from a group of up to four players in the roles of ghost investigators. The players must collect various types of