

#### TPS GAME WITH MODULAR HIT POINT SYSTEM

#### **UNDERGRADUATE THESIS**

Submitted as one of the requirements to obtain Sarjana Komputer (S.Kom.)

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FACULTY OF COMPUTING
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# TPS Game with Modular Hit Point System

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TPS GAME WITH MODULAR HIT POINT SYSTEM By Bryan Tannovento Meledy 001202000155 A Final Project Submitted to the Faculty of Computing President University In Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Informatics Cikarang, Bekasi, Indonesia May 2023 Copyright By Bryan Tannovento Meledy 2023 Student Name: BRYAN TANNOVENTO MELEDY Advisor: CUTIFA SAFITRI Revision Checklist No.

Correction List Revision by Student Pages 1.

Add timer for playing the game Adds timer to the gameplay for each level.

36 - 39, 90 -93 Just like the previous iteration of the game, after selecting a level, player will be loaded in the level.

Player then can select a character to play.

This time, a timer is added into each level.

An objective description is also added into the player's HUD, telling the player on what should they do in the level.

A defeat screen has been added as well.

In level 1, there will be a barrier blocking the player from proceeding into the objective.

The player will need to touch the start orb.

After touching it, the barrier will disappear and the timer will start.

In level one, the timer is set to 40 seconds In level 2, after spawning right into the level, a 5 seconds timer will count down.

After it finishes, a 60 seconds timer will count down.

The player will need to destroy 10 enemies before the timer runs out.

2.

Follow finpro guideline to write the report (page number, line spacing, caption, references, etc) Revising the page numbers for the opening pages from abstract to list of figures by changing from standard 8 - 18 numerical values to roman numerals.

3.

Line spacing revision to double line spacings.

Done on most pages especially on chapter 4 and 5.

19 - 116 4.

Captions revision by switching the placement of the captions, especially for the tables, to the top the tables and bottom of figures 35 - 46, 52 - 57, 112 - 115 5.

Fixing reference writing following guideline example 98 6.

Removed Pronouns on all pages of all chapters and abstract i, 1-98 6% SIMILARITY INDEX 2% INTERNET SOURCES 1% PUBLICATIONS 5% STUDENT PAPERS 1 2% 2 1% 3 <1% 4 <1% 5 <1% 6 <1% 7 <1% Full Draft Revision ORIGINALITY REPORT PRIMARY SOURCES Submitted to Bellevue Public School Student Paper Submitted to Oklahoma State University Student Paper docs.unrealengine.com Internet Source Submitted to President University Student Paper Josephine Angeline Poetri Yanes Phun, Cutifa Sa tri.

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scholar.sun.ac.za Internet Source Submitted to University of Greenwich Student Paper of After Revision PLAGIARISM CHECK RESULT Before Revision 7 ABSTRACT In the final project, the writer attempts to create a third person shooter game and implement a Modular Hit Point System.

The approach for Modular Hit Point System is proposed to all people love video games like game enthusiasts who are interested in unique or interesting game mechanics.

The Modular Hit Point System allows the player to approach enemies differently and to be more careful about in-game decision makings to coplete level objectives.

The benefit of the proposed work is to enable people from shooter game genre or people from non-shooter game genre to experience or test out different approaches to game mechanics and prioritize important decisions like repairing damaged character parts before engaging enemies and restoring character's full combat capability.

The approach utilized to achieve the project goal is by using a game engine can be run and operated in Windows operating computers for game development.

Since the shooter game genre is very popular in Windows OS machines, the writer creates the game mechanics and logics similar to other shooter games so any experienced shooter player can try out the game while having the different game mechanics running.

By using the proposed method, the result gain is to improve and utilize a different approach to the hit point system for most shooter games, creating a unique way to play the game than usual shooter games while also is available for people who are not too familiar with the shooter game genre to experience shooter game without too much issue.

i 8 DEDICATION For me, anyone who loves video games and video game developers ii 9 ACKNOWLEDGEMENT I would like to thank God I can actually achieve my main goal of the project and finish the project to a functioning state and I'd like to thank all of the following people who have supported me in the making of the final project 1.

To myself, for putting in a lot of effort and not giving up on the project's main feature and functionality.

I couldn't thank myself more for still not giving up.

2.

To my academic advisor, Miss Cutifa Safitri, for helping me with problems during the making of the final project 3.

To my friends who've helped and supported me throughout the project development iii 10 TA

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#### **ABSTRACT**

In the final project, the writer attempts to create a third person shooter game and implement a Modular Hit Point System. The approach for Modular Hit Point System is proposed to all people—love video games like game enthusiasts who are interested in unique or interesting game mechanics. The Modular Hit Point System allows the player to approach enemies differently and to be more careful about in-game decision makings to coplete level objectives. The benefit of the proposed work is to enable people from shooter game genre or people from non-shooter game genre to experience or test out different approaches to game mechanics and prioritize important decisions like repairing damaged character parts before engaging enemies and restoring character's full combat capability.

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