Programming Commercial Game Engines

Assignment 2

Due: Week 9 (Check Submission deadline on FOL)

You've been tasked to create the next big survival game. The art style, points, and feel are completely up to you but the core mechanics must fulfil the requirements of the marks below. The player must control a character that is avoiding and shooting oncoming enemies. Each enemy that is eliminated gains you points. Once an enemy touches you, you lose and the game should start over.

The Game can be in 2D or 3D. Demo can be found on FOL under the assignments section.

MENU

- 2 Marks Game starts on a menu with buttons for playing and exiting the application
- 1 Marks Menu has a slider to increase or decrease difficulty of the game
- 1 Marks Difficulty set from the slider is saved once game starts
- 1 Marks Upon menu loading the slider is set back to its last saved position

GAMEPLAY

- 2 Marks Character moves forward, back, and can turn (or strafe) left and right using W A S D & the arrow keys
- 1 Marks Left mouse click fires a single shot
- 2 Marks Right Mouse button being held down shoots rapid fire until button is released. There must be at least some delay between shots.
- 2 Marks New enemies are constantly created and move towards the player
- 2 Marks The number of enemies increase when the difficulty is set higher
- 1 Marks Points are gained and displayed for every enemy eliminated
- 3 Marks When an enemy touches the player the game restarts. Player position, enemy positions, and score should all reset

AUDIO

- 1 Marks Background music is used
- 1 Marks Sound is played for each shot fired
- 1 Marks Sound is played when an enemy touches the player

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BUILD

- 1 Marks Game is playable as a compiled .exe, not just inside unity editor
- 1 Marks Your .exe has a custom icon, not just the default Unity Icon

BONUS 3 Marks - Game is playable using a controller such as an Xbox One or PlayStation 4 Controller. <u>To get this mark you must get perfect on all other marks!</u>

Please do not only submit code that I gave you in class! You are welcome to build off of that code but avoid handing in the exact same examples.

-10% per day late penalty.