

The purpose of this test is to check your technical skills and code practices. You are not allowed to use any plugins/addons from unity asset store.

The test consists of creating a top down shooter game where you gotta last as long as you can, and kill enemies to gain points. You can get assets from the following sites:

www.mixamo.com (for 3d models and animations)

<https://opengameart.org/> (for props and other assets)

You can be as creative as you want but the game should have the mechanics and functionalities listed below:

Mechanics Overview

In this game you should be able to navigate a room and shoot at enemies that spawn at random spots in the room. Each kill will give you points. Number of enemies spawn increases as time passes. Game ends when player dies.

The World

It could consist of a simple room with 4 walls. They should have at least a texture.

Player Controls

You can move the player using regular keyboard controls (arrow keys and WASD). And shoot with SpaceBar or Right click. Your character could rotate to the direction they are looking.

Player Character

Player model should contain the following animations:

- *Idle*
- *Walk*
- *Dead*

Enemies Characters

Enemies should have the following animations:

- *Idle*
- *Walk*
- *Attack*
- *Dead*

AI

Enemies should have the following behaviours:

- *Wander* (Enemies will move around the room and look for player)
- *MoveToTarget* (Enemies will move to a target, in this case the player).
- *Attack* (Enemies will attack the player when reached).

Object Pooling

Projectiles and enemies spawn/despawn should be handled using an object pooling system.

UI

Should display player health and points gained by player, along with a timer to display time in game.

Weapons

You can pick up weapons on the go and equip it. (Weapon ammo is a plus).

Health Pick Up

You gain a bit of health when you pick it up.

Speed Pick Up

Player character receives a speed boost.