
Assignment 2

Due: November 17, end of day.

In this assignment, you will recreate common mechanics found in third person action games, like Dark Souls and Monster Hunter. This document will describe the requirements in detail and the point distribution. Please be considerate of your project's file size. You will submit your whole project by Dropbox, and if the size is too large, you might not be able to do that. I would recommend a project size under 2 GB.

Total points: 10 + bonus.

Requirements (1 point each + bonus)

1) HP

Both the player and enemies have HP. The player has HP displayed on the HUD.

Bonus

Enemies have an HP bar displayed on top of their head.

2) Melee Attack

The player attacks by swinging a weapon in front of them.

Bonus

Add a second melee attack. Both melee attacks are comboed in a sequence. They must differ by at least one property:

- Different damage
- Different knockback
- Different hitbox

3) Ranged Attack

The player attacks by shooting a projectile which flies straight (arrow or dagger).

Bonus

Add a second ranged attack that uses a different input action. The player throws an explosive item which deals area damage.

4) Stamina

Running and attacking depletes stamina. There is a stamina UI to display the stamina. Stamina regenerates over time.

Bonus

When stamina reaches 0, the player is exhausted and must stay still to recover its stamina past a certain threshold (ex: 20%).

5) Healing

Drinking a potion or eating food restores your health. This animation takes time to finish.

Bonus

During this, you can walk, but not run.

6) Evasion

The player can perform a maneuver (roll, dash, ...) to quickly move in one direction.

Bonus

During this, the player is immune to damage.

7) Melee Enemies

These enemies run to the player and attack at a close range.

Bonus

When a melee attack hits the player, the enemy follows up with a second attack combo.

8) Ranged Enemies

These enemies aim from far and shoot straight projectiles at the player.

Bonus

Add vision so they avoid shooting without having a clear vision line to the player.

9) Hybrid Enemies

These enemies perform a melee attack if the player is close, otherwise they fire a projectile to the player.

Bonus

When under 25% HP, they enrage and have increased movement speed and reduced attack cooldowns.

10) Item Drop

Enemies drop resources (souls, coins, ...) that the player collects.

Bonus

Ranged items and consumables used by the player have limited use. The player must collect these items from enemies to replenish their use.

Note: All attacks need to be able to hit, and not only be visuals. They need to deal damage on hit. Different enemy types have different skeletal meshes.