



A totally unrelated picture from <https://rare-gallery.com/934961-battle-charge-knight-fighting-fantasy-art-fantasy-men.html>

Endless Ascension

Distinction Task - A portfolio project for COS20007

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Leonardo Liew

102781996

Overview

This project will mainly be a top down RPG game with idea inspiration from "Soul Knight" by ChillyRoom. This game will feature similar game mechanics and system from the inspired game but is implemented by myself without referring to the actual source code. All ideas and inspiration comes from the gameplay itself.

Goals

1. To make a simplified playable RPG game similar to Soul Knight focusing on the mechanics and not so much on the graphics.
2. This project aims to challenge how close a real game can be created within the short time limit of the semester.

Lore

In a world with portal travel, the main character travels to the grocery store to buy ingredients only to find that the destination does not look like a grocery store. The portal travel is assumed to be intercepted and now the main character is in some crack of dimensions that look like a dungeon. He will now need to look for an exit to continue his portal travel.

Portals in this world function like a line, you go in one end, come out the other. In this case, the line broke and turned into two. The main character will need to find the second one which hopefully leads him to the grocery store.

Specifications

This part will go through briefly the scope of the game and mechanics planned during the design stage.

The game will feature a map-progressing gameplay where the player will fight their way through the map, looking for an exit. The exit marks the end of the game. However, the player will have to defeat a boss before even escaping. The plan is to fight your way through the dungeon to escape it.

A player will have means to fight with a weapon that is somehow near the spawn and can get a new weapon afterwards through a "vending machine" that gives random weapons.

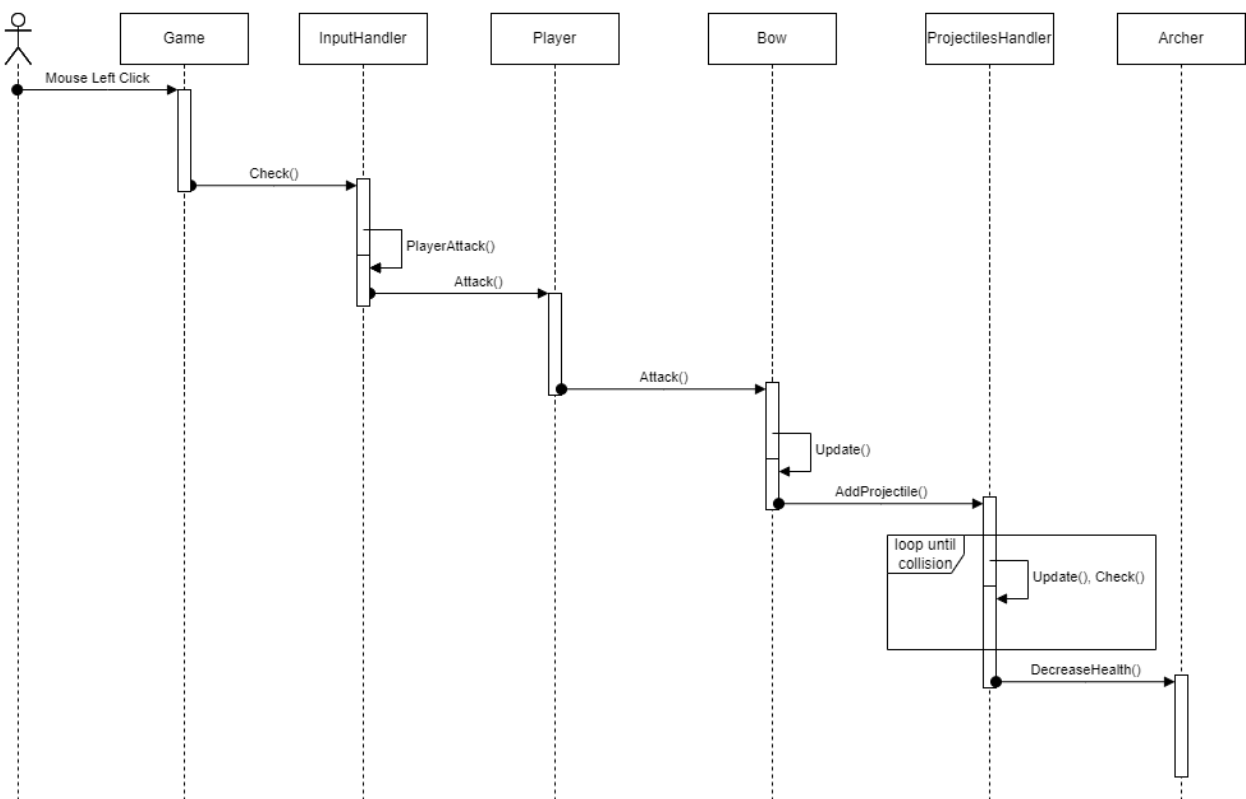
The dungeon enemies will drop coins which will be the currency system used in this game to buy weapons. Each weapon type comes with unique attack patterns.

Enemies will fill the floor and fight the player with unique attacks. Upon death, they will drop related items such as health and coins.

The main expandable part of this project is the enemy and weapon variations. Level design may also be one of them. Due to time constraints, there will only be a total of three weapons and enemy types implemented.


UML Sequence Diagram

Sequence Diagram of Player shooting an arrow towards an Archer enemy



The figure above shows the UML sequence diagram for one of the most complicated functions in the project - player shooting an arrow towards an enemy archer.

First of all, the player will input a Left Mouse Button which is the primary attack button for the game. The game will run a check function every cycle which will call the input handler's check to check for the user input by calling the PlayerAttack() function. The user input is confirmed and calls the attack function in the player object.



The player class will receive the call for the attack function in it and checks for the conditions in it - if a weapon is equipped and calls the attack function of the weapon.

The weapon in this case is a bow that will receive the attack call from the player and turn a boolean to true, indicating the weapon is attacking.

In the weapon object's update function, it will register that it is attacking and create a projectile that will be added into the projectile handler's object's list.

The projectile will then be updated every cycle until it hits an enemy archer.

If it hits the check class will do work and call the decreasing health function in the enemy class. The enemy archer takes damage and health is decreased.

Developer Logs

Where there is a start of a great journey, there shall be records of said voyage for ease of storytelling in the future. This section is where I will be recording my coding journey of Eternal Ascension. It will be in first person perspective and in an informal tone, hopefully not too cringe as I have fun with it.

Day 1 - 15 May

Damn all i did was copy a random picture and put it as my game window icon bro.

Day 2 - 16 May

I made a player and it can move now yay. Made a sprite for it too with heavy inspiration from those io games like zombs.io hmmm. It can turn to always look at the cursor direction as well.