

The Ripening

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Abstract

The Ripening is a shooter game where players play as a clock and shoot produce (e.g. avocados and bananas). Once the produce ripens, it will expire and the player receives points for ripening the fruit.

Introduction

Goal

The aim of this project was to create a goofy, creative game with simple mechanics and low difficulty. With limited time and resources, we recognized that we would only be able to implement basic features. To compensate for this we tried to come up with an interesting concept and fun details during gameplay.

Previous Work

Our project was partly inspired by the Pacman game created by Jerry Zhu, Daniel Wey, Michael Fletcher and Hollis Ma.

Approach

Methods

Player and Camera Movement

Users can navigate the scene as the clock using the WASD keys on the keyboard and move the camera by clicking and dragging the mouse. The clock is always oriented away from the camera and the keys move the player based on the direction the clock is facing (ie, 'W' moves the player away from the camera).

Scene Layout

Since we decided not to include gravity in our physics calculations, the scene simply consists of four walls which bound the player, enemies and projectiles within them. Given additional time, we aim to construct a more complex map. However, if difficulties arise, we will maintain this arena-based style.

Enemy Spawning

As it currently stands, enemies spawn only at the initialization of the game. They move towards the player at varying speeds in an attempt to make contact with the player. Additionally, each enemy has varying health depending on the object they are. After taking the requisite amount of damage, they will de-spawn from the map since they have sufficiently ripened.

Shooting

Users initially possess a die as the only ammunition. After shooting the projectiles, each projectile is moved forwards on every timestep and checked for collision with enemies and walls. If a collision occurred on a given timestep, the projectile object is removed from the scene. Additionally, if the collision was with an enemy, a random number between one and six is generated and subtracted from the enemies health.

Scoring

Players are awarded points for each enemy defeated and the score is accumulated until the player dies.

Results

Discussion

Next Steps

In the coming days we plan to make a few key additions to our current project. First, we plan to add enemy spawning to create a more dynamic game. We will utilize spawn points to do this. Furthermore, we will make a more complex map to make the game more engaging.

Related to this, we will add color to the walls to improve the aesthetic of the game. If possible, we want our map to be almost maze-like and create a surprise feeling when the character comes upon enemies. Finally, we have not added a feature where the player can lose yet. This is needed to give the game consequence. Along with this is a game over screen and start menu.

There are a few minor details we believe will improve the game as well which we have not implemented yet. One such feature is a recoil when objects intersect with each other. This recoil will occur when contacting walls, projectiles, or other characters. We want to add spinning to the projectiles and some bobbing movement to the characters. Finally, we want to implement the ripening feature which will cause the fruits to darken as they take damage.