

Assignment 1 Report

Game Introduction

My Custom Game is heavily based off Unity's 2D UFO Tutorial Game. It is a one level stage in which the goal is to navigate the level to collect all the golden "Pick Up" objects as fast as you can.

Instructions

From the Main Menu, you can either choose to play the Roll-a-Ball Tutorial Game, or the Assignment Custom Game. The "i" button will bring up a pop-up of the game's brief info.

You can use the directional keys or the "WASD" keys to control the UFO object to navigate through rooms and corridors to find and collect golden pick up objects. The control may be able to be custom set due to Unity's standalone player.

The UI displays the number of pick ups left to collect and how much time has passed since starting the level. When you've collected all the pick ups, the game will say "You Win!" and the ingame timer will stop to display how much time it took to complete the level. There are Speed Boosters to help get around the level, but be careful of possible dead ends that will make you go Out of Bounds and put you back to the start.

The included Roll-A-Ball game has the same goal and controls as the UFO game.

References

The Roll-A-Ball Game is an exact replica from Unity's Tutorial.

The Custom Game is a variation of the UFO Tutorial Game by Unity and it shares the same objective. Assets used were the UFO and Pick-Up sprites, as well as the Scripts that make up the underlying game mechanics.

So What's Changed?

The major change to the game was the level layout. No longer being just a one room level, the area is now a series of rooms connected via hallways. Custom floor and wall assets were made based off the original level background sprite, but split as opposed to being one big sprite. Minor changes include tracking how many pick ups are left, rather than counting how many were collected, and an ingame timer to track how long it takes to complete a level.

The notable additions, however, are Out of Bounds markers, and Speed Boosters. The Out of Bounds markers are triggers that set your position back to start while the level is still going. The Speed Boosters, will immediately send you moving at a decently fast velocity based on what directions they're pointing, to aid navigating around the level.

Assessment

Doing this assignment was a fun experience in getting to learn the Unity Editor and what it offers for game developing. What I learned was how it's possible to use Triggers to cause events for the players, such as the trigger to signify the player is Out of Bounds, if they've gone over a Speed Booster, if they've reached a critical area and must trigger a cutscene or audio cue, etc. Being able to implement features was quite the experience as well, such as the main menu, or a game timer.

While I was satisfied with what I implemented into the Custom Game. What I could improved on in the would be to experiment with different physics to make the Player object smoother to control, as well as level design and try out different kinds of platforming hazards.