

Game Design Document of Endless Runner

Yu Ren – 001051249

The name of the Game

Endless Runner

Concept

Endless Runner is a game for tutorial Unreal Engine. In the original official teaching, we learned how to make the character move forward automatically, how to use A and D inputs to do corner turn, how to set obstacles to destroy the character, how to add pickup items, and so on. In my Endless Runner, I added the following five feature enhancements.

1. Add a prop, so that the character can destroy the blockers.
2. Add timer for props' effective time.
3. The character can crouch to pass through specific terrain.
4. Store the record of the game to improve game experience.
5. With the progress of the game, change the speed of the character to increase the difficulty.

Game Flow

Players use different inputs, which include A for turning left, D for turning right, S for crouching and Space for jumping, to avoid being destroyed by obstacles and terrains. There are cash on the road. You need to pick them up because it's the only way to test your game ability. You can also collect the props with that the character can destroy the obstacles. Be careful of the effective time of the props, it will be shown on the top

of the screen. And try your best to pick up cash, the highest number will be recorded and shown in next games. Of course, the game will be more and more difficult because the speed of the character will be faster and faster.

Game Elements/Assets

Character: A third-person Character who can move forward, turn left, turn right, jump and crouch.

GameMode: To set up the scene and initialize the game.

Obstacle: A blocker which can destroy the character.

Topographies:

- Normal floor: The normal floor on which there might be blocker or props.
- Floor with corner: In this kind of floor, the character need to turn for right direction, or the character will be dead.
- Floor with ramp: It's just a normal floor with a ramp.
- Floor with gap: There is a blocker to make the character stop, the character need to jump over it.

Pickups:

- Cash: One item is \$10. The number of cash is an important index to be recorded.
- Prop: Collecting the props, the character will have the power to destroy the obstacles for 10 seconds.

Game save object: It's used to store some information which will be used later.

Map: To apply the scene for game.

Main Character(s)

A third-person character. It will move forward automatically and speed up. Players can control it to turn left, turn right, jump and crouch.

Story

It's a city marathon and you are an athlete. It's very hard to run through such a big city. There are different kinds of terrains and obstacles. Sometimes you need to turn left or right, and sometimes you need to go uphill or downhill. There are some props on the road to help you keeping playing. The target is to collect cash on the road. Try your best because everyone's number of collections will be recorded.

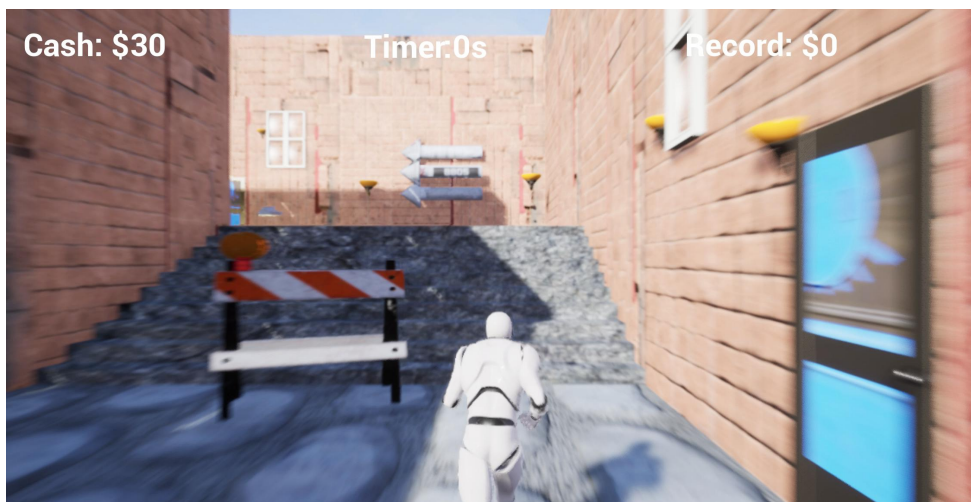
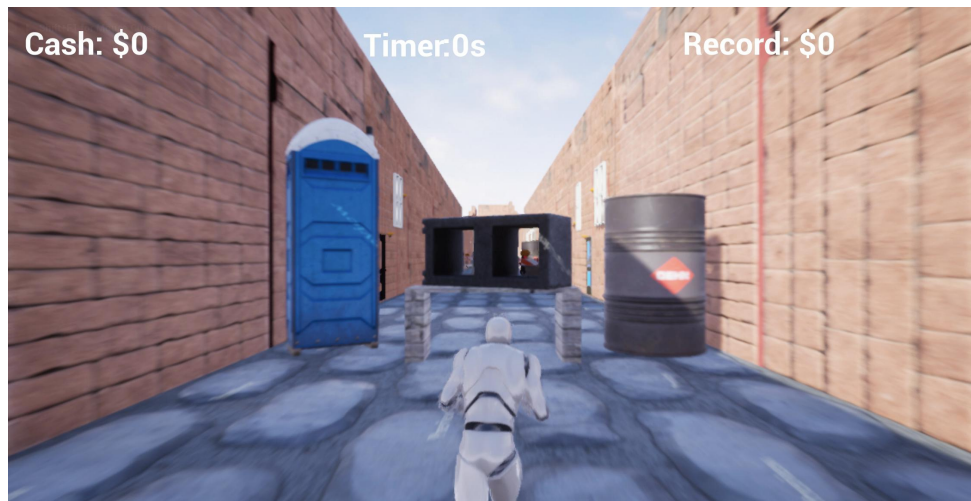
Gameplay

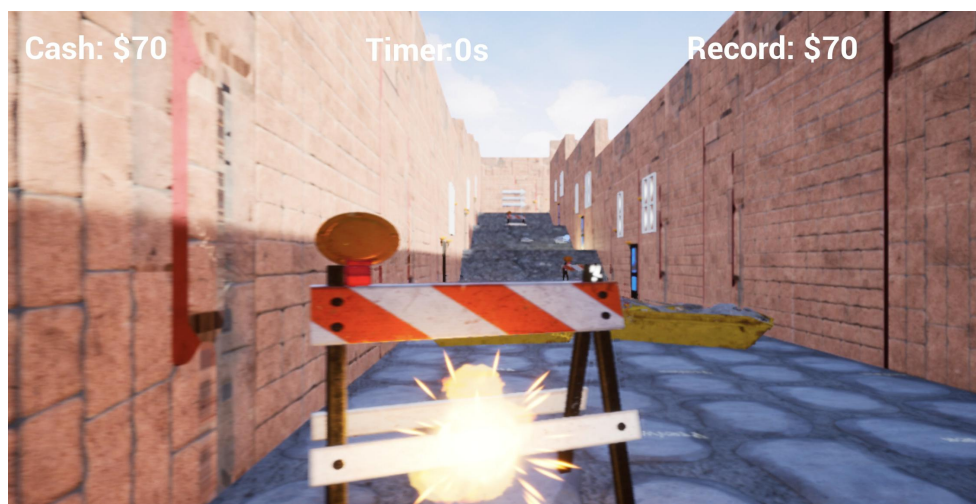
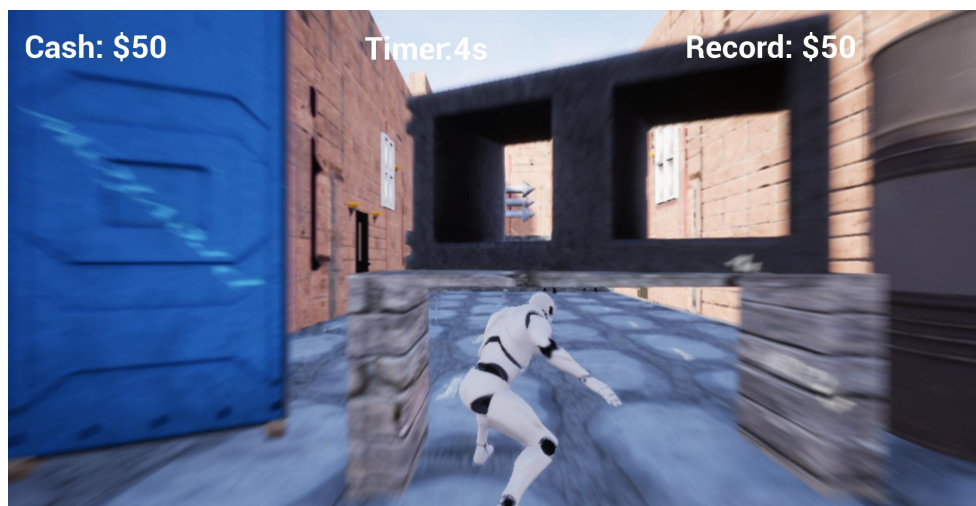
It's just a game for relax. The player needs to click the A, D, S and Space buttons of the keyboard to control a third-person character to move forward in a city. On the way, players need to react quickly to control the character to avoid the obstacles on the road. At the same time, players also need to pick up as much cash as possible. There might be props on the road, collecting which the character will have power to destroy obstacles for 10 seconds so that players can hold on longer. The speed of the character will increase over time, which means the game will be more difficult over time.

Graphics and Styling

In order to make the game vivid, I add crouching movement to the third-person character. Besides, I set up some things which will appear in real life in the map to make the game lively. I also changed the model of character. But it's in contradictory

with the crouching movement and I cannot find the animation related to the new modal.
So I canceled it.





Music and Sound Effects

I just add audios when the character is destroyed or picking up the cash.

Technical Description

Because I just set the keyboard inputs. This game can just be launched on devices with keyboard inputs.