* What worked, what didn’t. How stuff was changed based on that.

Social/ Political

* Offensive to Australia?
* Considered animal abuse?
* How the main character wears a blue jacket which signifies male, whilst never specifying his gender is a social problem.

Source Control

* Build problems with using c++, so we had to make multiple versions with different frameworks to see which worked.
* Source tree .ignore file problem, how it blocked VS code and needed binaries file
* We need the same visual studio version to compile and build the code each time.

VFX

* Added particle effects to the game to give abit of polish to the game, such as Jellyfish, butterflies, fireflies, falling leaves, Boomerang trail and walking, jumping smoke.
* Added smoke on the characters actions to give more weight to his movement. Idea was inspired by RIME- Simon Trumpler- vfx artist.

Design

* Made the trapped animals act scared to give the player a need to free them. Similair to the Teensies in Rayman series.
* Took inspiration for level transition from successful games , Spyro Reignited, Mario 64, Yooka-Laylee
* To improve the game add cinematics
* Could also improve on creating our own animations from scratch, did play around with motion capture but made the character feel too human.
* Adopted real world animal behaviour into our games, such as kangaroos attacking when cornered and aren’t exclusively territorial
* Animations are comical to appeal to a younger audience.
* TESTING- Mechanics, animation feel, flow of the game.

Abstract

1.Background

What was your team aiming to do?

The team wanted to create an aspiring 3D platformer with added unique gameplay mechanics whilst also including generic 3D platformer mechanics (such as Walking, Running, Jumping and double Jumping) as to still seem familiar to people who have played 3D platformers before. We decided to add the unique elements as to set it aside from other previously released games in the same genre.

 What was the composition (in skill terms) of the team?

As we were using the unreal engine, an engine that the team are very familiar and adamant in, we was able to utilise our skills with the engine to provide a range of services to the project. From gameplay programming to creating and importing animations to art assets. There was never a point when if we came up with an idea we said it was impossible to do, we would agree that it would be challenging and time consuming. If we able to fit this idea into our planning we would then act on it.

 What role did you play in the team?

I had many roles in the team, I was a gameplay programmer, creating the mechanics for the player character, which ranged from the abilities he could do to his death functions. I was also an animator, creating an importing animations and making them blend well together in the engine, These were then used in the animation blueprints which I also did, both for the main character and for the enemy. I did the UI programming, which consisted of making the menus work, the fading between menus, the pause menu and main menu. I also animated the UI for the collectables in game and for the health, the health had to be optimised so that it only updates in the UI when the player if damaged or gains health back. I was also a technical artist, creating tools for the other designers to use to speed up the level design aspect. The tools I created were the; Fence Tool, Floating Platform tool, Captured friends tool, Portal tool, Target tool, I attempted to create a path tool for the stone pavements as to reduce draw calls however it didn’t work properly and the other designers felt like manually placing them made the level look better. Also with being a technical artist I was optimising the game to make sure it runs at a stable frame rate, this was done by frequently checking the profiler, making sure the culling was working properly for most assets, most of the time the problem was with assets placed with the in engine foliage tool, I also checked the optimisation viewports to see the assets lightmap densities in real time and then alter them in the assets settings. I also created a few particle systems to add a bit of polish the game. The systems I crated were for the boomerang stream to make it appears like it was going faster as it left a trail, I made jellyfish particle effect it also made it so it was easier to keep track of where the boomerang is, I created the smoke effect for when the player walks, runs and lands. The original idea was inspired by Simon Trumpler and his talk on VFX on Rime. I also did Level Design, by giving feedback to other designer creating levels, either by discussing flow of the level and how they can adapt their ideas, or they are not utilising all the mechanics that are available to them, which made certain mechanics feel obsolete as they were hardly used. Or by saying to add more platforms to make a jump easier as some were either too hard and felt like the player was glitching to get to a area.

 What state was your prototype in at the point when this module started?

The prototype was at as stage where the core mechanics were just barely working, as there were clear bugs and it needed more polish. The game itself was playable with one main level. However, with that design of the level done and with the better tools developed for level design, it became easier and more apparent to make more levels.

2. Introduction

In this paper I’m going to go through in detail, what I did in the project, what inspired me to do that aspect, how I managed to do that aspect, either by my own tuition or by inspiration from another’s work through lectures or previously released games. I will also go into detail of each aspect of how it was implemented into the game and what that had on the design process from there. Either from level design or mechanic design.

3. Activities on the project (Change)

-Made tools

-Added particle effects

-Gameplay programming

-Controller inputs

-Optimised blueprints- Keys

-Animations

3.1 The Task undertaken(change)

3.1.1 Brief discussion of relevant literature

3.1.2 How this work was approached (design ect)

3.1.3 Problems, solutions and evaluations of this work in comparison to research undertaken

3.2 The second task undertaken (change)

3.2.1 Brief discussion of relevant literature

3.2.2 How this work was approached (design ect)

3.2.3 Problems, solutions and evaluations of this work in comparison to research undertaken

4. Reflection

5. Conclusion

References

VFX

Simon Trümpler – Smoke VFX talk - <https://www.youtube.com/watch?v=ExD_p3hsV80&t=695s>

Animal AI Design

Boxing in Red Kangaroos, Macropos Rufus: Aggression or Play?- <https://escholarship.org/uc/item/0dv2h5zv> - Croft, D.B. and Snaith, F., 1990. Boxing in Red Kangaroos, Macropos Rufus: Aggression or Play?. International Journal of Comparative Psychology, 4(3)