GAM6001-18 Major Project

Individual Report

Assessment 02

McDonald, Bradley

1608793

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# Abstract (Do Last)

This report is to…

# 1.Background

## 1.1 Aims of the project.

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. The team decided to add the unique elements as to set it aside from other previously released games in the same genre.

## 1.2 The Team

The team was made up of five people, an artist, a programmer and three designers. Each person applied skills that adhered to their role. Whilst branching into artist or programmer depending on workload. The artist would create 3D models, unwrap, texture and import into engine for the designers to place within the game. The Programmer would focus primarily on Enemy AI and fixes bugs when attempting to build the game. The Designers would create tools and polish to the game in the form of particle effects or sound whilst creating and designing multiple levels for the player to navigate in UE4 (Epic Games,1998).

## 1.3 What role did you play in the team?

The role in the team of which the author carried out was that of a designer in a small indie team. As quoted by Mike Bithell: 'The highs and lows of creative freedom are very addictive'; Having developed Thomas Was Alone and Volume, the indie games designer is both a one-man studio and a devoted collaborator. But what does his work actually involve? 2015, , Guardian Newspapers. Which implies to use and learn a wide range of skills within the project, this is different than being a designer on a large AAA team, where the role would have been more specific. The role of being a generic designer meant going into different aspects of game development, such as; Gameplay Programming, Animating, UI Design, Technical Art and VFX. This allows for constant learning and developing new skills as the project progressed.

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

The prototype was at as stage where the core mechanics were working, there were a small number of visual glitches to do with animations, of which needed polishing. The game itself was playable with one main level. However, with the overall design of the level done and with the better tools developed for level design, it became easier and more apparent to make more levels. Of which the team reorganised with the intent to create more playable areas. This was doing by using HacknPlan to organise individual jobs to the respected individuals responsible to that aspect of development.

## 2.Introduction

As one of the Designers of the team, many roles had to be undertaken to provide a quality product. The document will go into detail of these roles, what they were, how they were done and what effect these implementations had on development. These effects can range from implementing feedback from testing results, to setbacks in development which led to rework of the original design. This document will also go into detail of relevant literature and research of which informed the approach in this project, and if these findings actually were reflected in my findings or not.

These redesigns relate back to the author’s individual research within the literature review. Specifically, how implementation of new mechanics can change development of the project. This was done several times since the presentation of our prototype. Of which will be discussed in later segments of this document.

# 3.Technical Art

This section will cover the role of a technical artist and how the author took up this role through development to provide a greater service to the team and project.

The job of a technical artist as defined by (Full Sail University, 2018)“Something of a hybrid between an artist and a programmer is the video game technical artist. This person works under the direction of the art director and technical art director, and is responsible for the systems and tools associated with creating and porting art assets”. Though that is a definition of a technical artist, it is not the clearest. As an article by (Sokanu, 2019) states that “The role of technical artist is a relatively new one, but it is becoming increasingly important as consoles and PC hardware become more complicated. A technical artist works closely with the lead artist and the creative director, as well as the lead programmers. Their responsibilities include setting up and maintaining the workflow of art production, deciding which art packages and tools a studio should use, investigating new techniques, and then going ahead and implementing them”. Both quotes interlink with saying that the technical artist works alongside programmers and artists however verge when discussing tools, (Full Sail University, 2018) makes it seem that the technical artist simply decides on the tools that are being implemented whereas (Sokanu, 2019) goes into that the technical artist actually creates the tools needed for production. This keeps with how the author approached the role, creating various tools for the designers whilst maintaining a stable version of the game through optimisation.

To take up the role of a technical artist is to utilise both art and programming to create a multitude of tools so that Designers can speedily design, create and test level layouts and adjust them easily based on feedback. Be that feedback internal or external. As the author’s role of being a designer, with experience in both art and programming. The job was possible. With existing knowledge of game design, allowed the writer too tailor the tools so that a fellow designer would be able to fully utilise the tool with little or no tutorial. As they knew themselves of what a tool needed and how it needed to function in the editor.

Another task that comes with a technical artist it to optimise the game, by viewing the in-engine profiler, to see if any imported assets effect the game in either by performance (Frames per second) or they create visual glitches (Assets appears or disappearing in player view). This can lead to unanticipated stops in production of which then need to be solved before any new alteration or iterations are added to the game.

Figure 1 Unreal Engine Profiler- Before Optimisation



Figure 2 Unreal Engine Profiler- After Optimisation

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## 3.1 A Designer Creating Technical Art

The tools that were created, mostly relate to level design, with these new tools meant

## 3.1.1 Brief discussion of relevant literature

* James Miller Uni lecture
* Real-time cinematography for games-by Hawkins, Brian

## 3.1.2 How this work was approached (design etc)

## 3.1.3 Problems, solutions and evaluation 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 etc)

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

## Reflection

## Conclusion

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HacknPlan

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