XBCGD7312 Group Report

22/11/2024

Tyrique Forbes ST10191223

Gabriel Camara ST10138961

Corbin Kruger ST10035315

William Hughes ST10029867

Contents

Team Members and Responsibilities

Gabriel Camara ST10138961

Corbin Kruger ST10035315

William Hughes ST10029867

Tyrique Forbes ST10191223

Roles

Gabriel Camara

Co-Programmer

Focusing on putting the whole game together with audio/gameplay and making menus.

William Hughes

Co-Artist

Main character artist and animator

Tyrique Forbes

Co-Programmer and Technical artist

Focusing on making the main mechanics of the game.

Modelling and texturing most assets

Corbin Kruger

Co-Artist

Menu and UI Design

The Game

Title

Nature Crawls

Nature and Scope of the Problem

The problem we are addressing in this game is the problem with nature conservation in our country. We are specifically addressing three main problems: poaching, deforestation and overfishing.

Relevance of the Problem to our Demographic

This issue is pertinent because it persists daily and, despite the belief of some that it has disappeared, it still happens; you simply don't hear about it very often. In particular, the significance to our demographic is that they may soon have to deal with a future in which there is less food available, oxygen levels in the atmosphere are lower, and more creatures are becoming extinct, but they aren't as conscious of this as they ought to be.

Genre

Roguelite arena shooter

Demographic and Player Type

Our games demographic are individuals aged between 16-25. The reason we chose these people as our demographic is because they are the young generation who influences what happens next in the world and if they want a world that can sustain them, they need to be aware of these problems.

The player type are gamers who are familiar with games and are looking for just another game. The goal is to make the game as interesting to normal gamers as possible so that we can get them to realise the real problem of nature conservation.

Description and Mood Board

We are making a 3D roguelike where the player is a park ranger who uses different weapons based off of the big 5. He must enter the 3 different levels each one addressing the different problems above. The player will face off against poachers, lumberjacks and fishing pirates. If he manages to defeat them, he will please the hot anime conservationists who are dressed like the big 5. The movement will be fast paced high energy. The weapons are:

-A Charging Shield for the rhino (you charge into enemies to damage them)

Figure 1: Concept sketch of potential rhino shield (Hughes, 2024)

-An Elephant Gun for the elephant
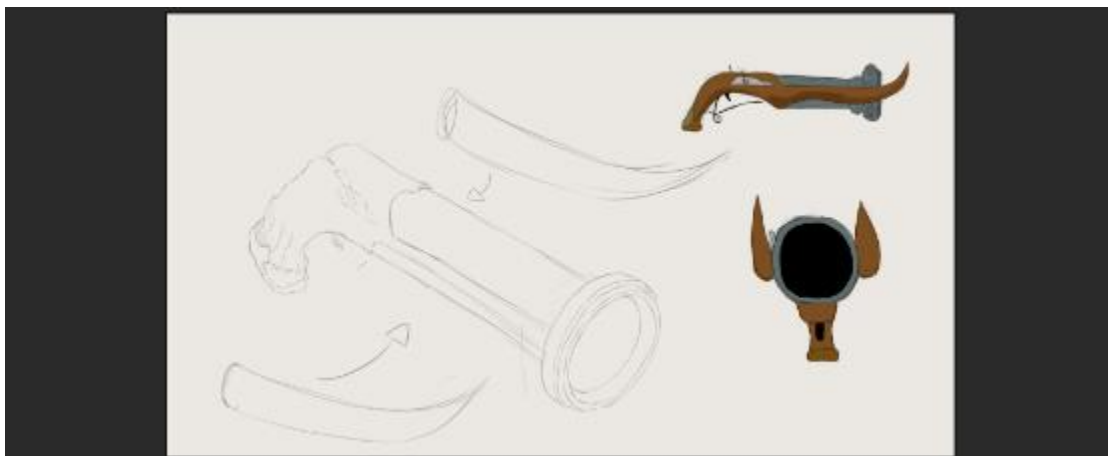
Figure 2: Concept sketch of potential elephant gun (Kruger, 2024)

- Claw Gauntlets for the lion (gauntlets that you punch with inflicting bleed damage)
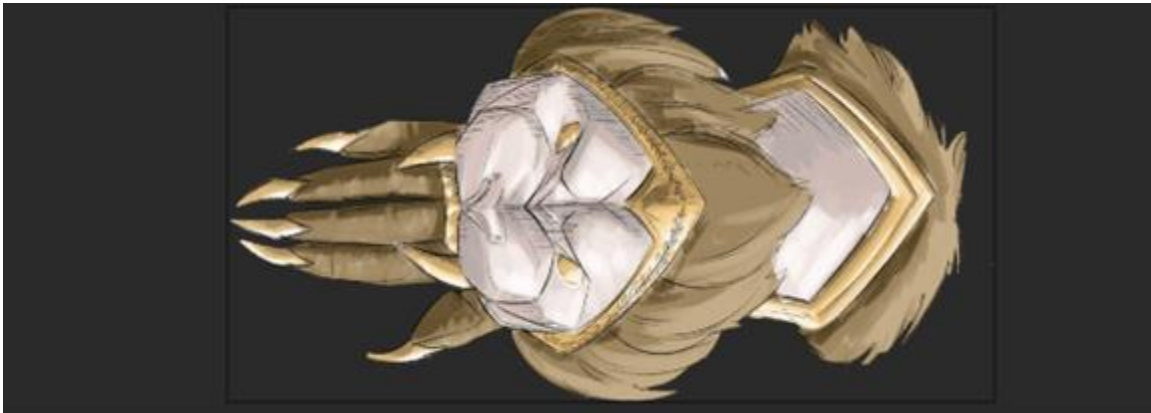
Figure 3: Concept sketch of potential claw gauntlet (Hughes, 2024)

- Stealth Revolver for the leopard (if you hit enemies in the back, it instantly reloads your clip)
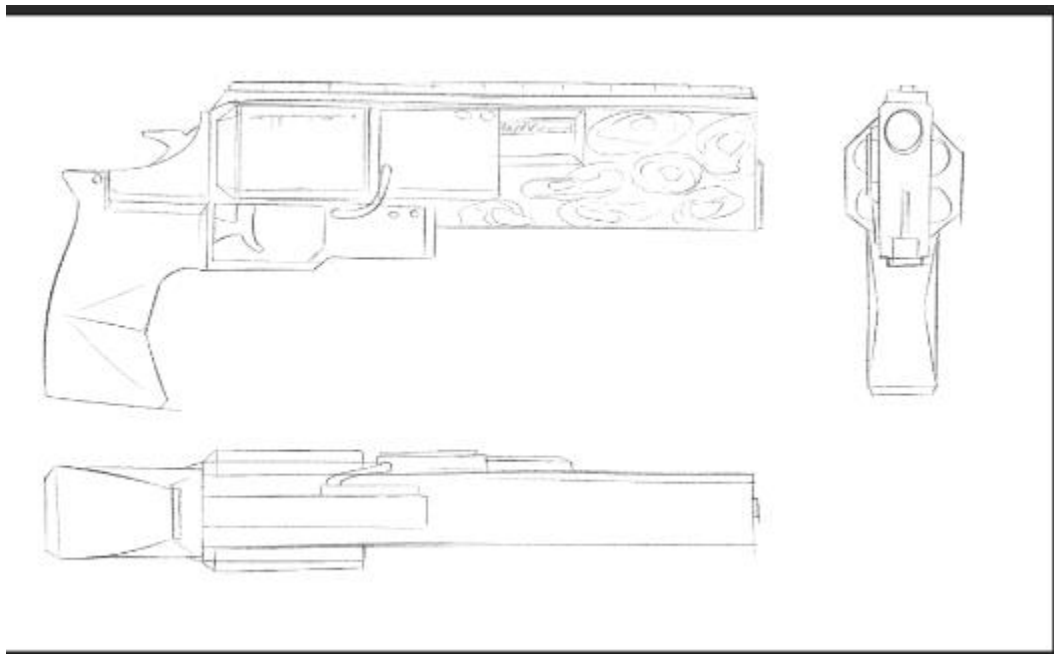
Figure 4: Concept sketch of potential leopard revolver (Hughes, 2024)

-Two-Horned Spear for the buffalo

Figure 5: Concept sketch of potential water buffalo spear (Kruger, 2024)

Gameplay

Game rules

- Player must defeat all enemies in a wave
- Player must find weapons on the map or complete challenges to unlock them
- Death restarts level

Instructions

- Players should keep moving to avoid death
- Levelling up improves stats allowing for better combat control

Playtest report

Bugs:

- Enemies getting stuck on terrain
- high movement speed allows player to fall off map
- Weapons struggle when enemies are too close.
- Mouse unresponsive on launch

Suggested changes:

- More waves spawning

What was enjoyable:

- Intuitive controls and movement
- Fun sound effects
- Interesting enemy designs

Minimum System Requirements

Ryzen 9 5950X 16 core

16 GB RAM

GTX 1660TI

1GB of SSD storage

Sound effects

The game will include many sound effects for different purposes, ranging from the sounds made by weapons when attacking to UI sounds. Some of the examples of sounds to that will be used are:

Weapons

- SFX for collisions depending on surface hit

- SFX for weapon attacks, different for each weapon and dependent on the motion of the animations

- More non-standard SFX for certain weapon's alternate attacks.

Environment

- Various environmental sounds fit for the landscapes they are present in

- Integrated so as to fit with game's music.

UI and Menus

- Various clicks and other sounds for pressing buttons or changing sliders.

- Preview sounds for changing volume

- Musical chimes when confirming whether to apply certain options.

- No music or game sounds when game is paused.

NPCs

Although NPCs will be mostly limited to enemies within levels, the very few non-hostile enemies that might be present also need some sounds.

Enemies

- Sounds for NPC movement – particularly when enemies are moving.

- SFX for attacks as well for the wind up before an attack to give the player a chance to avoid.

Non-hostile

- No recorded speech, rather musical chimes or silence for dialogue

Music

The game will include varied music that will be played and possibly looped through for a number of occasions, while in the main menu, or when certain conditions are met within a level.

Combat

During combat the music of the game is based on the theme of breakcore. A fast paced high action genre which matches the pace of the game.

11

With sound effects from combat matching and not negatively influencing the gameplay but rather making it more unique and interesting.

Menus

In the game's main menu there will be little music with a larger focus on environmental sounds in order to create a sense of calm. The few tracks used will be more ambient, aiming to highlight the sounds of nature and draw the player closer to the game's message and themes.

Core Concept, Theme and Genre

The themes the game tackles are to do with Nature Conservation.

The core concept of the game is nature conservation. We are focusing on this issue because it is a serious issue not only in South Africa but also worldwide. The wildlife of our country is a big financial and economic venture making illegal poaching a big problem for the already struggling economy. The county's nature is also an important part of its survival, culture and national identity so it is obvious that the ecological damage caused when deforestation, overfishing and poaching occur is a massive issue. This ecological damage ends up harming our daily lives.

During gameplay you take the role of a nature conservationist - someone who is directly trying to prevent illegal poaching, deforestation and overfishing. Our aim is to use popular aesthetics so that more people are drawn into our game thus spreading awareness and encouraging those playing the game to make a change in the world. We will also include websites within game for the player to access and find out more information/donate to organizations that champion causes aiming to address the issues.

Our game takes place in one arena based on the level however with waves of enemies coming towards the player. We have 3 levels which can be switched between in the hub. The goal is for the player to complete as may waves/levels as possible without dying aiming to get as high a score as possible.

The genre of our game is rogue-lite. A rogue lite is a subgenre of roguelike games which in many cases are like a dungeon crawlers where the player has a permanent death when losing forcing a restart from the game or level's beginning, losing all progress. This game being a rogue-lite means that the penalties for losing are not as strict, where certain milestones remain completed even after a loss.

Story and level progression

Story

The story our game follows is that of a nature conservationist who cares greatly about the environment but also well-endowed anime styled women. A servant of Mother Nature (the leader of Big Five Incorporated) he has been given the task of helping to conserve nature for the entirety of South Africa. She tasks him with defeating the Counter Conservation Project sent by a hostile foreign power. They are a corporation focused on poaching, mining, and fishing who hate the natural environment and with to convert the little bits of nature that are left into more factories, harvesting their natural resources. The Big Five are 'children' of mother nature - beautiful woman making up an elite task force, each trained for a specific conservationist role with only five existing due to their elite nature. In response to the deployment of this elite task force, the megacorporation has sent out machines built for war with the aims of weakening and injuring the five so their plans of mass ecological destruction will go uninterrupted. The player is the first test subject of a new line of clones aiming to further support the elite members of the Big Five without the extensive lifetime training required to reach their level, however due to the invading powers destroying the

13

clone factories no more subjects were able to be made. The dire situation and the lack of experience of the player has forced Mother Nature to push out an experimental technology that gives the clone the ability to merge the Big Five's spirits with his soul allowing him to produce manifestations of the Five as weapons. Throughout the game the player will unlock these manifestations by gaining the trust of the Five through fighting more of the corporations' machines.

Level Progression

Main Objectives:

the main objective of each level is the same: kill a certain number of enemies in a given time frame, killing enemies rewards the player with small increases to the timer.

Savannah

Area Description:

Taking place outside a recently raided factory for the prototype clone units, the player is tasked with removing any remaining machines in the vicinity in order to salvage what little research and technology remains. The area will feature a combination of both rugged, desolate savannah with scattered structures that resemble crashed orbital pod.

Design and Descriptions Assets, Game World, Characters

Design Philosophy

Our design philosophy for our game was to make as many possible connections for players to the big five, this is seen in the weapons the player uses all corelating to the big five in some way and the anthropomorphic characters all being representations of the big 5 to create a humanization of them for the player to connect with.

Seen above in figure 1 is the shield weapon, when designing this we chose the shield to represent the rhino as they are commonly associated as being strong and sturdy, which we felt was best represented by a shield, to represent the rhino we added it's horns onto the front of the shield giving it attacking power as well as a representation of the animal

Seen below for figure 2 is the concept art for the Elephant rifle, when designing this we went for a more subtle incorporation of the animal aspect of the weapon as it would be more interesting that other methods we could have taken.

Seen above in figure 3 is the Lion gauntlet, we chose gauntlets to represent the Lion as they are commonly seen as aggressive and brutal hunters and thus gauntlets, which require the user to get up close and personal. To represent the Lion we have the claws on the hands as well as various lion themed decals along the gauntlets

Seen above in Figure 4 is the leopard revolver, this was our most controversial weapon choice to represent an animal but our logic was that gunslingers are often known for being quick on the draw and being quick is a well-known feature of leopards thus making the connection, while there is no outward representation of the leopard it will be featured in the leopard print skin of the gun.

Seen in Figure 5 is the design of the buffalo spear, for this weapon we designed it as a normal spear, however the tip of the spear is made to resemble the face of a buffalo with the point being the buffalo's horns thus calling back to the animal aspect of the weapons that we incorporated

Figure 6: Lion girl concept art (Hughes, 2024)

Seen in figure 6. A concept for the first waifu the player would come across was done along with 2 different facial expressions for her. The thoughts behind this character are to make a girl who is extremely muscular, following her lion heritage. A good personality trait for her, however, would be to have her be shy. She's what would be referred to as a "Tsundere" or an individual who acts harshly in response to intimacy as a coping mechanism to hide their embarrassment and emotions. This would spark a lot of enjoyment in men out there as a Tsundere is a widely adored character type.

Figure 7: Savanah loading screen (Hughes, 2024)

The above drawing (Figure 7) showcases a loading screen for the savannah level. The low angle and warm colours perfectly emulate a warm feeling felt when out in the wild of South Africa. Having the savannah being as flat as it is, however, there would be very little in the distance other than a flat horizon line. This does, however, give the player a sense that they are going to be heading in to a *vast* open plane.