Game Design Document for:

Guardian of Anima

Hack and Slash + Fighting games = Pure Awesomeness

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Version # 3.00

Sunday, November 25, 2012

Contents

Design History

This is a brief explanation of the history of this document. Each version of this document is based on when a document is released for feedback/review, or major changes/additions have been made.

Version 1.00

Initial pass at design.

Version 2.00

More detail in Features section
Add Music and Sound design section
Add Character section with art
Add Scale in World Section

Version 3.00

Game Overview Updated
Feature set updated
Single Player Game updated
Camera Updated
The Game World Updated
The World Layout Updated
Physical World Updated
Characters Updated
User Interface Updated
Menus Updated
Sound Design Updated

Game Overview

High Concept

One armor is just not enough in this epic hack and slash fest.

Guardian of Anima is a 3rd person/Action game in which the player controls Zorya, to rescue the world from some evil creatures called The Damned. The main goal is to reach the great tower in a floating island called the Emerald Lands and defeat the god Mordecai, which is trying to destroy everything alive. The player can use two armors, and switch between them at any time. This part

is crucial, changing armors is the only way Zorya can survive the difficult battle ahead. Each armor has a different combo focused for different types of enemies, for example; the Life armor has better range but doesn't deal too much damage, making it perfect for groups of enemies, and the Death armor doesn't have a lot of range but deals huge amounts of damage making it perfect for huge enemies that are alone.

Philosophy

Philosophical point #1

Guardian of Anima is trying to change the way players engage in battles by taking away the most basic form of health regeneration. The game gets rid of any kind of healing item or magic and borrows the tagging mechanic from pure competitive fighting games to give players a fresh take on Hack and Slash.

Philosophical point #2

Our game runs in Xbox and PC systems because we aim to make it accessible to a hardcore audience as well as new comers to the genre interested in action.

Philosophical point #3

The story is about sacrifice and how it affects people around you and how sometimes, one person needs to be selfless. We want to tell a story and through it bring emotion within players but ultimately we aim to bring a complete memorable experience that stays with players.

Common Questions

What is the game?

Guardian of Anima is a 3rd person/Action game in which the player controls Zorya, who has to rescue her city from evil. The player can use two armors, and switch between them at any point in the game. The armors have a different health bar that will regenerate when the respective armor is not used, making health a managing challenge. Both armors have different attack patterns that will make them effective to different situations.

Why create this game?

We love Hack and Slash and Fighting games. We wanted to develop something that encompasses aspects of both genres.

Where does the game take place?

The games take place in a fantasy world, where magic is the center of everything. People breath, eat and live through magic. The source of the magic is a powerful, floating island known as The Emerald Lands which maintains the balance.

What do I control?

The player controls Zorya, a normal girl who has the philosophy that life is a journey not a destination. When the world is in trouble, she is the only one that is selfless enough to be chosen by the gods to protect it.

How many characters do I control?

There is only one main character but what the player controls is the two god's armors.

What are the Goals/Objectives of the game?

The main goal of the game is to find out what happened with the magic and stop this monsters, known as The Damned, that are attacking everyone. The game has two objectives:
- Level 1: Reach the main tower in the Emerald Lands.
- Level 2: Destroy 4 waves of enemies.

What is the main focus?

The player must travel from point A to point B destroying every enemy that is in the way.

What's different?

Guardian of Anima has a unique healing mechanic within a Hack and Slash game. We want to take the character swapping mechanic from competitive fighting games like Marvel VS Capcom and implement it in a more action oriented game. The armor swapping mechanic allows the player to change armors on the moment to heal. When any of the armors are really damaged, the player needs to take it out of the game for a certain amount of time and use the other one.

Feature Set

Hack and Slash Gameplay

The main way of interaction in the game is combat, and we want to offer a simple and fun battle system with real time hits, feedback and animations. The player can do three things in combat; attack, switch armor and dodge. The mixture of these abilities is what makes combat fluid and challenging.
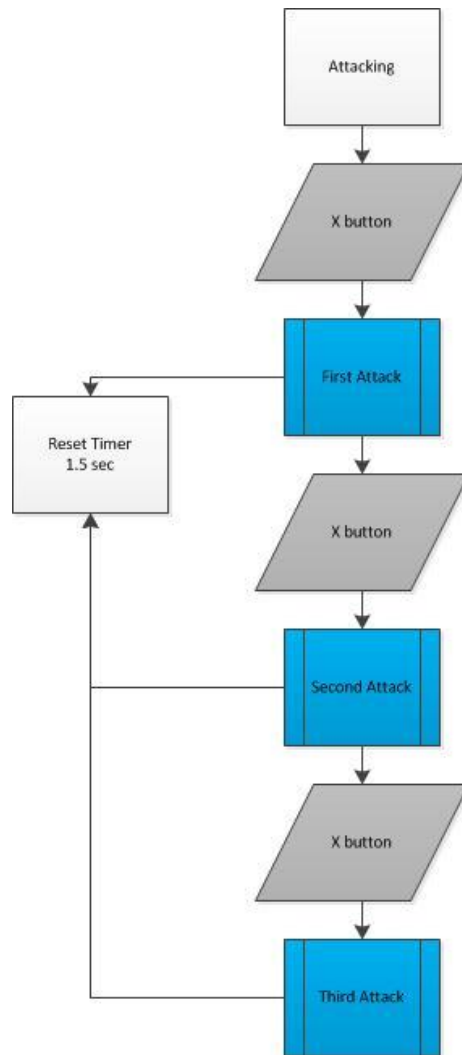
Attack

Attack is a succession of animations that makes the character. These animations move the character forward and the weapons of each armor. The weapons have each a different collider that will contact with the collider of the enemy and create a reaction that gives feedback of damaging the enemies. The armors have a different 3 hit combo between each other that makes the player more effective in different situations.

The action changes depending on the armor the player is wearing. The life armor has a more bulky and slow gameplay that deals low damage but its huge sword damages a lot of enemies, which requires a lot of precision in the positioning of the player to be most effective. While the death armor has a swift game play that has a balance between dashing and attacking but exposing yourself easier.

Attack starts when the player presses the button X, immediately the animation will play. The code needs to start a counter to lock the movement of the player and stop registering new inputs in the attack button, until the attack animation is 90% finished. This allows the player to cancel animation in case they don't want to continue the combo, but only with dash. Then, if the player presses the attack button in the correct time the character will play the second animation, if not the character will play the third animation ending the combo sooner. If any animation finishes and the attack wasn't cancelled with a dash or continued with another attack, the character will go back to idle animation. The timer is a public variable that can be tweaked.

Diagram explaining the process of attacking

Dash

This ability allows the player to push the character in a certain direction for a short burst. This helps the player to move faster in normal areas and escape damage when surrounded by enemies.

The player can dash by pressing the A button and move the left directional stick to any direction. The code will register the two inputs and perform the dash animation in the direction the stick is telling. To move the character the engine has to add a force that can be tweaked to move the character in a fast burst. After the dash is finished a counter will start, blocking the dash for 0.5 seconds.
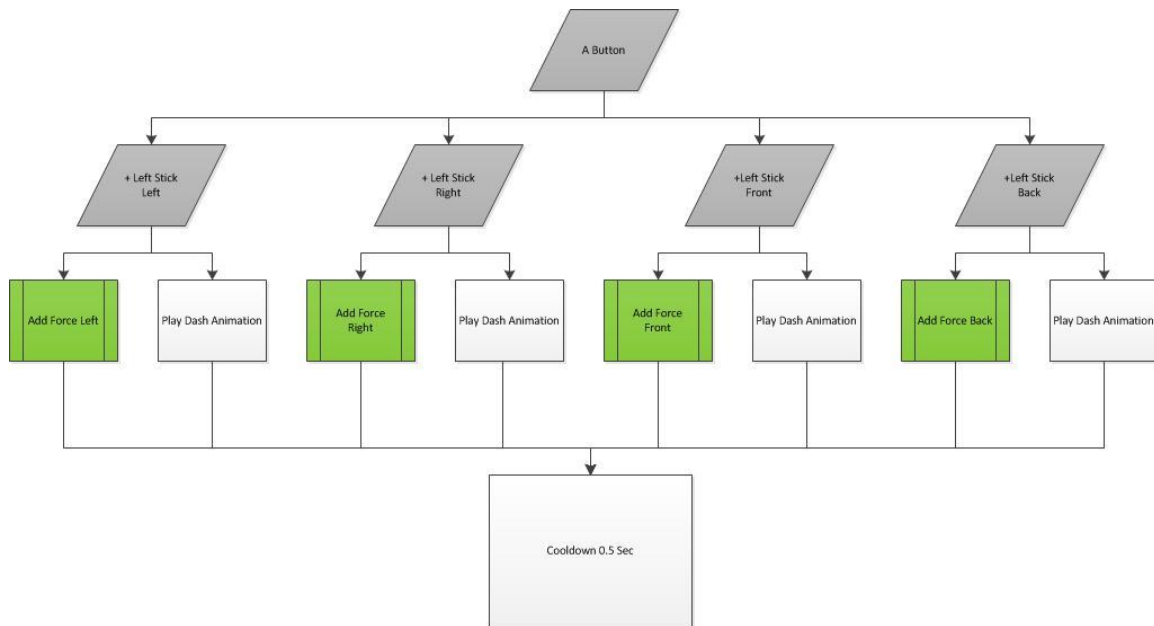
Diagram that explains the dash

Swapping Mechanic

There is no potion, item or drop that heals the player in the game. Instead the player can switch the two armor sets that have their own health bar each. When one of the armors has low HP, the player can recover health by bringing the other armor into the game. This creates a cycle to keep the player alive in any moment, but also can make the player invincible if they switch constantly. To avoid this, the code must initiate a counter for 20 seconds in which the player cannot change armors. So the player needs to manage his health in other to succeed.

Guardian of Anima

Figure showing the main character and the two armors

When the armor is really damage and taken out of the game, the HP of that armor starts recovering by 10 points every 3 seconds so that the armor is ready after only 30 seconds of gameplay. The swapping happens instantly after the player sends the command, spawning a particle effect that covers the change but doesn't interrupt gameplay. The player has control of the character at any time during the swapping, for that reason the transition must be fast.
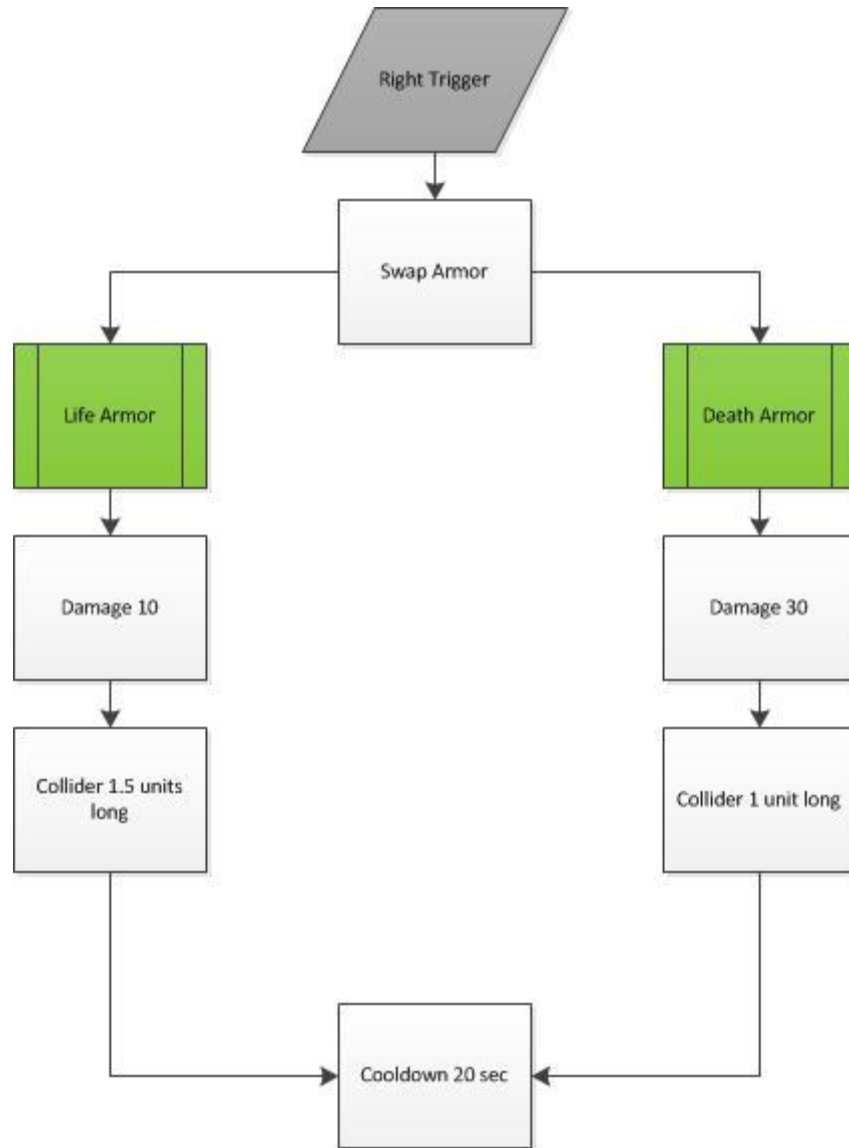
Diagram that explains the process of switching armors

Lock on

The player can focus all his efforts in one enemy. When the game receives an input from the right trigger, the camera gets locked in its default position showing the enemy in front of the player. Movement changes to keep the player facing the enemy at all times. Dash is enabled in all directions and the pose of the main character changes. The way it works is that the player needs to keep pressed the button to hold the lock on. In code, a Boolean will be false until the right trigger input is sent to the engine, this input will change the status of the variable to true and initialize the lock on. For better details follow the diagram bellow.
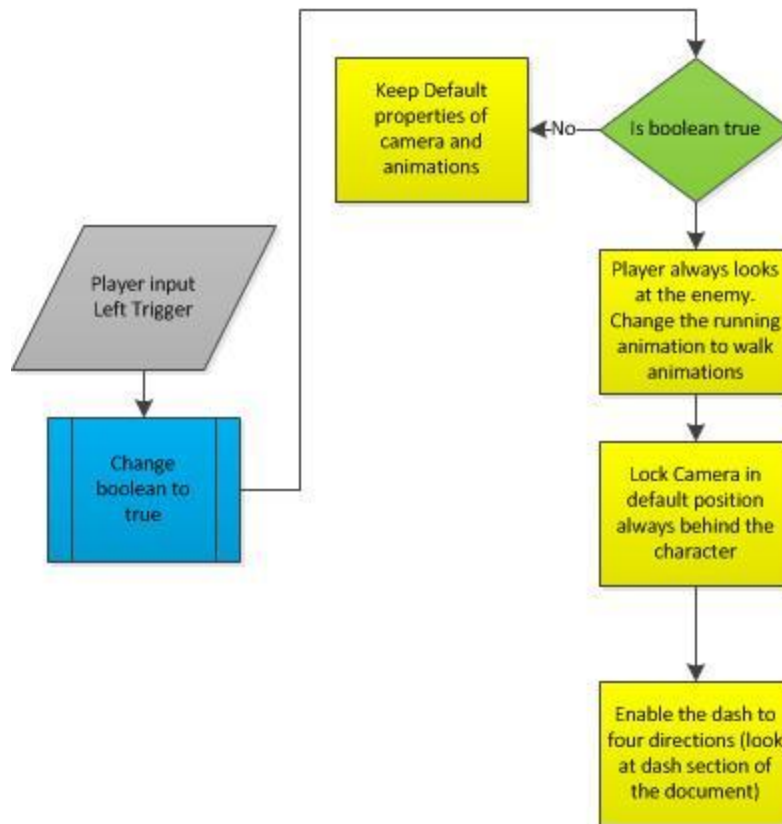
Diagram that explains the process of lock on

The lock on works to keep the player focused and to make automatic some controls of the game, for example; the player usually has to control the camera of the game but when in lock on that control is automatic, the camera will focus on the enemy and the player has only to worry about fighting and dashing and makes the combat experience easier and more fun.

Screenshot of that shows an example of the camera

Life Armor
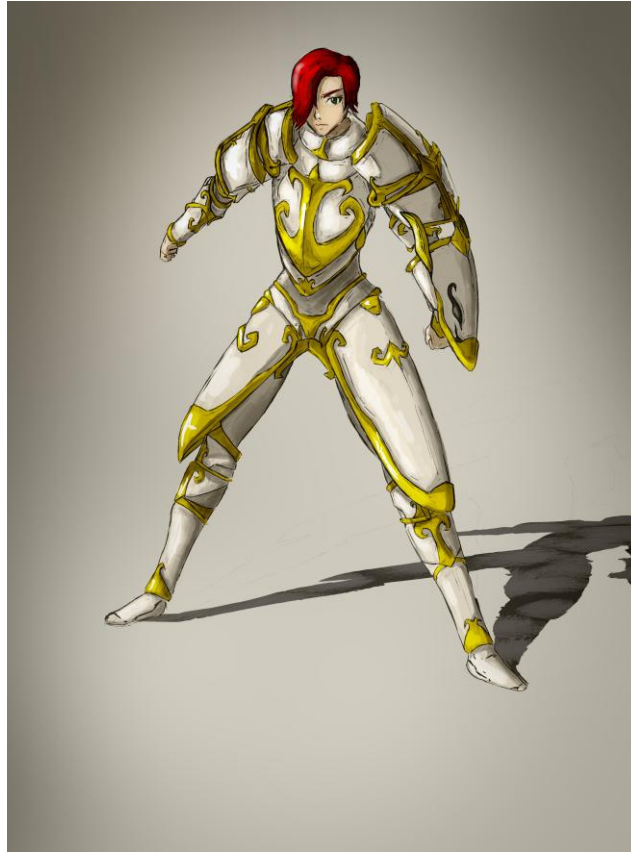
Figure showing Zorya in the Life Armor

The Life Armor has a heavy and large claymore for attacking and has a huge amount of health. The combos are slow and they don't deal a lot of damage but the attacks can reach a lot of enemies surrounding you and keep them at bay.

The specifics stats are:
- Health: 150 points
- Normal attack damage: 15 points

Death Armor

Figure showing Zorya in the death armor

The Death Armor has a swift and light katana for attacking and has a small amount of health. The combos are strong and fast but only attack one enemy, so the player needs to be careful when fighting a group.

The specific stats of the armor are:
- Health: 100 points
- Normal attacks: 30 points

Coliseum

In this part of the game the player will fight waves of enemies in a round stage. The objective of this is different depending on how you access the area.
This part of the game can be accessed in two ways:
- By finishing the level and getting to the main tower
  - The game will summon five waves of enemies. The player needs to defeat each one of the enemies to win this coliseum and see the ending of the game.
- By accessing in the title screen

- o The player will fight enemies continually spawning for five minutes. After the time is over, he'll receive the amount of enemies he killed.

*For more information about this feature go to the level design section.

Single-Player Game

Overview

Guardian of Anima is a 3rd person Hack and Slash that has a linear progression. The player controls Zorya who is trying to save the world by reaching the Emerald Lands and defeating the god of magic Mordecai.

The player needs to open his way through waves of enemies and bosses in three different levels. The second and third level will have a boss that will require the use of special abilities to be defeated.

Single Player Game Detail #1

The game has a linear progression. The player needs to find and destroy crystals located all over the level to open the doors or raise bridges. Each crystal has its respective door or bridge. All crystals have a force field that doesn't let the player destroy them until all the area is cleared of enemies.

*For more information check the Detailed Walkthrough section.

Story

No one knows how the old world was, but people know how this world started. At the beginning only one god existed, Mordecai the god of magic and energy. He decided to give this power to the world, do that the lives of all living beings were easier. For that he created to gods; Via the god of life and the one in charge of giving magic to the world and Ahum the god in charge of death and taking magic back from the life that doesn't need it any more. These three gods travel through the world, giving and taking life, through an island pulled by the only dragon in the world. When the Island is close to a certain place, li8fe is born and life perishes but only if the island is passing through. Many people wait while others fear the return of the sacred place known as the emerald lands.
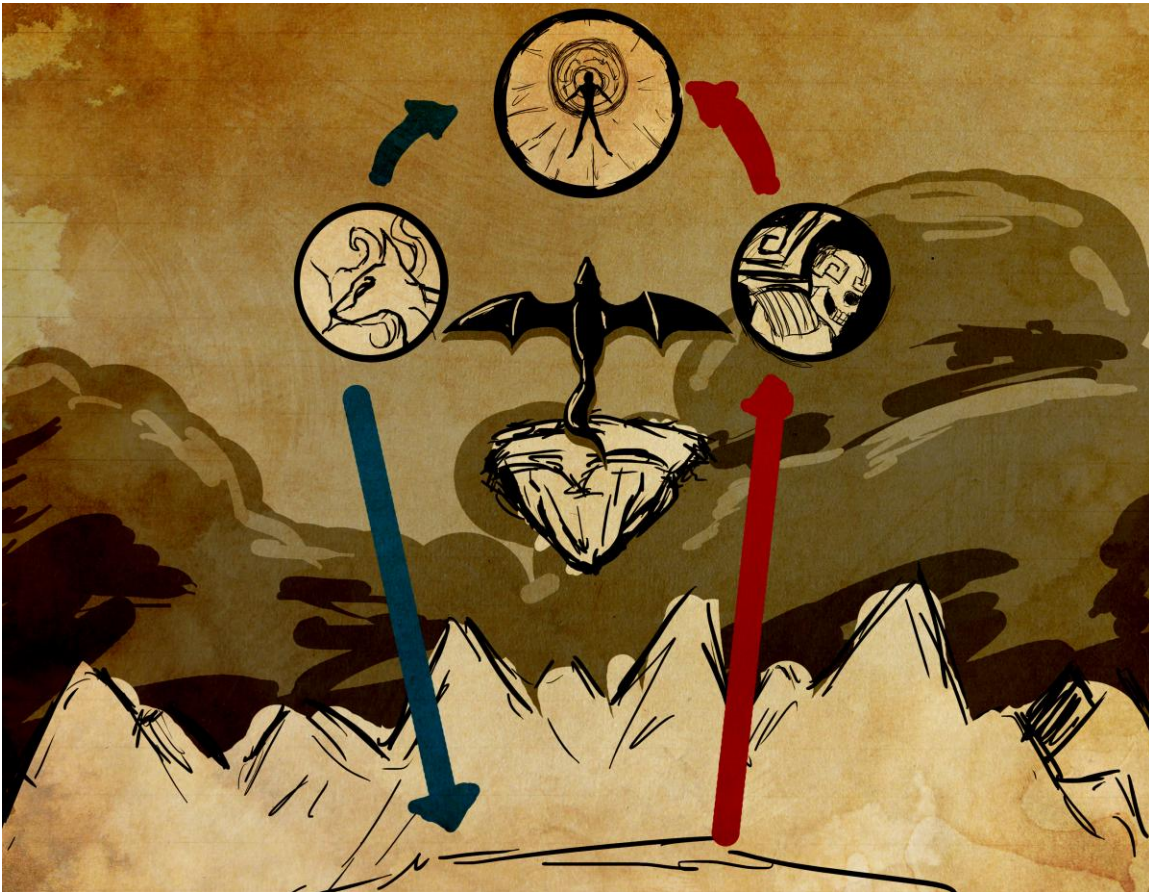
Figure showing the diagram of the magic flow in the world of Guardian of Anima

The story starts in one of the biggest cities in the world, Gehan, where the king Johansson and his councilor talking about a plan to change the balance of the world. As they walk to the castle's balcony a canon as big as the castle, rises from the middle of the city. The king is full of excitement to see his plan finally completed, after a couple of seconds, he orders fire. The canon shoots a beam just when the island is at the top of the city, killing the dragon. The island stops abruptly and starts to shine, short after it launches a laser in the middle of the city, destroying the whole castle. From the beam, monsters start to spawn and killing everything. It is the job of the player to find out why and save the world.

Detailed Walkthrough

The levels in Guardian of Anima are mostly linear with a set path for the player to follow. Players are unable to roam beyond these paths as they will be blocked. A walkthrough of each of the levels is given below.

*To know more about the enemies, see the characters section.

Level 1: Emerald Lands

At the beginning of the level the player will find himself in a corridor surrounded by beautiful flora. At the end of the corridor there is a crystal and behind it a door. As the player gets closer to the crystal a minion will appear, the player has to kill the minion and destroy the crystal to open the first door.

In the next section, the player will find another encounter but this time is against a group of enemies. 4 minions will spawn to attack the player; also we introduce a new enemy called Trap. This enemy will run from the player guiding him to the next crystal. After destroying the Trap and the crystal, a bridge will raise just in front the player.

In the area after the bridge, the player will find another crystal guarded by 5 minions and a Trap. Once the crystal is destroyed, the camera will move to show a door opening in another part of the level. After backtracking to that door, the player will find 4 minions and a new enemy called Golem. The new enemy is huge and can kill the player easily, so he needs to be very careful in that fight. When the player continues, he will find an elevator with one crystal on it. If the player hit it once they will get to the next area in the second floor. The player has to defeat 6 minions and 2 traps before destroying the crystal, a cinematic will play showing the door in the entrance of the third floor opening. Once destroyed, the player has to go back to the elevator and hit the crystal again; this will bring the player to the third floor and show the open door. As the player continues, he finds 2 Golems, 1 trap and 4 minions. When the player finishes this battle and destroys the two crystals at the end of the room, the level is over.

Level 2 Coliseum

The player is in a complete circle surrounded of enemies that spawn in different waves. He needs to defeat 5 waves of enemies to finish this level and beat the game. After each wave the player will have a recovery time of 10 seconds to catch some breath and let the armors recover some health.

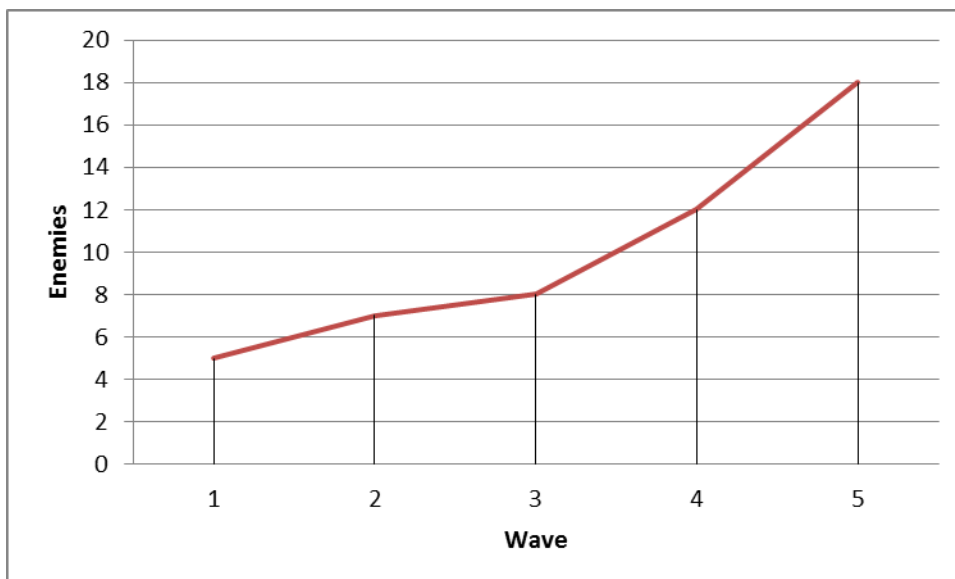| Wave	Enemies
1	4 Minions
	1 Trap
2	6 Minions
	1 Trap
3	4 Minions
	1 Golem
4	6 Minions
	1 Golem
	2 Trap
5	8 Minion

	2 Trap 2 Golem

In case the player accesses the coliseum through the main screen. He will have five minutes to finish all the waves if not he loses automatically.
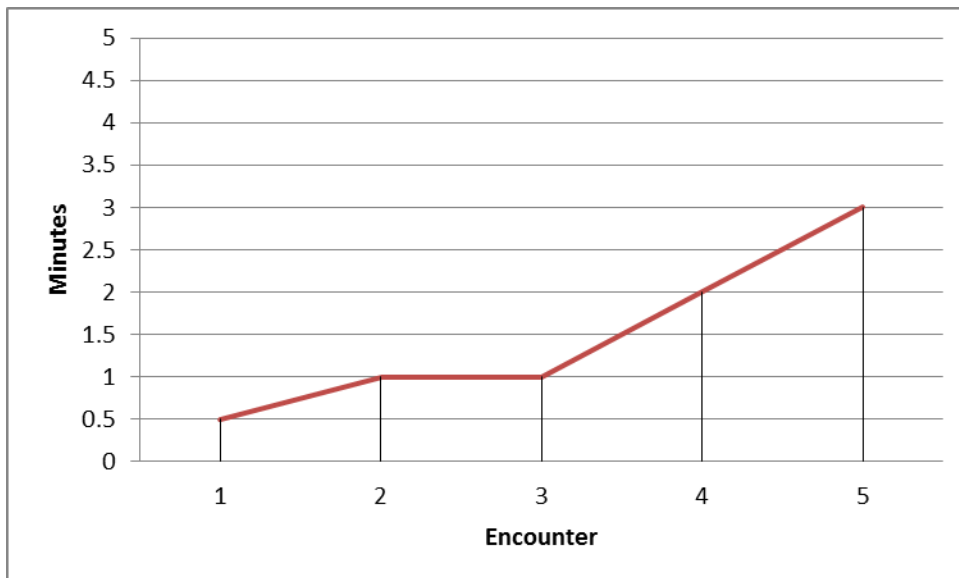
Beat Chart

Emerald Lands

Coliseum

Hours of Gameplay

Emerald Lands

Total: 15.5 min

Coliseum

Total: 7.5 min

Camera

Overview

Guardians of Anima will have a third-person over the shoulder camera that the player may rotate around "Zorya" at any given time. The player will not be able to change the distance between the camera and the player as this would be somewhat detrimental to gameplay. Also, the third-person camera controller that we programmed for the game, has occlusion on it so, that when the player moves into a position where the character would be hidden by an object, the camera will automatically adjust on the X,Y,Z axis to a more suitable position relative to world space. This way, the player will never lose sight of "Zorya" in the heat of battle.

Camera Detail #1

The camera can be manipulated by rotating it left and right on the Y axis. This way the player will be able to see all that happens around them, without losing sight of "Zorya" as she will be always in the center of the screen.

The camera has a set amount of "buffer" space, between itself and the player at all times, allowing it to smoothly transition back to a suitable position depending on where the player is on the screen. The pertaining variable that sets the amount of buffer space between the player and the camera is exposed, to enable on the fly tuning for our design.

The main reason we have decided to design the camera model to interact with the player in this way, was so that the player would not have to worry about zooming the camera in and out and would only have to worry about rotating it around them in two different directions. This allows for simpler gameplay and keeps the player focused on the game and not on the camera instead.

Figure showing the camera in the unity engine

Camera Detail #2

By adding a simple occlusion formula to our code, the player will never have to worry about losing their FOV, from behind an object, or a wall. The camera will automatically adjust itself in relative world space to a more appropriate position for the player.

Adding this feature to the camera keeps the action on the screen and keeps the player immersed. We decided to build the camera this way because, some games, the camera is allowed to travel through walls and will sometimes become stuck and break the overall experience that the player is having while playing the game. We wanted to make our camera complement our gameplay design and make our camera feel, "right" to the player.

Figure 9 showing how the camera will not pass thorough geometry within our levels and become occluded.

The next image shows the position values of the camera. The red lines show the distance between the player and the camera and the default altitude. The yellow line shows the space in which the player can move the camera in the Y axis; the player has complete freedom for the X axis. The white line shows the altitude which the camera considers cero or default. The player can move the camera with a speed of 95 units in both the X and Y axis.
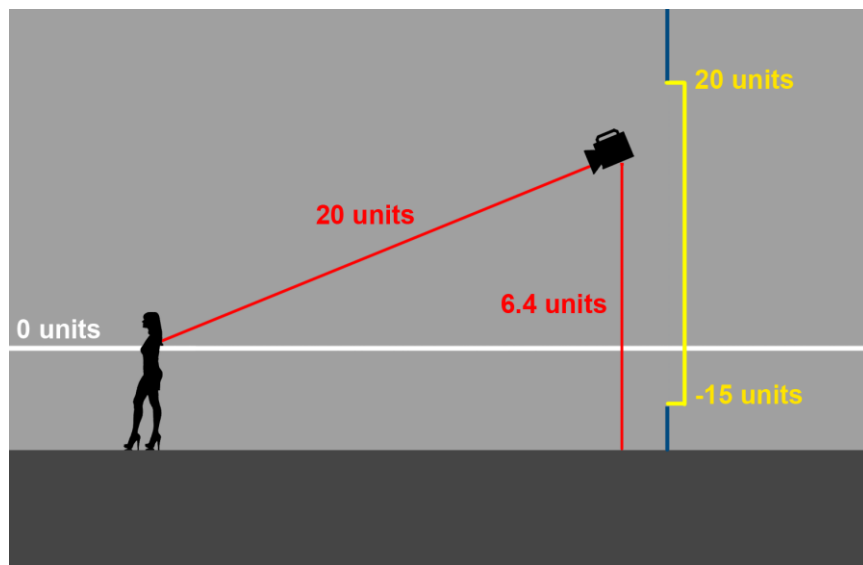

Diagram that shows the position of the camera and the freedom of movement

The Game World

Overview

The world is developed in a linear fashion that emphasizes on combat and with duality in mind. The level shows a beautiful nature world, but the enemies feel and look artificial, giving the feeling that they don't belong there. Trees can be seen growing all over the place and ruins from an ancient civilization appear throughout all the level. Other islands can be scene floating around the level and the main tower is always visible to the player.

Scale

Zorya is 1.5 cm tall and the levels are from 150 cm to 200 cm long.
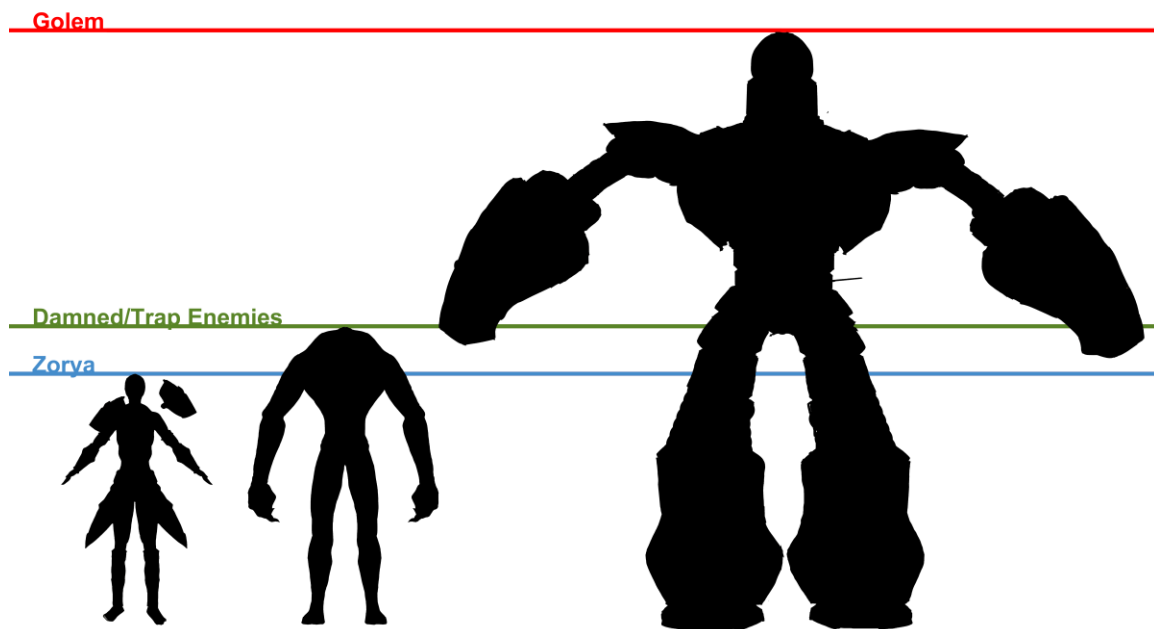
Figure showing the scale of the characters in the world

The World Layout

Overview

Guardian of Anima takes place in a fictitious world called Dhara. In this world the king causes The emerald Lands to stop and this causes a beam of magical energy to crush into the city and destroy it, this game takes place in that

situation. The world scale is in centimeters. There is only one level in the game and a coliseum; both of them are in the Emerald Lands. The player doesn't see the city.

World Layout Detail #1

The level of the game is the emerald land, the sacred island of the gods. This place is complete with no marks of destruction, but minions start to arrive to this part and this is where Zorya start her adventure. This is the map layout.

Diagram of the level

The different tones of green in the floor are the different levels of the area. The darker the tone the higher is the terrain.

The numbers are the enemy encounters.

1. 1 minion
2. 4 minions 1 trap
3. 5 minion 1 trap
4. 1 Golem 4 Minion
5. 6 minion 2 trap
6. 2 golems 1 trap 4 minion

The blue lines are doors and the bright green dots are the crystals that open the doors.

The yellow spot is the elevator used to traverse through the floors.

The Physical World

Overview

The world of Guardian of Anima is very linear, but full of magic and wonder. The player can find a green and magical place where the level will take place. The player can always see his objective clearly in the distance. It can be a sad or happy setting, but the player will never feel alone, he can be attacked by monsters or surrounded by sound effects that will show the player the situation of the world.

Key Locations

There are two very important locations in this game, each located in the end of the levels. One is location is the center temple in the end of level. This is the final destination of the player, where he will have a final battle and win the game. The other one

Travel

The player moves just by walking. All levels are linear in the game so the player needs to follow a defined path to traverse the world.

Scale

The scale in the game is centimeters. The main character is 1.5 cm and levels are between 150 and 200 cm.

Game Characters

Overview

The player will control Zorya in her fight to defeat the army of monsters known as the Damned and reach the Emerald Lands. Characters are low res

(5000polis) with normal maps to emphasize body parts and hand painted textures for the armors and environments.

Main Character

Zorya

The main character of the game and she is the player's interaction with the world. She is 1.5 units high and has a gray outfit underneath the armor. She is chosen by Ahum and Via to stop the world from getting destroyed.


Figure showing a close up of Zorya

Enemies and Monsters

The Damned/Trap

They are the most common enemies in the game. They are divided in two types:

- The small Damned: These enemies are the normal spawns that will attack the player throughout the game. They don't deal much damage but they come in parties of 4 or 5.
    - They have one attack that deals 40 points of damage.
    - They have an HP of 100 points.
    - The AI will surround the player and attack taking turns. They will never attack all at once, but two or three can attack at the same time depending on the difficulty (for more information about AI look in the Technical Design Document).
    - Their size is 2 units tall.
    - The main difference between the normal damned and the trap is that the second one is purple and the AI is totally diferent.
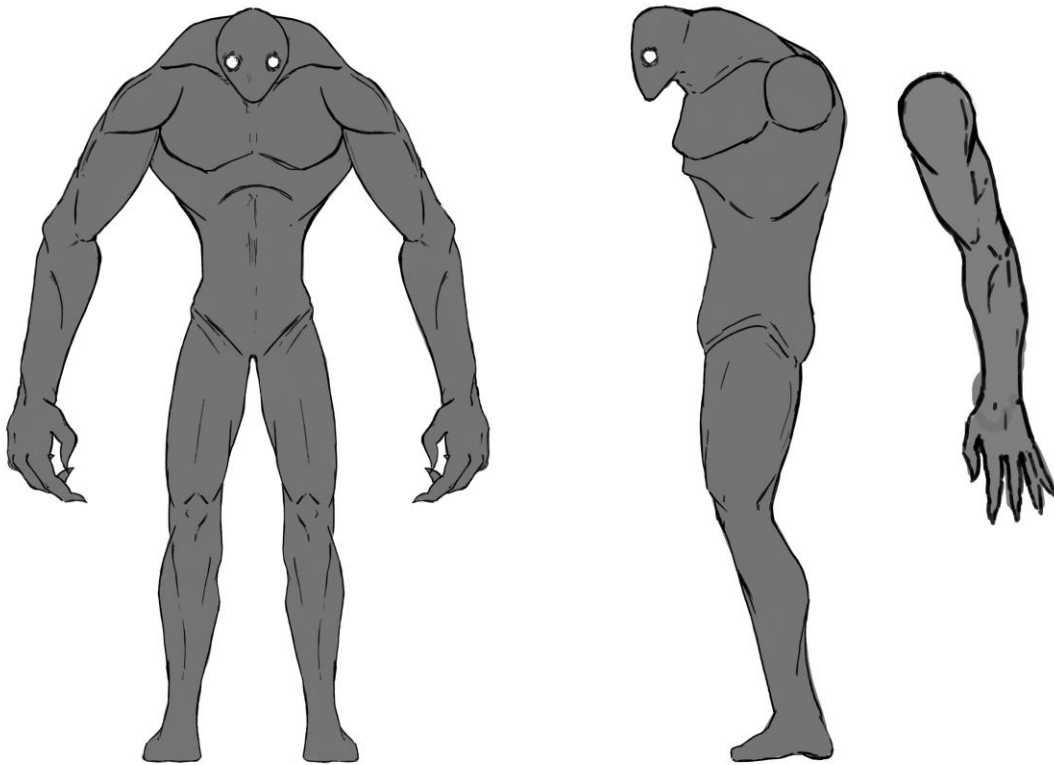
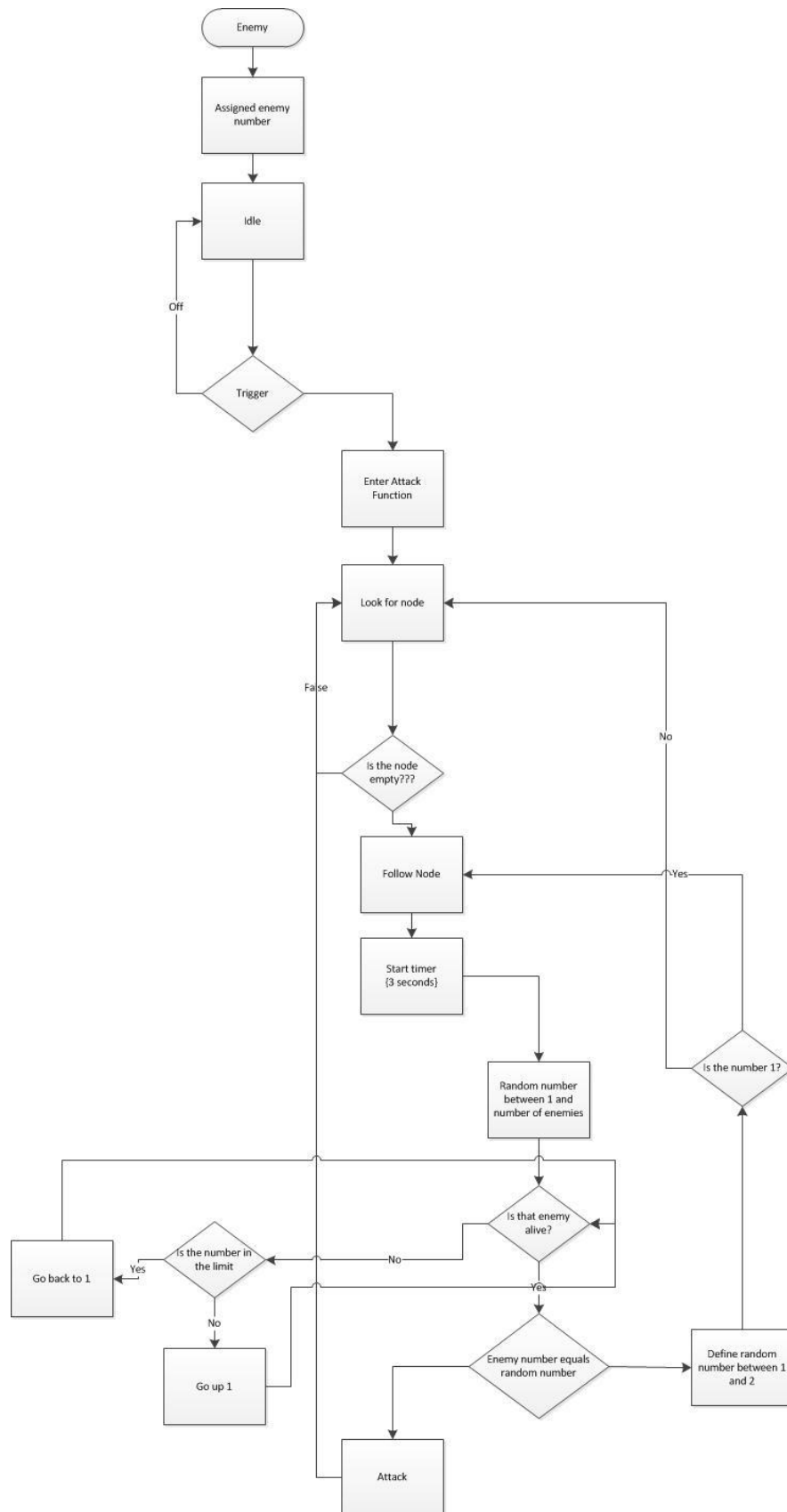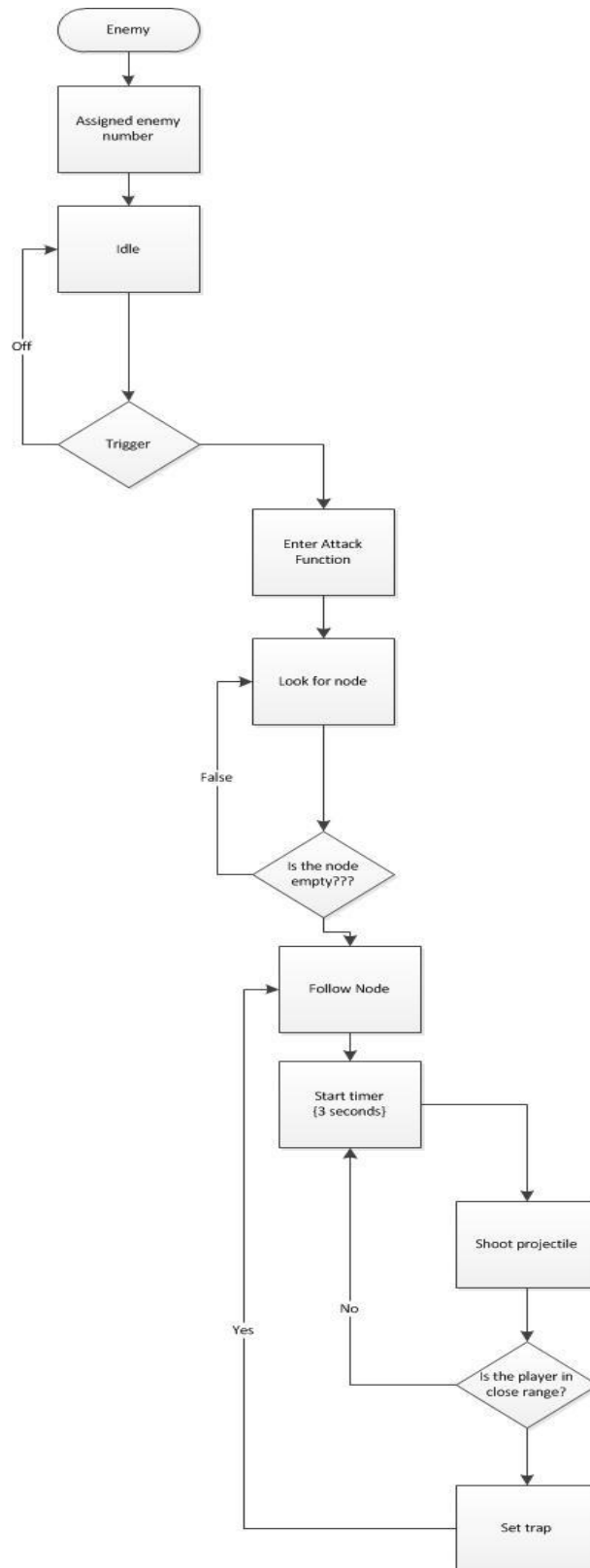*Figure showing the turnaround of the damned*

AI normal Damned

Diagram of the normal enemy and golem AI

Guardian of Anima

Trap normal Damned

Diagram of the AI of the Trap Enemy

Guardian of Anima

- The Golem: This monster is almost double the size of Zorya and can deal a huge damage. He is relentless and dangerous, often found alone.
    - They have an attack of 90 points with an attack.
    - They have a health of 400 points.
    - Follows the same AI as the normal damned but his speed is much less and the attack force is a lot more.
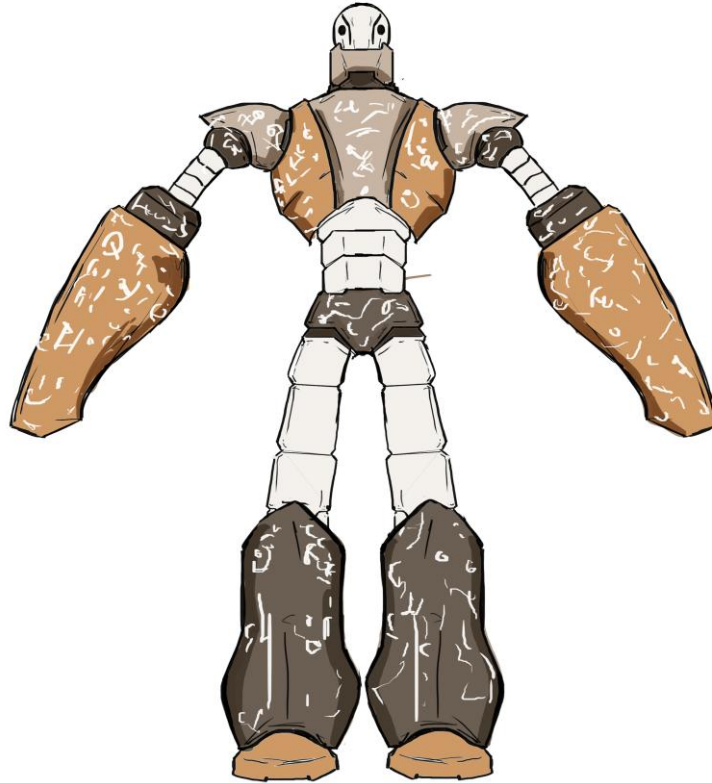
Figure showing the different types of brutes

Weapons

Overview

The game has only two weapons based on mythology and literature of east and west. Both swords are opposite of each other, while one of them represents dark and death the other one shows light and life. Both armors work together to create a balance in gameplay and encourage the swapping mechanic.

Alighieri/Life Claymore

The claymore is a long range sword that deals low damage to all enemies in range. This katana focuses on defense and slow down the enemy to deplete their health slowly but steadily.
The combos of this sword are slow because the armor has high health; the claymore gives the player the chance to pace the battle more slowly and block often. It is a low risk weapon.

(for more info about damage and stats go to the life armor section)

Figure showing a normal claymore as reference

Kusanagi/ Death Katana

A katana that is focused on short range attack with a lot of damage. It can absorb the magic of enemies, and after getting enough, it can release the energy back dealing a lot of damage. The combos are extremely fast and short because the armor has low health; the katana gives space to the player to escape. It's a high risk weapon.

(for more info about damage and stats go to the death armor section)

Figure showing a normal katana as reference

User Interface - Controls

<u>Overview</u>

The control system for both the X Box 360 controller and the PC keyboard are given below. Other than movement, there are 5 main actions which the player can perform.

1. <u>Attack 1</u> - This is the basic set of attacks. This button triggers 3 slashes in a row.
2. <u>Lock on</u> – The ability to focus on one enemy.
3. <u>Dodge</u> – The ability to lunch the character in a direction to move faster or evade damage.
4. <u>Switch armor</u> – This action enables the player to change between armors at any point in the game.

Action	X Box controller
Move Character	Left analog stick
Camera Control	Right analog stick
Attack 1	A
Dash	A Button
Switch armor set	Right Trigger
Lock on	Left Trigger

Figure showing the layout of Xbox 360 controller if used to play

Game Interface - Menus

Screen Flow Diagrams

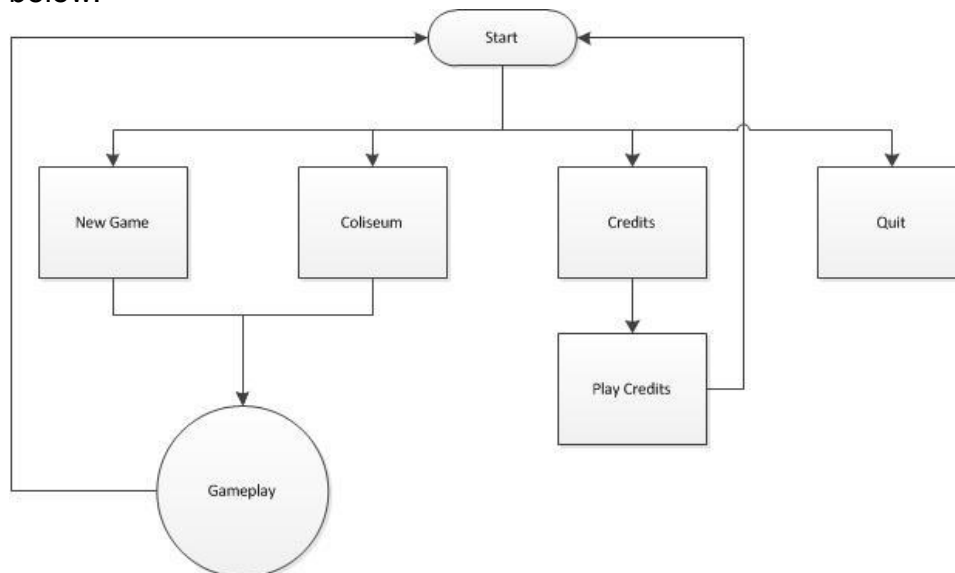A flowchart illustrating the screen flow and the different menu screens is given below.

Figure showing the flowchart of the menus

Guardian of Anima

The main screen features a 3D rendered version of the main character of the game in both the sets of armor. The main menu options are presented to the player in a horizontal row of buttons which players have to scroll through. As players scroll through the menu options, the background will change based on what option they have selected.

Overview

This section describes the various menu options presented in the main menu and the various on screen displays that accompany them.
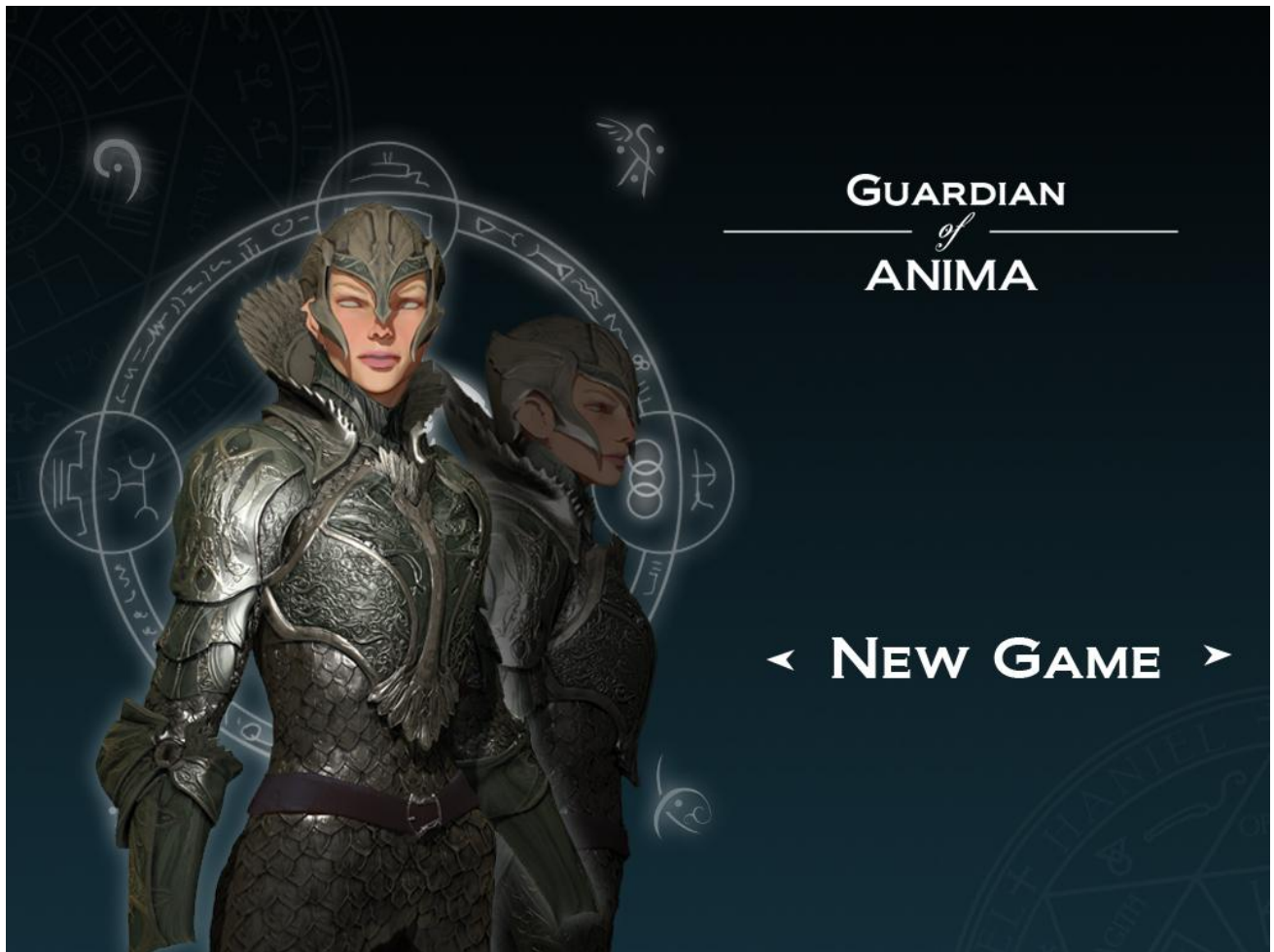
New Game Screen

The new game screen illustrates the main character Zorya in both her armors. The Life armor is shown in priority here and the Death armor Zorya is shown behind. The glyphs and markings behind Zorya are the magic symbols belonging to the gods of life and death as according to the story. The circular diagram denotes the flow/balance of magic from birth to death.
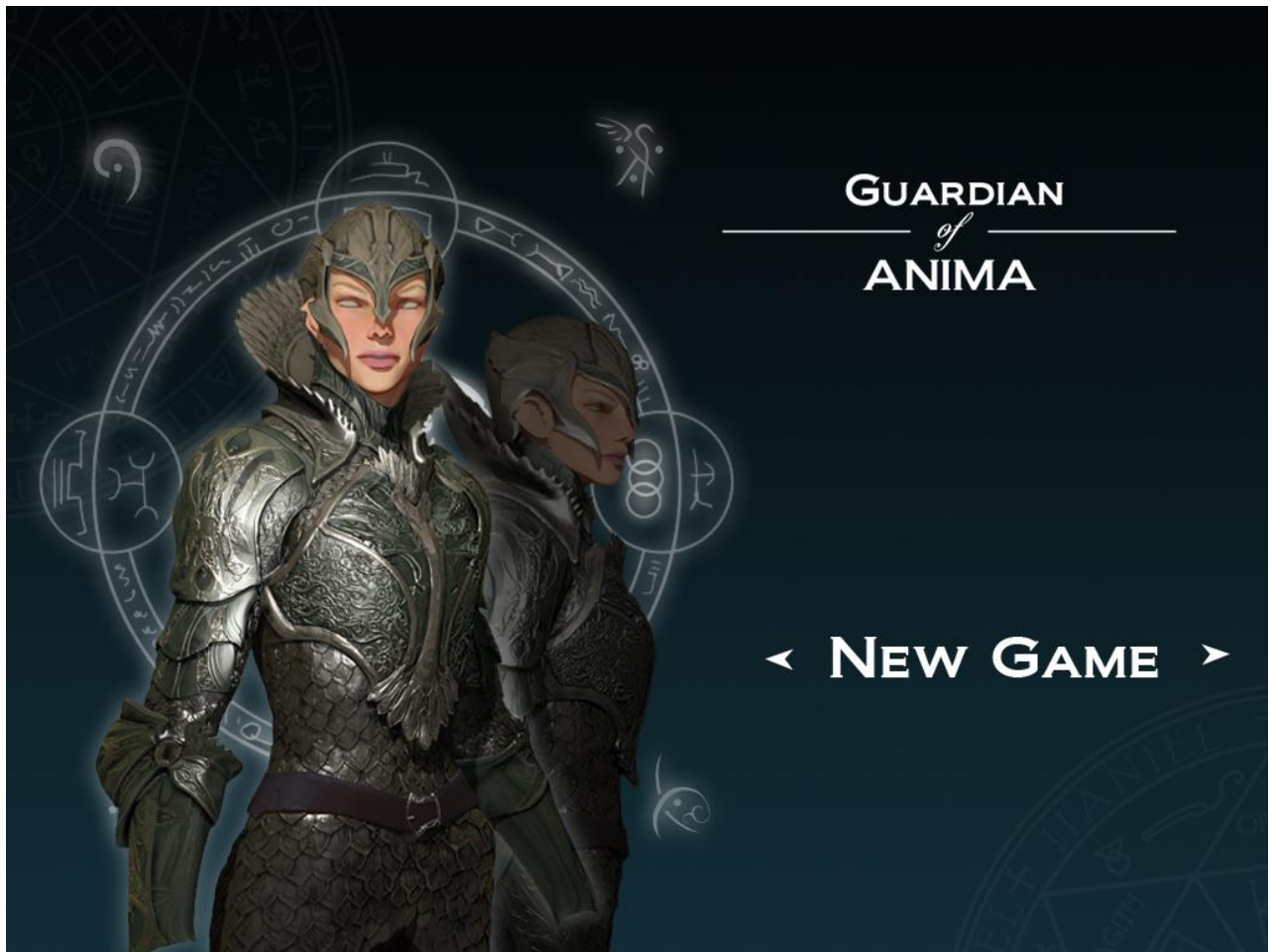
Figure showing mockup 1 of the title screen

Coliseum

The coliseum illustrates the main character Zorya in both her armors also. This time The Death armor is shown in priority here and the Life armor Zorya is shown behind. The same glyphs are shown in the background.

Figure showing mockup 1 of the title screen

Quit Game Screen

The Quit game screen illustrates both armors sharing the same space and showing their profile. The glyphs and symbols of key characters in the game's storyline are also showcased in the background.

Figure showing mockup 1 of the title screen

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HUD/On Screen Displays

The main components of the HUD in Guardian of Anima are:

1. This is the player character who occupies the center of the screen at all times. Players are able to rotate their camera around with the main character as the pivot point.
2. This is the lock on symbol which is generally on enemy characters. It denotes the character on which all attacks will be targeted on.
3. This section denotes the remaining health for the player character. Both the health bars are visible at the same time. The health bar of the currently equipped armor set is brighter and is given more priority in the display.

The unequipped armor's health bar lies below the main health bar and is a bit more transparent.

4. The guardian logo denotes the symbol of the currently equipped armor.
5. The green radial bar around the guardian logo denotes the adrenaline level of the currently equipped armor. In the mockup given above, the adrenaline level is full.
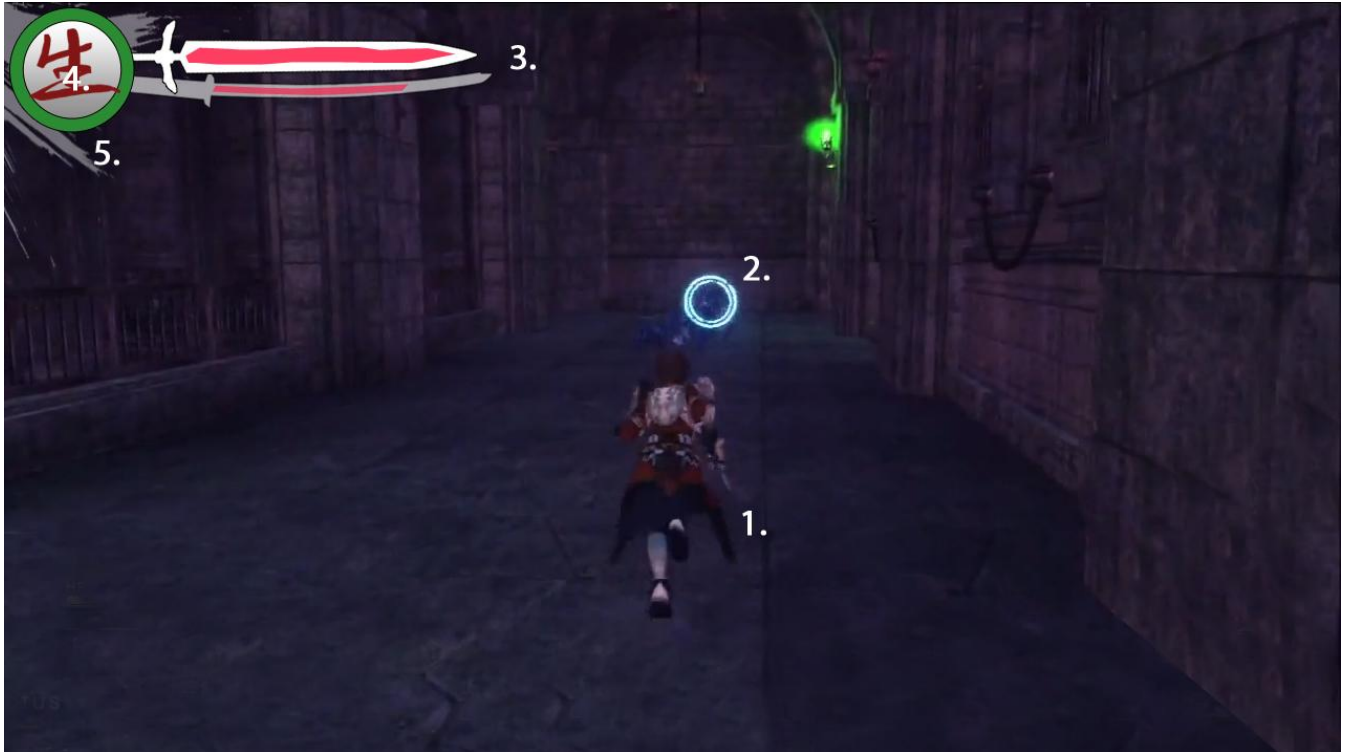

Figure showing a Mockup of the gameplay

Musical Scores and Sound Effects

Overview

Guardian of Anima will have instrumental music focusing on piano tunes and orchestral pieces. We want to have a title screen theme song, a song for each level, boss fight song and an ending theme to have a total of 6 songs.

Guardian of Anima's music tracks table:

Music
Intro Theme
Level 1
Level 2
Level 3
Boss theme

Ending Theme

Sound Design

Here are the tables of sound assets for the game

Zoria
Walking
Running
Dodging
Switching mechanic (Life armor to Death)
Switching mechanic (Death armor to Life)
Jumping
Attack1 (LIFE Armor) (Character) (3 slash hits)
Attack2 (Life Armor) (Character) (2 slash)
Attack 1 (Death armor)(Character) (3 slash)
Attack2 (Death Armor) (character) (3 slash)
Attack1 (LIFE Armor) (weapon)
Attack2(LIFE Armor) (weapon)
Blocking
Attack1(Death Armor)(Weapon)
Attack2(Death Armor)(weapon)
SpecialAttack(Death Armor)(character)
SpecialAttack(Death Armor)(Weapon)
SpecialAttack(Life Armor)(Character)
SpecialAttack(Life Armor)(weapon)
SpecialAttack(Life Armor)(Growing Planteffect)
Special ability (absorbing enemies)
Impact sound1 (Death armor)
Impact sound1 (Death armor)
Impact sound 2(death armor)
Impact sound1 (LifeArmor)
Impact sound2(LifeArmor)

Minion (enemy)
Idle
Running
Attack
damage1
damage2
death1

death2

Golem(Heavy)
Idle
Running
Scream
Attack1
Attack2
Attack3
damage1
damage2
death

Envirometal Sounds
Waterfall
Energy Beam
Birds
Fire (burning effect)
Destruction (buildings)
Gusts

Cutscene Sounds
Dialogue (Zorya)
Dialogue (Mordecai)
Dialogue(Ahurm)
Dialogue(Via)
Background Music