

Game Design Document

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Tutorial:

Link to the game repository:

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1 Overview

The game will be a 3rd person single player RPG for PC. The backdrop for the game are medieval viking times and norse mythology with religion being a core gameplay mechanic. The gods are at war and it is the player's task to join a side and win the war by slaying the other gods and ascending into godhood themselves. With religion being a core mechanic the player will need to worship the god they decide to follow by completing quests for them and upholding their tenants. Combat revolves around 3rd person hack and slash gameplay with blocking and dodging mechanics, as well as the use of projectile weapons in form of bows and magic spells.

1.1 Game abstract

3rd person PC action RPG centered around norse mythology, with religion as a core gameplay concept.

1.2 Objectives to be achieved by the game

Learning the concepts of game development in a practical manner?

[Describe the benefits to be achieved by making the game. Objectives should guide the design decisions of the game. Any constraint should be linked to objectives to].

1.3 Core gameplay

At the core of gameplay is combat. The player will mainly be focussed on completing quests for the war effort. The bulk of which will consist of fighting enemies. In order to make it fun for the player, combat will be challenging needing the player to avoid damage in order to survive encounters.

1.4 Game features

Combat:

The combat of the game is rather simple. Being inspired by the combat of games such as From Software. 2015. Bloodborne. Game [PS4]. (25 March 2015). Sony Computer Entertainment, San Mateo, USA. Last played 2020. The player will hack and slash their way through enemies, while relying on block and dodge mechanics to avoid taking damage, or they will use projectile based weapons such as bows or magic to deal damage from afar. The player can score critical hits on enemies if he hits them during one of their own attacks. The Player can choose from an assortment of different weapons like melee weapons such as swords, axes, daggers and range weapons such as magic, and bows. The player will also be able to adopt a more stealthy playstyle and score sneak attacks on opponents. In a more traditional sense there are three main classes so to speak. A warrior class, a mage class and a rogue/assassin class. However it is possible to mix and match the three to a certain extent and create a unique playstyle in combination with a god's boni and powers.

Stats:

The player has six main stats that are important to him. First there comes health, which he needs to survive, stamina, which he needs to sprint and attacks, and magic, which he needs to cast spells. The next important stat is his damage. The damage the player deals is determined by the weapon he wields, or the spell he casts. Additionally the player can receive bonuses to his damage by his chosen deity. The next stat is the player's armor. Armor is calculated by the apparel/gear the character is wearing and reduces the damage the player receives, when being hit by enemies. The stat carry capacity determines the

weight the character can carry. Each item in the game (weapons, armor, potions, etc.) will have a certain weight.

Inventory System:

The game will have an inventory system. In the player's inventory he can store weapons, armors, potions and other quest items. There will be a limit to the players carrying capacity allowing him only to carry a certain amount of weight. The Inventory and carrying capacity System is similar to the one found in Bethesda Game Studios. 2011. The Elder Scrolls V: Skyrim. Game [PC]. (11 November 2011). Bethesda Softworks. Rockville, Maryland, US. Last played 2021.

Quests:

There are different types and ways of receiving quests in the game. The player can pray to their god to receive favor and accept quests. These will be the main quests the player needs to complete in order to win the war and finish the game. Each god has their own territory in the world. That territory includes a main settlement, a main temple and some smaller farms and shrines. The main objective is to win the war and therefore to kill the enemy gods. For the player to fight the gods they need to be angered enough to come forth. Main quests will achieve just that. They include tasks like attacking the settlements and desecrating the temple and shrines of their gods, and lastly slaying their god. In a way each enemy territory has their own smaller questline, but they all work the same way.

Then by interacting with villagers (npcs) the player can get side-quests to do. These include things like killing bandits, or delivering items to other people.

NPC's:

There are a number of npcs in the game the player can interact with. Most important being the gods. The player can interact with the god they worship through prayer, which will gain him favor and allow him to receive quests. Praying at their gods temple/shrine will grant them slightly more favor, but prayer can be used anywhere in the world. Gods that aren't the player's chosen deity, but are on the same side of the war can be interacted with at their temples/shrines, which will allow the player to receive a smaller blessing of some sort. Enemy gods cannot be interacted with, besides fighting them in combat after their settlement and temples/shrine have been destroyed. There are 6 gods in total in the game, which create a two-sided. The two sides are respectively Odin (mage), Thor (warrior) and Loki (rogue). And the opposing side consists of Freya (mage), Tyr (warrior) and Hel (rogue). The next group of npcs are settlers/ townspeople. Townspeople of settlements/territories that are allied to the player's god are friendly as long as the player doesn't behave unlawfully and can give the player sidequests. Settlements also contain merchants which can sell gear such as weapons, armor and potions to the player. Townspeople in settlements of enemy gods are hostile towards the player and will attack on sight. The last group of npc's are bandits. These are hostile towards the player and townspeople of any settlement. Slaying bandits through side-quest and in general can make a good source of income for the player as well as some gods will reward the player with favor for killing the unlawful.

Religion (Tenants, Favor):

The two most important aspects of worship are the tenants and favor. Tenants can

affect the players play style as well as roleplaying choices. An example for a tenant that influences the players play style would be one such as: "Defeats enemies in open combat." encouraging the play to shy away from using stealth and assassinations. An example for a tenant that influences role play would be one such as: "Murder the innocent.". Each god has 3 tenants for the player to follow. These 3 tenants consist of 2 "do's" and 1 "don't", telling the player what he is supposed to do and what not. An example for tenants would be "Complete quests for the people of the land. Fight enemies in open combat. Never break the laws of the land". At the beginning of the game the player's chosen deity will bestow a blessing on the player, that is permanent, as long as the player is a follower of that deity. The player can also receive the blessing of an allied god to his own for a certain amount of time by interacting with that god at their temple, or shrines. An Example for such blessing would be: "Odin's blessing: Magic deals 20% more damage". By upholding tenants, praying and completing quests the player raises his favor with his deity. Favor ranges from 0 to 150. The base level of favor at the beginning of the game is 30. If favor falls below 30 the player's god may abandon him. At a favor of 100 the player is rewarded with an additional blessing/magical effect that is more powerful than the base blessing. An example would be "Thor's wrath: Melee weapons deal triple damage during storms/rainy weather.". If the player reaches a favor of 150 he is awarded with a powerful new ability. An example would be "Freya's Power: Praying in nature replenishes 50 health/stamina/magic per second.".

1.4.1 Genre

The game is an RPG (role playing game). The player will create their own character to play with in the world.

[Describe the game genre by defining elements or a common basic rule set that describes the nature of the game].

1.4.2 Number of players

Singleplayer.

1.4.3 Game theme

Norse Mythology, Medieval, Fantasy.

1.4.4 Story summary

The Norse gods are at war and there are two sides. Odin, Thor and Loki against Freya, Tyr and Hel. It is up to the player to decide which side will win. At the beginning of the game the player will choose a deity to worship. The goal is to help the chosen side win the war by slaying the enemy gods in order to ascend into godhood as reward. To slay the gods the player has to attack their settlements and defile their shrines and temples making them mad and therefore luring them into a fight in which they then can be defeated.

2 Mechanics

[This section describes the game elements, its attributes, and its interaction rules. All elements that create the game must be detailed and described in this section. A game

character, its visual aspect, its sound effects, its personality may be described in this section].

2.1 Game elements categories

Enemies:

Hostile NPCs. Fight with all sorts of weapons. Cannot be interacted with.

Boss:

Norse Gods of the enemy faction. Fight like normal enemies. Have more health and deal more damage.

Weapons:

Swords, Axes, Daggers, Bows & Arrows, Magic Spells.

[Create game elements categories. This may help to organize better the design and to establish a solid base for reuse. Some examples of game elements categories are: enemy, boss, weapon, world or music].

2.2 Rules

Following Tenants -> Player gains Favor

Disobeying Tenants -> Player loses Favor / gets abandoned by their god

[Describe the valid actions that the player can do and how the game should respond to these actions].

2.2.1 Interaction rules

[Describe the valid interaction between game elements and the result of the interaction].

2.2.2 Artificial Intelligence

[Describe here how the game elements should react under different circumstances in the game].

2.3 Game world elements

[Describe elements that are outside the core gameplay. Some examples of game world elements are: world map or transportation (horse, boat or car)].

2.4 Game log elements

Two elements in the game track a player's progress. The Favor level of the player showing how well they worship their god. And a quest log showing what quests the player has completed up to this point.

[Describe elements that register the player progression. Some examples of game log elements can be: score, save or achievement].

2.5 Other elements

[Describe any other element that can't be classified on any other element classification in the mechanics].

2.6 Assets list

[This section contains the list of every game asset that needs to be created to finish the game].

3 Dynamics

[This section describes the flow of the game. History, levels, chapters, puzzles, interfaces (hardware and software). This section is directly related with the mechanics section since the dynamics are constructed from the elements in the mechanics].

3.1 Game World

Grasslands, light forests, settlements.

[This section describes the world where the game is played].

3.1.1 Game theme details

Green grasslands and light forests. Trees and small sparse vegetation. Mabe snowy regions. Wooden houses and sheds. Wooden temples and shrines for worship of the gods. Dirt roads.

[Describe the world environment, its ambientation. Put in details how the game world should look, sound and feel].

3.1.2 Missions/levels/chapters Flow

Since the game is an open world game, navigation is not of a linear nature. The player is free to go wherever he wants. However in certain areas, depending on the player allegiance npcs will be hostile. Missions/Quests are of a linear nature however. The player needs to complete one quest after another to advance the main questline.

[Describe how the player can navigate through the world in the game, if navigation is linear or he can choose where to go, if he can skip levels or if there are restrictions to enter in some areas].

3.2 Missions/levels/chapters elements

Fortify your Position:

Defeat bandits in the area controlled by your god, or allied gods.

Defile Shrines (0/2):

The player needs to defile two shrines of an enemy god in that particular gods territory.

Attack Settlement:

The player attacks an enemy settlement. Defeat the enemy forces and claim the settlement for your god's side.

Defile Temple:

The player has to defile the temple within the acquired settlement.

Defeat God:

The player has to defeat the enemy god in combat.

[This section describes the elements that will form the core gameplay].

3.2.1 Objectives

[Describe the objectives to achieve in the dynamics of the game].

3.2.2 Rewards

Defeated enemies can be looted to find better weapons, armor or usable items (potions). Player actions according to their gods' tenants are rewarded with a gain in favor. Gaining a certain amount of favor gains the player is rewarded with blessings (magical effects/ stat bonuses), or new abilities. Quests will also yield item rewards for the player. [Rewards to the player for his actions in the game. Like achieving a goal or beating a challenge].

3.2.3 Challenges

The game poses three main challenges. Raising your favor by adhering to your chosen gods tenants. Defeating enemies in combat. Defeating enemy gods in Boss fights. [Challenges put to the players throughout the game. Some examples of challenges are: a fight, a puzzle or a boss fight].

3.3 Special areas

[Describe the areas which not classify as mission, level or chapter. Some examples of special areas are: stores, inns or bonus areas].

3.4 Game interface

[Describe every element of every screen that the player can manipulate. Some screen examples can be: title, options, main, inventory or save].

HUD:

Features a Health- and Stamina Bar and Character Quickslots. Top (magic), bottom (Items), left (left hand equipment), right (right hand equipment). The Player can go through the left and right hand Quickslots using the arrow keys on the keyboard.

Select Window:

The Player can open the "Select window via the Esc key on the keyboard. In the "Select Window" the player can choose what UI window to open: Quest, Inventory, Equipping, Settings.

Quest-Window:

The Quest Window shows a list of active and completed quests.

Inventory Window:

The Inventory Window at this point shows the Weapon Items the player has in his inventory.

Equipping Window:

In the Equipping window the player sees the items he has equipped in his quickslots. To equip an item into one of the slots the player clicks on the slot. The player is then directed to the Inventory where he selects the item he wants to equip in the selected slot, by clicking on it.

Dialogue Window:

The Dialogue Window contains the name of the NPC the player interacts with and their dialogue.

3.5 Controls interface

[Describe how the player can manipulate every screen in the game].

3.6 Game Balance

[Describe the elements that are easy to change and can be used to increase or decrease the challenges difficulty. Examples of elements that can easily balance the challenges are enemy speed, life or number of enemies in a fight].

4 Visuals and Sounds

[This section details what the player sees and hears. This section can be extended in case of augmented reality games like the inclusion of smells].

4.1 Game visuals

Low Poly graphics.

[Describe all the visual aspects of the game used by providing screenshots and short descriptions].

4.2 Game sounds

[Describe all the sound and music used in the game and describe why you use them].

5 Document information

5.1 Definition, acronyms and abbreviations.

[Define all the concepts, acronyms and abbreviations needed to the understanding of this document].

Term or abbreviation	Definition and acronyms

5.2 Document references.

Movement + Movement Animations + Character Animations:

Sebastian Graves. (15.03.2020). *Create DARK SOULS in Unity* ▷ EP. 1 Movement [Video file]. Youtube. <https://youtu.be/LOC5GJ5rFFw>

Camera Movement (Follow Player):

Sebastian Graves. (22.03.2020). *Create DARK SOULS in Unity* ▷ EP. 2 Camera Handler [Video file]. Youtube. <https://youtu.be/c1FYp1oOFIs>

Camera Collision + Smooth Camera Movement:

Sebastian Graves. (31.03.2020). Create DARK SOULS in Unity ▷ EP. 3 Camera Collisions [Video file]. Youtube. <https://youtu.be/Don3IGSAF2A>

Rolling Mechanic:

Sebastian Graves. (11.04.2020). Create DARK SOULS in Unity ▷ EP. 4 ROLLING [Video file]. Youtube. <https://youtu.be/RVWh-YAQEIQ>

Sprinting:

Sebastian Graves. (22.04.2020). Create DARK SOULS in Unity ▷ EP.5 SPRINT [Video file]. Youtube. https://youtu.be/gyqfmE_1aus

Inventory System, Weapon Items:

Sebastian Graves. (21.05.2020). Create DARK SOULS in Unity ▷ EP. 8 WEAPON ITEMS [Video file]. Youtube. <https://youtu.be/7lbW2dxxrf4>

Player Stats, Health, UI, Receiving Damage:

Sebastian Graves. (21.05.2020). Create DARK SOULS in Unity ▷ EP. 10 Player Health & Damage [Video file]. Youtube. <https://youtu.be/iJSfBwC121c>

Weapon Quick Slots:

Sebastian Graves. (27.07.2020). Create DARK SOULS in Unity ▷ EP. 14 Weapon Quick Slots [Video file]. Youtube. <https://youtu.be/qC9TPzXdxyk>

Weapon Slots UI Screen, Weapon Slot Manager functionalities, Weapon Icons:

Sebastian Graves. (04.08.2020). Create DARK SOULS in Unity ▷ EP. 15 Weapon Slots UI [Video file]. Youtube. <https://youtu.be/Xo8gKcu3yxw>

Stamina Drain on Rolling and Sprinting:

Sebastian Graves. (10.08.2020). Create DARK SOULS in Unity ▷ EP. 16 Weapon Stamina Drain [Video file]. Youtube. https://youtu.be/K3--1PCTf_g

Item Pick Up, Interactable class:

Sebastian Graves. (20.08.2020). Create DARK SOULS in Unity ▷ EP. 17 Pick Up Item [Video file]. Youtube. <https://youtu.be/Rva7zfW9NFw>

UI Pop Ups, for Pick Up Item, Dialogue, Quests etc:

Sebastian Graves. (27.08.2020). Create DARK SOULS in Unity ▷ EP. 18 UI Pop Ups [Video file]. Youtube. <https://youtu.be/SaSbwLs8WOo>

Inventory UI, used same Idea for Quest Lists UI:

Sebastian Graves. (15.09.2020). Create DARK SOULS in Unity ▷ EP. 20 Inventory UI [Video file]. Youtube. <https://youtu.be/0Zl1Si23XbE>

Weapon Inventory Slots UI:

Sebastian Graves. (21.09.2020). Create DARK SOULS in Unity ▷ EP.21 Inventory Slots UI [Video file]. Youtube. <https://youtu.be/l7yYL00dzlo>

Equipment Screen UI:

Sebastian Graves. (22.09.2020). *Create DARK SOULS in Unity* ▷ EP. 22 Equipment Screen UI [Video file]. Youtube. <https://youtu.be/jFRI3hwQhOE>

Bug fixes: camera jitter, input memory usage:

Sebastian Graves. (30.09.2020). *Create DARK SOULS in Unity* ▷ EP. 23 Camera JITTER & Bug Fixes [Video file]. Youtube. <https://youtu.be/iQ6lvTsSmY8>

Camera Lock On:

Sebastian Graves. (03.10.2020). *Create DARK SOULS in Unity* ▷ EP. 24 LOCK ON [Video file]. Youtube. <https://youtu.be/r5SdldM0pKQ>

Sebastian Graves. (10.10.2020). *Create DARK SOULS in Unity* ▷ EP. 25 LOCK ON (PT. 2) [Video file]. Youtube. <https://youtu.be/XOmXBO7a1RA>

Sebastian Graves. (18.10.2020). *Create DARK SOULS in Unity* ▷ EP. 26 LOCK ON (PT. 3) [Video file]. Youtube. <https://youtu.be/5SnhbiKsqoY>

Equip Weapons from Inventory:

Sebastian Graves. (26.10.2020). *Create DARK SOULS in Unity* ▷ EP. 27 Switch Weapons from Inventory [Video file]. Youtube. https://youtu.be/R_0hcqRaLMk

A.I State Machine:

Sebastian Graves. (17.11.2020). *Create DARK SOULS in Unity* ▷ EP. 30 ENEMY A.I - FOV Detection [Video file]. Youtube. <https://youtu.be/DPtfqQvUIEQ>

Sebastian Graves. (24.11.2020). *Create DARK SOULS in Unity* ▷ EP. 31 ENEMY A.I - Movement & Pathfinding [Video file]. Youtube. <https://youtu.be/rGlxCB3MKtl>

Sebastian Graves. (02.12.2020). *Create DARK SOULS in Unity* ▷ EP. 32 ENEMY A.I - ATTACKS [Video file]. Youtube. <https://youtu.be/XdSNG6FWq8A>

Sebastian Graves. (08.12.2020). *Create DARK SOULS in Unity* ▷ EP. 33 A.I STATE MACHINE [Video file]. Youtube. <https://youtu.be/X7TPjtsdqhg>

Sebastian Graves. (16.12.2020). *Create DARK SOULS in Unity* ▷ EP. 34 A.I STATE MACHINE (PT. 2) [Video file]. Youtube. <https://youtu.be/g43lohNVF9M>

Stamina Regeneration:

Sebastian Graves. (09.01.2021). *Create DARK SOULS in Unity* ▷ EP. 38 Rolling Invulnerability & Stamina Regeneration [Video file]. Youtube. <https://youtu.be/vHxcJihYXhc>

Stamina Dependant Actions:

Sebastian Graves. (16.02.2021). *Create DARK SOULS in Unity* ▷ EP. 45 Stamina Dependant Actions [Video file]. Youtube. https://youtu.be/nLhCa_17fHQ

Quest + Quest Goal Class:

Brackeys. (10.02.2019). *QUESTING SYSTEM in Unity!* [Video file]. Youtube.
https://youtu.be/e7VEe_qW4oE

Pick Up Items - Particle System Animation:

Brackeys. (18.02.2018). *Everything to know about PARTICLE SYSTEM* [Video file]. Youtube.
<https://youtu.be/FEA1wTMJAR0>

UI Animations (Tweening):

Coco Code. (25.02.2021). *Master UI ANIMATIONS! - Unity UI Tutorial* [Video file]. Youtube.
<https://youtu.be/YqMpVCPX2Is>

Attack Animations:

Sebastian Graves. (01.06.2020). *Create DARK SOULS in Unity* ▸ *EP. 9 LIGHT & HEAVY ATTACKS* [Video file]. Youtube. <https://youtu.be/cOGep0Vlayk>

6 Attachments

[Add any other information or relevant document to the design of the game].

Character Asset:

<https://assetstore.unity.com/packages/3d/characters/humanoids/lowpoly-norse-gods-184490>