SHADOW CAST
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Design Document
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TABLE OF CONTENTS

SECTION 1: INTRODUCTION

Sunshine Daisy Studios presents *Shadow Cast*, a game filled with dread and urgency as you race to protect the people you love from menacing Shadows. Playing as a Viking warrior women who foresees an attack on her village and Chieftain, our story follows her mission to save them from the Shadows. Through many obstacles and battles against the Shadows, she gradually makes way home, but is home better off without her?

Set in Nordic Viking country, *Shadow Cast's* aesthetic is that of minimalist art, primarily utilizing shades of dark grey with pops of dark blues and reds. Colors will be muted and silhouettes blurred, contributing to the game's grim and unforeseeable plot line. Shadow Cast is a 2D action-adventure side scroller with occasional quick-time events.

SECTION 2: STORY & LORE

SECTION 2.1: VIKING LORE

Since the dawn of time, Vikings have been at war with the realm of Shadows. Thriving on human suffering, they relish in the damage and fear they inflict on mere mortals. The Vikings proudly rush into battle, seeking honor and vengeance for themselves and their brethren lost to Valhalla. While a Shadow's touch can mean instant death for most, the real horror dwells for those who are touched and live to tell the tale...

SECTION 2.2: STORY

Deep in Viking country, a battle breaks out yet between man and Shadow. The Chieftain's daughter (the main character, MC) and her fellow Viking warriors engage the Shadows with all their strength and valor. As the war escalates, MC is struck by a Shadow, triggering a vision of her father (the Chieftain) and her village being ravaged by Shadows, and she passes out on the battlefield.

Waking from her slumber, MC finds herself weaponless in the forest. Fearing for her village, she races through the region to return and protect her people. However, MC doesn't realize that the Shadows may be the least of her worries...

Stealthily avoiding the Shadows, MC makes her way through the forest, eventually coming across a sword. The ongoing turmoil and newfound weapon makes MC reminisce on a happier time when her father presented her with her first sword. With a weapon in hand and the fond memories of her village close by, MC plows her way through the remainder of the forest, determined to reach her destination.

Exiting the forest, MC must venture through a cave to reach her village. Along the way, she notices several Shadows up ahead. Sensing their menacing presence, MC takes the offensive and destroys all the Shadows in her path until she reaches the end of the cave.

As she approaches her village, MC looks back on all the fond memories she had with her friends and family. Sadly, her memories of a proud-but-quaint town are in stark contrast with the ruined village she now sees before her. Desperate to save her father and remaining villagers now more than ever, MC

charges to her village and kills every Shadow she sees on her way. Upon entering the Chieftain's hut, MC is shocked and saddened to realize that she is too late: a Shadow smugly sits where her father once sat, wearing the helmet he once wore.

Blind rage quickly consumes her sadness, and MC viciously slaughters the final Shadow. As her anger dissipates, so does the curse that was placed upon her on the battlefield from the Shadow's touch. As the Shadow on the throne transforms into her dead father, she realizes that the Shadows she was killing were actually the villagers, the very people she tried to save.

In order to end the game, the player must choose one of two paths: Honor or Revenge.

Choosing honor, the story concludes with MC giving herself up for execution as penance for her grave mistake. Otherwise, MC will approach a hoard of Shadows, angrily pursuing their king for vengeance.

SECTION 3: STORY SEQUENCE CHART

SECTION 4: STORYBOARDS

SECTION 5: SCRIPT

Shadow Cast - Script

BLACK SCREEN

All beings manifest as Shadows.

Since the dawn of time, Vikings have been at war with the realm of Shadows.

Shadows thrive on human suffering, and they relish in the damage and fear they inflict on mere mortals.

The Vikings proudly rush into battle, seeking honor and vengeance for themselves and their brethren lost to Valhalla.

While a Shadow's touch can mean instant death for most, the real horror dwells for those who are touched and live to tell the tale…

-- Scene 1 : Prologue --

EXT. Field/meadow.

Battle is taking place between the Vikings and the shadows.

Screen fades into images of the battle between Vikings (including protagonist) and shadows

Image of MC being touched by a Shadow, immediately has vision of Shadows attacking her village

MC passes out, cuts to black, TITLE SCREEN!

-- Scene 2 : The Forest --

EXT. A forest on the edge of the battlefield.

Black screen fades out

MC

((After the battle, she suddenly wakes up in the forest))

(Large Gasp)

AHHHH! I must return to the village!

Starts off in the forest, starts seeing shadows.)

MC

What are shadows doing this far into the forest? Where did my sword
go? I'm unarmed so I'll have to hide...

(She can hide in trees now!)

(Keeps going through the forest until she discovers a fallen sword)

(picks up the sword, triggers a flashback of MC and her father, the
chieftain)

-- Scene 3 : Flashback 1 --

Series of still-motions

Father giving MC her first sword. MC is really happy!

She swings the sword, dad steps back, surprised.

Dad close-up, proud.

MC on dad's shoulders swinging sword. Walking into sunset.

-- END FLASHBACK --

EXT: Forest transitioning to cave

(MC walks into the cave...to level 2…)

-- Scene 4 : Cave / Cavern --

MC

(first encounter with shadows in the cave)

What are so many shadows doing so close to home? How close to the chieftain's stronghold have they gotten?

(continues through the cave slaying shadows in her path)

(sees the broken Viking warship)

This is my way out. Looks like I need a sail and a couple of oars.

(sailing on boat towards the village, fades to white for flashback)

-- Scene 5 : Village Flashback --

(Stills of MC, her friend(s), and villagers hanging out/bonding together in the past)

Still: Landscape of village @ sunrise

Still: Happy Villagers

Series of Stills: MC and friend

Still: Landscape of village @ sunset

(At end of the flashback, fade to black)

-- Scene 6 : The Village --

MC

(upon entering the now deserted village)

How could so much have changed in so little time?

-- Scene 7 : The Stronghold --

MC

(upon entering stronghold)

ODIN OWNS YOU ALL!

(entering the throne room, MC is shocked to see a shadow sitting on the throne where her father should be)

WHAT HAVE YOU DONE WITH HIM?

(she races in and stabs the shadow)

CHIEFTAIN

You've thrown your lot in with them. You're no longer a Viking. You've become one of them...

(stabs the shadow king, shadow falls/dies, shadow image flickers to reality, aka the king on the ground, dying)

CHIEFTAIN

(dying)

...you're no longer my daughter…

(MC realizes what she has done)

(cue backwards flashback)

(cue final choice...)

-- Scene 8 : Epilogue --

AMEND THROUGH HONOR - ENDING 1

-CUTSCENE-

See MC getting captured and lead away

MC marches up the the execution platform

MC kneels

Executioner raises axe

--CUT TO BLACK--

~~~~~~

AMEND THROUGH REVENGE - ENDING 2

-CUTSCENE-

See MC escape and leave the stronghold/ village

Epic shot of MC on a mountain, below is a mass of shadows

MC charges mass of shadows

--CUT TO BLACK--

SECTION 6: AESTHETICS

SECTION 6.1: AESTHETIC DESCRIPTION

The art style throughout *Shadow Cast* will be based primarily on geometric shapes and simple texturing. The characters will be styled as silhouettes with very simple texturing. The art throughout the game will maintain this minimalistic aesthetic. This style of aesthetic is meant to add to the uncertain and eeriness of the game's plot line. The outline of the shapes will be blurred to create a menacing atmosphere. The coloring throughout the entire game will be centered around grays and dark blues. Each stage will have highlight colors specific to that level with darker neutrals overlaid.

The aesthetics of *Shadow Cast* take inspiration from a few different games such as *Alto's Adventure*, *Limbo* and *Journey*. When looking at environment design, *Altos's Adventure* will greatly influence the art style. The environment art in *Alto's Adventure* is made up of geometric shapes and monochromatic coloring. The characters of *Shadow Cast* will be influenced by the silhouetted characters found in *Limbo*. They maintain very simple shapes and texturing.

SECTION 6.2: WORLD MAP

SECTION 6.3: MENU SCREENS

The aesthetic throughout all of the menu screens will be very minimalist. Most will have a plain, dark color as their background. Specific typefaces used will include Norse, Epistolar , English Runic, and Lato (Light). These typefaces include Nordic (Viking) styling, English Ruin characters, and a themeless style. The typeface coloring will mainly be a light grey color.

MAIN MENU

The main menu screen of the game will be what the user will see upon start up of the game. On this screen there will be a few options to choose from. "New Game", where the player can begin playing the game. "How to Play", where the player can access instructions on how to play the game.

Aesthetically, this screen will be overlaid with dark colors. There will be a very simple silhouette of mountains in the distance. The *Shadow Cast* game title will be displayed in the center of the screen with the two buttons positioned underneath, at the bottom center of the screen. The coloring of these pieces of text will be a lighter gray color. While on this screen, *Shadow Cast's* main theme will be playing on loop.

LOADING SCREENS

Loading screens will be an important feature in creating smooth gameplay for the user to experience. These screens will be placed as transitions between each level of *Shadow Cast*, as the player progresses. Their purpose is to allow each new level time to completely load before the player begins gameplay in the following area.

The aesthetic of each loading screen with primarily be a plain, dark gray screen. There will a small animation in the center of the screen depending on the level. The animation will consist of a small light gray (almost white) shape such as trees, a boat, or the village gate with a simplified silhouette of the main character (described in section 6.5) running.

PAUSE SCREEN

The pause screen allows the player to have freedom if they need to step away from their computer or review game controls. The player will have ability to pause the game at any point throughout gameplay. The only places the pause feature wouldn't be accessible would be on the main menu, loading screens or during cutscenes. The pause screen will be activated when the player presses 'p' on the keyword.

This screen will have a very simple design. It will be a black screen with three buttons positioned in the center of the screen one under the other. The options given will include Continue, How to Play, and Exit Game. These buttons will be displayed in light gray text color.

ENDING CHOICE

This screen will give present two buttons for the player to choose between. The two options the player will be given are 'Amend Through Honor' and 'Amend Through Revenge'. This page will have a dark background with light gray text in a stylized font. The background of this page could include faded silhouettes that would allude to what each option could entail but if this option cannot be executed the background will be a solid dark color.

CREDITS

A credits screen will be the very last screen of the game. It will be displayed after the player has completed the game in its entirety. This screen will list the game title, game creators and their title. Any additional information that is appropriate to the game ending would be displayed on this screen.

Aesthetically, this screen will be very similar to the previous screen designs. It will be made up of a dark background either with dark gray silhouettes of mountains or of a solid color. The text on this screen will be very light gray. There will be a specific musical score for this screen that will be playing on loop while the player is viewing this screen.
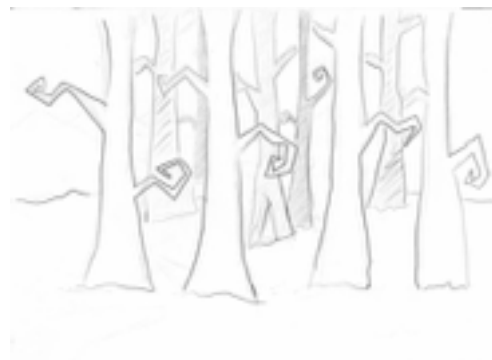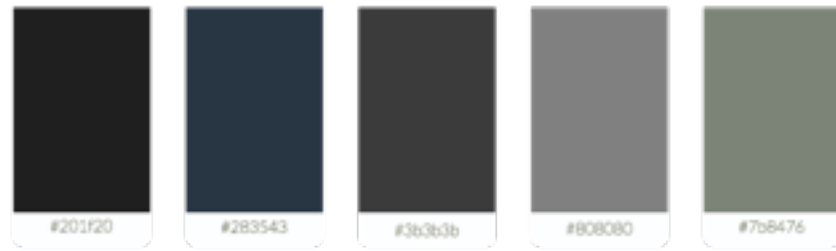
SECTION 6.4: ENVIRONMENTS

LEVEL 1: FOREST

The Forest will be the calmest area of the game. The player will be involved only in stealth type gameplay. This includes walking through forest and hiding from Shadows. The Forest will be located at the bottom left(South West area) of our map. The player will start at the edge of the Forest and journey east. The Forest will be designed with multiple layers made up of background mountains, geometrically designed trees, and sloping planes as ground.

Tone: The player should feel a little confused but generally calm during this area of the game. They should feel a sense of survival in result of being without a weapon and in the presence of enemy Shadows.

Colors: In the forest there will be greens and dark blues combined with neutrals (white, grey, black). All colors will be overlaid with a partially translucent black layer to bring the saturation and brightness of the layers down.

LEVEL 2: CAVE

The Cave will be an area of tension, resourcefulness and purpose. The player has her first in game "Flashback" depicting her and her father from the past. She recalls her need to return to the Stronghold to save her father. The player will begin fighting off her enemies (Shadows). This area is the first place she feels they are threatening her life. She is in possession of a weapon (sword) and uses it to 'defend' herself. The player comes across a boat that she must repair to sail through the cavern. The Cave will be located in the south east area of the map. This area connects the Forest to a nearby Village. The general aesthetic of the Cave will remain both geometric and monochromatic in color. At this level in the game though the coloring will begin to get darker and the blur of shape outlines will get more prominent. Inside the Cave there will be different objects such as broken pieces of ships, crates, etc. These items will contrast the darker environment and be highlighted with tints of reds and blues.
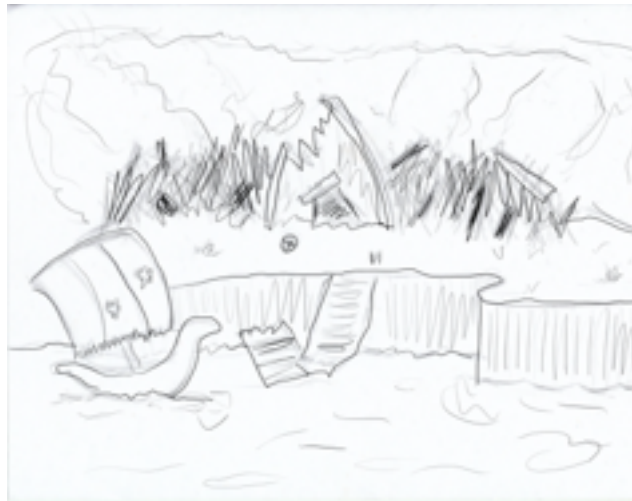

      Tone: The player should feel determined and fearful during this stage of the game. They are forced to protect themselves by killing Shadows as well as collecting items to find a way out of the cavern.
      Colors: This area will include much darker colors. This will include deep blues, purples and neutrals. Classic Nordic colors will make an appearance in the form of ruins in the cave. These colors will include deep reds and blues.

#201f20 **#32223a** **#070746** **#808080** **#511520**

LIMBO

LEVEL 3: VILLAGE

The Village will be very dreary and completely deserted. The player should feel very concerned and confused why the Village is so different outside of the flashback. When the player reaches the end of the town they will see a single shadow. The Shadow is the only "being" inhabiting the town. The player assumes this Shadow killed the humans who lived in the town. The player will then fight the Shadow in revenge of her people. The aesthetic of this area will continue to be geometrics and monochromatic but instead of accentuating blurred outlines, like in the Cave level, the outlines will be sharp. This is to emphasize how destroyed this Village is. There will be buildings that will have rough exteriors as well as debris scattered along the ground.

Tone: The player should feel scared and concerned for what has happened to this Village. They should also feel a sense of duty to protect and avenge the losses of the Village. This area should raise concern in the player to get to the Stronghold and ensure her father is still alive.

Colors: This area will be primarily dark neutrals. The Village is meant to be lifeless so it will be very monochromatic and desaturated.
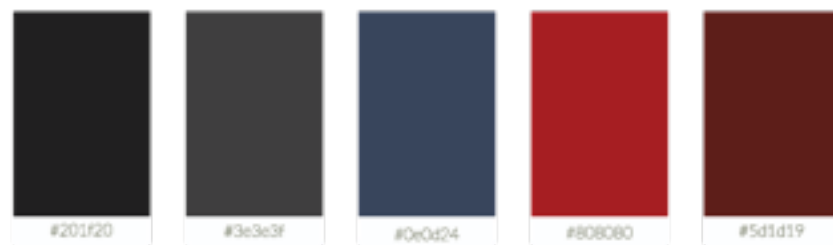
LEVEL 4: STRONGHOLD

The Stronghold is the area that the Chieftain occupies. Many Vikings live in this area. When the main character arrives, it is overtaken by Shadows. There will be no human in sight. This will be the second area that the player is forced to fight multiple Shadows to protect herself / make her way to the Chieftain's hut. The player should feel anxious to get to the Chieftain's hut. The main character will do almost anything to get through the mass of Shadows to get to her father.

Tone: There will be a mix of many emotions during this area. These include anxiety, determination, fear, confusion and guilt.

Colors: The color scheme for this area will return the winter blues, greens, and neutrals. There will be pops of red and darker blues.
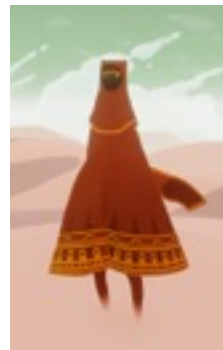
SECTION 6.5: CHARACTER DESIGNS / DESCRIPTIONS

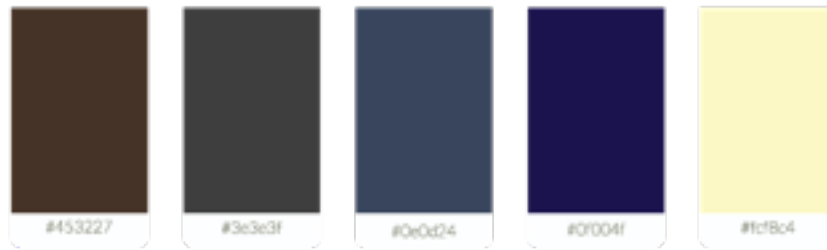## MAIN CHARACTER

Art Design

When designing the main character, our team first looked at historical depictions of women in Nordic culture. We decided to make her resemble a shield maiden, who is characterized by a stronger build, specific wardrobe, and blonde hair in some kind of braid. After establishing this look, we decided to keep the art style of our main character to a more simplistic 2D silhouette. The design will resemble the character design of the characters in the game LIMBO.

We will be keeping the frame of our character simple and add details in the texturing that is added on top of her silhouette. This texturing will resemble that of the textures in the game Journey. We will give our main character blonde hair that is styled into a longer braid that falls down her back. Her wardrobe will be a simple blue dress geometrically styled, similar to that of what shield maidens would generally wear. She will also be wearing dark brown boots because our setting is during the winter time. All of these designs will be drawn in a geometric and minimalistic fashion to be cohesive with the art style of our game environments.
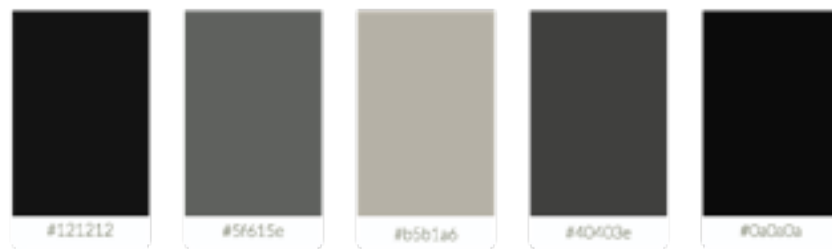
Personality

The main character's personality will be impulsive, well-intentioned, anxious, and proud.

#453227 #3e3e3f #0e0d24 #0f004f #fcf8c4

SHADOWS

Art Design

The design of the Shadows is important to give the right balance of tone. The Shadows will be completely silhouetted. Their shape will resemble the frame of a person. The outline of the silhouette will be very smooth and blurred on so that their shape isn't too crisp. The only detail on the body of the Shadow will be two larger indentations for eyes. There will not be any type of eye used but just two areas that eyes would be located in. The Shadows will not have any texturing on their frame other than being completely colored dark gray approaching the color black. The Shadow may have a slight glow to them.

#121212 #5f615e #b5b1a6 #40403e #0a0a0a

Personality

Shadows are typically menacing and relentless in their infliction of human suffering. They don't care who or what they cause damage to, and they love using humans to their advantage to strengthen their numbers. Shadows in the game have slight personality/attack level differences in each level. They are as follows:

- Forest: The Shadows personality in this level will be calm and foreboding.
- Cave: In this level the Shadows personality become ruthless and hesitant.
- Stronghold: Throughout this level the Shadows personality become merciless and defensive.

CHIEFTAIN/FATHER

Art Design

        The design of the father will be drawn in many different ways throughout our game. In normal gameplay the Chief will be visualized as a Shadow. He will take on the exact same form as the rest of the Shadows do in the rest of the game with the exception of a basic Chieftain helmet on top of his head. When the main character finally kills him in shadow form, he will be displayed as a normal 2D figure similar to the art style the main character will take on. Throughout any cutscenes the Chief is apart of, he will be drawn very flat as if sewn onto a tapestry.

Personality

The Chieftain's personality throughout the game will be assertive and loving.

OTHER VIKINGS/ VILLAGERS

Art Design

Other Vikings and villagers are usually depicted in cutscenes, so they will have a very flat, tapestry-like appearance. Their design is very similar to the Chieftain's in tapestry form.

Personality

The Vikings and villagers are proud and valiant. They have an immense vendetta against the Shadows that have caused them so much devastation in the past, and seek honor in defeating them.

SECTION 6.6: WEAPONS / ITEMS

Throughout the game there will be specific items that the main character will use during gameplay. These items will have very specific uses. Certain items will only be used in mini games to progress to the remainder of the level. The design of these items will be silhouettes with very minimal detail. They will be geometric in nature with only a few details added. The coloring will primarily depend on the item specifically. Though each item will have a different set of colors, each color scheme will tend towards darker and desaturated shades. These items will be modeled in Autodesk Maya and textured using Adobe Photoshop.

SWORDS

The sword will be the primary item / weapon used through most the game. This item is found towards the end of the first level, the Forest. The main character will be using it to fight off all of her "enemies". There will be three different actions/animations associated with the main character holding the sword. The aesthetics of the sword will be sharp and geometric in design to mimic the look of an authentic Viking sword. This style will also be cohesive with the style of the other art throughout the game. The sword will have minimal detail. The primary shape will be silhouetted and then textured accordingly. The texture will be based on one darker gray color combined with two shades, one being dark and one lighter to emphasize any shadowing or details needed.

SHIELD

The shield will only be used by Shadows in specific levels of the game. The aesthetics of the shield will be slightly more detailed than other items. This is primarily because of the stylization they have in their silhouettes. Since the shield is only being used by Shadows, their coloring will mimic their color scheme. This means that they will primarily be colored very dark gray, almost black, with accents of medium shades of gray.

OARS

The oars are an item used entirely in a mini game. The main character is given the task to find this item to continue her journey onward. That being the case, this item needs minimal detail. The silhouette of the oars will be very simple geometric shapes. The detail of this item will be in its texturing. The most complex aspect of this items aesthetic is creating a texture that somewhat resembles wood. Its coloring will begin with a shade of brown and then adjusted to be very desaturated. There may be a simple Nordic design made to look engraved onto the model of the oars. If this is the case , the design will be located on lower end of the oar.
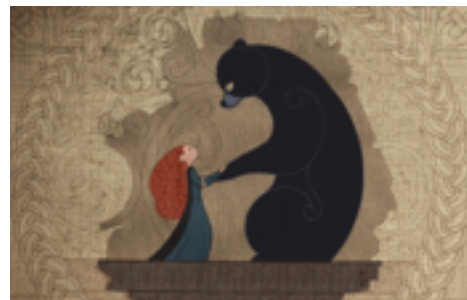
SAIL

The sail is another item that is only used during a mini game to progress the main character through the game. The sail with be folded up on top of another minor item in the Cave Level. It will not look like a sail normally would because it is meant to look ripped and discarded. Its appearance will resemble that of a folded sheet. This item will have accents of color in the form of a pattern to more closely resemble a sail. The accents of color will be shades of red and dark blue accompanied by dark neutral tones. All of these colors will be desaturated and darkened to aesthetically match the color scheme of the game as a whole.

SECTION 6.7: CUTSCENES

Art Design

The art design for the cutscenes will resemble the artwork on a tapestry. The cutscenes will be very simplistic, "black and white," and on a backdrop resembling parchment paper. All of the art work will be geometric in style and made up completely of silhouettes without any texturing. If time permits, these cutscenes will be animated line drawings. If there is an issue transferring the art work into an animated form, the cutscenes will be a sequence of still images. All of the cutscenes will have specific music to add to the tone of the cutscene.

CUTSCENE #1 (OPENING SEQUENCE):

After some brief context on a black screen (see Storyboards), the cutscene opens with an ongoing battle between the Main Character, her fellow Vikings, and a band of Shadows. After some clashing, the main character is touched by a Shadow and is propelled into a vision of the Stronghold being attacked by Shadows and killing the Chieftain. The screen fades to black as the main character passes out.

CUTSCENE #2 (END OF FOREST LEVEL FLASHBACK):

As a young girl, the main character is being given her first sword by her father, the Chieftain. Her father teaches her to use the sword, and she swings it ecstatically. The main character and her father lovingly embrace.

CUTSCENE #3 (END OF CAVE LEVEL FLASHBACK):

The main character reminisces about her visits to a neighboring village. This cutscene consists of showing how pleasant she remembers this village and the people who inhabited it. She remembers hanging out with her childhood friend, drinking, and doing activities throughout the village.

CUTSCENE #4 (STRONGHOLD FLASHBACK OF FATHER):

In this cutscene, the main character sees a Shadow wearing a Chieftain helmet standing where her father should be. This cutscene is to show that to the main characters sees that her father, the Chieftain, is missing and in his place is a Shadow. This situation makes the main character think her father has already been murdered by the Shadow standing in front of her.

CUTSCENE #5 (END OF STRONGHOLD LEVEL FLASHBACK):

This cutscene will be a video playing in reverse of all the major events of the game. It will show the main character killing her father, killing villagers, murdering her childhood friend, initiating combat with Vikings in the cave, and end on the Shadow striking her in the battle sequence at the beginning of the game. Throughout gameplay the main character thought she was killing Shadows, but was really killing her fellow Vikings. So, in this flashback we see her killing these characters except in their Viking form as they would be seen in reality had she not been disillusioned by the Shadow striking her.

CUTSCENE #6 (ENDING 1 – AMEND BY HONOR):

If the player chooses this ending, the game concludes with the main character surrendering herself to her people, ending the game with her death by beheading. This cutscene will include still images of the main character at a public gathering where she is about to be beheaded for her wrong doings. The colors with be very dark, including grays, deep purples and blues.

CUTSCENE #7 (ENDING 2 – AMEND BY REVENGE):

If the player chooses this ending, the game concludes with the main character running away and standing atop a hill, staring at a horde of Shadows and perhaps the Shadow Kingdom. This cutscene will also be executed using multiple still images. The color of these images will include dark grays and shades of dark red to allude to the tone of the ending choice the player has made.

SECTION 6.8: MINI-GAMES

Below is a list of all the mini-games that will appear in Shadow Cast. All mini-game locations are marked on their respective level in Section 8.2: Level Layouts. In order to begin the mini-game, the player will walk into a Collider created in Unity. Almost every mini-game will incorporate Quick-Time Events(QTEs). The one exception is the "Find the Missing Materials" mini-game in the Cave level.

QTEs involve a screen prompt asking the user to hit a key. We will be randomly picking one of four keys: 'w', 'a', 's' and 'd'. The consequence of not hitting the key in time will vary based on the mini-game. The length of time a player has to press the key will also depend on the mini-game.

LEVEL 1: THE FOREST

No mini-games appear in this level.

LEVEL 2: CAVE

Falling Floor

When the main character reaches a starting point for this mini-game, an animation will occur showing the floor beginning to collapse. In order to get past the mini-game, the main character must run and dodge the rippling floor in order to not fall to her doom. In addition to the player making the main character run and jump through the mini-game, a series of three QTE's will trigger at specific points in the map(shown on level map in Section 8.2: Level Layouts). The QTE's in this mini-game will give the player three seconds to hit the correct key. If they do not hit the correct key in time, the player will fall and die. Upon dying, the player will restart at the beginning of the level.

Stalactites Fall

When the main character reaches a starting point for this mini-game, an animation will occur showing stalactites beginning to break loose from the ceiling of the cave. In order to get past this mini-game, the main character must run and dodge the falling stalactites in order to not be impaled and die. In addition to the player making the main character run through the mini-game, a series of three QTE's will trigger at specific points in the map(show on level map in Section 8.2: Level Layouts). The QTE's in this mini-game will give the player three seconds to hit the correct key. If they do not hit the correct key in time, the player will be impaled by a stalactite and die. Upon dying, the player will restart at the beginning of the level.

Find the Missing Materials

The main character finds an old Viking ship that still floats but needs a sail and two oars. Being surrounded by shipwrecks, the main character must scavenge resources to make the ship sail. The necessary materials will be in hard-to-reach areas and will require the player to pass over the objects to

pick them up. Once all the necessary items have been picked up, the player can proceed back to the ship where they will enter a cutscene and progress to the next level.

LEVEL 3: VILLAGE

No mini-games appear in this level.

LEVEL 4: STRONGHOLD

Into the Stronghold

Once the main character reaches the gate, she will walk up to the lock and enter a Quick-Time Event. This QTE mimics placing the lock pick at the correct location in the locking mechanism. The player must complete three successful key-presses before they can get into the Stronghold. Otherwise, the QTE will reset and the player will have to start again. Each QTE will give the user five seconds to hit the correct key.

SECTION 7: ACOUSTICS

A complete list of all the Dialogue, Environmental Sounds, Character Noises and Music are listed on the next page along with their accompanying details.

SECTION 7.1: SCORE

The musical score for Shadow Cast takes inspiration from traditional Nordic music. Because our game has an overall darker tone, pedal tones, minor chords and minimalist drumming will be utilized to reflect and amplify this mood. Our overall instrumentation will be small and consist only of single instruments: cello, double bass and Hi and Lo Toms. Also included will be vocal accompaniment by bass, baritone, and soprano voices.

MUSIC	TONE
Menu/ Cutscene Music	————————————————
Main Menu	ominous but triumphant; contains the main theme
Flashback #1 & 2	happy but with underlying tones of sadness
Ending Flashback	very sad, long tones, solo cello
Ending #1(Amend by Honor)	dark and moody; contains the main theme (*Symphonie Fantastique*, *IV*)
Ending #2(Amend by Revenge)	dark but triumphant; contains the main theme
Credits	long tones, moody
Ambient Music	————————————————
Forest(Ambient)	Quiet, a little bit lighter, mysterious
Cave(Ambient)	suspenseful at first then ominous
Village Destroyed(Ambient)	despair, hope has been lost
Stronghold(Ambient)	intense, warlike
Triggered Music	————————————————
Conflict	is triggered when MC gets close to shadows; lots of drums, faster

SECTION 7.2: SOUND EFFECTS

There will be natural sound effects corresponding to each environment. The Main Character's and Vikings' sound effects will be a series of grunts and gasps or other sounds heard during combat and action such as running. Shadows will sound slightly human when fought/killed but will also have an underlying otherworldliness to them, achieved through mixing in *Audacity* to distort the sounds.

SECTION 7.3: SOUND CHART

Audacity will be the software of choice when recording the Dialogue, Environmental Sounds Character Noises listed in Section 7.3: Sound Chart. *MuseScore* will be the software of choice in terms of writing Shadow Cast's score. *MuseScore* also has an "Export" feature that will allow us to download a WAV or MP3 version of the music.
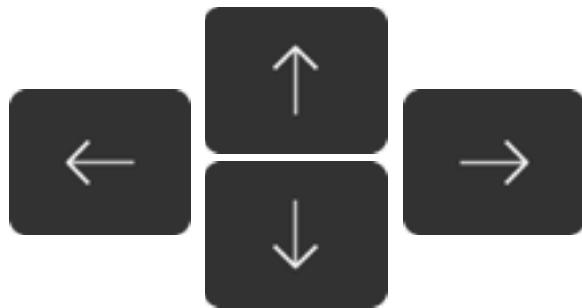
SOUND CHART ON NEXT PAGE

SECTION 8: TECHNICAL DESIGN

SECTION 8.1: SOFTWARE OVERVIEW

The software we will be using to produce Shadow Cast will be Unity 3D. This game engine uses Javascript and C# scripts as a means to program all functionality needed for gameplay. Although Shadow Cast is a 2D side scrolling game, Unity 3D will be used effectively by making the camera orthographic and follow the character as they progress through the game. The other software being used to create art, acoustic and visual elements of the game are *Adobe Photoshop*, *Autodesk Maya*, *Audacity*, *Muse Score* and *Final Cut Pro*.

Game Mechanics / Controls:

Game controls will be programmed in Unity through scripting to correspond to the respective key commands that the user can enter during gameplay. The control commands are outlined below:
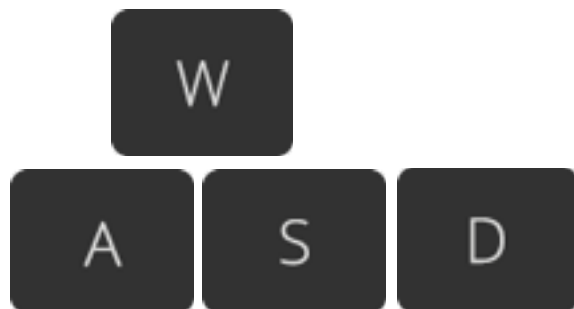
The arrow keys will be used as the main controls for movement throughout gameplay. The left and right keys will be used for moving the main character forward and backward throughout each environment. The up arrow key will be used to allow the main character to jump. The down arrow key will be used to move downward or crouch.

The 'P' key will be used to activate the Pause Screen and freeze gameplay until the player presses the continue button.

The 'WASD' keys will be used within quick time events. The player will be prompted to use these keys in a specific order to continue gameplay.

The space bar will be used throughout all of the game to allow the player to attack.

SPACE BAR

Characters

Character models will be implemented in *Autodesk Maya* and *Adobe Photoshop*. Sketches of each character will be drawn in *Photoshop* and then imported into *Maya*. In *Maya* each character will be attached to a plane and textured with their respective *Photoshop* file. To animate each character, the plane will be rigged with a basic skeleton. We will be creating animation cycles for each of the characters' movements using key frame animation. The animations the main character will have include running, walking, jumping, crouching, falling, dying, three different attacks and an idle stance. These attack animations will involve her holding a sword. The movements will include a forward stab, a swing of the sword and a jumping swing. The Shadows will also have specific animations including walking, running, attack, dying and an idle stance. These models and animations will then be imported into *Unity* for implementation.

Environments

Each environment will be drawn in *Photoshop* and then imported into *Maya*. The sketch of each environment will then be used to trace a plane in the shape of each environment layer that will then be textured with its respective *Photoshop* file. There will not be any animation cycle attached to the environment backdrops. The Maya file will be imported into Unity. Each environment will have at least two layers and their movement will be done through scripts.

Cutscenes

Art for cutscenes will be drawn using *Photoshop*. These files will be saved as images and imported into *Final Cut Pro* where they will be made into short .MOV files and imported into *Unity*. By using *Final Cut Pro* to create each cutscene, transitions can be added so that the screen fades to black before and after cutscenes are played.

Audio Development

Game music will be created with *MuseScore*, a sheet music composition software that creates electronic representations of instruments. *Audacity* will also be used to mix, cut, and edit sounds that we create through phone or computer recordings. Environment, character voices, and sound effects will be all be cut together for final edits with *Audacity*.
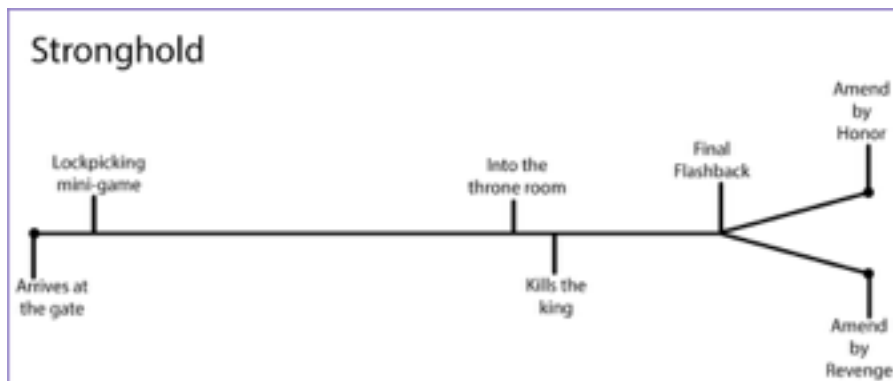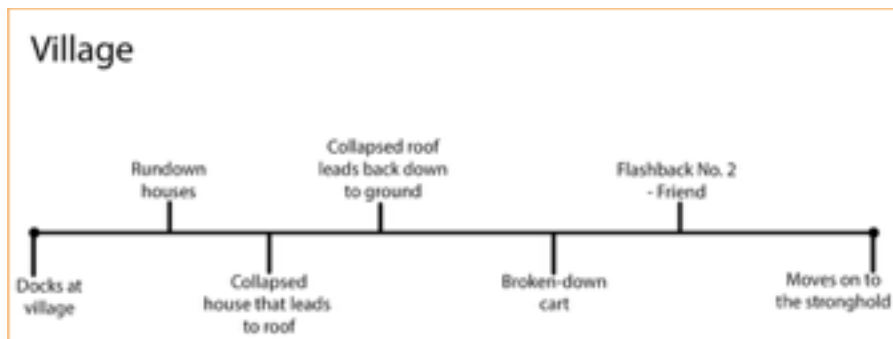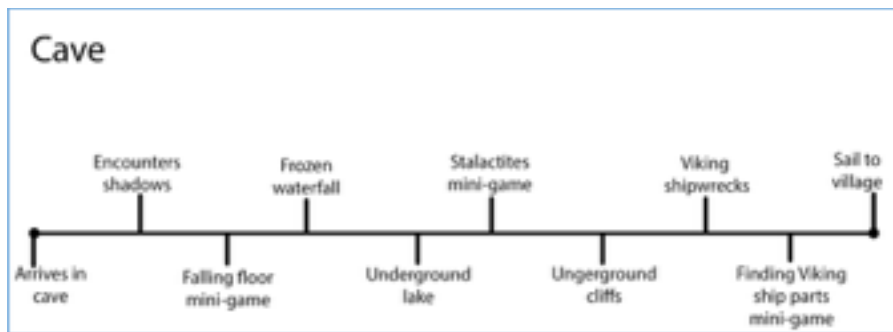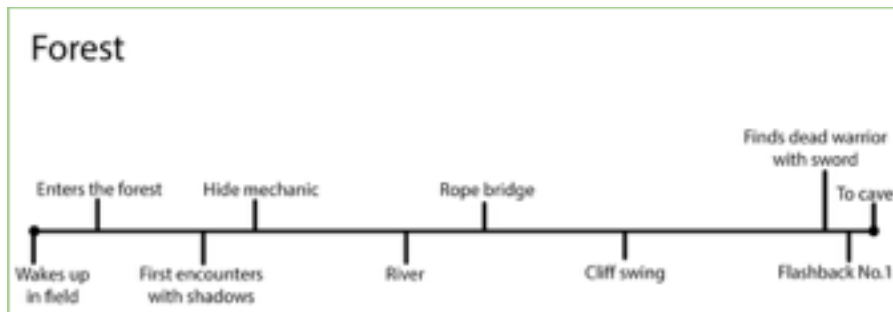
Artificial Intelligence

Shadow enemies will be placed onto a constant movement path in Unity in order to simulate enemy interactions with the main character. The shadows will move towards the character in a linear path, allowing the main character to effectively attack enemies.
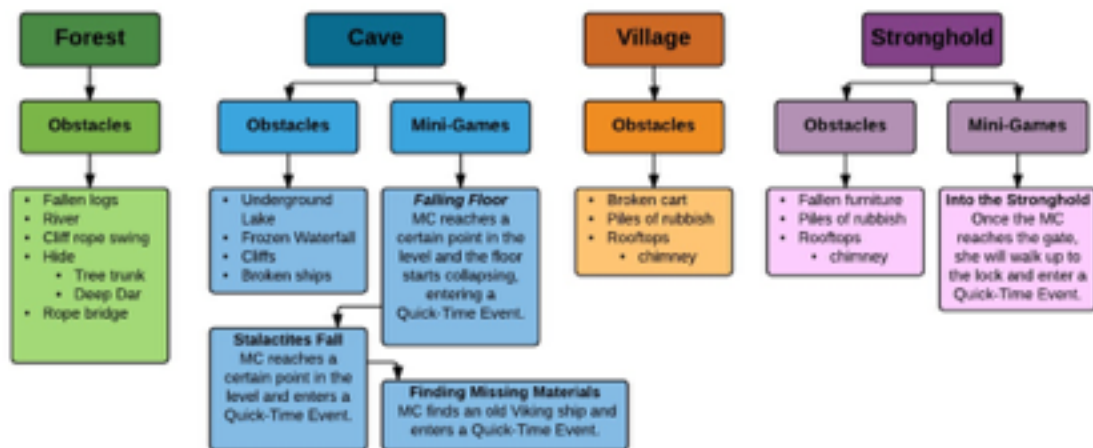
Triggered Events/Quick-Time events

When the main character reaches a certain point in gameplay, she will enter a Quick-Time event. During this moment, the player will have three seconds to complete a series of key presses to continue in the game. If the player does not finish the task in the specified time, the main character dies and will start again at the beginning of the level. Triggered Events will also be used throughout gameplay when the main character collides with another objected or enemy.

SECTION 8.2: LEVEL LAYOUTS

Forest

Finds dead warrior with sword

Enters the forest · Hide mechanic · Rope bridge · To cave

Wakes up in field · First encounters with shadows · River · Cliff swing · Flashback No.1

Cave

Encounters shadows · Frozen waterfall · Stalactites mini-game · Viking shipwrecks · Sail to village

Arrives in cave · Falling floor mini-game · Underground lake · Ungerground cliffs · Finding Viking ship parts mini-game

Village

Collapsed roof leads back down to ground

Rundown houses · Flashback No. 2 – Friend

Docks at village · Collapsed house that leads to roof · Broken-down cart · Moves on to the stronghold

Stronghold

Amend by Honor

Lockpicking mini-game · Into the throne room · Final Flashback

Arrives at the gate · Kills the king · Amend by Revenge

SECTION 8.3: SEQUENCE DIAGRAM

Below is a chart that denotes the certain events that the player will encounter throughout the levels. Obstacles indicate things that will be - for the most part - only changes in background and will require no more than the user jumping to get past. The Mini-Games title indicates scenarios that will be triggered by the player's location.

SECTION 9: RISK MITIGATION PLAN

Case 1 - Task Dropping

If a team member is to drop their task, everyone on the team will be given an equal share of that team member's task. The team member will be given one day to try and finish their task and if it is not finished after this day it is divided out to the rest of the team. We want to stray away from giving more time to the team member who dropped their task in case they are a repeat offender. This ensures that time is not wasted.

Case 2 - Menu/Pause Screen

In the case that the menu and pause screen cannot be implemented correctly, each screen will be simplified. Menu options will be removed as needed or in the worst case there will be no menu screen at all. The game would automatically begin upon start up. The same protocol will be used for the pause screen. In the worst case scenario, will either be completely removed from the game or just simply be a still image with no functionality.

Case 3 - Save / Load Game

If a normal save and load game option isn't able to be executed, we will attempt to create a way for the player to at least manually return to the level they left off on. The way we will do this is by a password

option that displays on the loading screen before entering each level. To return to that specified level the player would be to enter the password in a pop up window when loading their game. In the case that save/load game functionality isn't able to be executed properly at all this option will be removed from the player.

Case 4 - Character Sprites

If character sprites cannot be imported into Unity, we will have the user represented by a white rectangle surrounded by a black background and scenery. The enemies to the main character will be represented in a dark gray color.

Case 5 - Not Working

If a team member cannot get their task working correctly by their deadline there will be a two day period where the rest of the team will brainstorm together how to resolve the issue or if needed come up with a better plan to solve the issue. If it cannot be resolved within the two days the task gets simplified or cut if not crucial to game.

Case 6 - Emergencies / Sickness

In the case that a team member is struck by emergency or sickness the rest of the team members will equally take on the missing team member's task. This is the same consequence as a team member dropping a task.

Case 7 - Acoustics

In case that music cannot be imported or represented in gameplay, no music will be provided for the user during their time playing the game.

Case 8 - Not Enough Time

In the case that there is not enough time to finish specific tasks, the team will have to decide which tasks are of lower priority and drop what is unnecessary to the game/story. For instance, the mini games and quick time events are not explicitly necessary to the story or gameplay. Types of elements like these would be the first to be eliminated if the team is short on time. If animations are taking too long, we will shorten the animation cycle and make it more simplistic. If we cannot compose the amount of score or sound effects planned, then we will use any score or sounds effects that have already been composed throughout the entire game.

Case 9 - Mini-Games

In case that there is not enough time for the team to complete mini games throughout gameplay, we will simplify the functionality of each mini game. If the team still cannot meet expectations, mini games that are not necessary to gameplay or story will be removed completely.

Case 10 - Voice Acting

If team members cannot create voiced dialog in scenes with the main character and other enemies, text boxes with respective responses in the script will be used throughout gameplay.

Case 11 - Quick time Event

In the case that the team cannot create quick time events during gameplay, they will be omitted.

Case 12 - Health Bar / Lives

In case there is not enough time to implement a life or health system in gameplay, the user will return to the beginning of a level upon being hit or colliding with an enemy's attack.

Case 13 - Ending Flashback

In case there is not enough time to implement the ending flashback of the game as envisioned (video of gameplay in reverse), we will display its contents as still images.

Case 14 - Collision Detection

In case the team is unable to support collision detection throughout gameplay, all objects that the player would collide with, will be placed in the background so that they are not in the players path. When it comes to fight enemies, the player will be able to walk through any enemy but would inevitably lose health or life.

Case 15 - Inventory Holding

In case there is not enough time to implement inventory holding, the mini game associated with the player collecting items will be removed from gameplay.

SECTION 10: TESTING PLAN

Test #1 - Title Screen / Main Menu

The user will test the New Game, Load Game, How To Play and Quit buttons to see if they work properly. If there are any issues with the functionality of any of these buttons that cannot be resolved in a timely fashion, we will revert to risk mitigation plans.

Test #2 - Movement / Actions

The user will test all possible movement and action combinations. This includes making sure the playable character moves correctly using the the arrow keys, space bar and W - A - S - D keys. This will ensure that actions such as stealth, sword strikes and quick time event actions work properly. This test also ensures that specific actions interact with the enemies and environments correctly (i.e. striking a Shadow results in a visible and audible response from the playable character and the Shadow).

Test #3 - Pause Menu

The user will confirm that the pause menu actually halts the game's progress when triggered and can return to the main menu if desired. The user will also confirm that the game can be saved and returns to the start of the current level.

Test #4 - Sound

The user will receive a list of all sounds implemented in the game and will observe if those sounds are implemented as they should and are triggered at the proper times. The user will also check that the score throughout the game is cohesive with tone, story and the Viking theme.

Test #5 - Environment Interactions

The user will make sure all characters and triggers inhabiting the current environment collide with or pass certain objects as they should. The player should be unable to glitch through objects or surfaces.

Test #6 - Cutscenes / Flashbacks

The user will observe all cutscenes and make sure they are triggered at the correct times. Since most of the game is without dialogue, the tester will also make sure if the cutscene can be understood in terms of overall story.

Test #7 - Quick Time Events

The user ensures that the time given for each quick time event makes logical sense (ie, not too slow and not too fast).

Test #8 - Aesthetics

The user will check that all the environmental tones make sense together in terms of the overall story. The user will observe that all the objects, characters, and environments are cohesive in terms of color, story, and Viking theme.

Test #9 - Game Over

The user will test the consequences of dying at some point in the game. This test includes making sure death is triggered at the proper time (i.e. death after 3 hits, for instance), a game over screen appears, and that the player resumes the game at the start of the current level.

Test #10 - Locked Screen

The user will test that the screen is locked in place during any shadow battles. The tester ensures that they cannot leave the screen until all enemies are defeated.

Test #11 - Enemies / AI

The user will confirm that all enemies move and act as they should at the proper time. They will make sure that the enemies attack and/or defend when the playable character is present and die after a certain number of hits. The user will also check that the enemy difficulty level is fair and raised as the game progresses.

Test #12 - Multiple Endings

The user will test out both possible endings at the game's conclusion. They will ensure that each ending plays out properly and that each ending is equally substantial. This test includes making sure that both endings proceed to the credits and title screen afterward.