

# Ascend

Game Design Document

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## 1.0 Game Overview

Ascend is a Narrative Driven Adventure Exploration game. The player takes the role of a lost wanderer haunted by an ominous Tower, and trying to discover why it calls to him. Enter the Tower and explore its vaulted heights to uncover the mystery of its existence. Each level of the Tower houses a lost soul, stuck in a forgotten memory of their lives, reliving their failures for all eternity. The player bonds with these characters and sees the world through their eyes and memories. By helping them break the cycle of their torment, the player learns more about the Tower, and in the process learns more about the human condition.

### 1.1 Key Features

#### Branching Character Driven Narrative

The game has a deep NPC character connected to each level that the player will have to interact with to progress through the game. NPC characters have deep backstories and rich inner emotions that can be explored through dialogue and exploration. The NPC will take player's dialogue choices into consideration, and can end their stories in different ways depending on how the player speaks with them.

#### “Stepping Into Their Shoes” Mechanics

Many mechanics in the game serve to put the player in another character's shoes, to help them see their perspective and emphasize with their struggle.

- Perspective Shift - this system lets the player view the game directly from the NPC's perspective. They see the NPC's view, and more importantly, objects that have emotional importance to the character will look different. These objects will look as the NPC remembers them, not as they are. Shifting lets you see the NPC's "perceptions" of the world as well as their general view.
- Memory Systems - Important items found in the world are stored in a Memory Inventory. The player character can access their memories of the important objects in the level as well as the NPC's memories of those important objects.
- Deep Thoughts - Provide a deeper storytelling experience, especially in relation to Dialogue Mechanics. Deep Thoughts give the player the true

feelings of the NPC and can open up special Dialogue the player can access.

## A World that Tells a Story

The level design and storytelling are tied together very closely in Ascend. The NPC character will have connections to the world and to objects in the environment. These prompt memories from the NPC and allow the player to learn more about the world they are in by asking the NPC questions.

## 1.2 General Project Points

- Release Date: TBA
- ESRB Rating: T for Teen
- Platforms: PC with Mobile Component (May Need to Download App on Phone)
- Audience: Young Adults between the ages of 18 - 28, fans of narrative games, people who enjoy character driven story.

## 1.3 Large Team Class Requirements

### Role Playing Elements Represented in Game

- Expressed through our multi-choice dialogue system and the ability for the player to go down multiple paths and branches of the story. The way the player interacts with the world determines how the narrative flows, letting the player play the role they want and embody the main character.

### Learning Opportunities Presented in the Game

- We are addressing this requirement in two ways. One, we are teaching moral lessons through the character narratives. Two, by using the Tarot as a template we are teaching the player about the Fool's Journey and the path to understanding it leads to.

### Must Use a Mobile Device as Game Component

- The game uses a Mobile Screen in several of its major gameplay mechanics. It's used in Perspective Shift, it shows character's Deep Thoughts, and it serves as a physical inventory for viewing Memory Items as you explore the game.

## 1.4 Thematic Guidelines

*"Enlightenment Through Empathy"*

*"Overcoming Personal Struggle to Reach a Better Place"*

*"Tarot and The Fool's Journey"*

Everyone struggles. Everyone has a deeper conflict they are waging within, and sometimes those problems get the best of us and lead us astray, lead us to be people we don't want to be. But we draw strength from the stories of the people struggling around us, and we draw wisdom from understanding them. Sometimes struggles are shared, and helping someone else overcome their inner demons can give you the courage and knowledge to face your own.

The Tarot is a unique way that we tell and interpret the stories of our lives and our futures. The cards of the Tarot tell a story about growing up and learning to find a purpose and peace with the world, The Fool's Journey. Ascend uses The Fool's Journey as templates for some of our stories and levels, and these help guide the main character through the different lessons that the story of Tarot teaches us.

## 2.0 Gameplay Overview

### 2.1 Main Mechanics

#### 2.1.1 Perspective Shift

- The player learns about each level by interacting with the NPC character trapped in it. One of the player's tools in doing this is Perspective Shift. Perspective Shifting allows the player to see directly through the eyes of the NPC character. They see the world as the NPC knows it, colored by their personal biases, experiences, and feelings in the moment. In order to identify important memory objects in the Hunter's life, the player has to use this tool and find items in the level that have a blue glow. This signifies an object with importance that the Player can touch to trigger a conversation with the NPC.

#### 2.1.2 Branching Dialogue / Attitude Changes

- The player can more directly learn about the world by talking with the NPC and having short Dialogues. The NPC and the player will have multiple opportunities for Dialogue throughout a level.
- Dialogue can be triggered by the scripted progression of the level, NPC interruption events, and identifying and discussing Memory Objects using Perspective Shift.
- Through dialogue, the Player can influence the NPC character's Attitude and Worldview. The more dialogue the Player uncovers and works through, the more influence they have on the NPC character.

#### 2.1.3 Memory Log and Objective Items

- Memory Log

This is a visual Inventory of the Player and NPC character's Memories. Some Memories will be records of important Dialogue choices and decisions that the player can revisit. Memory Objects are also stored in the Memory Log and can be either Key Items or Memory Items. Individual Memory Objects and Dialogue snippets are greyed out and inaccessible until the player finds them or talks about them in the world. After they're unlocked, these Memories can be accessed individually and viewed for more information.



- Key Items
  - These are items in the level that are related to the NPC's personal goals and desires.
  - These items always provide a path of progression through the level, but often come with a duality that must be solved.
  - Duality: The NPC will try to use these items in a way that will leave them trapped. The player has to try and convince them of a separate option that can break the cycle the NPC is stuck in.
  - The NPC choosing how to ultimately view the item is called Memory Sync. The item will appear and be viewable in both character's Memory Logs after a Sync. The way it appears in the Log depends on if the Player convinced the NPC to follow their view, or if the NPC convinced the Player to see the item their way.
- Memory Items
  - These items act as a way to further the narrative of the world and NPC character. They also provide more dialogue opportunities for the player to influence the NPC
  - These items are hidden around the game world. When found, they become accessible in the Memory Log.

#### 2.1.4 World Interaction

- Interactable World Elements
  - Objects and areas around the world will have many interactable components that allow the player to explore and learn about different aspects of the environment, the NPC character, and the culture of each level.
- Exploration and Discovery Elements
  - Narrative Locations - areas that progress the story and understanding of the plot
  - Character Triggers - triggers that allow the character to give their thoughts on the environment.
  - Memory Objects - These are important objects that can be identified by Perspective Shifting. These objects glow in the
- Hidden Spaces(?) *\*This is still somewhat undefined, and may not need a full section detailing it, it will just be expressed in the level design at a base level. It's more stretch and if we have the time and resources to create more hidden, unique spaces for storytelling, we can come back to this part of World Interaction (as an example, our Shrine in the Marketplace would*

*be considered a Hidden Space)*

## 2.2 Secondary Mechanics

- 2.2.1 Object Manipulation.
  - Smaller objects in the level can be picked up and observed. Some objects have intricate detail, and this mechanic provides a nice way to get a closer look at the art and cultural styles of the game.

## 2.3 Level Progression

For the primary game level for this project, built for vertical slice to present at the Game Developer's Conference in San Francisco

*The Hunter and the Leviathan (The Hanged Man)*

### Level 3

- 2.3.1 Entrance - Player enters from the Previous Level's exit, climbing a spiral staircase and opening a door out onto a huge deserted city, standing alone in the center of an ocean of sand.
  - Player is in a cave outside the city wall. As the player emerges on the beach, they see a curious ball of light around a broken ship.
  - The Hunter (NPC Character) is the ball of light, floating amidst splintered wood and broken ships scattered around the area.
- 2.3.2 Shipwreck Beach
  - Player talks with the Hunter for the first time
  - Introduces Key Items and Story Exposition
    - Also provides a basic Perspective Shift tutorial.
    - To progress the player must Perspective Shift and help the Hunter find a better piece of wood to use on his boat. The piece of wood is outlined when shifted and clearly visible as an interactable object.
  - Memory Objects
    - Bowsprit
- 2.3.3 Marketplace
  - Past the gate in the city wall, a short road leads to a Grand

Marketplace. Shops line the streets with different curios.

- Progression Goals
  - \*Explore the Market until the Player or NPC reach the Akka statue at the other end of the market.. Use perspective shift to find the statue from high ground., and then traverse to it.
  - Player talks with the NPC about the statue.
  - Player can now move to the next section of the level.
- Memory Objects
  - Key Items:
    - Prow Ornament - Topic: Conversation about the God
  - Memory Items:
    - Leviathan Mural - Topic: Conversation about Leviathan without relation to NPC
      - Would be attached to one of the houses in the marketplace. Shows a stylized villager's approximation of the leviathan, would not constitute a 1-1 similarity, would be brightly colored to contrast with the stone walls. Can be similar to hieroglyphs for inspiration.
    - Foreign Pavillion - Topic: Festivals / Market trade
      - Should have different coloration compared to other shops, the fact it is all made of cloth would also distinguish itself from the stonework
    - Statue of Kuras - Topic: The City Sentinels.
      - Simple statue of an old Sentinel, a guardian of the City. Kuras was called to help the city in a time of famine
    - Statue of Gideon - Topic: The City Sentinels
      - Simple statue of an old Sentinel, a guardian of the city. Gideon was called to help defend the city from invaders.
- 2.3.4 Hunter's Abode
  - After the player finds the statue of the City God, they move deeper into the city to where the city's people live. They make their way through the Residential Area until they come upon the Hunter's house.
  - Progression Goals
    - Find the house that belongs to the Hunter. He mentions that the symbol of the Sentinel (visible during the Kuras and

- Gideon conversations) will lead the way.
    - Walk around the house and investigate various objects and items. A certain object will prompt the Hunter to bring you to his workshop.
    - The Skis Key Item is in the workshop/
    - When the Skis are picked up, a boulder on the path in the Residential area rolls out of the way. Allowing the Player access to the 2nd floor of the area.
  - Memory Objects
    - Key Items
      - Side Skis - Conversation about NPC as Sentinel
        - Talk about the use of the skis on his boat, and the art of boat crafting.
    - Memory Items
      - Balista - NPC's obsession and work ethic
        - A small handcrafted balista in the Hunter's yard. Small, but sturdy, it looks like it is small enough to fit snugly on a boat.
      - Wife's Loom - NPC's Wife
        - A large intricate loom that the Hunter's wife used to weave tapestries.
      - Ripped Leviathan Tapestry
        - A torn up tapestry with a large hole in the middle. Triggering this object will unlock the NPC's workshop.
- 2.3.5 The Sentinel's Watchtower
  - After the player has found the Skis, a path opens to the second level of the residential area, leading straight to the Hunter's Watchtower.
  - Progression Goals
    - On approach the Hunter will interrupt the player with an important conversation that helps cement his final decision in the level.
    - The player and Hunter then enter the Watchtower. There are several Memory Objects the player can examine and talk to the Hunter about.
    - As they near the top of the Tower, they hear rushing wind and a roar in the distance. When they reach the Watchtower balcony, the Leviathan is visible in the distance, approaching the city.

- Memory Objects
  - Key Items
    - Colored Sail - Final decision about how to deal with the Leviathan.
  - Memory Items
    - Leviathan Scale - In depth about leviathan
      - Pointed scale that has a directionality towards it (similar to a shark) in order to provide maximum aerodynamics (if they are gliding through the sand)
    - Map of the Desert - Declining Faith Conversation
      - This item is a map with numerous markings that have accumulated over time that the hunter has notated the Leviathan's movements.
- 2.3.6 Level Exit
  - NPC Endings
    - The NPC can either break the cycle or keep fighting the beast forever. There are two paths of logic or reasoning that the Player can use throughout the game to influence this final decision.
    - The NPC will take all of the player's conversation options into consideration and make a final decision about how to deal with the Leviathan.
    - After this decision is made, either way the NPC and Leviathan disappear.
  - Transition - As soon as the player goes to leave the Watchtower, the level fades to black and ends. This is the end of the vertical slice of this game.

## 2.4 Mission Walkthrough Example

### 2.4.1 Mission Synopsis

The Lost Wanderer continues his climb up the Tower, emerging from a dark spiral staircase on to the outskirts of an arid desert town. The Lost Wanderer must help The Hunter, the lone

inhabitant of the desert town, rebuild his sand ship so he can sail the Sand Ocean and hunt down the beast that terrifies his people.

## 2.4.2 Scene Specifics

**Player Character:** The Lost Wanderer

**Main Level NPC:** The Hunter

**Time of Day:** Slightly After Midday -> Late Afternoon

**Location:** Town of Akkydia - Sand Ocean - Desert Oasis

## 2.4.3 Objectives:

**Objective 01:** Search the City for pieces of the Hunter's ship -> *Key Items (0/3)*

**Objective 02:** Find The Ship's Figurehead (*Key Item 1/3*)

**Objective 03:** Find The Ship's Sand Skis (*Key Item 2/3*)

**Objective 04:** Find The Ship's Mainsail (*Key Item 3/3*)

**Objective 05:** Listen to the Hunter's Final Choice

**Objective 06:** Exit The Level

**Influence Objective:** Convince The Hunter to give up chasing the Leviathan

**Success:** Push the Hunter towards peace and ending his obsession in at least 6/8 Memory Objects Conversations and 3/5 Triggered Deep Thought Conversations

**Failure:** Take a neutral, indifferent, or aggressive stance in more than 4/8 Memory Object Conversations or 2/5 Triggered Deep Thought Conversations

## 2.4.4 Interactables

### Key Items

- These are the 3 main items that need to be collected to help the Hunter finish his boat. There are 3 major sections of the Town of Akka, and one Key Item in each section. The Ship's Figurehead is in the Marketplace, The Ship's Sand Skis are at The Hunter's Abode, and The Ship's Mainsail is on top of the Hunter's Watchtower.

### Memory Objects

- Scattered around the city are objects that bring back memories or are important to the Main Level NPC (The Hunter). The player can find these objects and when they do, the objects unlock the next section of the level. Examples of Memory Objects include: Statue of Kuras, Leviathan Scale, Hunter's Map of the Sand Ocean

- Most Memory Objects can also trigger or unlock unique conversations with the Main Level NPC (The Hunter). These conversations allow you to learn more about the story, The Hunter's character arc, and the world the player is exploring. They also allow the player to sway The Hunter's feelings towards them and the Hunter's feelings about the world around them.

### Trigger Switches

Certain single-use objects will be interactable, and can open paths to other areas of the level, or can change the environment to allow the player access to secret areas of the level. These will usually consist of basic wall switches, or interactable buttons.

### Deep Thought Triggers

When the player uses the Perspective Shift, they gain access to the Main Level NPC's (The Hunter's) inner emotional state and wisps of their thoughts. While exploring and speaking with The Hunter, certain areas of the level or topics will cause a Trigger Deep Thought to appear. This can be selected by the player while Perspective Shifted to start a special dialogue pertaining to that Deep Thought.

## 2.4.5 Walkthrough

### • Intro

No Memory Objects in this area.

- The player climbs a dark staircase. At the top is an interactable door that opens out into a cave on the outskirts of an arid desert city. The player sees a man (Main Level NPC) surrounded by splintered wood and scraps repairing a torn up Sand Ship.
- The Player approaches the Main Level NPC and starts a dialogue. They find out the character is called The Hunter.
- Hunter asks for aid repairing his ship. He is searching for a beast that tormented the city in order to slay it once and for all, and must rebuild his ship to take the fight to it..
- Hunter and player enter the city to find the missing parts of The Hunter's ship (Key Items (0/3))

### • Marketplace

Memory Objects found in this area will provoke dialogue pertaining to the social, religious, and political structure of the Level World. They will explore the Hunter's role in society, and his opinions about this.

- The player and Hunter enter the Marketplace. A bridge splits the area in half, with an arched tunnel to allow passage underneath. Stalls line the street, but no people are present.
- The Hunter is looking for the right **Figurehead/ Prow Ornament** to bring him luck in his Hunt. The Statue the Hunter is looking for is at the top of the tallest building in this area.
- Player and Hunter move to second half of the Marketplace area through the arched bridge tunnel. There are more stalls lining the street and a larger pavilion with trading tables. A small walled off area is accessible from the street through a small unlocked door.
- Walking into the small walled off area will put the player near the market well. From this area the player will have a line of sight to the statue. The Player can Perspective Shift and the statue will be highlighted during this mode in order to find it more easily.
- The player can find small ramps by the well and back by where the player first entered the marketplace. These ramps will allow the player access to the roofs of the buildings in the Market and allow the Player to retrieve the **Ship's Figurehead (Key Item 1/3)**

- **The Hunter's Abode**

Memory Objects found in this area will trigger dialogue related to the Hunter's backstory and connection with his family. They will explore his feelings for his family and his town.

- The player and Hunter enter the Housing Area of the city. Hunter leads the player to his old home.
- The Hunter keeps the **Ship's Sand Skis** in the locked workshop in his backyard. He asks the player to enter his home with him find where he left them.
- The Hunter will talk about a lot of memories in the house, and feels more distant.
- The Player can interact with a variety of objects in the room to examine them. One Memory Object in particular will prompt the Hunter to allow the player access to his Workshop.
- After the **Ski's (Key Item 2/3)** are retrieved from the shed the player and Npc will leave the area.

- **The Sentinel's Watchtower**

Memory Objects in this area will relate to The Hunter's previous job as the city's Sentinel. Conversation triggered by these objects will explore The Hunter's initial dedication to his duty as The Sentinel and his slow descent into stress and obsession.



- The player and Hunter enter the second level of the Residential area of the city. Only one, large watchtower is still fully intact. This is where The Hunter worked and lived for many years. The Hunter asks the player some questions and points out the flag at the top of the tower would work perfectly for his **Ship's Mainsail**
  - Player and Hunter enter the watchtower. The building has 3 floors, a ground level, second floor, and roof level. The Player can explore the ground and second floor interacting with memory objects and talking with The Hunter
  - The player then explores the room looking for a way to clear the door.
  - The player and Hunter slowly climb the watchtower. When they reach the top, they see the sail, as well as the Leviathan approaching in the distance.
  - The player can retrieve the last Key Item, and trigger the Hunter's Final Decision. **Ship's Mainsail (Key Items 3/3)**
- **Ending Transition**
    - After the NPC leaves, as soon as the player starts to walk away from the area, the game exits and sends the player back to the main menu

## 3.0 Story Overview

*Main Themes - Obsession, Learning how to Let Go*

*Tarot Influence - The Hanged Man*

*Subplots - Interpretation of Religion, Hope vs Despair*

### 3.1 Characters

#### 3.1.1 The Lost Wanderer

- Backstory intentionally left vague - sparse details
- Before the events of the game, Wanderer is travelling the world aimlessly.
  - At a certain point during the Wanderer's journey, they begin to see the Tower everywhere they go
  - Tower appears on the horizon to the character. Even when they try to travel away from it, it reappears on the horizon a short time later.
  - Begins getting closer every time the Character sees it.
- The Tower is calling, beckoning to the Wanderer.
  - Character gives in, and travels towards the Tower itself = they

accept the call/ challenge of the Tower.

- The Wanderer enters the Tower - this character's ultimate goal is now to understand why the Tower is calling them, and find out what it wants them to learn.

### 3.1.2 The Leviathan Hunter/ City Sentinel

- Personal History
  - Previously a shipwright for traders who passed by the town
  - Sailed boats personally and mapped the small area around the Town
  - Married the daughter of a trader she stays in village with him, they make a family.
  - 2 kids
- Important Backstory
  - Leviathan suddenly appears in the desert and threatens the people of The City, they are warned by the City's god.
  - Leviathan is an unstoppable "train" with the City right in the beast's path.
  - NPC is picked to become The Sentinel of the city (title bestowed by god when danger arises)

"A sentinel is not appointed to be the Will of god, but a  
Servant of his people."

- His family considers the appointment an honor.
- Sentinel resolves to keep the people of the City safe.
- Sentinel defends the City for months by riding out into the desert and diverting the Leviathan around the City, but the Leviathan continues to return.
- City and family are proud of Sentinel, thinks he is doing the best he can, doing what god wants, and continuing to keep them all safe.
- Sentinel however despairs. Believes he is failing to get rid of the threat, overtime believes he is personally failing his god and the People he loves.
- Purpose is corrupted, and Sentinel starts believing he must take matters into his own hands.
- Sentinel leaves the city, breaks from family, and goes out on his ship to Hunt the Leviathan -transition of identity = now The Hunter
- Forsake home and love, the city he was supposed to protect.

- Consumed by his perceived failure
- Believes that only by killing the Leviathan can he be absolved/saved.
- Chases the Leviathan across the desert for weeks. Runs out of supplies. Falls during his pursuit.
- Narrative in the Tower
  - In the Tower, he is trapped, forever chasing the Leviathan, being taunted by the object of his absolution, he is a lost Hunter.
  - Everytime he repairs his boat to go back on the Hunt he finds himself washed back up on the shores of the city, his ship smashed against the stone walls.

### 3.1.3 The Leviathan

- Mythology
  - No one knows the origins of the Leviathan but there are many theories. Some believe the beast is the devil incarnate, here to steer them away from their God. Other's see the creature as a force of nature, a test to be weathered to prove their devotion.
- Role in the Story
  - Symbolism
    - Religion sees Leviathan as a demon against god - In Reality it's a force of nature being used by god.
    - A Test of Faith
    - metaphorical "Noah's Flood"
  - Connection to NPC
    - God is testing the City with the Leviathan
    - The Sentinel acts as a microcosm of that test of faith.

## 3.2 Level/ World Scenario

### 3.3.1 Level World Backstory

#### THE CLIFF CITY OF AKKA

- Overview - General Mythology and Religion

Cities of the desert each have a Patron god of the many they believe. The City in the game has a Patron god, Akka, and there are many statues and

shrines to him scattered around the city.

High Priests are chosen by Akka to interpret the god's will, and use this information to Govern the city

Theocratic System of Government

During danger, god warns the High Priests and tasks them with choosing a Sentinel to protect the city from whatever the danger may be.

The Sentinel is a title that is bestowed upon a chosen individual of the City when danger arises. There have been many different Sentinels over the years for different Crises.

Doctrine states that eventually, the City's god will find a way to Save them from any danger that may appear (The Leviathan)

- Government

Local Theocracy with successors appointed by current leaders.

High Priest -> Priest -> Populace

High Priest serves as governmental leader

High Priest is selected from pool of active priests, also serve for life.

Priests serve as judges and day to day mediators

Priests serve for life, and choose their successors (ideally) before death

- Social structure (Population: a few hundred)

--Clergy: High Priest - Priests - Apprentices

--Laymen: Rich Laymen - Poor Laymen

- Technology

--Simple machines and variations thereof

--Animal Powered Farming: - Sheep - Oxen - Goats - Cattle - Scorpion farming

--Sail/Oar/Ski based Desert Traversal via boat

--Wool/leather based clothing & boats: Sheep farming - Massive migratory silkworm for cloth production

--Underground water sources (Wells/Public watering hole)

--Rock based architecture

--Fire based light & cooking: - Hearths - Ovens - Torches - Salted food  
-Smoked food

- Culture

High culture is written and highly religious  
Low class culture is vocal and less religious

- Geography

City built on top of a large plateau in the middle of the Great Sand Ocean  
The tall cliffs keep the sand of the Great Sand Ocean from spilling into the city, and puts the city high enough off the ground to avoid the ravaging sandstorms of the ocean.

Buildings are hewn into the large rocks and cliffs around the city.

- Economy

Barter-based economics  
Family Based professions

- Religion (Details)

Patron God of the city is Akka

--Polytheistic overall but Mono-adherence within city

--Akka is a supernatural being whose domain is the city rather than having dominion over a specific aspect of reality. -Protector -Not omnipresent

-Close to omnipotent

-God Carved the City for his people

--Human like, but have an aspect of divinity to differentiate from common human.

--Animal representation of god for symbol (Turtle or ram possibly?)

--Sun Faced God?

--Seasonal harvest festival in market place

--Animal Sacrifice, used for gaining attention & deific favor.

--God specifically commanded the high priest in the choosing of the Sentinel

### 3.3.2 Level Story Progression

- The Lost One/Wanderer meets The Hunter

- Hunter needs help rebuilding his boat so he can go out and hunt the Leviathan
- Pieces for the ship can be salvaged around the City.
- Explore the Hunter's Story, find the Ship Pieces, explore the city, and sync Hunter's memory with Player Character or vice versa.
- Conversation can push Hunter towards Aggressive or Defensive actions.
- The Player and Hunter travel through the city, exploring the Marketplace, Residential Area, and the Watchtower.
- Depending on (Aggressive or Defensive) syncing, Hunter will determine how he wants to deal with the Leviathan.
- NPC confronts the beast and decides their ultimate ending
- The game fades to black and returns to the Main Menu.

## 4.0 Design Specs

### ● 4.1 Primary Mechanics

- 4.1.1 Perspective Shift
  - Functions by lifting the mobile screen while in the level.
  - Mobile screen displays game world and main screen displays Deep Thoughts.
  - Mobile screen shows differences in the world and has Memory Objects and Key Items highlighted in order to find them.
  - Memory Objects can be touched on the Mobile Screen to activate a conversation with the Player.
- 4.1.2 Branching Dialogue / Attitude Changes
  - Different dialogue choices will affect how the NPC sees the world and how favorably they view the character.
  - Different options also follow different lines of logic and reasoning. Sticking to a main line of logic will help the player get a more specific ending.
- 4.1.3 Memory Objects and Key Items
  - These are items and objects scattered around the world that all have special meaning to the NPC character.
  - They are found by using Perspective Shift and lead to special conversations with the Player.
  - Key Items are needed to move to the next area of the level, and progress can't be made unless these items are found.
- 4.1.4 World Interaction
  - The player can pick up small objects and props in the world and examine them on a superficial level.
  - Some objects have small animations that make the world feel alive and in motion.

### ● 4.2 Level Layout Guide

### ● 4.3 World Interaction List

- Memory Objects
  - Statue of Kuras
  - Statue of Gideon
  - Leviathan Mural
  - Foreign Trade Pavilion
  - Loom

- Missing Tapestry
- Piece of Missing Tapestry
- Balista
- Leviathan Scale
- Map of the Sand Ocean
- Key Items
  - Bowsprit (tutorial item)
  - Statue of Akkydia.
  - Boat Skis
  - Main Sail
- Kickables
  - The Abacus.



## 5.0 Art and Aesthetic Specs

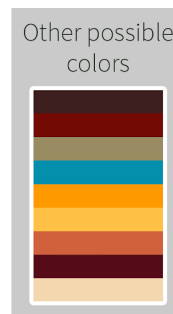
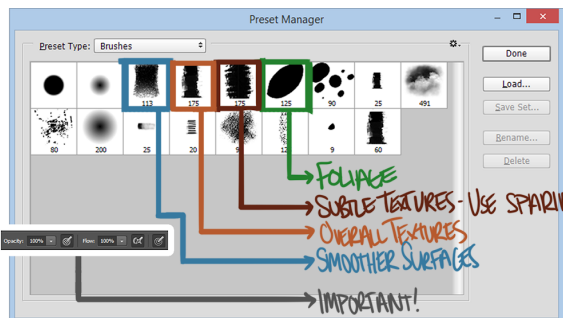
### ● 5.1 Aesthetic Style Guide

We have decided on a style that we feel is appropriate for our current design. Overall it will incorporate design principles from the game Journey, with simple meshes but not low poly. Colors are bold and mostly flat, with simple cells and gradients to convey shadow that conveys an illustrative look, despite it being 3D. There will be a strong reliance on lighting and VFXs to polish the scene. Cell shading is soft with dithered edges like in Journey, and conveys a subtle implied texture. The scale of the level should feel cavernous and large in scale with heavy architectural structure to convey gargantuan size of the tower and the levels within it. Current color scheme is generally complementary using yellows, oranges, and blues, and is reminiscent of Monument Valley. There will be an emphasis on foreground to background.

- Aged Appearance:
  - paint is mostly (but not completely) worn away, primarily saturated blues and yellows
  - lots of breaks in artificial formations- primarily vertical cracks in walls and windows, broken stone structures, fractured pottery from overgrowth, torn & desaturated fabric, chipped away tiles with mostly worn-away paint
  - steps, doorway arches, and similar forms have significant chunks broken away with stone debris covering ground
  - more purple hues are brought into yellow/orange stone and environments for desaturation, but not overwhelmingly.
  - significant overgrowth
    - lack of saturation in architecture is often made up for with healthy foliage, depending on mood/level design
    - saturation true green --> middle-toned 80% green/20% yellow --> lighter mint with little yellow to differentiate from yellow surroundings when possible, some variation in green tones for more believable natural environments
    - vines similar in tone to leaves, if anything, slightly less saturated
    - vines growing upward and along ground in cracks- el dorado inspiration
    - cracks in ground maintain more saturation than rest of the

- ground- deep reds and warm browns
- heavy foliage drapes over walls and stone structures, often mostly hiding weathered, originally colored wall and architectural decor
- vines drape over doorways, cling underneath hanging structures, and under larger-scale forms such as arches

● 5.1.2 Visual Guides



Brush	Typical Colors/Stroke	Texture Example	Description
125 			Used for leaves, bushes, on vines, and for general foliage.
BOTH 175s A B 			<b>175A</b> used for most rough/eroded surfaces: ground, walls, props, etc. <b>175B</b> used for subtle surface detail as needed: sand and dust. Do NOT over-texture with this, use lightly!
113 			Used for small objects, finer detail, and smooth surfaces such as fabric or pottery.

## Large Team Brush Pack

Ascend - Becca Hallstedt

## ● 5.3 Character Aesthetics

### ○ 5.3.1 Player Character

#### - The Lone Wanderer

#### -Aesthetic details:

Slender silhouette, red and neutral based color palette, layered and draped cloth, small pieces of asymmetric armor, small feet, simple patterning, worn appearance, ambiguous identity and gender



**Aged Style Concept**

Ascend - Becca Hallstedt

#### -Themes:

Based in both “The Fool” and “Death” arcana, the wandering protagonist has the appearance of a traveler, yet the dark and ambiguous features of death. The black and white color palettes signify the black of death’s armor and his white horse (and the fool’s white dog) and rose. There is also a subtle petal like pattern on the wanderer’s clothes. They also have a pack slung across their back in reference to the fool. These signifiers together could be interpreted as the innocence (or ignorance) of the player/ protagonist to their identity as “Death” and the power they have as a catalyst for great change with the ones they interact with.

A more surface level interpretation suggests the player is a worn traveler, a loner who has been long distant from society. Their identity is either concealed or has been long stripped away, leaving them as something more than what they once were. The armor and possible broken weaponry suggests past turmoil and conflicts that have been overcome. Since they continue to wear them, they have some indication that more trials lie ahead. They are quiet, contemplative, and poised with great composure; even in an alien and unfamiliar environment.

#### -Assets:

3D block out, Finalized Model, Completed skeleton with animations,

possible broken weapon prop, voice acting, footsteps and other sound FX

### ○ 5.3.2 NPC – The Hunter/ Sentinel

-Aesthetic details:

Bulky and hunched silhouette, blue and brown color palette, revealed skin with large white scars, armored like a soldier, but worn and beaten, greying beard and older appearance, wielding a sickle shaped spear.

-Themes:

Based on “The Hanged Man” and “The Chariot”, the hunter appears as a soldier with a somewhat “Odin” like appearance. His blue cloth and stripped trimming comes straight from “The Chariot”, while his nod to the “Hanged Man” is somewhat subtler. Mostly it is referenced in the rope tied to his spear, suggesting it is the cross to which he was/is bound to. Like the arcana he is based off, he is both bold and takes charge, yet strongly devout and connected with his sense of deity. Metaphorically speaking, his blind determination is what severed him from his duty and in a way his connection to the gods, cutting the rope that binds him to his spirituality. As such, he has made himself to be a false martyr, with a false sense of duty of slaying the leviathan, which is mirrored in the erroneous interpretation that “The Hanged Man” represents obligation and martyrdom. It also suggests the new perspective he may gain from his interaction with the player and a call for the sense of calm and thoughtfulness the hunter lacks.

A more superficial interpretation suggests the hunter is a veteran soldier, huge and looming with power, yet broken from years battle and rage. He is a man of action and duty, and his scars show years of fighting and defending his city of which he is the sole survivor. His physical limp is an outer reflection of the inner brokenness within him, and his sense of loss and purposelessness, which he misdirects at the Leviathan. He is bold and charges through obstacles like a bull, yet his injuries hold him back and break his stonewall personality revealing the worn, confused, and remorseful feelings within.

-Assets:

3D block out, Finalized Model, Completed skeleton with animations, spear with possible animated rope animations (may be dynamic with physics),

voice acting, footsteps and other sound FX

### ○ 5.3.3 The Leviathan

-Aesthetic Detail:

Giant wormlike silhouette, brown white and bronze palette, large worm with rocky plating, dripping spiny mouth opening surrounded by fierce tooth-like mandibles and large hooked forelegs/antenna, five compound eyes resting on forehead, mostly hinted at and rarely directly seen

-Themes:

There is no direct tarot interpretation for the Leviathan, although one that may fit would be the creature emerging from the water in "The Moon", as it is a force of nature with mystical and divine origins, as well as its illusory appearance as something demonic as opposed to an act of the gods. "The Moon" is all about things not being what they appear. Sand is also a stand in for water and the ocean in the level, making the leviathan a "desert sea creature".

-Assets:

3D block out, Finalized Model, Completed skeleton with animations, voice acting, sound FX (shifting sand, trembling earth, roars), visual FX (moving sand, sand jets/clouds/waterfalls)

## ● 5.4 Environment Aesthetics

- 5.4.1 Shipwreck Beach
- 5.4.2 Marketplace

### OUTLINE

-A grandiose city in the desert that has hit it's prime, with large markets, tall towers and walls for defense and dense history rich in culture, with it's own religious system and set of beliefs shown in their citizens artwork and way of living.

- The city was abandoned, but only recently, as to why the remnants of their life, worldly possessions and spirit are still very much in tact.

-Although there are no people, it is apparent at how packed and crowded the town once was, with multiple levels, stacked housing and storage units,

condensed pathways and streets and wide open areas much like a plaza to allow the townspeople to move freely during through the hustle and bustle there once was

- What makes it stand out- Condensed buildings/housing units (square and round and in varying sizes), tents and stands where merchants once sold goods. Compacted and tight in some areas and open in others. Multiple levels of living and moving space, and was once heavily occupied by a proud group of people. Large walls and pillars protecting and surrounding the town and its people, guarded by giant statues that seem to represent some form of protector in their religion.

### MOOD

-The environment is shown in midday, with overall warmer tones with pops of blue and burgundy.

-It feels empty and omniscient although not quite to the level of eeriness after such a large city suddenly became a ghost town. However it can also feel lively and crowded with tight streets and densely packed areas of the market, regardless of the lack of people..

-The warmth/arid feel both in a physical and emotional sense has swept through the city from the desert surrounding it, however it does not feel quite as desolate.

-You can almost feel as if there are people there because it is so lively, almost waiting for someone to appear from the blue, even through there are none.

-This area peaks interest and sparks creative thinking with color pops and rich culture, making the player question and wonder about the people, background and story on a deeper level with a want to "connect the dots".

-The player should feel small with the grand scale of the buildings, monuments and physical structures

### ○ 5.4.3 Hunter's Abode

### OUTLINE

-This is where the NPC, and his family lived. However, the NPC started

leaving more frequently to the Watch Tower due to his obsession of finding the Leviathan, before leaving for extended periods of time until he did not come home at all.

-The items in the area are more "homey" feeling and full of sentimental value opposed to informative or offensive/defensive items used for and against the Leviathan and market items that has little to no feelings of attachment to the NPC.

-Stereotypical type of home found in this era/location.

-A tad bit larger than the surrounding homes to give the player a space to walk around and explore in perhaps including multiple levels/rooms to experience.

- What makes it stand out- It is strictly a residence, and has items strewn throughout that would represent a family and home life rather than profession and or the NPC's obsession. (Although a small shrine might be find in the corner). The Hunter's abode is larger in size in comparison to the other houses in the area giving the player more room to explore. Evidence of family life is shown with beds, hearth and fireplace creating a more lived in sentimental atmosphere.

## MOOD

-Feels warm and brings back sentimental feelings for the NPC as he remember fondly remembers his family. However these feelings are also mixed with guilt and resentment for not being there for his family.

-Homey feel, as if you can still feel the love that the family had and gave, leaving with an almost bittersweet feeling.

-Warm in the sense of in the heart apposed to the also warm but harsh desert like environment surrounding the town.

-Feels lived in, with items such as hanging herbs and knick-knacks giving the player a sense of feeling that a close family once lived there, and although left, it was not that long ago; as the house is not completely worn and decrepit.

## 5.4.4 Sentinel's Watchtower

### OUTLINE

-Attached to the city wall, gives off the sense of both power and protection to it's citizens.

-Similar to the barracks or soldiers quarters show in many historical RPG games, consisting of multiple levels in which each area offers a specific purpose. For instance there are living quarters on a lower level, with a work area above it offering a place for writing and or researching and at the very top, an open and rooftop only protected by the tarp/tent sheltering it, allowing the watchtower guard to view the city from all angles and views possible.

-The main character has spent a good majority of the rest of his life at the town here, on an overly obsessive search for the Leviathan, leaving his family to live and fend for themselves in the home he once called his.

- What makes it stand out- Opposed to the open and vibrant city, the tower is darker and enclosed. Both darker in color and lighting giving it a more serious and melancholy feeling. The levels are connected by a large staircase wrapping around the interior walls. There are more tools and equipment used to find and research the leviathan opposed to worship and depict in art as show in the other parts of the world. It is also more "aggressive" in that the area was designated to protect the city.

### MOOD

-A more serious/mysterious and almost darker feeling tone conveyed by darker, richer colors.

-Feels completely different from outside environment, giving users a sense of separation from the dry arid wasteland they have started from.

-More studious in that the area holds information and ways to reach the mythic creature the player is searching for.

-A "dusty feeling" as if it has not been kept up, because the residents were too busy searching for the leviathan to take care of the building itself, however it is not been totally destroyed or decrepit.



-Full of memories and a form of resentment, as the NPC has abandoned his family and spent too much time at the tower and away from them due to his obsession.

#### ○ 5.4.5 Leviathan's Oasis

##### OUTLINE

-This area is reached after walking from the beach in which the ship has taken the player from the Sand Ocean. They then encounter a bridge that connects the two vastly different areas together. The other side (the Oasis) is a lush, green, and very much alive environment.

-This is the final location before re-entering the tower that leads to the next level. It is green and full of life in contrast to the vast dry desert the player has spent the level in creating a sense of separation and conclusion.

-The end of the level features a cave in which the player will walk through to reach the door to the stairs of the tower that takes them to the next level. It is dark, with a light at the end visually cuing the player to walk towards it and assures that they have moved on, regardless of the outcome. The cave is potentially bioluminescent however we are still working on these ideas.

- What makes it different- It is green and full of life in contrast to the vast, dry desert. It also (possibly) features a shrine dedicated to a deity/mythical being. Opposed to the water-like Sand Ocean and sand waterfalls seen throughout the game, the Oasis is the one area where actual water, and real waterfalls can be found. The large rock structures encircling the level now reveal cavernous areas/structures.

##### MOOD

-The Oasis is green and full of life in contrast to the vast dry desert the player has spent the level in creating a sense of separation and conclusion.

-Walking through waterfall give sense of rebirth or cleansing and closure.

- Light at the end of the cave gives player a sense of enlightenment/accomplishment, assuring them they have moved on not only to the next level but to the next level of consciousness.

-Overall, sense of life, accomplishment before entering the next level with a new set of challenges and questions.

- **5.4 Animation**

- Hunter Idle animation
- Leviathan Emerging
- Leviathan Idle
- Lizard Moving
- Desert Fox Moving

## 6.0 Technical Specs

### Pulled directly from the Functional System Specification Document

#### 6.1 Player Systems

##### 6.1.1 Player Controls

This is the system that houses the player's controls for other scripts to reference and is attached to the player object.

Variables:

ForwardMovementAxis – Axis for Forward and Backward Movement

StrafeMovementAxis – Axis for Left and Right Movement

RotationAxis – Axis for Left and Right Rotation

LookAxis – Axis for Up and Down Rotation

PerspectiveShiftButton – Button for Shifting Perspective

InteractButton – Button for Interacting with Interactable Objects

##### 6.1.2 Player Movement & Rotation

This is the system from for how the player character controls and feels when moving throughout the game world.

Variables:

MaxMovementSpeed – Maximum possible movement speed

MinMovementSpeed – Minimum possible movement speed

MovementSpeed – Current movement speed

MaxRotationSpeed – Maximum possible rotation speed

RotationSpeed – Current rotation speed

AccelerationRate – Rate at which the player accelerates

DecelerationRate – Rate at which the player decelerates

DecelerationBuffer – The velocity value that the player will stop decelerating at

MaxLookAngle – Maximum angle the player can rotate around the LookAxis

MinLookAngle – Minimum angle the player can rotate around the LookAxis

## Specifications

- As the player tilts the left analog stick, the player's speed increases up to a max speed.
- As the player tilts the right analog stick along the horizontal axis, the player rotates around the RotationAxis.
- As the player tilts the right analog stick along the vertical axis, the player rotates around the LookAxis.
- Player speed will rapidly accelerate and decelerate between movement speeds.
- Ex. If going from untouched analog stick to fully tilted analog stick, the player character's MovementSpeed will rapidly change from MinMovementSpeed to the MaxMovementSpeed based on the AccelerationRate.

### 6.1.3 Player Memory Log

This is the system that stores memories (Memory Objects and Key Items) for the player to access at their will.

Variables:

MemoryObjectArray – an array of memory objects and memory dialog

CurrentlyViewingMemoryObject – a reference to the memory object the player is currently viewing

## Specifications

- This system will be accessible through a tab on the mobile screen.
- Holds a reference to all the Memory Objects and Key Items, when an item is found, the computer will send the id of the object to the mobile device where it will become available for viewing in the Memory Log.
- Screen will display an icon for all obtainable memories.
- Icons will be obscured and inactive when the player does not have the memory.
- Use a silhouetted version of the icon in this case
- When touched (selected) the screen will display a 3d version of the Memory Object and next to it the text that was played when the memory object was found.
- For Key Items will show a description of the item.
- Touching the outside of the area that is showing the details of the selected memory will bring you back to the main memory log screen.

### 6.1.4 Player Perspective Shift

This is the system that allows the player to view the world through other cameras and will be used for advancing the narrative and puzzle solving.

Variables:

LingeringImageDuration – the amount of time the perspective shifted object’s view lingers over the player’s view.

Specifications

- Player camera switches to another camera on button press.
- Player can only shift into the NPC’s camera or Perspective Shiftable Objects’ cameras.
- Player cannot move while perspective shifted.
- NPC or Perspective Shiftable Objects must be within the player’ camera view in order to perspective shift.
- If multiple Perspective Shiftable Objects are within the player’ camera view, the object closest to the center of the player’ camera view will be the object that is perspective shifted into.
- While perspective shifted, mobile screen displays Deep Thoughts and the NPC Memory Log.
- After switching out of Perspective Shift, objects in the Perspective Shiftable Objects’ view remain in existence, although faded, for LingeringImageDuration.

### 6.1.5 Player Dialog

This is the system that allows the player to initiate and continue conversations with the NPC.

Variables:

ChangeToBond – The value added to the NPC’s short term bond value

ChangeToWorldViewIfPositiveBond – The value added to the NPC’s World View if the NPC’s Long Term bond is positive

ChangeToWorldViewIfNegativeBond – The value added to the NPC’s World View if the NPC’s Long Term bond is negative

DialogText – The text displayed on the mobile screen

DialogAudio – The audio played by the computer for each line of dialog (may only apply to the NPC)

ChangeToMemorySync – The value added to a Key Item’s Memory Sync Value

KeyItemToSync – If ChangeToMemorySync is not 0 then this is the Key Item to change the Memory Sync Value of.

IsTimeSensitive – Bool if the response is time sensitive

SecondsBeforeWarning – Seconds before the NPC will play the WarningAudio

SecondsBeforeConversationEnd – Seconds before the NPC will play the ConversationEndAudio

DroppedConversationDialogIDList – List of dropped conversation that can be revisited

#### Specifications

- Player Dialog options are allowed depending on memory objects found, certain points of interest within the area, and key items found.
- Selected Options can change the NPC's Bond, the Memory Sync level, the NPC's World View, and the NPC's Deep Thoughts.
- Positive ChangeToMemorySync will make the sync towards the player, negative ChangeToMemorySync will make the sync towards the NPC
- Available dialog options are decided on the computer and then are passed to the mobile device. When the player chooses an option, the chosen option is sent back to the computer for it to display the correct text, play the correct audio, and handle any changes in Bond or Memory Sync.
- The player dialog choice is reiterated on the computer before the
- If a dialog is time sensitive, after SecondsBeforeWarning seconds, WarningAudio will play. After SecondsBeforeConversationEnd seconds, ConversationEndAudio will play and the conversation will end, and the conversation dialog's id will be added to the DroppedConversationDialogIDList.
- When DroppedConversationDialogIDList.count is greater than 0, the player has an option to pick up a dropped conversation.
- When chosen, an option will appear for each dropped conversation.
- When an option is chosen, the conversation will return to where it was dropped. The id will then be removed from DroppedConversationDialogIDList.
- Certain triggers, such as the stop trigger, will drop conversations. If NPC response audio is playing, it will drop once the current audio ends.

#### 6.1.6 Player Memory Sync Handler

This System Handles the Memory Sync Value for Each Key Item for the player.

#### Specifications

- Takes in the Memory Sync Value and determines which text and images to display the key item as in the normal game world as well as in the Memory Log for the player.

## 6.2 NPC Systems

### 6.2.1 NPC Points of Interest Handler

This is the system that causes the NPC to look around while in Perspective Shift as well as move to look at various objects. Refer to Points of Interest.

Variables:

LineOfSightDistance – This is the distance at which the NPC cares about points of interest

PointsOfInterest – This is a list of points of interest within the NPC's LineOfSightDistance.

Specifications

- If not in a forced follow state, if PointsOfInterest.count is greater than 0, when not in Perspective Shift, and within LineOfSightDistance, the NPC will move toward the object with the greatest weight.
- When the NPC moves, their speed is dependent on the distance from the Point of Interest.
- The NPC should run at MaxSpeed if they are far away from the object, and they should move at MinSpeed when they are close to the object.
- When in Perspective Shift, the camera will shift where it is facing between the Points of Interest.
- The weight determines how long the camera faces each Point of Interest.
- When in dialog, the player will be the main Point of Interest.
- PointsOfInterest will be populated with Points of Interest by the NPC checking for Points of Interest in a spherical around them with a radius of LineOfSightDistance.

### 6.2.2 NPC Movement System

This is the system that controls the NPC's movement. This system is heavily influenced by Points of Interest as well as NPC Trigger Zones.

Variables:

MaxSpeed – The maximum speed the NPC can move at

MinSpeed – The minimum speed the NPC can move at

CurrentSpeed –The current speed the NPC is moving at

SPEED – Const used as the base speed when calculating the current speed based on the distance from the Goal

MagnitudeOfSpeed – Holds the distance magnitude.

NPCState – an Enum of states for the AI such as Idle, Move, Follow, and Wander.

DistanceUntilFollow – When the player is this distance away, the NPCState will default to follow.

Goal – The target the NPC is moving toward

Specifications

- NPC moves at a speed relative to its distance from its target. The longer its distance, the faster the NPC moves toward it.
- The NPC will always stop StoppingDistance away from the MoveToTarget.
- NPC moves using a Nav Mesh. This will have to be added to the floor of each level.
- Objects within the game world that act as places the NPC cannot traverse will have a Nav Mesh Obstacle component attached to it.
- While in Perspective Shift, the NPC will not use this system.
- If there are no PointsOfInterest, the NPC will default to the follow state.
- If the NPC is of DistanceUntilFollow away from the player, the NPC's state will be follow.
- If there are PointsOfInterest with weight greater than 0, the NPC's state will default to wander.

### 6.2.3 NPC Trigger Zones

This is the system that allows the designers to override the NPC Points of Interest Handler and have the NPC do specific things.

Variables:

WaitDuration – Duration for the NPC to wait

GameObjectToMoveTo – GameObject for the NPC to move to

PositiveDeepThoughtText – The text added to the NPC Deep Thoughts if the NPC World View value is positive

NegativeDeepThoughtText – The text added to the NPC Deep Thoughts if the NPC World View value is negative

DeepThoughtValue – The value added to the NPC Deep Thoughts

Specifications

- A GameObject with a trigger attached. Changes the NPC's NPCState when the NPC enters



them.

- Types of NPC Trigger Zones

- Stop

Stops the NPC from progressing. Acts like a wall for the NPC.

-If the player goes beyond this trigger, the NPC will stop at the trigger, if the player goes back the NPC will follow the player again.

- Wait

-Cause the NPC to stop moving for WaitDuration of seconds.

- Move To GameObject

-Causes the NPC to move to GameObjectToMoveTo

- Add Deep Thought

-Adds a deep thought to the NPC Deep Thoughts List while the NPC is in the Trigger Zone

## 6.2.4 NPC Dialog

This is the system that controls the NPC's responses to Player Dialog.

Variables:

DialogText – The text displayed on the mobile screen

DialogAudio – The audio played by the computer for each line of dialog

ChangeToMemorySync – The value added to a Key Item's Memory Sync Value

KeyItemToSync – If ChangeToMemorySync not 0 then this is the Key Item to change the Memory Sync Value of

WarningAudio – The audio that plays to warn the player the response is taking too long.

ConversationEndAudio – The audio that plays when the player takes too long to respond and the conversation ends.

Specifications

- NPC's Dialog responses are determined by their Bond with the player

- In conversations about Key Items, responses are also determined by their Memory Sync level

- NPC will also have barks, which will play referencing Points of Interest

-The dialog system we are using is packaged with a bark system so we will not need to

make it ourselves.

- Positive ChangeToMemorySync will make the sync towards the player, negative ChangeToMemorySync will make the sync towards the NPC
- NPC dialog is determined and displayed on the Computer
- While in a conversation, the NPC will only follow the player and will ignore Points of Interest

### 6.2.5 Bond System

This is the system that controls the NPC's bond with the player which changes how the NPC interacts with the world and the player through its movement, dialog responses, and other means.

Variables:

PreviousConversationBondModifier – Previous conversation's bond modifier.

MaxBondValue – Maximum possible bond amount.

MinBondValue – Minimum possible bond amount.

LongTermBondValue – The value of the NPC's long term emotion, this is equal to TotalBondValue / NumberOfConversations.

ShortTermBondValue – The value of the NPC's short term emotion.

CurrentBondState – This is a fuzzy variable that will solidify between Positive, Neutral, or Negative before each NPC response.

NumberOfConversations – This value increases every time the short term value is added to the TotalBondValue value at the end of a conversation.

TotalBondValue – This value is the total of all the short term bond values that are added to the long term bond.

Specifications

•Emotion Scale

- The NPC's Emotion is on a scale between MaxBondValue and MinBondValue.
- If between zero (0) and half of MinBondValue, CurrentBondState will solidify to either neutral or negative.
- If between zero (0) and half of MaxBondValue, CurrentBondState will solidify to either neutral or positive.
- If below half of MinBondValue, CurrentBondState will solidify to negative.
- If above half of MaxBondValue, CurrentBondState will solidify to positive.

- Long Term Emotion

- The long term main emotion, in addition to the PreviousConversationBondModifier, affects the starting value of the short term main emotion.
- This is the value used for determining how the NPC Points of Interest Handler handles Points of Interest
- This value is equal to the TotalBondValue divided by NumberOfConversations to give the average of all short term bond values

- Short Term Emotion

- The short term main emotion is the value that directly affects the dialog
- At the start of each dialog tree this value is set equal to half the long term emotion value plus the PreviousConversationBondModifier.
- This is to have the conversation and NPC reactions feel more realistic (and may be tweaked over time).
- This value changes after player dialog choices, if the choice has a ChangeToBond value greater than 0.
- At the end of the conversation this value is added to the TotalBondValue and NumberOfConversations is increased by 1.

### 6.2.6 World View System

This is the system that controls which ending the player and NPC is going down.

Variables:

MaxWorldViewValue – Maximum world view value

MinWorldViewValue – Minimum world view value

CurrentWorldViewValue – Current world view value

Specifications

- If a dialog line is hit and is set to change the CurrentWorldViewValue, it will change CurrentWorldViewValue accordingly.
- This system is used at the end of the game to determine which one of the 2 endings the player will get.
- A value greater than 0 will result in a positive ending, a value less than 0 will result in a negative ending.

### 6.2.7 NPC Deep Thoughts

This system gives the player clues for how to get past puzzles, as well as insight into the NPC's Current World View Value. Displayed on the Mobile Screen

Variables:

DeepThoughtTextList – List of strings that will appear at random

DeepThoughtValueList – Corresponds to the DeepThoughtTextList. Holds the value of each string to determine how close to the center and how big it appears.

DeepThoughtTypeList – Corresponds to the other Deep Thought lists. Holds which system the text comes from. Types will be PointsOfInterest, Dialog, and TriggerZone

MaximumFontSize – Maximum font size

MinimumFontSize – Minimum font size

MaxDuration – Maximum duration the deep thought remains on screen

MaxValue – Maximum value of the deep thoughts

FadeTime – The time it takes for the Deep Thought text to fade in and out.

LastTextLocation – Vector2 of the last text's location

MinimumSpawnDistance – minimum distance away from LastTextLocation a text can be displayed.

DefaultValue – The default value for deep thoughts if not otherwise set.

Specifications

- Pulls text and the text's value from Points of Interest, general location triggers, and from dialog triggers.
- Greater valued Deep Thoughts makes them spawn closer to the center of the screen and with a larger font size up to MaximumFontSize, but not smaller than MinimumFontSize.
- This is displayed on the Mobile Screen. The text and value is passed to the mobile device from the computer where the mobile device handles how to display it. (This is subject to change)
- If the value of any deep thoughts is less than or equal to zero, remove it from all lists
- The Deep Thoughts randomly appear one at a time on screen. They fade in and out, and their duration that they remain on screen is  $\text{MaxDuration} * (\text{Deep Thought's Value} / \text{MaxValue})$
- When a new Deep Thought appears, it must be MinimumSpawnDistance away from LastTextLocation.
- Interaction with Points of Interest

- If a point of interest is in range
- If world view is positive, add the positive world view deep thoughts text from the point of interest to the DeepThoughtTextList
- If world view is negative, add the negative world view deep thoughts text from the point of interest to the DeepThoughtTextList
- If a point of interest is not in range, remove the text, type, and value from the lists.
- Interaction with Dialog
- When a dialog line that is set to add a deep thought is hit
- If world view is positive, add the positive world view deep thoughts text from the dialog to the DeepThoughtTextList
- If world view is negative, add the negative world view deep thoughts text from the dialog to the DeepThoughtTextList
- Lower the value of all other dialog deep thoughts
- If anything is added to the list, decrease the value of all dialog deep thoughts.
- When a conversation starts or ends, decrease the value of all dialog deep thoughts.
- Interaction with Tigger Zones
  - If the NPC is in a trigger zone that is set to add a deep thought
  - If world view is positive, add the positive world view deep thoughts text from the trigger zone to the DeepThoughtTextList
  - If world view is negative, add the negative world view deep thoughts text from the trigger zone to the DeepThoughtTextList
  - If the values of the trigger zone deep thought is set by designer, set deep thought value to that value, otherwise set it to DefaultValue.
  - If the NPC leaves the trigger, remove the deep thought from all lists.

### 6.2.8 NPC Memory Log

This is the system that stores memories (Memory Objects and Key Items) from the NPC's perspective for the player to access while Perspective Shifted into the NPC.

Variables:

MemoryObjectArray – an array of memory objects and memory dialog

CurrentlyViewingMemoryObject – a reference to the memory object the player is currently

viewing

Specifications

- The same system as the player memory log however uses different descriptions and images referencing the NPC's World View for Memory Objects and more directly their Memory Sync levels for Key Items.
- Holds a reference to all the Memory Objects and Key Items, when an item is found, the computer will send the id of the object to the mobile device where it will become available for viewing in the Memory Log.
- Player must be perspective shifted into the NPC to see this option.

### 6.2.9 NPC Memory Sync Handler

This System Handles the Memory Sync Value for Each Key Item for the NPC.

Specifications

- Takes in the Memory Sync Value and determines which text and images to display the key item as in Perspective Shift as well as in the Memory Log for the NPC.

## 6.3 Miscellaneous Systems

### 6.3.1 Mobile / Computer Connection

This is the system that allows the computer application to talk with and have specific things displayed on the mobile screen.

Specifications

- Both the computer and mobile device find each other's ip addresses and connect to each other.
- Information is sent between the devices. The type of information depends on the system.

### 6.3.2 Points of Interest

This is the object based system that the NPC uses to move throughout the world and focus their attention while perspective shifted.

Variables:

MaxWeight – Maximum possible weight

MinWeight – Minimum possible weight

CurrentBaseWeight – Current weight value before WeightChangePerDistance modifier

CurrentWeight – Current weight value used.

Visited – Bool whether or not the NPC has visited this object

CurrentlyBeingVisited – Bool whether or not the NPC is currently visiting this object

NPCWaitSeconds – This is the number of seconds the NPC will visit this object

CanBeRevisited – Bool whether or not the NPC can revisit this object

WeightChangePerDistance – Value multiplied by the distance and added to the CurrentBaseWeight to determine CurrentWeight

DeepThoughtValue – The value of this object when passed to the NPC Deep Thoughts

DeepThoughtPositiveText– The list of text about this object that is passed to the NPC Deep Thoughts

DeepThoughtNegativeText– The list of text about this object that is passed to the NPC Deep Thoughts

Specifications

- The player will have an inverse weight so as their distance increases, their weight increases. All other object will have a decreasing weight as the distance increases.

### 6.3.3 Key Items

This is the object based system that the player uses to progress through the game.

Variables:

DescriptionDefaultFromPlayer – Player’s default description of the Key Item in their Memory Log.

DescriptionConvertedFromPlayer– Player’s description of the Key Item after the NPC converts them to their view.

DescriptionConvertedFromNPC – NPC’s description of the Key Item after the player converts them to their view.

DescriptionDefaultFromNPC– NPC’s default description of the Key Item in their Memory Log.

ModelPlayerView – Asset used to show the object through the Player’s view

ModelNPCView – Asset used to show the object through the NPC’s view

Specifications

- These Objects are stored in both the Player’s and the NPC’s Memory Log
- Upon finding a key item, the player and the NPC view the Key Item Differently
- The player can use dialog conversation about the key item as well as Interactable Objects to

## Memory Sync

- The description information is stored on the mobile device within the Memory Log
- The model information is stored on both the computer for viewing in the game world and on the mobile device for viewing in the Memory Log

### 6.3.4 Memory Objects

Objects that allow the player additional dialog options and plays narrative oriented dialog on pickup.

#### Variables:

AudioOnPickUp – Audio Clip played when the memory object is picked up by the player

TextOnPickUp – Text Displayed when the memory object is picked up by the player

DescriptionFromPlayer – Description shown in the player’s Memory Log

DescriptionFromNPC – Description shown in the NPC’s Memory Log

#### Specifications

- These Objects are stored in both the Player’s and the NPC’s Memory Log
- Holds a description of the object and the memories associated with it for both the player and the NPC’s perspective.
- When picked up, may play a bark.

### 6.3.5 Memory Log Manager & Memory Sync

This System is attached to Key Items and connects the Key Items to the NPC’s World View as well as how the player and NPC views this object.

#### Variables:

Item Type Array – The type of object in each array value. Can be either Memory Object or a Key Item.

MaximumMemorySyncValueArray – The maximum Memory Sync value that resembles the Player’s Default View for all Memory Objects and Key Items.

MinimumMemorySyncValueArray – The minimum Memory Sync value that resembles the NPC’s Default View for all Memory Objects and Key Items.

CurrentMemorySyncValueArray – Current value used to determine how the NPC and the Player view the Key Item. Starts at 0 which means the player and NPC do not have synced views of the Key Item. For all Memory Objects and Key Items.

#### Specifications



- The CurrentMemorySyncValueArray changes through dialog and can be affected by the use of some Interactable Objects.
- Players must hit a certain MemorySyncValue through dialog to convince the NPC that the key item is how the player sees it and not how the NPC sees it
- If the player convinces the NPC, Memory Sync occurs which changes the NPC's Memory Log of the Key Item to resemble what the player's Memory Log of the item is
- In this case, the NPC's World View shifts to be more positive
- NPC's Bond with the player increases
- If the NPC convinces the player, Memory Sync occurs which changes the player's Memory Log of the Key Item to resemble what the NPC's Memory Log of the item is
- In this case, the NPC's World View remains more negative
- NPC's Bond with the player increases
- If the player and NPC do not Memory Sync, their Memory Logs of the Key Item will remain different
- In this case, the NPC's World View remains more negative
- NPC's Bond with the player does not change (although it will decrease due to the dialog)

### 6.3.6 Interactable Objects

This is the object based system that the Player uses to interact with the world.

Variables:

Used – Bool if the object has been interacted with before

Reusable – Bool if the object can be interacted with more than once

Specifications

- The player must be within a trigger zone and facing the Interactable Object in order to interact with it.

- This will be an abstract class.

•Examples:

-Doors

-Torches

-Switches

- As specific Interactable Objects are confirmed by design, this doc will be updated with the

specifics for those objects.

### //6.3.7 Perspective Shiftable Objects

Objects besides the NPC that the player can Perspective Shift into.

Variables:

asd – asd

Specifications

- These objects may have their own deep thoughts
- This is unconfirmed
- Functions like the NPC however will not move, or will move very subtly (Like being rocked by the wind)

## 7.0 Sound

### **Introduction:**

*Ascend is a game about finding one's self. The art is inspired by games like "Shadow of the Colossus," "Ico" and "Journey." Other visual influences are Afghanistan cliffs, large spaces (Salt Lake City, Utah), Beggar's Canyon (Tatooine), and Arches National Park.*

*The main character will be in first person and have a partially hidden face, revealing no gender. They will be wearing light to medium armor or a scarf-hood combo, and carrying a damaged shield and/or melee weapon.*

### **Dialogue:**

*Ascend will be a game mainly revolved around listening and following dialogue from the NPC or memory objects that are found throughout the game. It is going to very important that we keep the dialogue heard over music or ambiences that are played, through some kind of volume or side chain automation.*

### **Music:**

*The music for ascend was originally drawing inspiration from mesopotamian culture and sound, but has evolved to have more instruments of later cultures, as well as different styles of music to fit more within the theme and art style of the game.*

**Music\_1:** *Heavy "drone" woodwinds with a plucked acoustic guitar accompaniment. Percussion, horn, string, and piano pieces have been written to go along with this piece for transitional/emotive/evocative events that could potentially change during gameplay.*

**Music\_2:** Multiple woodwinds that play off of each other in a very slow paced tempo. This piece would be considered for background music in a bazaar or town area in a more free world environment type of situation. This is the piece of music used for the Ascend Trailer that was released in November 2015.

**Music\_3:** This piece consists of two plucked sitars with a pair of violins playing low tremolo notes. This piece has a similar "open space" feel to it, like "Music\_2."

**Music\_4:** Strings are the main element in this piece, with occasional mild percussion being played. The strings play an emotive, slow, trancing style which could be used for multiple in game events, including finding certain "Memory objects."

**Music\_5:** Music\_5 is driven mainly by a piano and percussion instruments. The percussive elements have an "industrial" aspect to them, while keeping a fairly simple repeated beat. The piano is mostly slow single notes being played.

### **Themes:**

So far we know for sure that there will be a house theme and a marketplace theme, of which the music and ambience is still under discussion due to the dialogue needing to be finalized. For the most part the player character will be alone or with one NPC, but it's possible that

*some of the memory objects will reveal past situations, such as a marketplace that was once booming with society.*

***Ambience\_1:*** *Open space ambience consisting of sound effects like wind and sand blowing and scraping.*

***Ambience\_2:*** *Inside buildings, houses, stairwells: Ambience here is filled with mysterious possibly cave-like (heavy reverb) from inside the stone architecture.*

### ***Composition:***

*We have several pieces of music being constructed, which are mainly composed of flutes, acoustics guitars, percussion, sitars, and some horns. A major part of the game will seem to be in a large outdoor sand covered area, with a tower in the distance, and for this we are discussing how we want the ambience and music to enhance the experience, but as of right now we are thinking of using a soothing, slow guitar and woodwind piece of music along with a slightly dark ambience consisting of wind, birds, and insects.*

### ***Sound Effects:***

*Most of the sound effects are still under discussion because, besides the memory objects, interactive objects haven't been determined yet.*

**Leviathan:** *There is a large leviathan creature on the outskirts of the world that is preventing the NPC from escaping. The creature will emit sounds that are formed mainly from organic animal sounds, and will possibly also be swimming or jumping in and out of sand dunes.*

**Memory Objects:** *Memory objects are going to be an important source material for the user to continue on his quest. Each time a memory object is found, lessons, history, or a path to follow could be shown to the user. Each memory object found by the player will trigger specific, as well as ambiguous responses from the user. Finding a memory object will need to trigger a specific sound analogous to all the other memory objects, but each will most likely transition into its own theme based upon the specific memory that it is drawing from.*

**NPC (hunter):** *This is the only character that speaks during the game. The Hunter is a heavy-set, middle-eastern man. Though he initially comes across as driven and stubborn, he is actually quite self-doubtful. He uses his loved ones as his primary motivation to hunt.*

## Technical:

### Integration:

We are using Wwise for integrating our sound design into Unity.

### File Formats:

.WAV

### Applications:

Pro Tools

Wwise

Unity

### Wwise-Unity Dialogue Sheet example:

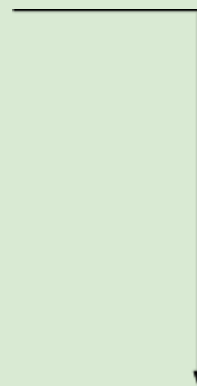
Wwise							Unity	
#	Audio File Name	Sound Voice File	Parent Switch Container Name	Switch Group Name	Switch Name	Event Name	Conversation ID	Dialogue ID
1	Megan Dialogue 1.wav	Megan Dialogue 1	Dialogue Conversation 1	Conversation 1	Switch 0	Play Conversation 1	1	0
2	Megan Dialogue 2.wav	Megan Dialogue 2	Dialogue Conversation 1	Conversation 1	Switch 2	Play Conversation 1	1	2
3	Megan Dialogue 3.wav	Megan Dialogue 3	Dialogue Conversation 1	Conversation 1	Switch 3	Play Conversation 1	1	3
4	Megan Dialogue 4.wav	Megan Dialogue 4	Dialogue Conversation 2	Conversation 2	Switch 0	Play Conversation 2	2	0
5	Megan Dialogue 8.wav	Megan Dialogue 8	Dialogue Conversation 3	Conversation 3	Switch 0	Play Conversation 3	3	0
6	Megan Dialogue 9.wav	Megan Dialogue 9	Dialogue Conversation 3	Conversation 3	Switch 2	Play Conversation 3	3	2
7	Megan Dialogue 10.wav	Megan Dialogue 10	Dialogue Conversation 3	Conversation 3	Switch 5	Play Conversation 3	3	5

## 8.0 UI Flow and Functionality

- 8.1 Logos and Cert Info
- 8.2 Start Screen
- 8.3 Pre-Game Menus

- 8.3.1 Main Menu UI Flow

PRESS START	PLAY GAME -Begins the game from the level start
	OPTIONS -Opens <b>OPTIONS MENU</b>
	CREDITS -Displays Credits Screen
	EXIT GAME -Closes the game



- 8.3.2 Options Menu Flow

VIDEO OPTIONS	BRIGHTNESS - adjusted with horizontal slider
SOUND OPTIONS	MUSIC VOLUME - adjusted with horizontal slider
	EFFECTS VOLUME - adjusted with horizontal slider
	VOICE VOLUME - adjusted with horizontal slider
	LANGUAGE - toggle button press
*MOBILE CONNECTIVITY	*TEST CONNECTION - button press activation
	*FIND MOBILE DEVICE - button press activation

\*May change depending on how mobile connectivity is implemented and established.



- **8.3.3 Main Menu and Option Menu Descriptions**
- Title Screen - contains a Title Art Splash and Press Start text
  - *Press Start*: Reveals Main Menu choices
- Main Menu Screen - Art Splash with Main Menu options
  - *Play Game*: This options starts the game from the beginning of the demo level. (Currently no save states, game always starts at the beginning of demo).
  - *Options*: This choice will allow the player to modify the game's settings.
  - *Credits*: Selecting this will take the player to the Credits Screen, where the credits for the game will be displayed and viewable. Player can press any button to return to the Main Menu.
  - *Exit Game*: This option will stop the game from running, close the game window, and return the player to the computer's desktop.
- Options Menu Screen
  - *Video Options*
    - *Brightness*: This option lets the player adjust the brightness of the game.
  - *Sound Options*
    - *Music Volume*: This option allows the player to independently adjust the volume of the game's Music.
    - *Effects Volume*: This option allows the player to independently adjust the volume of the game's Sound Effects.
    - *Voice Volume*: This option allows the player to independently adjust the volume of the game character's Voice/ Dialogue
    - *Language*: This gives the player a toggle between different languages, English and Spanish.
  - *Mobile Connectivity*
    - *Test Connection*: Selecting this option sends a ping to the connected mobile device to make sure the connection is active and stable.
    - *Find Mobile Device*: Selecting this option makes the game scan for a useable mobile device, and then connects it to the game's systems.

- **8.4 In-Game Menus**

## PERSPECTIVE SHIFT

Referring to UI cues and visualizations while the Player is using the Perspective Shift mechanic.

### Main Screen

- *Deep Thoughts Display:* Displays various floating pieces of text that comprise the NPC's Deep Thoughts. Large Deep Thought text is at the center of the screen and are the NPC character's most pressing thoughts. Small Deep Thought pieces of text are further from the center of the screen and are the NPC's passing emotions and feelings.
  - In special areas a Large Deep Thought will have a highlighted VFX that allows the player to select the thought to unlock special dialogue.

### Mobile Screen

- *Memory Inventory Select:* The mobile screen will display the game world as the NPC character sees it. On the bottom left of the mobile screen is a small GUI button with the text "Memory Inventory" on it. Pressing this button displays the Memory Inventory Screen on the Mobile Screen.

## MEMORY INVENTORY

This refers to the screen that displays any Memory Objects or Key Items that the player has seen or collected.

### Mobile Screen

- *Memory Inventory Navigation:*

This screen contains a grid of UI buttons, each button has a picture of a Memory Object or Key Item on it. At the start of the game all of these pictures are blacked out.

  - *Active Memories:* When the player finds Memory Objects or Key Items in game, the picture on the UI button in the Memory Inventory that is connected to that Item will become colored and selectable. The player can press an Active Memory button to display a larger picture of the Item and a description of the item's importance in the game.

- *Inactive Memories:* If the player hasn't found a Memory Object or Key Item associated with a UI button in the Memory Inventory, the picture on that button will be blacked out, and the button unselectable until the matching Memory Item is found in the game world.
- *Memory Inventory Object Descriptions:*
  - *Description Window:* Selecting an Active Memory Object or Key Item in the Memory Inventory will open a Description UI Window on the Mobile Screen.
    - *Item Display:* The left half of the window will have a 3D image of the selected item. The image can be dragged with the player's finger to rotate it.
    - *Item Description Text:* The right half of the window will have descriptive text describing the object. This description will include the location the item was found and a piece of flavor text about the item.
    - *Back Button:* The bottom right corner of the Description Window will have a small UI button with the text "Back" on it. This will close the Description Window and bring the player back to the Memory Inventory Screen.

## 9.0 Hardware and Software Specs

- **9.1 Organization**
  - 9.1.1 Hansoft
  - 9.1.2 Tortoise SVN
- **9.2 Engine Tools**
  - 9.2.1 Unity Version 5.1.2
  - 9.2.2 wWise
  - 9.2.3 Microsoft Visual Studio
  - 9.2.4 Adobe Acrobat
  - 9.2.5 Autodesk Maya
  - 9.3.6 Pixel Crushers
  - 9.3.7 Zbrush
- **9.3 PC/Mobile Specs**
  - 9.3.1 Target Platforms
  - 9.3.2 Min/Recommended Specs
  - 9.3.3 Target Version
  - 9.3.4 Apple Computers
  - 9.3.5 Dell Computers
  - 9.3.6 Microsoft Software
  - 9.3.7 Android Nexus
  - 9.3.8 Samsung
  - 9.3.9 Sony
- **9.4 Custom Hardware**
  - 9.4.1 Specialized Game Controller with Mobile Mount

## 10.0 Compiled Asset List (For Quick Reference)

- 10.1 Design Assets
- 10.2 Art Assets
  - 10.2.1 CHARACTER ASSETS
  - 10.2.2 ENVIRONMENT ASSETS
    - Props
    - World
  - 10.2.3 VFX ASSETS

### Shaders

- Rim shader (highlights important objects)
- Fading shaders (for lingering objects from POV switch)
- Sand Ocean sand shader
- Sand footsteps
- Water shader (for pools of water)

### Env. Particles

- Sideways sand cloud (from wind kicking up sand from the ground)
- Sand "tornado" (a swirl of sand caught in the air)
- Sand kicked-up from feet
- Sand waterfall
- Sand Plume
- Possible fire particles
- Beams of sunlight

### Camera effects

- Possible tinted filter during POV switch
- Dust floating particle (parented to camera)
- Depth of Field (blur and saturation) (Dynamic?)
- Rule of 3rds for setting scenes, esp for character screen placement & framing shots
- Motion blur?

### NPC interaction

- NPC mood indicator (conveys NPC's attitude towards player)

choice)(needs clarification)

### Skybox

- Skybox itself as an asset
- Tower pillars (may be physical object)
- Horizon clouds
- Directional moving clouds

### Lighting

- Dynamic ambient occlusion when player is near a wall/ large object-
- Simple, soft, gradient based shading combined with cell shading
- Very soft glow coming off the edge of objects, esp on the horizon
- Light hues adjust for specific locations (convey emotion of the scene)
- Lights are largely static and come from the sky
- Flickering firelight from fire

- **10.3 Coding Assets**
- **10.4 Sound Assets**

## 11.0 Auxiliary Information

- **11.1 In Class Production Flow**
  - Class starts with general information going out to the team.
  - The team then takes some time to do Standups where they talk about how they are feeling and what they are working on.
  - The team splits into groups and starts working.
  - Lunch breaks are taken team by team every 15 minutes, starting with the first team at 3:00 and ending with the last team at 4:00.
- **11.2 Out of Class Production Flow**
  - Tasks are assigned by leads on Hansoft, or through a task sheet.
  - Leads are available to help provide information and assistance in completing these tasks.
- **11.3 QA and Bug Reporting**
  - 11.3.1 QA Info
  - 11.3.2 Bug Report Instructions

THIS IS NOT AN ACTUAL BUG (there is no build for there to be a bug yet)

This will be what you will refer to when you post a bug report.

Note: When you fill out a bug it will auto save as you type so you don't have to worry about doing it all at once, but it is good to type it out in word first so everything is grammatically correct and everything is spelled correct.

When you report a bug there is a lot you have to do, first being the information to the left.

The first box is the description, this can be updated at any time so when you first report a bug this should be the format:

"NEW: team it involves: Area: Sparknote what bug is."

-The reason you put "NEW" when you report a bug is so we know that it is new

(obv) but this is also good for me so I know what is going on with the game when I load hansoft.

-The next is the team involved (eg, DESIGN, PROG, ART, SOUND, QA, etc) if it is something like the character controller doesn't work it will go to PROG, if a wall has no texture it goes to ART, if the music is nothing but a goat screaming it is a SOUND problem.

-The area where the bug was found is next so the team can find it and replicate it to find out how to fix it.

-Last is a description of what is it so we know what to look out for.

When you report a bug the status must be "New / Not done" when you assign the bug to someone it will change it to assign (that is fine) just as long as it says new and not done.

IMPORTANT!!! Whenever you report a bug you have to assign it to me (Jacob.Berry) I will assign it to the lead from there to be assigned to the individual to fix the bug. If the bug is assigned to someone else I will not know about it and therefore it might not get done or fixed.

The next box is for what version you found the bug on. This is helpful for when we have a weekly build. If you find a bug on version 1.0.1 it may have been fixed in version 1.0.2, but if you don't put the version we will assume the latest build and it will basically waste our (my) time trying to replicate the bug that doesn't exist on the version I am working on. (If you waste my time like that I will not be happy)

The last two boxes are for severity and bug priority. They are similar but very different.

Severity is for how detrimental the bug is to the game. If the game crashes and closes it is automatically a severity A, if the game just glitches or if it is "Z fighting" it is severity D. The severity is based on how damaging the experience is for the player if they run into that bug.

The base ranks for each bug are as follows:

A: Game closes. End of story, if the game completely crashes and bursts into flames it is Severity A, no exception.

B: The player gets into a spot where they cannot continue in the game unless they restart the game.



C: Something happens in a way that was not supposed to happen but doesn't crash the game or prevent the player from continuing in the game.

D: Something that just doesn't look right, usually art or sound.

Bug Priority is something that I assign, so do not touch it, unless it is a lead that find the bug. The leads and producers are the only ones that should change the bug priority.

Now onto the detailed description box. This box right here needs to be so detailed it hurts.

An example of good description would be:

"There is a bug in the front doorway of the hunter's house. When you approach the doorway everything is fine until you collide with the trigger box. When the player collides with the trigger box the player explodes and the game catches on fire. When I tried to replicate this bug I tried from a few different angles, all producing the same result. To find the location use the map reference picture attached <img.001>. To see the bug in action see the reference pictures <img.002> and <img.003>."

In the detailed description you NEED to include: location of bug, what happened for it to be a bug, when precisely it happened (try to be as clear as possible), and images of the bug.

When bug testing it is good to try to replicate the bug multiple times, if it happened once and you can't get it to happen again it is most likely a fluke and don't report it. Only if it happens multiple times should you report it.

This box here is for the steps to replicate. THIS ALSO NEEDS TO BE SO DETAILED IT HURTS.

The steps should be listed in a number list like so:

1. Open up Ascend version 0.0.0.1 (THIS MUST BE THE FIRST STEP BECAUSE WE NEED TO KNOW WHAT VERSION YOU ARE ONE)
2. Head to the hunter's house as marked on map in <img.001>
3. Stand 10 yards from the front door to the hunter's house.
4. Walk toward hunter's house towards the trigger box collider. <img.002>
5. Collide with trigger box.
6. Observe player explosion and spontaneous combustion of game.

<img.003>

Each number should be a different action from the user, the moment they do anything different on the controller or in the game should be a different number. These steps must be accurate so the testers can figure out what is going on and why the bug happened.

After you finish those boxes if you have any other information that is relevant to the bug post it in the comments, I don't always need a comment but as we work on fixing the bug we will be using the comments to communicate on the issue.

Last is including reference pictures, all you do is attach file and click on your file you wish to add. Same rules apply, you have to leave a comment on the file before you can attach it.

And that is all you need to do when you post a bug, not that hard right?

- **11.4 Game References/Inspirations**

- *Journey*
- *Toren*
- *Everyone's Gone to the Rapture.*
- *Until Dawn*
- *Undertale*

- **11.5 Visual References/Inspirations**