THIS LITTLE PIGGY
WENT TO THE TOOLSHED

ICE

53-471 Final Assignment

Inner Circle Entertainment

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2   INTRODUCTION

2.1   OVERVIEW

This Little Piggy went to the Tool Shed is a survival adventure game with roguelike elements for the PC. Players play as one of the 3 little pigs from *The Three Little Pigs* and attempt to construct a brick house before the Big Bad Wolf comes. The game consists of a day/night cycle in which players gather supplies and resources during the day, and survive against the wolves at night.

2.2   TARGET AUDIENCE

The target audience of This Little Piggy went to the Tool Shed are players aged 10-25, who enjoy survival games and are familiar with the fairy tale, The Three Little Pigs. This Little Piggy went to the Tool Shed is seeking an ESRB rating of E10 or Teen due to its theme and violence.

2.3   PLATFORM

This Little Piggy went to the Tool Shed is being developed for the PC.

2.4   COMPETITORS

This Little Piggy went to the Tool Shed will occupy the same game space as *Don't Starve* by Klei Entertainment. *This Little Piggy went to the Tool Shed* will have similar(albeit simplified) scavenging/construction elements as well as a day/night cycle. *This Little Piggy went to the Tool Shed* will largely differ in its survival elements. The experience of nighttime is influenced by Techland's *Dying Light.* Rather than building a fire to ward off danger, players build a house to rest in. Every house except the brick house is destroyed each night by the wolves, forcing the player to flee until the following morning.

2.5   INTENDED EXPERIENCE

Players of *This Little Piggy went to the Tool Shed* are thrown into a world where survival is difficult. The goal of the game is to build the brick house before the Big Bad Wolf arrives. The night phase of the game should scary and thrilling for the player. House construction and survival at night are the core experiences of the game.

For the prototype, one day/night cycle lasts ~2-3 minutes. The day portion of the cycle is longer. The player has 5 in-game days to construct a brick house before the Big Bad Wolf arrives. Gameplay for future versions of the game can be extended by increasing the length of the day/night cycle and the number of cycles before the Big Bad Wolf Arrives

3 GAME

3.1 SUMMARY

This Little Piggy went to the Tool Shed is a survival adventure game, where the player plays as one of the 3 Little Pigs from the fairy tale.

The game consists of a day/night cycle. During the day, the player's main objective is to collect resources throughout the map in order to build a house. At night, the wolves come out and roam the map. If the player is not in a house, the wolves chase the player character. Otherwise, the wolves attack the house that the pigs are in. While the player is in a house, the player's stamina is restored.

The wolves' attacks reduce the health of the house. Once the house's health drops to zero, the houses collapses and the player is forced outside.

There are different types of houses that can be built, and each requiring different materials, based on the three houses from the fairy tale.

Different regions of the maps contain various types of resources. The player must explore the game world to obtain the resources needed to build better houses. Houses can be built by the player at any time, but require time to be constructed.

The objective of this game is to build the brick house before the Big Bad Wolf Comes. The number of wolves that spawn at night increase as the game progresses. The game ends when the player dies or when the brick house is constructed and the Big Bad Wolf arrives.

3.2 STORY

3.2.1 Narrative
A pack of wolves has invaded the home forest of the 3 little pigs and the Big Bad Wolf is on his way. Construct a home for safety and build the brick house before the big bad wolf arrives.

3.2.2 Playable Character
The player plays as one of the 3 Little Pigs.

The players explore the world, scavenge items, and build houses. Pigs have no offensive combat capabilities and cannot physically harm the wolves. However, the player is slightly faster than the wolves and is able to hide in houses.

3.2.3 Enemies
The main enemies are the normal wolves. Wolves spawn randomly at night and disappear during the day. Normal wolves scale in numbers as the game progresses.

In addition to normal wolves, the Big Bad Wolf arrives on the third day of gameplay. The Big Bad Wolf is stronger and faster than the normal wolves, but is not able to destroy the brick house.

3.2.4   Environment
The map is a flat and natural environment. It contains various trees, rocks, and bushes. The map will also have different regions containing unique resources. Players will only be able to collect region specific resources in the appropriate region. General resources are available throughout the world.

3.3   GAMEPLAY

3.3.1   Gameflow
The player determines at a predetermined location in the forest, and ca immediately explore his/her environment. Resources near the player can be used to low level items and dwellings. Gameplay is split into day and night phases. Gameplay will follow the below game loop:
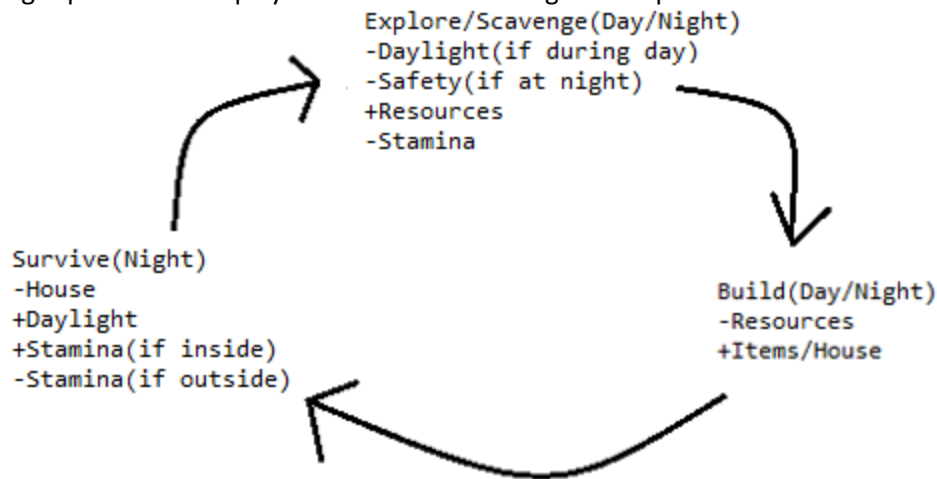

Figure 1: Base gameplay loop for *This Little Piggy went to the Tool Shed*
During the day, players gather resources and build items and build/improve houses. At night, players attempt to survive against the wolves.

3.3.2   Mechanics

3.3.2.1   Day/Night Cycle
The day/night cycle divides the game into two distinct sections. The day portion of the cycle focuses on gathering and building, while the night portion focuses on surviving against the wolves. Daytime lasts longer than nighttime, due to the importance of gathering resources.

Day

During the day, players are free to scavenge and build. No hazards exist for the player during the day. As the night nears, day will turn to dusk, indicating that players should go indoors or construct a house if they do not have one.

Night

Night gameplay consists of two components. The first component(if the player has a house) is rest and the destruction of the house by the wolves. The second component is survival, where the player runs flees from the wolves until the next day comes.

3.3.2.2   Scavenging

Scavenging is the player's primary method of collecting resources. Objects that can be picked up are easy to identify for pickup. The mini-map will alert player's to resources that are in their general location. In game resources are:

- Straw
- Wood
- Bricks

Resources appear throughout the map, but specific types primarily appear in specific sections of the map.

3.3.2.3   Construction

Construction is the primary method to build houses. Player's will use resources gathered by scavenging for construction.

Inventory

Players can collect straw, sticks, and bricks. There is no limit on the number of each collectable that the player can hold.

Houses

The player will be able to construct a variety of houses using various materials. Based on the fairy tale, straw, wood, and brick will be among the materials players are able to construct houses out of. While inside a house, the player's stamina is restored.

3.3.2.4   Survival

Players have two means of surviving against the wolves at night. Houses provide safe haven against the wolves at night. Wolves attack houses that the player occupies. If the house's hit points reach zero, the house collapses, and the player will need to flee the wolves.

If the player is not in a house at night, he/she can attempt to avoid wolves using stealth. If the wolves detect the player, he/she will have no choice but to run until the next day starts or the wolves lose track of the player.

3.3.3   Stamina

Stamina acts as health and energy for the player. Stamina decays over team, and if it drops below a certain threshold, the player receives a movement penalty. The player also loses health when he/she is hit by a wolf. If the player has 0 stamina and is hit by a wolf, the pig dies. The player cannot be one-shot by normal wolves, but can be killed by the Big Bad Wolf in one hit.

3.3.4   Controls

This Little Piggy went to the Tool Shed is a 3rd person game. The character is controlled using a mouse and keyboard.

- Run/strafe : WASD
- Look/turn : Mouse
- Interact with Construction Menus : Mouse(when construction menu open)

- Enter House : f
- Cycle camera view : z/x
- Access Inventory and Construction Menu: Tab

When the inventory and construction menus are open, players use the mouse to interact with the menu.

3.3.5   World Design and Generation

The World map is static. Different zones of the map contain resources that spawn at higher rates in that area. Within zones resources spawn randomly. Wolves and fairies spawn randomly as well. The player starts in a set location for each playthrough.

3.3.6   Win Conditions

The player wins the game if he/she can build the brick house before the Big Bad Wolf arrives. The player has 3 in game days to accomplish this goal. If the brick house is not built before the Big Bad Wolf arrives, the player will lose the game. The Big Bad Wolf can blow down any house that is not the brick house, and is substantially more difficult to run away from than normal wolves.

4   ART & VISUAL STYLE

4.1   VISUAL STYLE

The in-game world is a 3D world viewed from a third person perspective. In particular, the visual style is inspired by older storybook visual styles. The game consists of 3D assets and 2D assets that rotate to stay perpendicular to the camera. Beatrix Potter and Jan Brett exemplify the intended art style. This style may change depending on how well the 2D art style transitions to 3D.

4.2   CONCEPT ART

The Straw House

Player Character

4.3 CARTOON VISUAL STYLE

The first iteration of the visual style was very cartoony. It worked with the theme but didn't compliment the storybook theme that was desired.


4.4 FINAL VISUAL STYLE

The final visual style has much more of a "storybook feel" than the previous style. The style has a hand-drawn feel.

4.5 GUI

The GUI contains information regarding the time of day, map, stamina, inventory, and construction options. The mini-map, stamina bar, and time of day is always visible to the player. The construction menu and inventory can be toggled using 'Tab'.
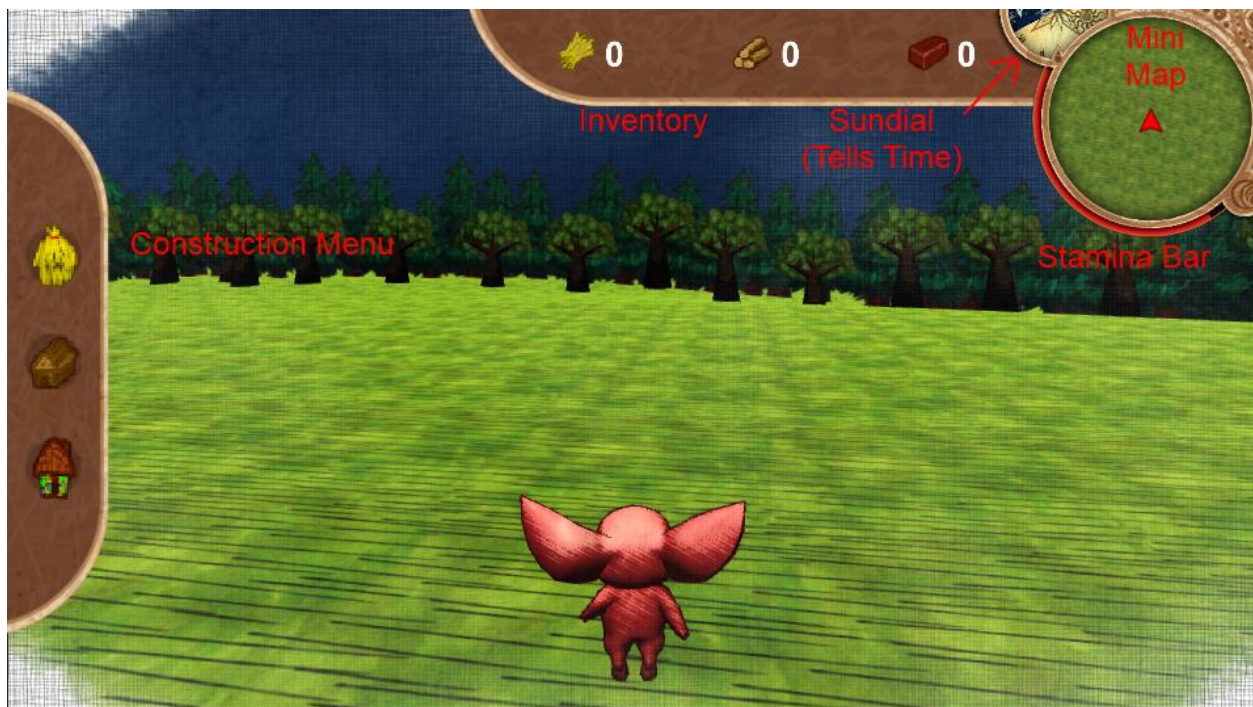
5 MUSIC & SOUNDS

5.1 MUSIC

The game contains no music, only ambient noise and sound effects that contribute to the environment and intended experience.

5.2 SOUND EFFECTS

Sound effects are used for the following purposes:

- Ambient background noise(differ between night and day)
- Noises to build tension at night
- Sound effects for various actions and characters