

Project Name: The Trash Pandas Horror Game

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Component Definitions:

Default Player – P – The default controllable model whose moves and actions are dictated by the player

Map – M – The overarching map of the game which can be broken down into two individual maps: The Forest and The Mansion

Enemy – E – The enemy of the game that hunts the player

Game Menu – G – The main menu of the game where the player can quit, or change their current settings of the game

Game Screens – S – The screens that the player will see upon bootup, victory, defeat, and request to see the controls of the game again.

Requirements

P.1.1 – The default player shall use the keyboard and mouse to navigate through the maps.

P.1.2 – The default player shall interact with collectible objects such as keys to doors in the mansion, or items to reconstruct the bridge in the forest.

P.1.3 – The default player shall be capable of holding up to 4 objects at a time.

P.1.4 – The default player shall use “F” to toggle their flashlight.

P.1.5 – The default player shall use “ESC” to open the menu.

P.1.6 – The default player shall complete some task to advance in the game.

P.1.7 – The default player shall choose a class that provides a unique ability that will assist the player during their playthrough.

E.1.1 – The enemy shall move around in the environment the player(s) is/are present in.

E.1.2 – The enemy shall target a player if it gets too close.

E.1.3 – The enemy shall become more challenging with each stage.

E.1.4 – The enemy shall track the player by sound.

E.1.5 – The enemy shall attack the player if they get too close or the enemy manages to catch up to the player.

M.1.1 – The overarching map of the game shall include two different maps.

M.1.2 – Each stage shall have a different objective to move on.

M.1.3 – The first map, the Woods, shall include an open area with many trees, night sky, foggy areas, rocks, and abandoned buildings.

M.1.4 – The second map, the Mansion, shall include intricately designed and confusing hallways, corridors, and rooms, spread out across a vast mansion.

M.1.5 – The win condition is to escape the mansion by collecting keys to unlock the door to the helipad.

G.1.1 – The game menu shall display 3 buttons.

G.1.2 – The game menu shall give the player an option to start the game, edit their settings, or quit the application.

S.1.1 – The title screen shall display buttons to start the game, quit the game, edit the settings of the game, and review the controls of the game.

S.1.2 – The victory screen shall display buttons to restart the game, go back to the start screen, and quit the game.

S.1.3 – The defeat screen shall display buttons to restart the level, restart the game, and return to the title.

S.1.4 – The “How to Play” screen shall display the basic controls of the game in an easy-to-understand manner.

Testing and Validation

T.P.1.1.1 – Start the game, navigate to a playable area, and press the spacebar key. This test has passed if the player executes a jump animation and moves upward.

T.P.1.1.2 – Press the “w” key. This test has passed if the player moves forward.

T.P.1.1.3 – Press the “s” key. This test has passed if the player moves backward.

T.P.1.1.4 – Press the “a” key. This test is passed if the player moves left.

T.P.1.1.5 – Press the “d” key. This test is passed if the player moves right.

T.P.1.1.6 – Bring the player to a state where sprinting is applicable and press the “left-ctrl” key. This test has passed if the player displays a noticeable increase in movement speed.

T.P.1.1.7 – Bring the player to a state where crouching is possible and press the “c” key. This test has passed if the player transitions to a crouching position with their height lowered.

T.P.1.2 – Ensure the player is capable of interacting with certain objects in the game. This test is passed if the player has successfully performed an interaction with the targeted object.

T.P.1.3 – Ensure the player is capable of holding certain objects in the game. This test is passed if the player has successfully picked up and maintained possession of the object until the player wishes to release the item.

T.P.1.4 – Start the game and press the “F” key. This test has passed if the player’s flashlight turns on and turns off when the “F” key is pressed again.

T.P.1.5 – Navigate the player through the game environment and then press the “ESC” key. This test has been passed if the game menu interface appears on the screen.

T.P.1.6 – Force the player to complete tasks to advance in the game. The test passes if the player cannot advance to the next level without completing the tasks necessary to proceed.

T.P.1.7 – Players can choose a class with certain abilities. The test is passed if the player chooses a class and cannot have access to any other classes’ abilities.

T.E.1.1 – The Enemy will be traversing the same environment as the player. The test is passed if the enemy can be seen successfully moving around in the environment.

T.E.1.2 – If the player comes within range of the enemy, the enemy will move in the direction of the player. The test is passed if the enemy successfully starts to move toward the player once the player is within a certain distance.

T.E.1.3 – The enemy can track the player better or move more aggressively. The test is passed if the enemy tracks the player at a faster rate than the previous stages or it moves more aggressively toward the player.

T.E.1.4 – The enemy can hear the player’s movement sounds at a certain distance. The test is passed if the enemy can successfully capture the sound the player makes and process the direction it came from.

T.E.1.5 – If the player is a certain distance away from the enemy, the enemy will begin attacking the player. The test is passed if the enemy attacks the player and successfully chips away some of the player’s health.

T.M.1.1.1 – Start the game. This test has passed if the presence of a visually unique map can be verified.

T.M.1.1.2 – Achieve the objective from the first stage, and progress to the second stage. This test has passed if the presence of a second visually unique map can be verified.

T.M.1.1.3 – Achieve the objective from the second stage, and progress to the third stage. This test has passed if the presence of a third visually unique map can be verified.

T.M.1.2 – Progress through each stage of the game while performing all of the necessary objectives. This test has passed if each stage presents a distinct objective.

T.M.1.3 – Navigate through the Woods map. This test has passed if the area promotes an eerie feeling: dark and foggy, with many trees, rocks, boulders, and abandoned buildings.

T.M.1.4 – Navigate through the Mansion and assess the complexity of the various hallways, rooms, and corridors, and assess their complexity. This test has passed if the player's navigation skills are challenged and the scene evokes feelings of disorientation and mystery.

T.M.1.5 – The player will be able to achieve the win condition by reaching the helicopter on the helipad.

T.G.1.1 – When opened, the menu will have 3 buttons relating to their actions. This test has passed if all three exist.

T.G.1.2 – The menu gives the player the ability to edit their configurations, start the game, or exit the game. This test has passed if they all perform the correct actions.

T.S.1.1 – When the game is booted up, the title screen appears and all buttons do their respective actions.

T.S.1.2 – When the game is won, the victory screen will appear and all buttons do their respective actions.

T.S.1.3 – When the player is defeated, the defeat screen will appear and all buttons do their respective actions.

T.S.1.4 – The screen appears with graphics to depict which key each action is mapped to.