Game Name: Key Escape

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Game Design

Summary

In Key Escape, the player must find and pick up a key to unlock the door to escape to the next level before the monster catches them. The game has two levels, a start screen, and a game over/you won screen. The scenery is dark and scary.

Gameplay

The player must navigate through each level to find the key while avoiding the monster. The monster moves faster and gets closer to the player as time passes. The player can hide behind objects to avoid the monster and throw objects to distract it. The game is won by finding the key and unlocking the door before the monster catches the player.

Mindset

The game is designed to make the player feel nervous and scared. The player should feel like they are in danger and need to be cautious and quick to escape the monster.

Technical

Screens

Title Screen

a. Start Game

b. Options

c. Quit

Level Select (locked until first level is completed)

Game

a. Inventory (items picked up by the player)

b. Assessment / Next Level (displayed after the key is picked up)

Game Over / You Won

Controls

The player can use the arrow keys to move and the spacebar to throw objects. The controls cannot be changed.

Mechanics

The monster's speed and distance from the player change as time passes. The player can throw objects to distract the monster and hide behind objects to avoid it. The key is randomly placed in each level.

Level Design

Themes

Forest

a. Mood

i. Dark

ii. Calm

iii. Foreboding

b. Objects

i. Ambient

1. Trees

2. Bushes

3. Rocks

ii. Interactive

1. Wolves

2. Goblins

Castle

a. Mood

i. Dangerous

ii. Tense

iii. Active

b. Objects

i. Ambient

1. Torches

2. Suits of armor

3. Chains

ii. Interactive

1. Guards

2. Giant rats

3. Chests

Game Flow

Player starts in the forest.

The key is randomly placed in the level.

The monster starts moving and gets faster as time passes.

The player must find the key and unlock the door to escape to the next level.

The game is won when the player escapes the second level.

The game is lost if the monster catches the player or if the player takes too long to find the key.

Development

Abstract Classes

BaseEntity

a. BasePlayer

b. BaseEnemy

c. BaseObject

d. BaseObstacle

BaseInteractable

Derived Classes

BasePlayer

a. PlayerMain

b. PlayerUnlockable

BaseEnemy

a. EnemyWolf

b. EnemyGoblin

c. EnemyGuard (may drop key)

d. EnemyGiantRat

BaseObject

a. ObjectRock (pick-up-able, throwable)

b. ObjectChest (pick-up-able, throwable, spits gold coins with key)

c. ObjectGoldCoin

d. ObjectKey (pick-up-able, throwable)

BaseObstacle

a. ObstacleWindow (destroyed with rock)

b. ObstacleWall

c. ObstacleGate (watches to see if certain buttons are pressed)

BaseInteractable

a. InteractableButton

Graphics

Style Attributes

The graphics will have a dark and scary theme with a limited color palette. The style will be pixel art with solid, thick outlines and flat hues. The game will use visual feedback such as changing colors of objects to indicate interactions.

Graphics Needed

Characters

a. Human-like

i. Goblin (idle, walking, throwing)

ii. Guard (idle, walking, stabbing)

b. Other

i. Wolf (idle, walking, running)

ii. Giant Rat (idle, scurrying)

Blocks

a. Dirt

b. Dirt/Grass

c. Stone Block

d. Stone Bricks

e. Tiled Floor

f. Weathered Stone Block

g. Weathered Stone Bricks

Ambient

a. Tall Grass

b. Torch

c. Armored Suit

d. Chains (matching Weathered Stone Bricks)

e. Blood stains (matching Weathered Stone Bricks)

Other

a. Chest

b. Door (matching Stone Bricks)

c. Gate

d. Button (matching Weathered Stone Bricks)

Sounds/Music

Style Attributes

The music will have a slow-paced, nerve-racking forest track and an exciting castle track. The sound effects will be realistic, emphasizing actions such as footsteps and object interactions.

Sounds Needed

Effects

a. Soft Footsteps (dirt floor)

b. Sharper Footsteps (stone floor)

c. Soft Landing (low vertical velocity)

d. Hard Landing (high vertical velocity)

e. Glass Breaking

f. Chest Opening

g. Door Opening

Feedback

a. Relieved "Ahhhh!" (health)

b. Shocked "Ooomph!" (attacked)

c. Happy chime (extra life)

d. Sad chime (died)

Music Needed

Slow-paced, nerve-racking "forest" track

Exciting "castle" track

Creepy, slow "dungeon" track

Happy ending credits track

Schedule

Develop base classes

a. BaseEntity

b. BasePlayer

c. BaseEnemy

d. BaseObject

e. BaseObstacle

f. BaseInteractable

Develop player and basic block classes

a. Physics / collisions

Find smooth controls/physics

Develop other derived classes

a. Blocks

b. Enemies

Design levels

a. Introduce motion/jumping

b. Introduce throwing

c. Mind the pacing,

let the player play between lessons

6. Design sounds

Design music

Create graphics

a. Characters

b. Blocks

c. Ambient

d. Other

Implement game screens

a. Title Screen

b. Level Select

c. Game

d. Inventory

e. Assessment / Next Level

f. End Credits

Implement game mechanics

a. Player movement and controls

b. Object interactions

c. Enemy behavior

Implement game flow

a. Start in forest

b. Find key and unlock door

c. Escape to the next level before the monster catches you

Playtesting and balancing

Debugging and polishing

Release