

Shape Shifter

DESIGN DOCUMENT

By FeatherMarauder for the July 2024 Pirate Software Game Jam

Introduction	2
Game Summary	2
Inspiration	2
Player Experience	2
Platform	3
Development Software	3
Genre	3
Target Audience	3
Concept	3
Gameplay overview	3
Theme Interpretation (Sacrifice Is Strength)	4
Primary Mechanics	4
Secondary Mechanics	5
Art	6
Theme Interpretation	6
Design	6
Audio	7
Music	7
Sound Effects	7
Game Experience	7
UI	7
Controls	7

Development Timeline

Introduction

Game Summary Pitch

Shape Shifter is a 2D platformer where different shapes with different abilities must be found and earned to progress. The goal is to reach the end of the main level by acquiring all shapes and abilities.

Player Experience

The player starts as a square and explores the main level to find links to other levels. Each linked level features a new shape with different abilities. If the player completes the linked level using the new abilities, they absorb those abilities and can use them in other parts of the game. The goal is to acquire all abilities from the linked levels and complete the final level to beat the game.

Platform

The game is developed to be released on browser.

Development Software

- Godot version 4.2 for programming
- GIMP 2.10.38 and MSPaint for graphics and UI
- FamiStudio for all music and SFX

Genre

Singleplayer, 2D platformer

Target Audience

This game is aimed at general gaming audiences, especially those who enjoy 2D platformers

Concept

Gameplay overview

The player plays as various shapes, from square to triangle to circle. Each shape must be unlocked by finding the corresponding portal in the main level. Each shape has different abilities and limitations which help the player progress through the levels. Once each shape's level is completed, that shape is unlocked in the main level, and the player can use all unlocked shapes and their abilities to progress.

Theme Interpretation (Shadows and Alchemy)

The environment obstacles are formed by shadows cast from the background. As the player shape completes challenge levels, it absorbs the ability of that shape's level and can use and combine these abilities in other parts of the game.

Primary Mechanics

Mechanic
<p style="text-align: center;"><u>Square (standard)</u></p> <p>The square can move at a normal speed with a small jump ability.</p>
<p style="text-align: center;"><u>Triangle (bounce)</u></p> <p>The triangle moves slightly slower than the square, but can jump much higher and wall-bounce.</p>
<p style="text-align: center;"><u>Circle (roll and momentum)</u></p> <p>The circle gains speed on downward slopes and maintains momentum through the air.</p>

Secondary Mechanics

Mechanic
<p style="text-align: center;"><u>Rectangle (magnetic)</u></p> <p>The rectangle cannot jump but instead sticks to surfaces, even upside down.</p>

Art

Theme Interpretation

The platforms and other obstacles throughout the levels are the shadows being cast by objects in the background.

Design

The level obstacles are all black in keeping with the shadows theme. The shapes are all primary colours to stand out against the obstacles and the background. The background colour is a pale orange to simulate sunset where shadows would be most extreme.

Audio

Music

Chip tune music creates a simple feeling. Each shape has its own music that combines with each other shape's music as each shape is unlocked.

Sound Effects

Short sharp sounds for the jump movements were added to give more feedback to the player, especially during wall jumps. The portal transition and game completion sounds are simple progressions to indicate to the player that something of significance is happening.

Game Experience

UI

Simple start and end screen, with images appearing throughout the game to tell the player the controls when appropriate.

Controls

Keyboard

Left and Right Arrow keys / A and D, Spacebar, Shift

Development Timeline

MINIMUM VIABLE PRODUCT

#	Assignment	Type	Status	Finish By	Notes
1	Design Document	Other	Completed	19 July	
2	Create player and basic level obstacles	Art	Completed	20 July	Square, Triangle, Circle, level obstacles
3	UI / Main menu	Coding	Completed	28 July	Button UI, screen transition, title screen
4	Level themes	Audio	Completed	29 July	Different tunes that all work together as shapes are absorbed
5	Square player movement	Coding	Completed	20 July	Move left and right and jump
6	Triangle player movement	Coding	Completed	21 July	Higher jump, wall-bounce
7	Circle player movement	Coding	Completed	22 July	Gain speed through gravity, maintain momentum
8	Special effects	Art	Completed	28 July	Shape transitions, level entry and exit
9	Player animation	Art	Not started	23 July	Movements
10	Sound effects	Audio	Completed	29 July	Player movement, UI interaction
11	Pause menu	Coding	Not started	28 July	Access to the main menu
12	Main Level design	Coding	Completed	24 July	Main level where all other levels are accessed
13	Triangle level design	Other	Completed	25 July	Jumping and

#	Assignment	Type	Status	Finish By	Notes
					wall-bounce
14	Circle level design	Other	Completed	26 July	Momentum and gravity
15	Final level design	Other	Completed	27 July	Combine all skills
16	Any extra polish	Other	Not started		
17	SUBMIT	Other	Completed	31 July	Create Itch Page and upload

BEYOND (if ahead of schedule / extra time)

Rectangle player movement	Coding	Not started	Stick to surfaces
Rectangle level design	Other	Not started	Stick to surfaces
Settings Menu	Coding	Not started	Volume slider