

Jump Strike

DESIGN DOCUMENT

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	5
Theme Interpretation	5
Design	5
Audio	5
Music	5
Sound Effects	6
Game Experience	6
UI	6
Controls	6
Development Timeline	6

Introduction

Game Summary Pitch

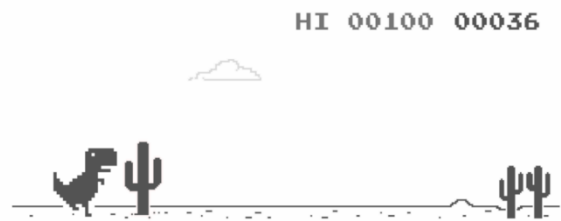
Jump Strike is a 2D, side-scrolling endless runner game about jumping over obstacles and attacking enemies as a sword.

Inspiration

Chrome Dinosaur Game

The Chrome Dinosaur Game is a simple, two button endless runner game. The most direct inspirations from this game are the obstacle jumping, one button start, a score counter, a high

score tracker, fluidity of the controls, and the simple pixel art with limited color palate. There is no duck button for Jump Strike, and the high score tracker will be an optional feature.



Player Experience

The player must learn how to use the one-button controls to master both obstacle jumping and for transforming into a sword to attack. Obstacles will always be on the ground, but enemies can spawn anywhere on the vertical axis. The runner procedurally generates both of these elements from the right side of the screen, forcing the player to make rapid decisions between jumping and/or attacking as a sword. Having both actions on the same button also introduces an additional level of challenge with mastering tapping versus holding the button.

Platform

The game is developed to be released as a HTML5 web game.

Development Software

- Godot 4.3
- Aseprite
- Pico-8 for SFX and Music

Genre

Singleplayer, casual, arcade, endless runner, one-button game

Target Audience

This game is targeted toward a wide audience. Casual gamers can enjoy playing a few rounds to see how long they can survive, and veteran gamers can test their skills and reaction times to see how high of a score they are able to achieve.

Concept

Gameplay overview

The player will press the button to start. The level will begin with both ground obstacles and enemies at various vertical positions spawning from the right side of the screen. By tapping the button, the player character will jump, allowing them to clear ground obstacles which are invulnerable to attacks. By holding the button, the player will transform into a sword and start attacking as long as the button is held. Points will be acquired as long as the player survives and defeats enemies.

When the player hits an obstacle or enemy, they will be brought back to the start screen.

Theme Interpretation (You Are The Weapon)

'You Are The Weapon' interpretation – The player can transform into a sword to attack.

To defeat enemies that impede progress, the player character transforms into a sword. For as long as the button is held down, the player will retain their sword form and continue to attack. When the button is released, they will instantly transform back. These transformations can occur in the air as well as on the ground.

Primary Mechanics

Mechanics

Player

The player is a ninja who can jump and transform into a weapon. Tapping the button leads to jumping. Holding the button leads to transforming and attacking as long as the button is held.

Enemy

Enemies are opposing ninja who can appear at any point on the vertical axis. They move to the left in a straight line. They only need to be hit once to be eliminated. Defeating the enemy adds points. If the player collides with the enemy, the game ends.

Obstacle

A wall acts as an obstruction. It spawns on the ground and moves to the left. It cannot be attacked. If the player collides with the obstacle, the game ends.

Secondary Mechanics

Mechanics

Player – Jump Plus Attack

The player can tap the button and then immediately hold the button to attack, allowing for mid-air attacks.

Art

Theme

A simple three-tone color palette was selected, inspired by the Chrome Dinosaur Game. The game is very simple and so a simple art design was selected to compliment the arcade, retro look and feel. A limited color palette also would support a limited artistic scope and simplifying designs.

Design

The design of the graphics was minimalistic in approach. The high contrast and strong pixel outlines make it easier to react to the rapid movement of the obstacles and enemies.

Audio

Music

The music will be an additional reach goal if time is available following completion of the main game. The music will be retro and chiptune, made using Pico-8's sound engine. The music will use a lot of bass and drum to keep up the high pace of the movement in the game. The title screen music would be slowed down or an alternate version of the main gameplay loop.

Sound Effects

The SFX will be created using a retro chiptune sound generator in Pico-8. Menu selection, jumping, transforming, attacking, and colliding with an obstacle/enemy will each have sound effects.

Game Experience

UI

The UI will be limited to a title screen and a score counter in the corner of the screen once the game starts. The title screen will also comprise of only a start button, activated using the one button.

Controls

Keyboard

Spacebar

Gamepad

X/A Button

Development Timeline

MINIMUM VIABLE PRODUCT

#	Assignment	Type	Status	Notes
1	Design Document	Other	Finished	
2	Jumping and transforming player controller	Coding	Finished	
3	Floor with collider	Coding	Finished	
4	Spawning obstacles with colliders	Coding	Finished	
5	Spawning enemies with colliders	Coding	Finished	
6	Point tracker UI	Coding	Finished	
7	End game / Title screen loop	Coding	Finished	
8	Tutorial	Coding	Finished	Text shows on first play
9	Player art with animations	Art	Finished	Naruto-style run, bandana flapping, legs moving. Jumping as spinning ball
10	Obstacle art	Art	Finished	Traditional Japanese-style castle wall
11	Enemy art with animations	Art	Finished	'Flying' ninja, cape flopping
12	Floor art	Art	Finished	Match surrounding art style

#	Assignment	Type	Status	Notes
13	Animate enemy kill points	Art	Finished	
14	Sound effects	Audio	Finished	Menu selection, jumping, transforming, attacking, and colliding with an obstacle/enemy
15	SUBMIT	Other	Finished	Create Itch Page and upload

BEYOND (if ahead of schedule / extra time)

Music theme for main gameplay and title screen	Audio	Finished	
Scrolling ground textures	Art	Not started	Create illusion of movement
Scrolling parallax background	Art	Not started	Create illusion of movement
Title screen art	Art	Finished	Art with animated bandana
Jumping movement for enemies	Coding	Not started	Help make enemy movement more believable, more challenging to predict
High score tracker and UI	Coding	Finished	Does not have persistence when game is closed
Particle smoke when transforming	Art	Not started	Both to and from becoming a sword
Variations in obstacle design	Art Coding	Not started	Add a spike barricade
Enhanced title screen menu	Coding	Not started	Animated start button