**ARROW STRIKE**

GAME DESIGN DOCUMENT



***‘Strike up a rhythm and show ‘em who’s boss!’*** – Jacob Brooks

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# 1 Game Overview

Title: Awesome Game Name

Platform: PC Standalone

Genre: Rhythm, Music

Rating: (10+) ESRB

Target: causal and competitive rhythm gamers (aging from 10 – 40)

Release date: November, 2020

Publisher: Jacob Brooks

Arrow Strike is a music-based rhythm game where the player may select a multitude of songs to play. The player will attempt to press their keyboard arrow keys in the order that the arrows appear on the screen. The goal of the game is to make it through the entire song while inputting the keys as close to the intended key map as possible. By landing multiple correct key inputs in a row, the player will generate a multiplier which will accrue bonus points depending on the combo length. Depending on the exactness of the player’s key input the player will accrue points based on how close to the intended input is to the player’s input. The levels of accuracy will be defined as miss, good, super, and perfect. Any missed inputs will be generated as a miss and will break combos.

# 2 High Concept

As arrows fall to the beat, you are tasked with achieving the highest score possible by matching the rhythm of the song with your arrow keys as precisely as possible. As the song progresses, so will the difficulty, so be ready! Sometimes arrows will fall at the same time requiring finesse to match the beat on time. Work your score up to higher levels by building your multiplier and shooting for perfect with every beat.

# 3 Unique Selling Points

* Multiple difficulties for wide range of enjoyment
* Low overhead and minimal hardware requirements
* Colorful visuals and stimulating gameplay

# 4 Platform Minimum Requirements

PC, MAC AND LINUX STANDALONE OS: Windows XP SP2+, Mac OS X 10.8+, Ubuntu 12.04+, SteamOS+

Graphics card: DX9 (shader model 2.0) capabilities; generally everything made since 2004 should work

# 5 Competitors / Similar Titles

* Dance Dance Revolution by Konami
* Stepmania by Chris Danford

# 6 Synopsis

It’s time you’ve mastered what it means to have perfect rhythm in the body in mind. Choose from a multitude of songs and strike your way through riveting song challenges. Play on a difficulty that suits you best and jam out while enjoying some upbeat tunes. The world of rhythm is at your fingertips! All it takes is the strike of a key.

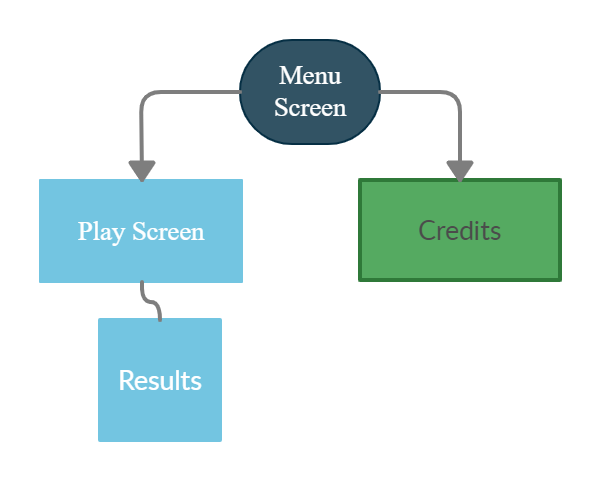
# 7 Game Objectives

The objective of the games is to achieve the highest score possible by striking your arrows to the rhythm of your song.

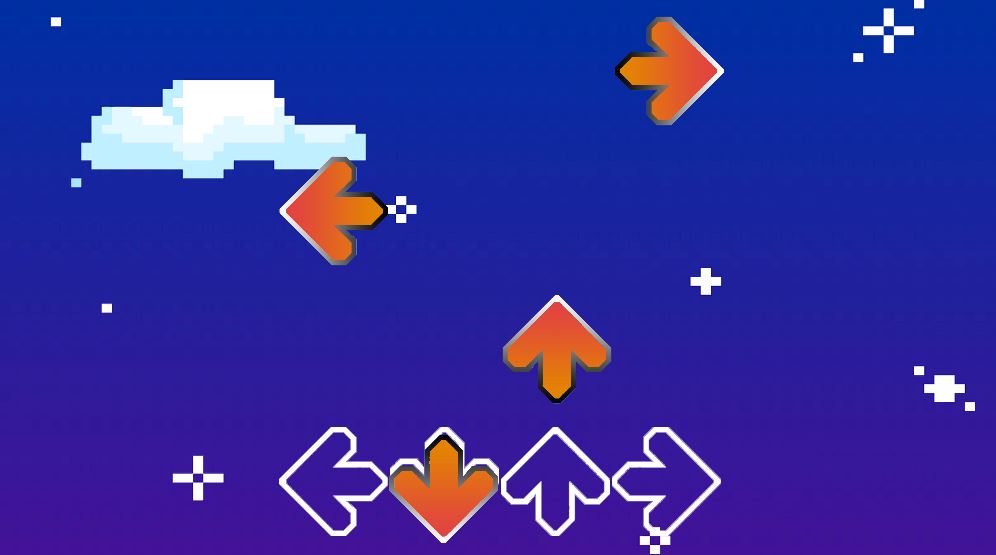
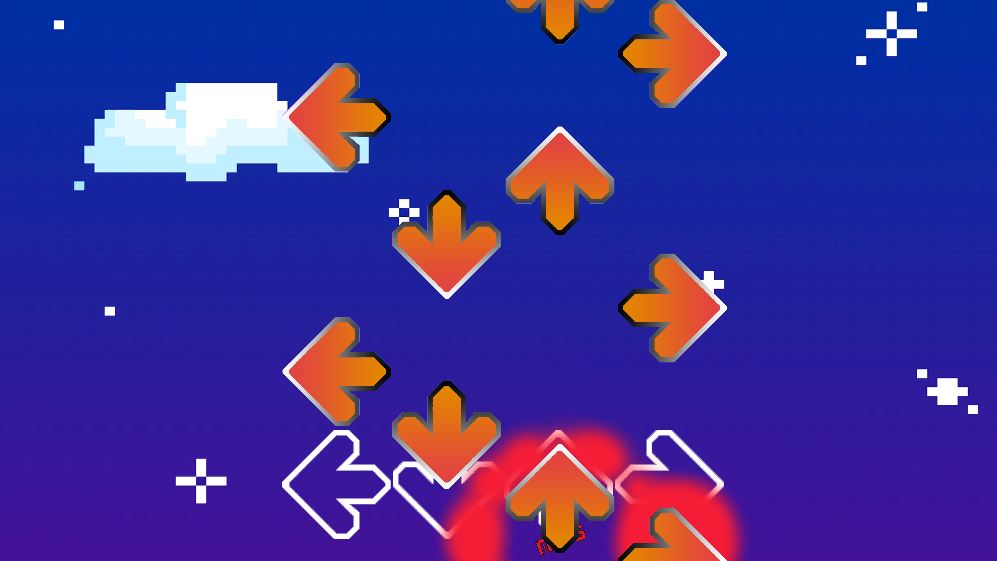
# 8 Game Rules

The rules of the game are simple. The notes begin falling when any key is pressed on the keyboard, or if the mouse is clicked. The player controls 4 different directional arrows that can be pressed. All arrows spawn from above the screen and fall at a constant pace. Allow arrow keys pressed while an arrow is within the requisite area will be counted as various points. Arrows that pass the pressable threshold without being pressed, will be counted as misses.

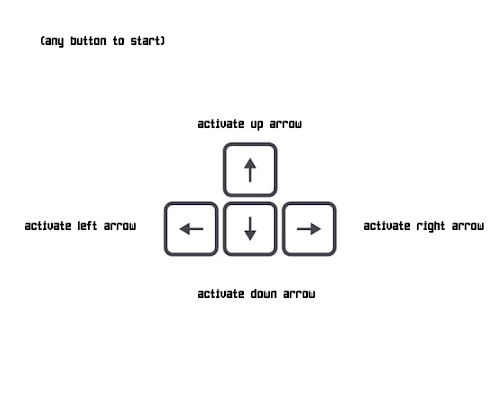
# 9 Game Structure



# 10 Game Play

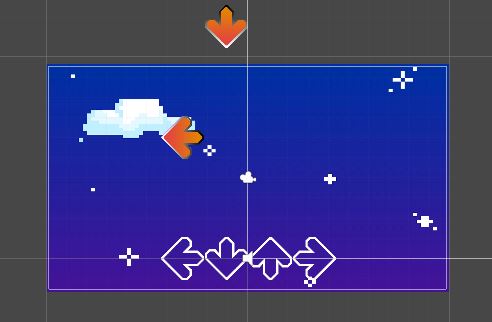


## 10.1 Game Controls



## 10.2 Game Camera





For every scene, the camera shows a widescreen view of the entire scene that allows elements to scale up with screen size. Use 1920 x 1080 for best results.

### 10.2.1 HUD



At the bottom left of the play scene, the player’s current score as well as the points multiplier is displayed.



Results are displayed showing scores and note accuracy after the player completes the song.

# 11 Arrows (controllable)

## 11.1 Metrics

**Miss:** Arrow leaves pressable region without being pressed

**Good:** less than 0.25 px away from perfect alignment

**Super:** less than 0.25 px away but more than 0.05 px from perfect alignment

**Perfect:** less than 0.05 px away from perfect alignment

## 11.2 States

**Not pressed:** Arrow is inactive and cannot destroy falling arrows

**Pressed:** Arrow is active and can destroy falling arrows in their column

# 12 Arrows (Falling)

## 12.1 Falling Arrows

### 12.1.1 Arrow States

**Falling:** Actively falling at constant rate toward bottom of screen

**Pressed:** No longer active or visible (points awarded)

### 12.1.2 Arrow Spawn Points

Manually entered at positions above play scene

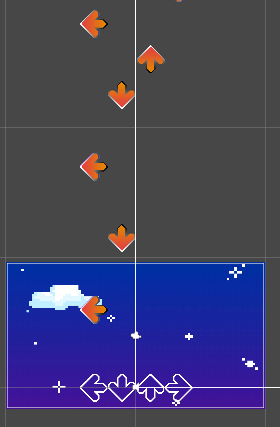
# 13 Art

## 13.1 Setting



The game takes place in a 2D night animated pixel sky to set the atmosphere of rhythmic fantasy.

## 13.2 Level Design



The level design consists of the background, four arrow controls, and the manually inputted beat map that falls into the scene as the song progresses.

## 13.3 Audio

|  |  |  |
| --- | --- | --- |
| **Name** | **Category** | **Description** |
| Chime – Lifelong | Track Beat | plays during game when arrows begin to fall |
| (freesound.org) | FX | plays when entering menu screen |
| broumbroum\_sf3-sfx-menu-back | FX | plays when clicking UI buttons |

# 14 Wish List

**Add more songs**

Create beat maps for more songs allowing the player to experience a wider variety

**Add more difficulties**

Create multiple beat maps for each song so that players of wider skill range can play each song. Currently, the song gets increasingly difficult the longer it goes on.

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