

Exotica Software

Design document for:

Rhythm Mania

Circle tapping game

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Design History

This is a brief explanation of the history of this document.

Each versions share their adjustment to the game design as the game is developed. The game may change throughout the lifecycle of the project. So, all the changes from the previous versions will be recorded here.

Version 1.00

Version 1.00 includes the initial design of the project. This is the initial design of the game. It is just an idea of what the possibility of the game could become. A solid foundation is required to make the game. Here are some of the key points:

1. Circle tapping game called "Rhythm Mania"
2. Three core mechanics: Circle, Slider, Spinners.
3. Explanation of rhythm timeframes.

Game Overview

Philosophy

Rhythm Mania

Written as RM for short. This isn't going to break the conventions of current rhythm games. It is a simple game to play for even beginners to join and understand with little to no effort.

Platform & Regions

Windows PC (7 and above) and is available worldwide.

The only language supported is English.

Development schedule outline

(Uni week times)

Week 7

A basic demo. At least a clickable circle spawned on screen.

Week 8

Load song file with circles spawning on the screen to be tapped.

Common Questions

What is the game?

A circle tapping game. You tap circles to the song. Nothing complex but more circles mean more difficult.

Why create this game?

We are creating this game because aim is very relevant in games in this day in age. Most rhythm games don't incorporate aiming but this has a balance of aiming and tapping which caters for both rhythm games players and also FPS game players who wants to have a go with playing a rhythm game.

Where does the game take place?

The game takes in place in "Osu! Tatakae! Ouendan" was released in 2005. This was a game release for the Nintendo DS and is very old with limited number of songs.

What do I control?

You control the cursor on the screen. The cursor can be controlled with mouse, controller, or a drawing tablet. A drawing tablet will give a similar feel to the DS game which gives a retro vibe.

What is the main focus?

The point of the game is to tap circles to score as much score as possible. The more accurate the player hits the circle, the more point they are rewarded.

Feature Set

General Features

Playfield

Object Types

Object Behaviors

Gameplay

Scoring

Hit window

Hit feel

Object appearance

General Features

Playfield

Overview

This will be the area where the circles will be spawned where the player can hit.

Coordinates

The playfield coordinates are x:512, y:512.

Object Spawn

Different types of circles (objects) can be spawned. The player will need to play accordingly to what appears on the screen.

Restriction

No objects should be spawned outside of this boundary. Player's cursor can go beyond this space, but the spawned objects must stay within this area.

Object Types

Cursor

This is the main control system. The cursor works just like a windows cursor. It will follow where your mouse will aim. Players will need to move this cursor to the object to hit. If cursor is not aimed at the circle, it will not count as a hit.

Circle

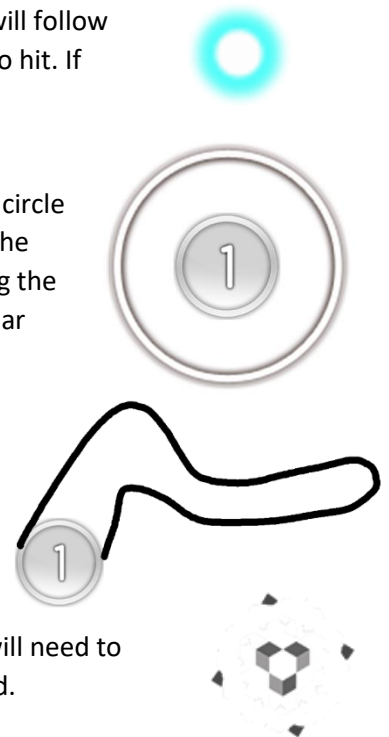
This is the most basic object. Circles will appear on the screen with an approach circle as well. The approach circle is to visually show when the circle needs to be hit. The approach circle will close into the circle and when the approach circle is touching the circle that is exactly on beat to be pressed. After hitting the circle, it will disappear and reward the player with score.

Slider

Slider works similar to the circle. The head of the slider act the same as a circle. After hitting the head, the player will need to follow the body of the slider until the end (tail).

Spinner

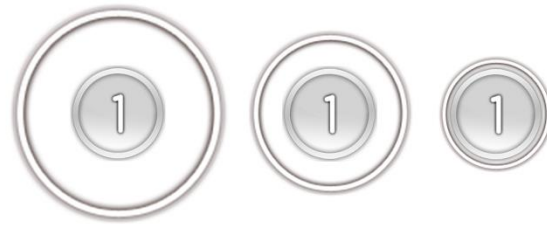
The spinner is self-explanatory. There will be a wheel in the middle and player will need to spin as fast as possible. The faster you spin, the more score you will be rewarded.



Object Behavior

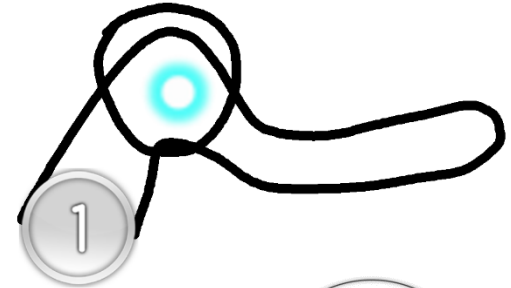
Approach Circle

The approach circle is to visually show the player when to hit a circle. It will be bigger than the hit circle and will close into the circle until the circle is hit or missed.



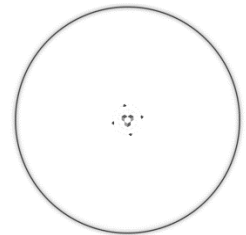
Slider Follow

Once the slider head is hit, player will need to follow the body till the end. A follow circle will be spawned, and the cursor needs to follow the follow circle till the end to be rewarded with full points.



Spinner Approach Circle

Spinners will have an approach circle just like a hit circle. The player can spin until the approach circle closes in with the spinner



Gameplay

Scoring

There are 3 main types of scoring: 300, 100, 50.

Circles and sliders will be rewarded with those amounts when hit depending on how on time the player hits. More explanation will be on hit window below.

Spinners will reward points based on how fast the player spins. There is a cap of 500rpm. Player can get as many points as they can with a spinner.

Hit Window

Hit window is for hit circles and slider heads. It is to measure how on time the player hits an object on time.

Here is the hit window timeframe:

- 300 - $\pm 32\text{ms}$
- 100 - $\pm 75\text{ms}$
- 50 - $\pm 120\text{ms}$

Hit feel

Everyone object will have a sound effect played when the player hits. This is to audibly show that player has hit the object. This is to make the player feel the rhythm, so it feels like they are playing an instrument than a game.

Object Appearance

Objects will only spawn within 180ms before they should be played. When spawned the object can be hit. Any invisible objects that haven't been spawned should not be active until it appears on the screen.

Appendix