

# Mutus Ludus

## Design Document

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# Introduction

## Game Summary Pitch

Mutus Ludus is a shoot 'em up based on the alchemy book *Mutus Liber*, a book supposedly containing the recipe for the Philosopher's stone.

## Inspiration

### Cuphead

Cuphead is the main inspiration for the level design of a boss battle in a single screen with the player shooting at the boss. Specifically, the style of the boss battles.

### Rock of Ages

Rock of Ages (and its sequels) is the inspiration for using existing pictures and morph/puppet them to animate the bosses, backgrounds, and player character.

## Player Experience

The player will battle 15 bosses in single screen levels designed from the pages from *Mutus Liber*. The player must use quick reactions and accurate timings to defeat the bosses.

## Platform

The game is developed for web and Windows PC.

## Development Software

- Godot version 4.2.2 for programming, level design, and rigging characters

- Gimp for converting the images to usable backgrounds and enemies
- Blender for the player character and any other “custom” assets
- onlinesequencer.net for audio

## Genre

Singleplayer, Shoot ‘em up

## Target Audience

This game is marketed to gamers already familiar with shoot ‘em ups. Difficulty settings allows casual and veteran gamers alike to enjoy this game.

## Concept

### Gameplay Overview

The player controls an animated drop of ink while going through *Mutus Liber*, fighting the beings on the page along the way. The specific method of fighting the beings is through shooting drops of ink at them, absorbing their ink. The player must also dodge attacks from the beings.

### Theme Interpretation (Shadows and Alchemy)

#### Shadow interpretation

*Mutus Liber* is but a shadow of the actual recipe for the philosopher’s stone.

#### Alchemy interpretation

*Mutus Liber* is an alchemical book from 1677 supposedly explaining how to make the philosopher’s stone, the magnum

opus of alchemy. Mutus Ludus goes through each page of *Mutus Liber*.

## Mechanics

Mechanic
<p><u>Movement</u></p> <p>The player can move left or right, jump, and drop through platforms. The player can also spend ink to double jump.</p>
<p><u>Ink Health/Ammo</u></p> <p>The player's health and ammo are linked. The player cannot shoot their last health.</p>
<p><u>Shooting</u></p> <p>The player can shoot ink drops in an arch towards the cursor.</p>
<p><u>Collecting Ink Drops</u></p> <p>When the player hits an enemy, the ink will run off the enemy into a drop onto the ground. When the player is hit they will either drop an ink drop on the ground or will drop a drop on the enemy that hit them. The player will then need to collect this drop to heal and reload.</p>

## Art

### Theme Interpretation

Most of the art is directly from *Mutus Liber*, an alchemical book. Any of the other art is based on the art from *Mutus Liber*.

## Design

The is prints from *Mutus Liber* with all of the people and angels “cut out” and hovering on top. The player is a drop of ink. The art was sourced from The Library of Congress at

<https://tile.loc.gov/storage-services/service/rbc/rbc0001/2017/2017gen18432/2017gen18432.pdf>



## Audio

### Music

The music of Mutus Ludus is classical music edited to loop more seamlessly.

### Sound Effects

The sound effects are water dropping and paper rustling.

## Game Experience

### UI

Health bar at the top of the screen and a timer

### Controls

Keyboard and mouse

Left/A for left movement. Right/D for right movement. Space to jump. Down/S + Space to drop through platforms. Mouse to aim. Left click to shoot.

#### Controller

Joystick for movement. Button to jump. Down joystick + jump to drop through platforms. The other joystick for aiming. Button to shoot.

## Development Timeline

### Minimum Viable Product

#	Assignment	Type	Status	Date	Notes
1	Design Document	Other	Done	July 19	
2	Create level 1 enemies' art and background art	Art	Done	July 21	Make with GIMP
3	Create player art	Art	Done	July 22	Make with Blender
4	Player movement	Coding	Done	July 22	Left, Right, Jump, Drop through platforms, double jump
5	Player shooting	Coding	Done (ish) Arch delayed for complexity	July 23	Arching hitting at mouse, includes ammo/health
6	Ink drops	Art/Coding	Done	July 23	Ink drops being able to be collected and refill ink meter

7	Enemy being damaged	Coding	Done	July 23	Simple damage with ink drops eventually dropping, complicated ink dripping can come later
8	Enemy attacking	Coding	Done	July 23	Shooting projectiles, implement melee later when enemies with melee appear
9	Player being damaged	Coding	Done	July 23	Spew ink drops in opposite direction when hit
10	Tutorial	Coding/other	Done	July 24	Movement, shooting, and collecting ink explained
11	Tutorial music	Music	Done	July 24	Find classical music and edit it
12	Level 1 music	Music	Done	July 24	Find classical music and edit it
13	Level 1 fight	Coding/other	Done	July 24	Choreograph the attacks to the music
14	Menus	Art/Music/Coding	Done	July 24	Main, escape, death
15	Level transitions	Coding	Done-ish	July 24	
16	Level 2-15 art, music,	Music/Coding/	Nope	July	As many levels as

	and fight	other		25-30	possible, all 15 is unlikely
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### Beyond

#	Assignment	Type	Status	Notes
1	Alchemist collecting defeated enemies	Art/coding		
2	Dripping ink	Coding		
3	Clean up code	Coding		