Danmaku Dream

Change log

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| --- | --- |
| V1.0 | First build |
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About

Software Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Software | Version | License | Used By | Used For |
| Unity | 2021.3.13f1 | Free | Programmers,  Designers, artists | Development of game |

Libraries

|  |  |  |
| --- | --- | --- |
| System.Collections | Free | For C# programming |
| UnityEngine | Free | For game build |

Overview

|  |  |
| --- | --- |
| Genre | Bullet hell |
| Perspective | 2d top-down |
| Platform | Windows (PC) |
|  |  |
|  |  |

Danmaku Dream is a bullet hell game based off the Touhou universe. It will be formatted like a boss rush, with a character coming onto screen onto the screen, do their spell (bullet pattern) and/or non-spell for a set amount of time, and then leaving. The player’s goal is to make sure to not get hit while achieving the highest score.

|  |
| --- |
| Feature list |
| WASD movement |
| Shooting |
| “Graze” |
| Score |
| Focus |
| Player getting hit |
| Player losing life |
| Boss health bar |
| High score |
| Spells |
| “Spell” timer |
| Bullets |
| Bullet paths |
| Bullet spawn |
| hitboxes |
| Game over |
| Pause menu |
| 1up |
| Health bar |
| “spell” capture bonus |
| Level border |

Game Flow and Structure

Game modes and handling

Normal mode

* This is the only mode available; it will consist of the boss rush.
* The objective is to make your way through each enemies’ spell cards and survive all the way to the end. However, a smaller objective is to get the highest score possible.

Gameplay loops

A picture containing letter

Description automatically generated

Core gameplay loop

This is the general core loop of the game

Gameplay Systems

Controls/ Input

|  |  |
| --- | --- |
| Player movement | This will enable the player to move up, down, left, right, as well as diagonally. This makes the player be able to navigate through the bullet patterns. |
| Focus | Upon holding down the input for this mechanic, the player will slow down, enabling them to do more precise movements. |
| Graze | When going near a bullet, the player will gain more score. It’s to incentivise more risky plays for a higher score.  The score gain will be a flat rate. It won’t matter how close the player is to the bullet, just if they’re near it.  The player character will have a separate hitbox to see if there are any bullets inside of it. |
| 1up | When the player reaches a certain score quota, they will be rewarded with a life, however every time they obtain a life point, the quota will increase. |
| Spells | Spells are the bullet patterns that the player has to survive through. |
|  |  |
|  |  |
|  |  |

Game Mechanics

Coding Standards

Coding Standards

Naming Conventions

|  |  |
| --- | --- |
| Prefix | Description |
| OBJ | Object |
| TXT | Text |
|  |  |
|  |  |