Project Vision Document

Bullet Hell

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Introduction

Bullet Hell is a vertical-scrolling shooter inspired by the indie Japanese doujin game series: Touhou Project and Undertale. Various types of enemies will come swooping down during the action, shooting projectiles trying to destroy you. It is your job to shoot back, dodge, and ultimately survive in order to advance through the game!

Key features

Bullet Hell contains a handful of features to make the game exciting and enjoyable to play

- Standard keyboard control WASD for player control
- Up to 2-3 minutes of gameplay
- Player/character has a total of 5 lives per session
- 4 stages of gameplay: regular play (grunts), mid boss, regular play (more grunts) and final boss fight
- Mid/final bosses have intricate movement and attack patterns
- Power-ups: dropped by enemies/bosses after they are killed. The player can pick up drops to increase damage and/or increase rate of fire
- In-game scoring system for players based on successful projectile hits on enemies/bosses, and progressing through the game
- In-game engine/"level interpreter"

Description

Phase 1 (regular play):

When the user enters the game, the player character is spawned at the bottom of the window; at this point, the user/player character is free to move in 8 directions with standard keyboard input WASD. A running countdown from 5 will display at the top of the screen to notify the player when the game and first phase of attack begins. Preceding the countdown, the player will be free to shoot projectiles freely with mouse left-click as enemies begin spawning. During the first stage, grunt enemies (A, B, C) will spawn and form randomized groups of size 5-10; these enemies will spawn, form into a group, then quickly leave. These enemies will rinse and repeat the group cycle for the entirety of the first stage. At 00:10, 00:20, 00:30, and 00:40 marks, a single enemy of type Elite will spawn and shoot a burst of 3 projectiles mimicking a simple triangle pattern. The Elite will shoot for a total of 2 times, repositioning itself after each shot.

Phase 2 (mid boss):

At 00:48 seconds, all grunts still present on the playing field will leave, and the Mid boss will enter thus beginning the second stage. During this phase, A health bar for the mid boss is displayed on the top of the screen; a HUD element to give players information i.e, dps, how far from defeat etc. During attack, the mid boss will blink side-to-side, and shoot straight vertical projectiles with increased velocity. At 1:15 the mid boss will leave if not defeated, and the third stage will begin.

Phase 3 (regular play):

The third stage of the game is identical to the first stage in terms of enemies, but instead will last for approximately 15 seconds, instead of 48 seconds. Additionally, 1 Elite enemy will spawn instead of 4.

Phase 4 (final boss):

At the 1:30 mark the final stage/final boss fight starts. The fight will last until the game finishes at the 3:00 mark, and will also include a HUD element similar to the mid boss health bar. The final boss fight will consist of 4 different stages of attack, each stage featuring a different firing pattern. (1) circle projectile pattern with slow speeds and increased spread (2) burst of several circle projectile patterns where each bullet is split into two individual bullets (3) triangle pattern with increased size and/or tracking (4) AOE blast of smaller projectiles that trail off screen.

Other notes:

During gameplay the user/player can shoot their own projectiles dealing 100 HP per hit. Enemies have the following hit points:

Grunts (A, B, C): 100 HP

Elite: 400 HP

Mid boss: 1500 HPFinal boss: 3000 HP

User/player accumulates 500 points per successful hit on enemies/bosses, 1000 points for advancing through a stage, and an extra 3000 for completing the game without dying. Note, if the mid boss is defeated before the start of phase 3, the game will continue. However in phase 4 (final boss), the game will end and you will be rewarded the 3000.