# Bullet Jumper

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Game Overview:

Bullet Jumper is a platformer/bullet hell game where the goal is to get to the highest score in climbing platforms while also dodging a fast barrage of projectiles. The gameplay is similar to that of Doodle Jump with the added twist of it being a bullet hell like a Touhou game. The game is simple where the goal is to get to the highest points possible in collecting orbs while using skill to dodge projectiles and jump platforms. There are 3 difficulty levels being Easy, Hard, and Endless allowing players to choose their preferred method of play.

Key Features and Mechanics:

Simple platform jumping - The game will have traditional platform mechanics being able to move left, right, jump, and fall on platforms.
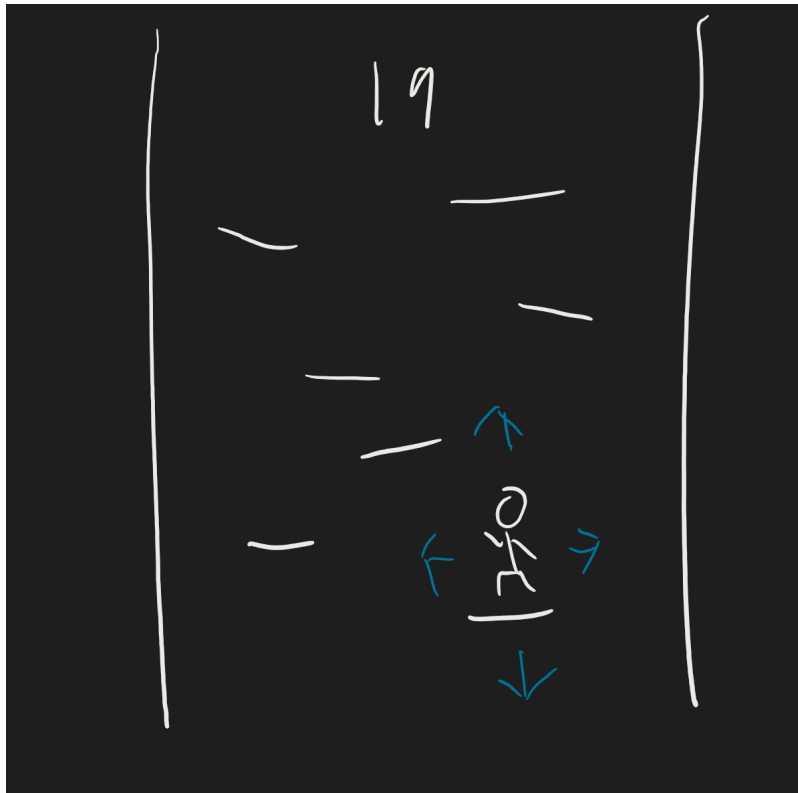
Bullet Hell enemies - The enemies that spawn will shoot various projectile patterns at the player as a way of obstructing the player from achieving their goal. A total of 3 enemies will be added

1. A bullet stream enemy that fires a continuous barrage of projectiles in a single stream

2. A bullet shield enemy that has a circle of projectiles rotating around them that can damage the player if they get too close

3. A spreadfire enemy that shoots projectiles around them that the player has to dodge
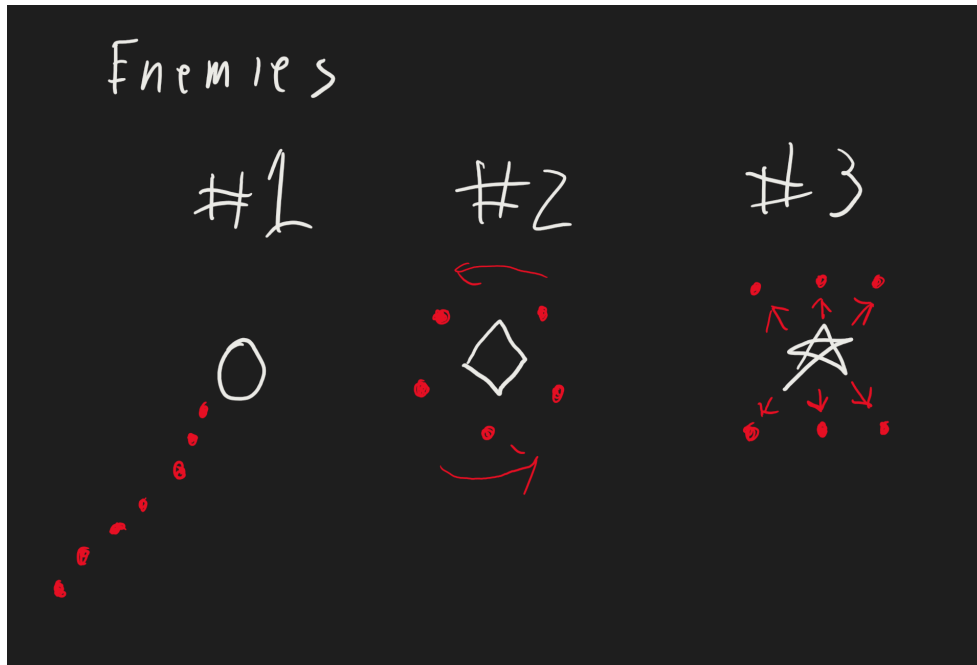
Platform Hazards - Some platforms that spawn may be normal platforms while others could break on the player or kill them with spikes, adding difficulty to the game.

Solid Platform - A regular platform that the player can land on and jump from

Fragile platform - A platform that will break/disappear if the player makes contact with it for too long

Spiked platform - A platform that spawns spikes that can kill the player if they touch it. The spikes will activate at a certain interval that the player has to time properly.
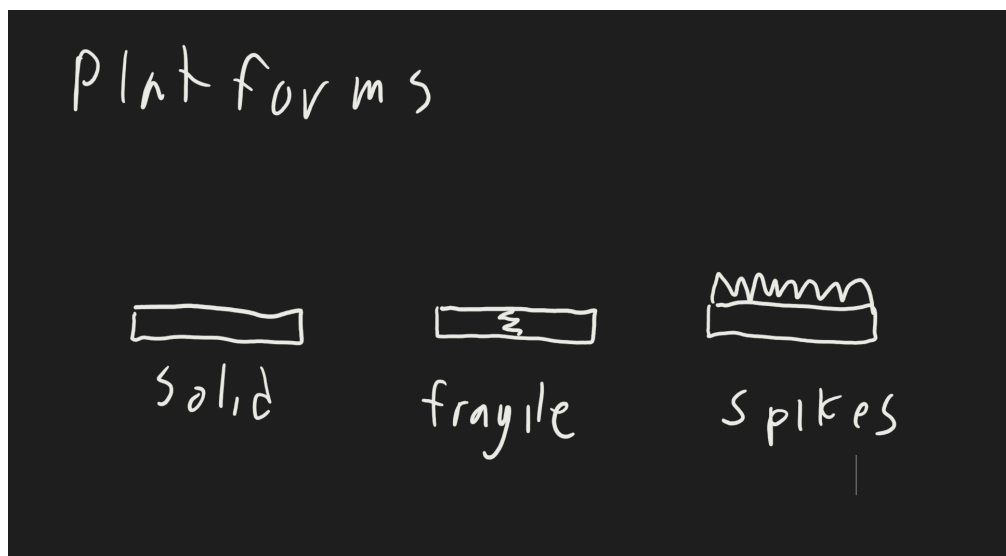
Sound Effects - Enemies and projectiles will have sound effects showing if they are hit or being fired.

Score System - In order to score the most points, the player has to collect as many "point orbs" as they can. Certain levels will have a target goal.

3 levels - The game will have 3 levels or difficulties.
- "Easy mode" with no enemies, and must collect at least 10 orbs.
- "Hard mode" contains enemies and must collect 20 orbs.
- "Endless" where you can play the game forever and achieve the highest score possible with endless enemy spawns

UI - The UI will contain a basic counter for orb collection for the player

Work Division:

Platform programming
- Level design
- Platform Collisions
- Platform types
- Out of bounds
- Difficulty levels

Programming Enemy NPCs
- Movement patterns
- Enemy Projectiles
- Sound effects
- Enemy types

Player Programming
- Movement
- Collision
- Life points

Score programming
- Score UI
- Score counter
- Orb collection

Engine: Raylib

Conclusion:

Bullet Jumper is a simple platformer for anyone to jump in, enjoy, and can be an endless experience to strive for the highest score. The game aims to test the players skill in platforming and also dodging dangerous projectiles while achieving the highest score possible