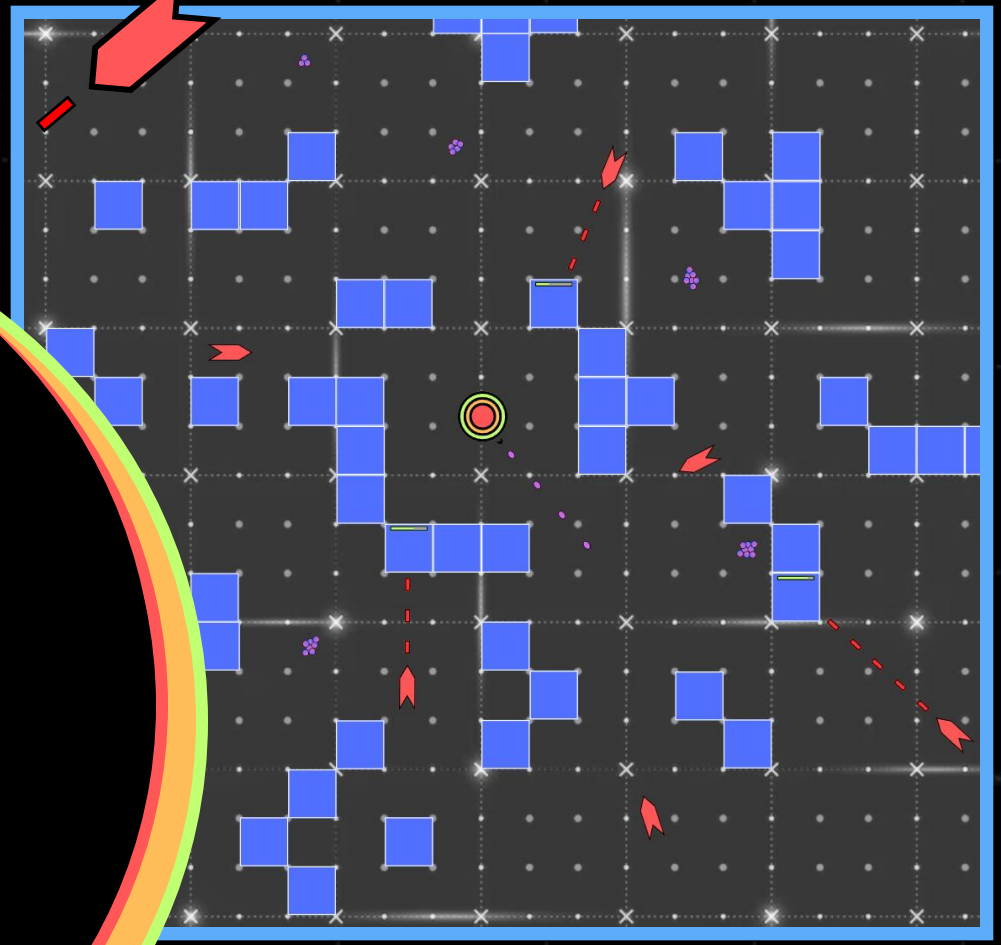
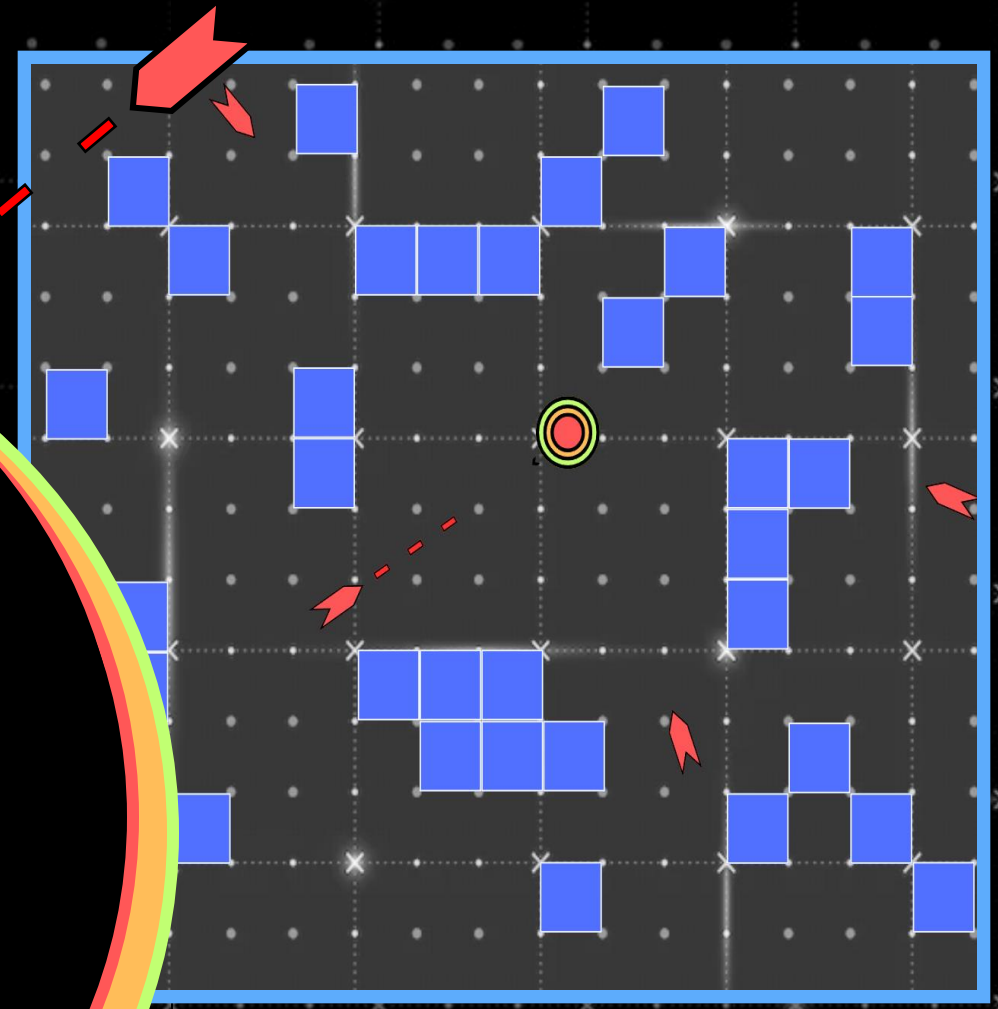
PIXEL CORE



BRENDAN DUTTON

WHAT IS PIXELCORE?

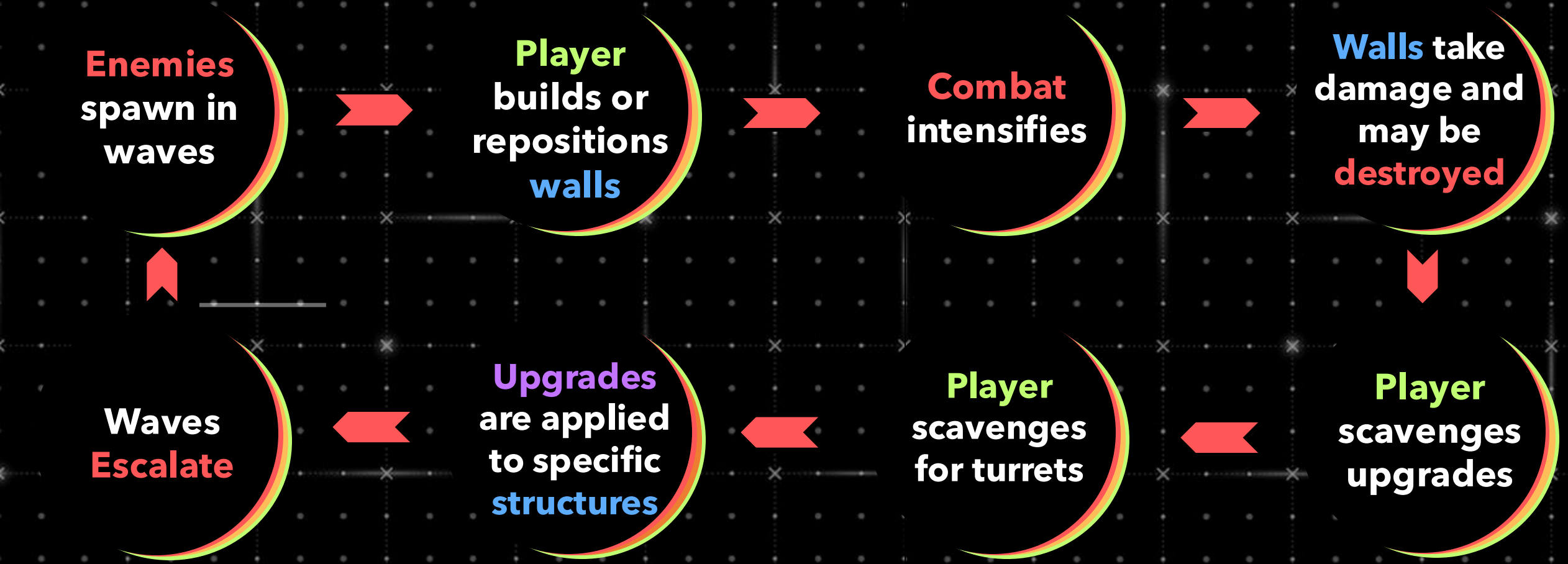


A Tactical Grid Defense Game

- Fast-paced wave survival
- Modular turret upgrades
- Strategy over brute force
- Clean geometric battlefield

THE CORE GAMEPLAY

Core Loop



THE KEY MECHANICS

COMBAT

- WASD movement
- Mouse-based aiming
- Left click to shoot
- Right click to block

STRUCTURES

- Walls snap instantly into place
- Each wall has independent health
- Destroyed walls lose attached upgrades

ENEMIES

- Triangle enemies shoot when detecting the player
- Damage walls through projectiles and collision
- Increase in aggression per wave

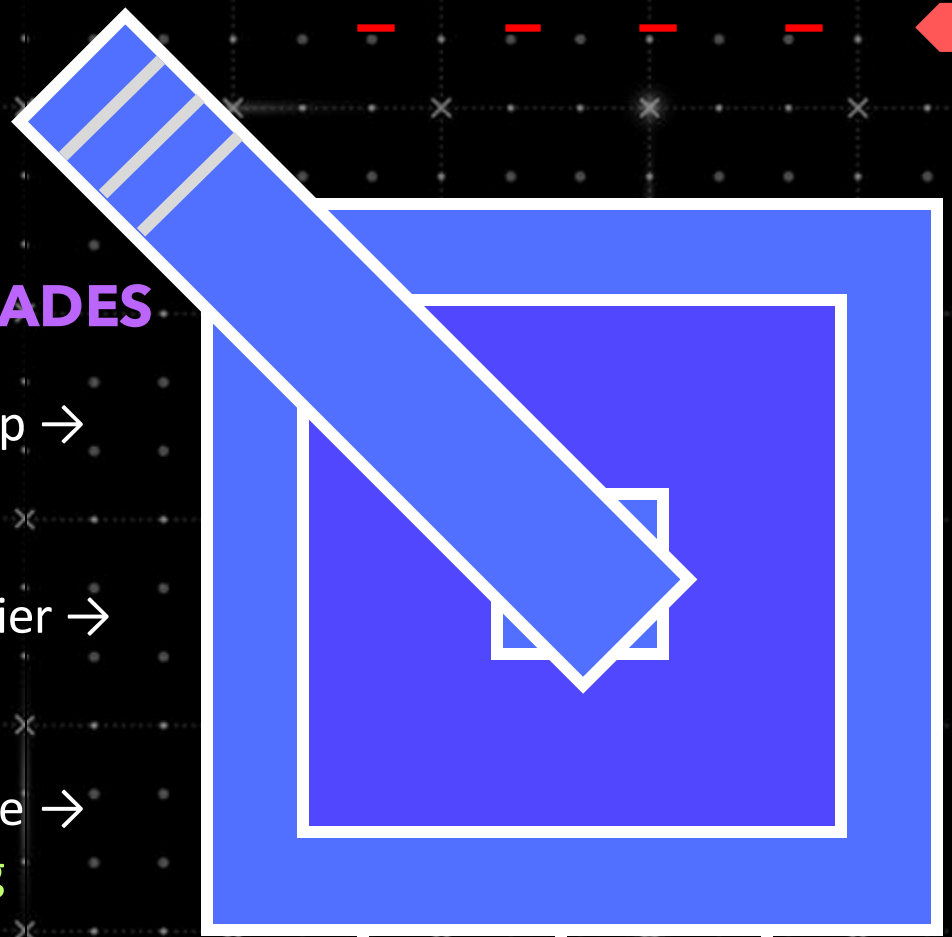
MODULAR UPGRADE SYSTEM

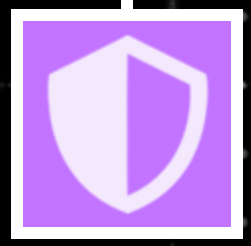
WALL UPGRADES

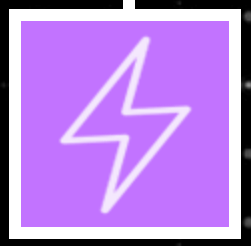
- Reinforced Core → More health
- Shock Plating → Higher contact damage
- Regenerative Matrix → Slow Passive healing

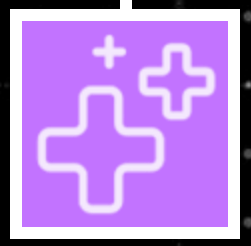
TURRENT UPGRADES

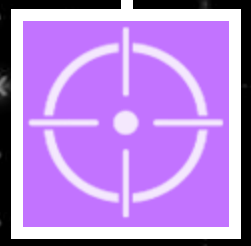
- Fire Control Chip → Faster fire rate
- Damage Amplifier → More damage
- Tracking Module → Faster targeting















PROCEDURAL WORLD

Procedurally Generated World

Upgrade Modules

Spawn in Risky Locations

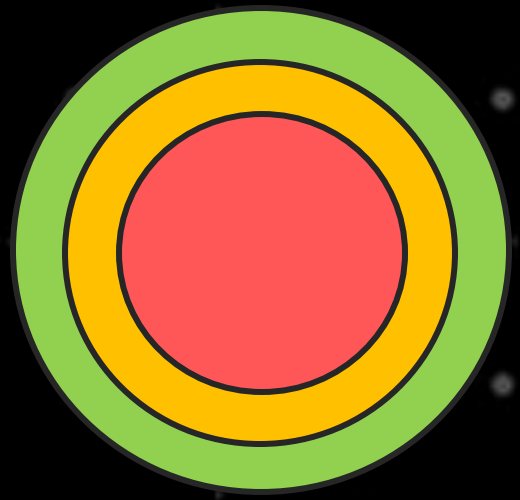


Wall Blocks

Spawn in Clusters

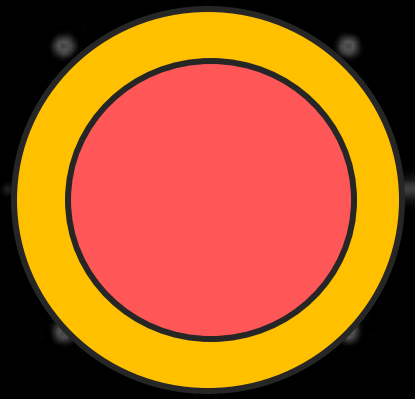
Player Can Move Walls

SHEILD BASED DAMAGE



Max Health

You will have all 3 rings when full health



Half Health

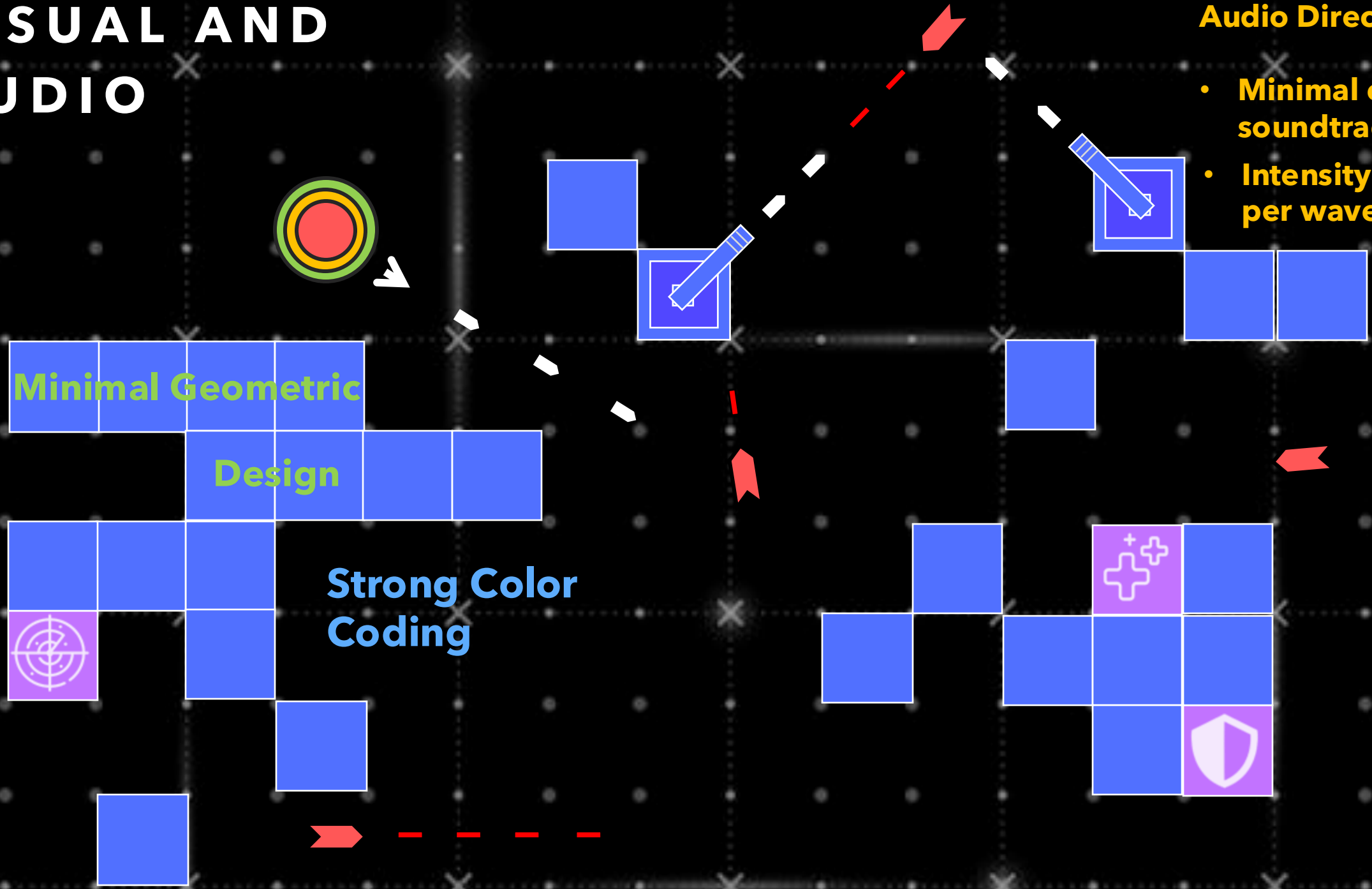
After taking 3 hits you will drop to half health and lose 1 ring



Low Health

After taking 2 more hits you will drop to low health and last ring

VISUAL AND AUDIO



Audio Direction

- Minimal electronic soundtrack
- Intensity increases per wave

WHY THIS GAME WORKS!

Design Strengths

- Unique movable defense mechanic
- Strategic modular upgrades
- Risk vs reward scavenging system
- High replayability through procedural generation
- Clear Unreal Engine implementation scope

PixelCore blends action and strategy in a way that creates:

- Customizable base designs
- High-pressure decision making
- Replayable survival gameplay

THANK YOU!

