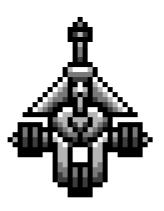
Turret Frenzy

Team Placeholder

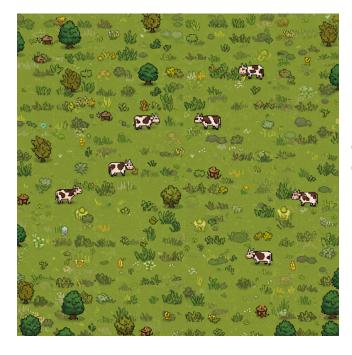
Stephon Carter
Shrijan Neupane
Nathan Yang
Jacob Younan



Concept Cannon Art, by Stephon Carter

Game Genre	Puzzle / Action
Platform	PC
Number of Players	Single Player

- A color-based action puzzle shooter where precision and timing are key
- Players control a turret capable of firing black or white bullets to destroy color-coded targets
- Circular waves of black and white targets continuously close in on the turret
- The player must carefully time and switch bullet colors to eliminate targets and prevent them from reaching the turret
- Increasing difficulty as the patterns of targets become more rapid and complex
- Win by clearing all targets in the level
- Lose if any target reaches the turret
- Encourages fast thinking, strategic shooting, and color-based coordination.



Concept Background, by Stephon Carter

Roles:

Nathan - Producer: My name is Nathan Yang, and I serve as the producer within our team. For the better part of the last 2-3 years, I have spent time learning about computers and coding as someone with zero background experience. While it wouldn't be accurate to say that I am a flawless programmer or game designer, I do understand what it takes to make a great project. I may not be the most experienced on the technical aspect, but I am able to provide a great deal of direction and organization to the workflow.

I have a large sum of experience in experimenting with different methods of organization and prioritization when it comes to deadlines. I understand the importance of discipline and time management, especially when it comes to larger projects. Coupled with my exceptionally talented team, I believe that we can bring our passion project to life for all to enjoy.

Stephon - Artist: I have been a lifelong artist, both self-taught and as a major in high school. I have extensive experience in traditional drawing and painting, 2d digital, and 3d modeling/sculpting. I have two small games made in unreal engine under my belt, where I made all the assets from the player models, enemies, ui, animations, etc.

Jacob - Designer: As someone adept in many fields, I can serve best at the intersection where they all meet. I code primarily in assembly and am fluent in C. I can also create 3D visual assets, make music and sound effects, and manage repositories and scheduling. Serving in the intersection of all these roles, I can discern where the limits of their abilities lie, and plan out a core game experience that best adheres to the strengths of the team.

In addition, with a great understanding of game mechanics from tinkering with games via my hobby of game modding, I have intricate knowledge of the internal mechanics of games and their implementations, allowing me to issue proper guidance on implementations of respective mechanics for our own game.

Shrijan - Programmer: I am an adept programmer who has taken classes in Intro to AI, Machine Learning, Software Engineering, and many more 3-4000 level courses. I have experience with writing and debugging GML code, with a background in Java, Python, and a little bit of C. I have successfully collaborated with group members in my past classes, so collaborating with group members is one of my strengths. I will mix my problem-solving skills and creativity to transform the designer's ideas to reality.

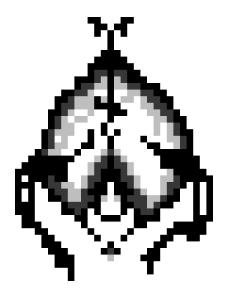
Description

This is an aracady puzzle shooter where the object of the game is to clear puzzle levels composed of circular arrays of black and white targets. You control a turret from a bird's eye view in the center of the screen that alternatingly shoots a limited amount of black and white bullets. Each color bullet can break the targets of its corresponding color. Every few shots the turret shoots, the array of targets pulls in closer to the center of the screen. If they get to the turret, you lose, but if you can destroy all the targets before that happens, you win.

The player controls the turret using a computer mouse. Moving the mouse cursor sets the aim direction while clicking either left or right shoots black or white bullets, respectively.

While this vertical slice only requires one level, the game's formula is easily extensible to a variety of formats. Discrete levels could be made using different curated formations of targets with various level gimmicks (moving target formations, bullet refills, bullet behavior changes, protective barriers, etc). Alternatively, the game could be made into a single endless level with procedurally generated target formations. If chosen to extend the game, we would likely choose a discrete-level approach as procedurally generated formations might create situations that are impossible to win without excessive fine-tuning.

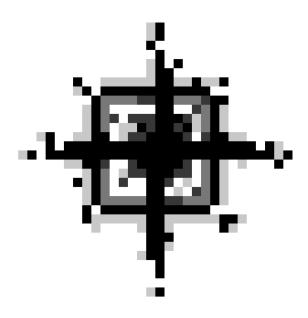
The key challenge to this game is managing the turret's bullets to eliminate target formations. As the player will only have a set amount of bullets initially, managing this resource is key to advancing through the game, which brings the puzzle aspect of this arcade-inspired shooter. Additionally, since the bullets of one color can only destroy that color's corresponding targets, choosing which particular color bullets to use at any moment can mean the choice between success and failure.



White Enemy, by Stephon Carter



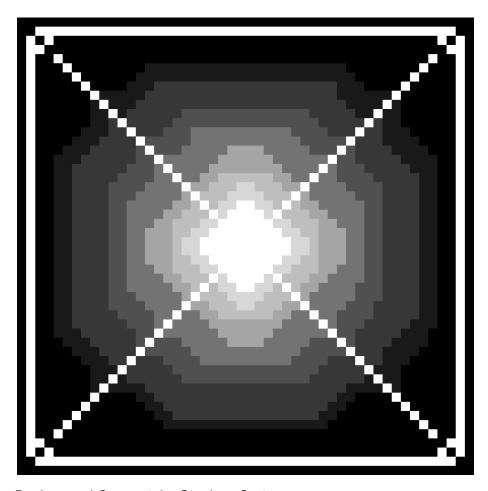
Black Enemy, by Stephon Carter



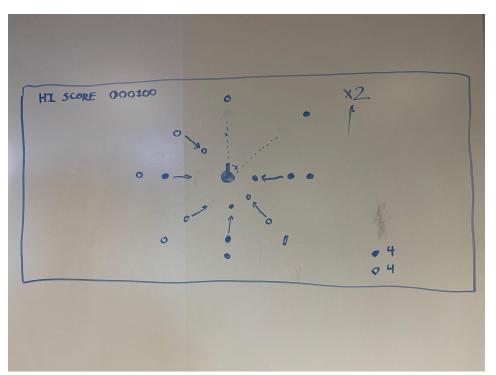
Black Enemy Bullet, by Stephon Carter



White Enemy Bullet, by Stephon Carter



Background Concept, by Stephon Carter



(Basic Game Function Concept, By Jacob Younan