498 MP2 Design Doc

I. Level Design

- A. The level design was split into two different types of sections: platforming and combat. These were intentionally set apart in order to not make the game too difficult.
- B. The first island requires no platforming and only combat so that players can get familiar with the enemies before progressing any further into the game. They are also intentionally kept separate so that the player can process them one at a time.
- C. Traversing between the first and second island is the first chance players get to use the grapple hook for platforming. In order to emphasize the fact that the grapple hook sections can't be solved with flying, the small islands players grapple onto are arranged vertically. On top of these small islands, there are also crystals that are collectibles.
- D. After traversing to the second island, the player has to use the flight mechanic to get the next set of enemies. The player can either fly to the enemies, or explore and find the island beneath that has a health pack and another crystal. The next set of enemies are a bit closer together, and multiplies the amount of chasers to increase the difficulty.
- E. After the round of enemies comes the last platforming section. The islands are a bit more spread out, and arranged diagonally upward to create a variety from the last grapple hook section. The player can also choose to explore to find health packs and crystals. After this platforming section there is the last fight with enemies.
- F. The final fight brings the enemies right next to each other, as well as multiply the amount of them. This creates chaos and tests the players ability to deal with them. After defeating all the enemies, the player can get to the finish line

II. Enemies

A. Mortar

The mortars were intentionally created to be short so that a player can
hop on top of them. The color scheme was chosen to look out of place so
that the player is aware that it is an enemy. The chute was added so that
the player knows where the bullet will come out of, even if they don't know
when it will come out.

B. Chaser

The chaser was made short for the same reason as the Mortar. It has a
distinct visual design, as well as a face. This is so the player can easily
identify what it is, as well as where it's looking, as it can only see from the
side it has a face on. This allows the player to sneak up behind the enemy
and kill them if needed

C. Mongo

1. This enemy is called a mongo because it looks like a much larger version of the turret. This enemy is unique, because it forces the player to use a

different mechanic than jumping to kill it. The player still has the option to kill it with jumping, but it's much easier to kill Mongo with a grappling hook. There's two sides that shoot projectiles to discourage the player from trying to get close. They also shoot the projectiles at a faster rate than the mortars

III. Grapple Hook

- A. As a new mechanic, a grapple hook was added. Implementing it was difficult, as the baseline was a third person game that isn't made well for shooting projectiles from your player. Design notes were taken from games like GTA V where a player can right click the mouse, and the player camera gets moved to the right of the player, and a crosshair is added. This allows for the third person view, but better aiming.
- B. In terms of the mechanics, the speed at which the grappling hook gets shot was tuned so that it was fast enough to aim across large distances, as well as reach the target in a short amount of time.
- C. The time taken for a player to move from their location to the grapple's location is based on the distance, with a min and max time set. The further the distance, the faster the player moves. This adds an exciting element to the game when you land a far away grapple.