

Ammo Crisis Design Document

By Guvvy Atwal

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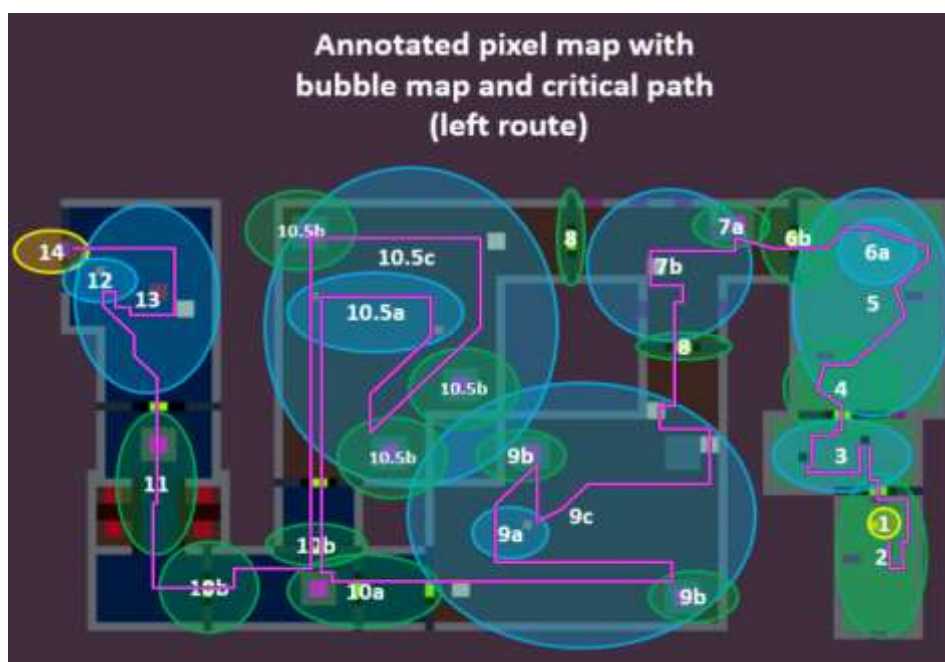
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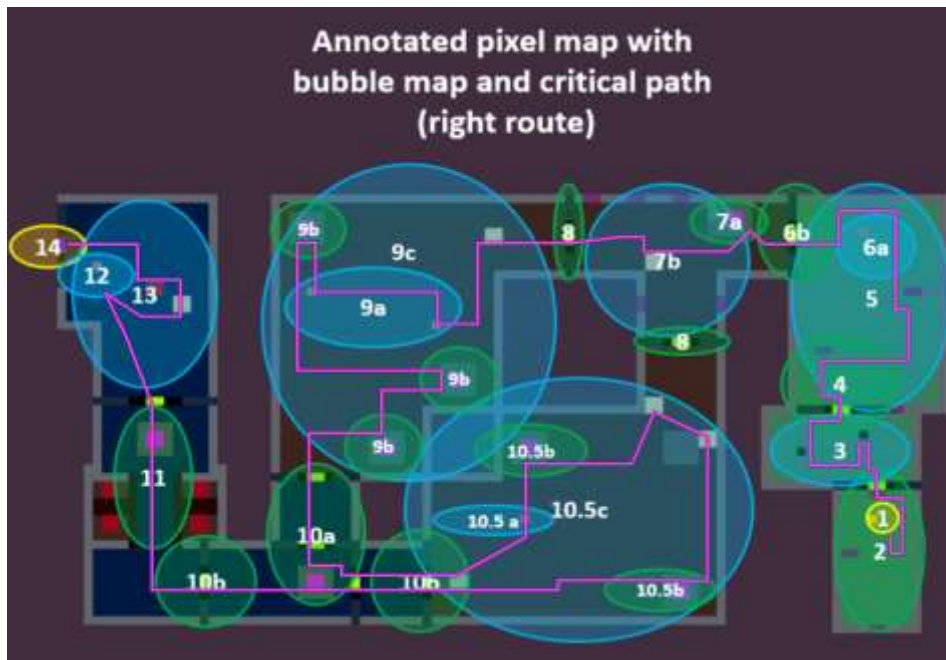
Game Overview:

Design brief:

This is a game design document for Ammo Crisis Alpha Build. The framework is a third person survival shooter. Where players must shoot and kill hordes of enemies to reach the end of the level. This document focuses on the levels design, gameplay mechanics, weapon diagrams, user interface and testing implementation to create a balanced experience.

Level flow breakdown:





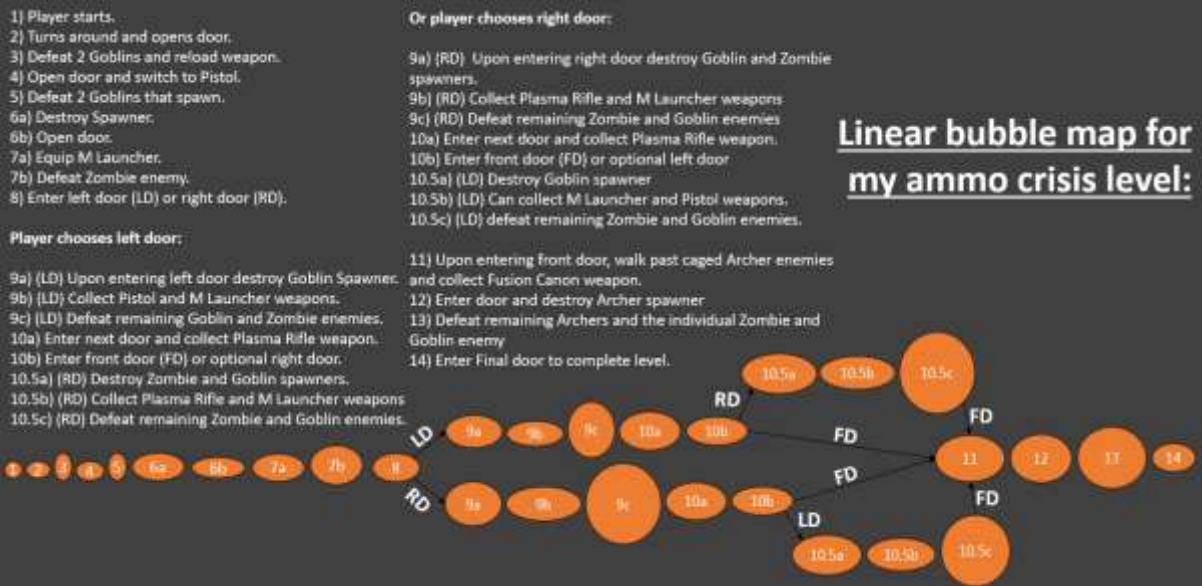
The level follows a non-linear structure to its design. Because there are multiple paths the player can choose from to finish the level. Hence why there is multiple diagrams to visualise this path.

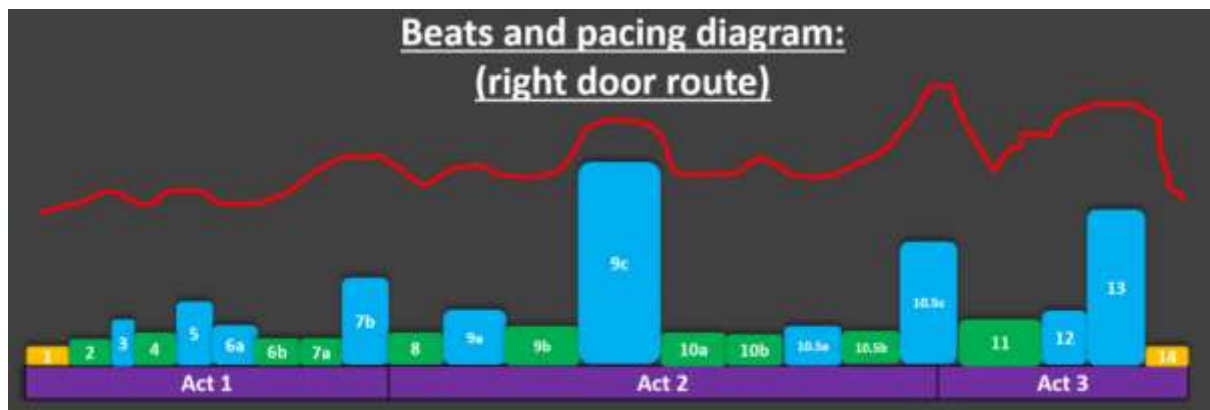
Act 1 (1-7B)- follows a linear path and serves as an area of introduction for the player. Where they learn the core mechanics of Ammo Crises, including combat encounters with Goblin enemies, how the Spawner works and opening doors.

Act 2 (8-10b)- Is where gameplay challenge heightens with giving players more agency. Since players now have a choice of choosing the left or right. If the players choose the left path they can fight 3 Zombies, collect a Pistol and Rocket Launcher weapon, and destroy the Goblin Spawner. Next players reach **10b** where they can either go forward to **11** or turn right. Where they can collect a Plasma Rifle, Pistol, and Rocket Launcher weapons. Then destroy the Zombie and Goblin Spawner. However, if players were to go down the right path, it's the exact same as the left path but in reverse.

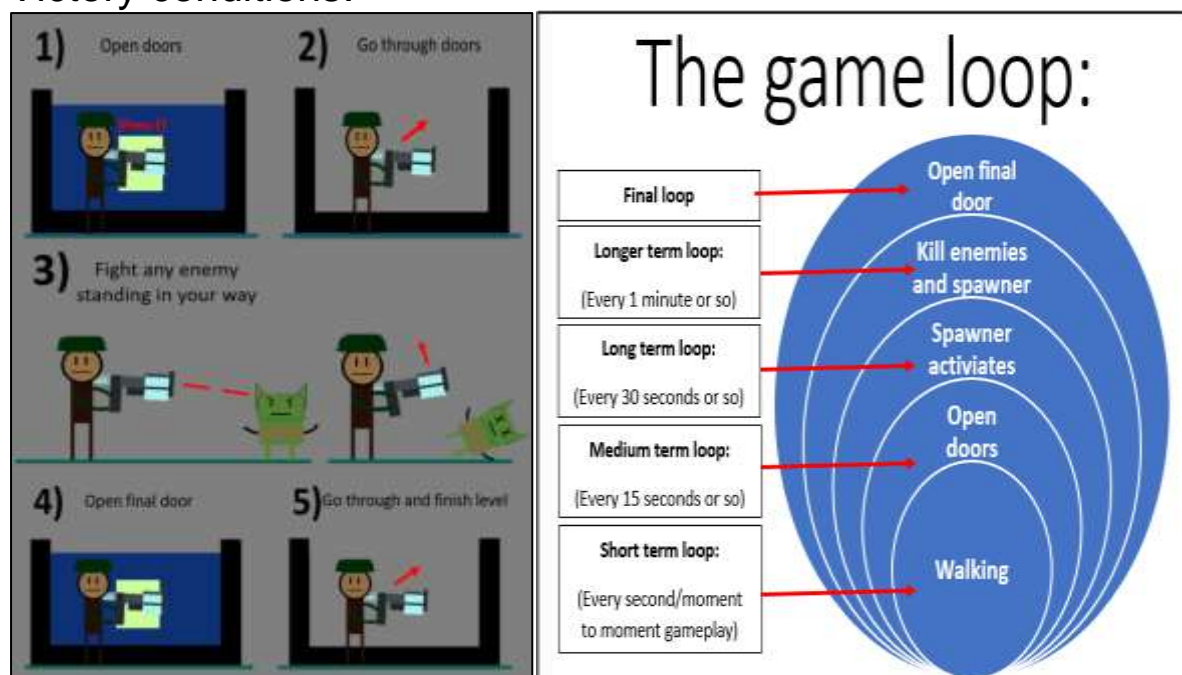
Act 3 (11-14)- Is where players reach the climax and pick up the most powerful weapons in the level: the fusion cannon. Plus fight the strongest enemy in the level, the Archers. The purpose of this act is more so to reward the player from their earlier actions. Because act 2 is designed to be more challenging than act 3. Directly enhancing the game feel because the player feels powerful and accomplished from receiving the Fusion Canon weapon. Because it feels well earned and is fun to use to take on the several Archers and weaker enemy types like Zombies and Goblins.

Further breakdown:



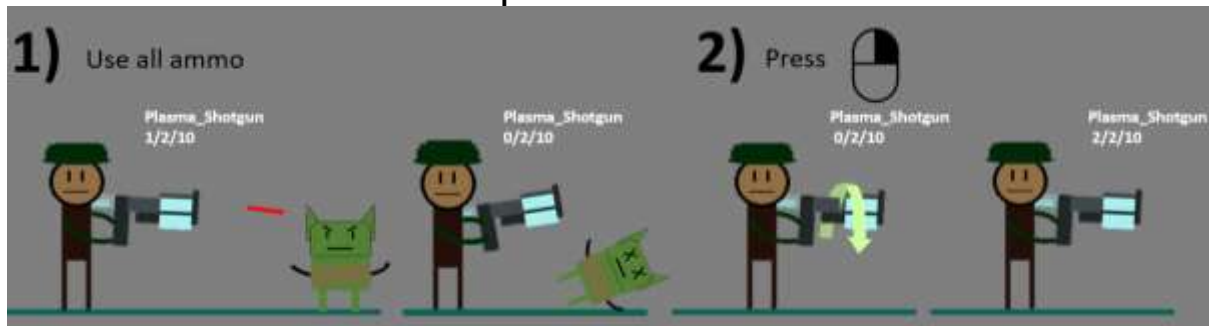


Victory conditions:

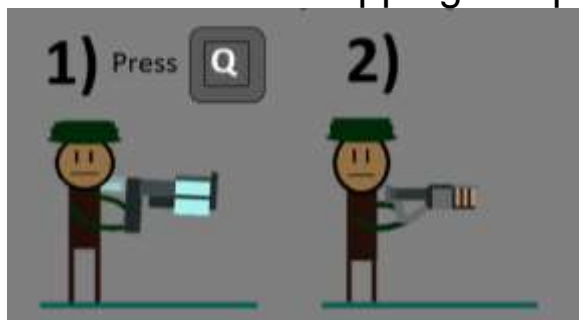


Gameplay Mechanics:

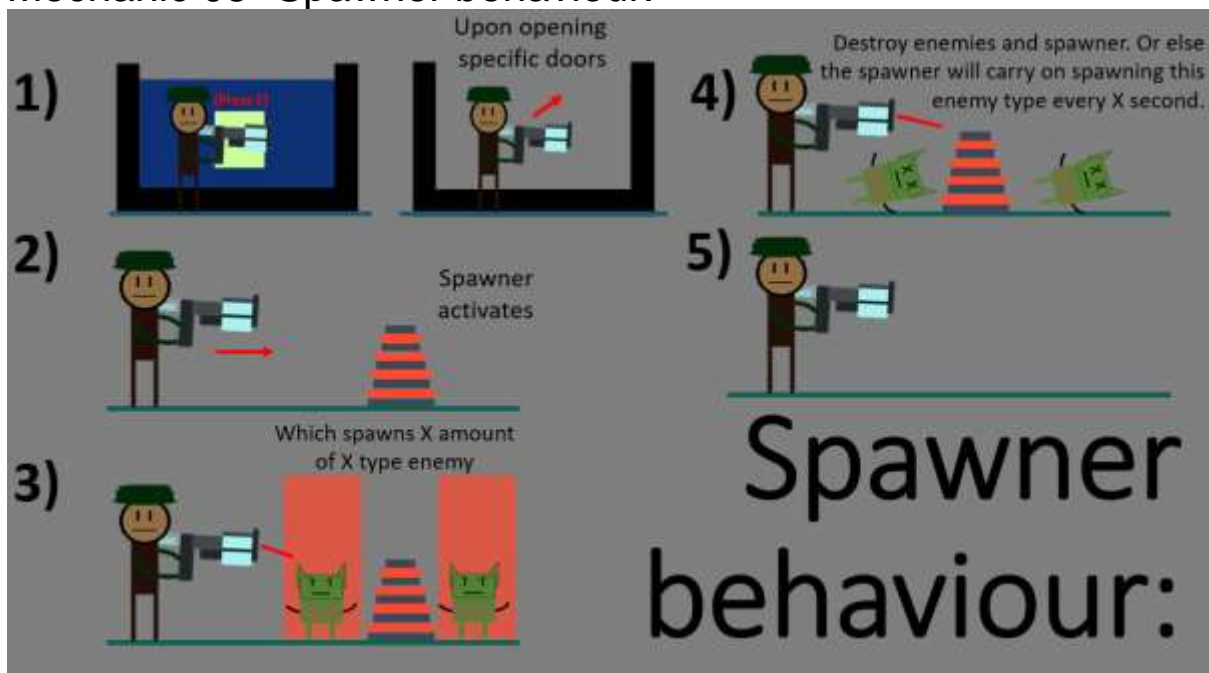
Mechanic 01- Reload weapon:



Mechanic 02- Swapping weapons:



Mechanic 03- Spawner behaviour:



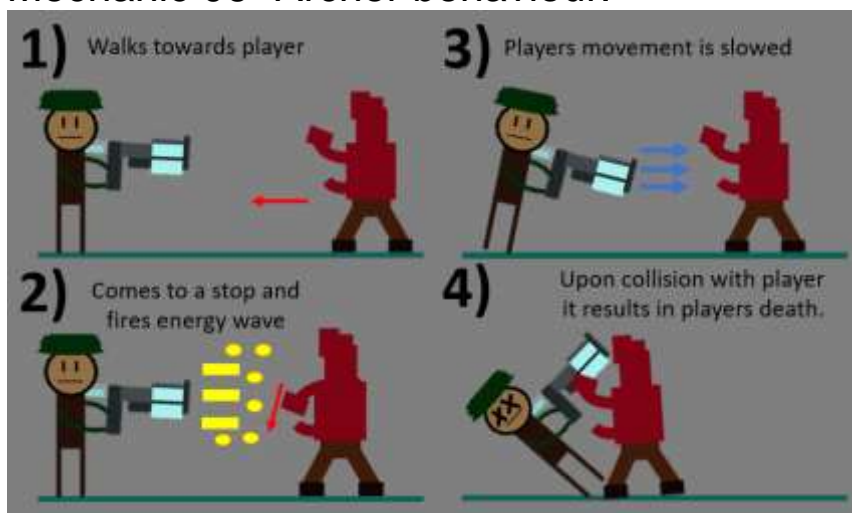
Mechanic 04- Goblin behaviour:



Mechanic 05- Zombie behaviour:

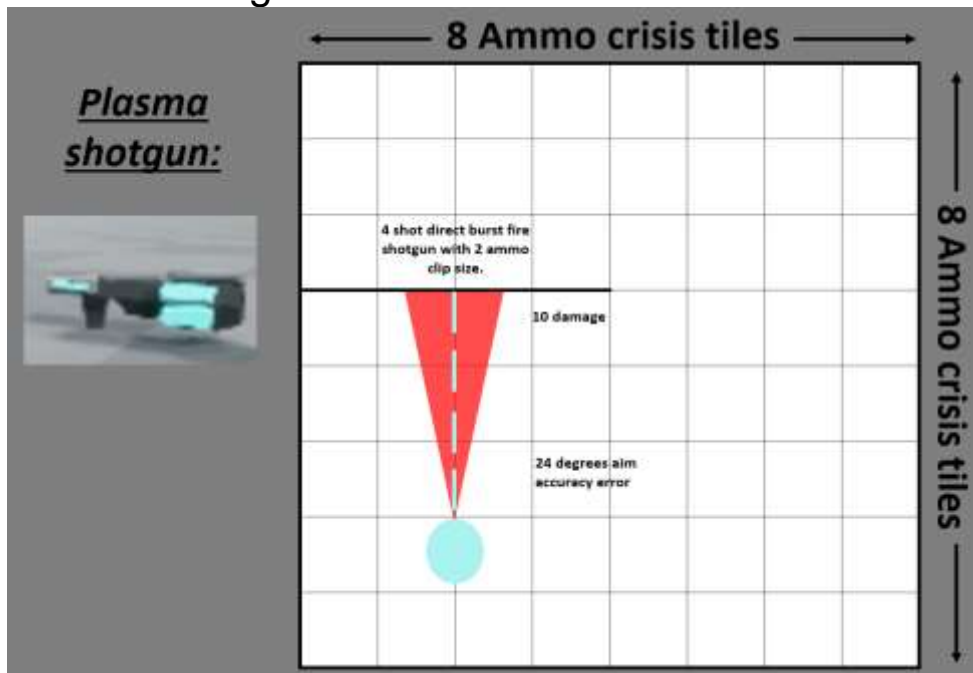


Mechanic 06- Archer behaviour:

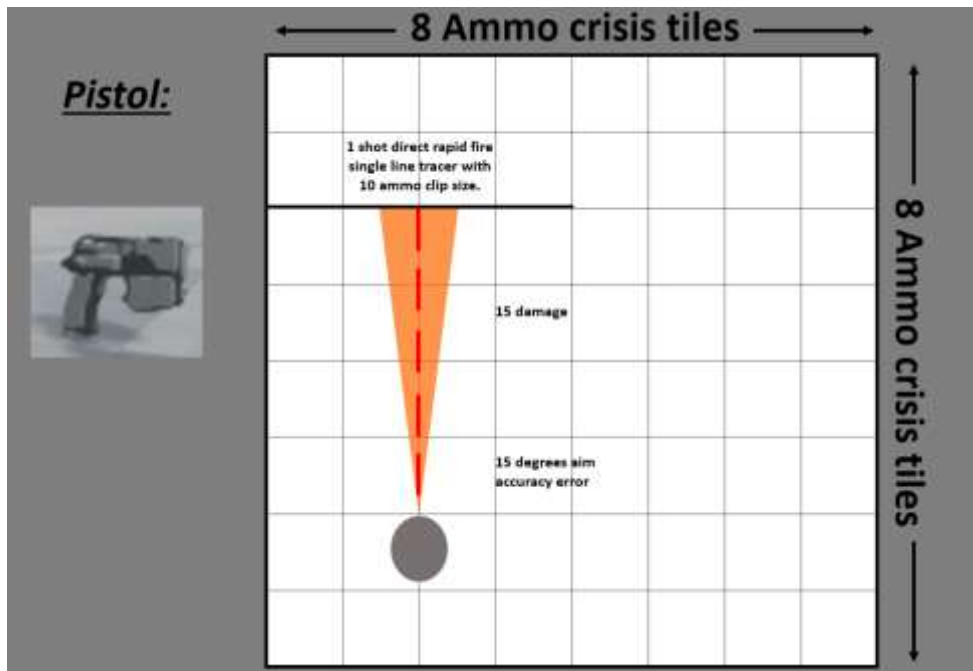


Weapon Mechanic Diagrams:

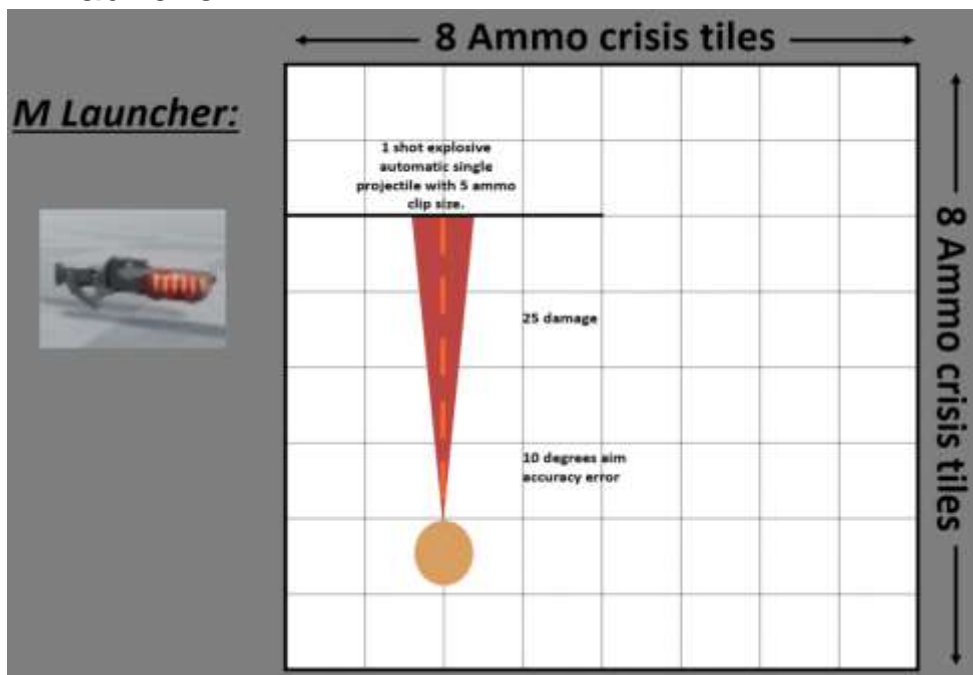
Plasma Shotgun:



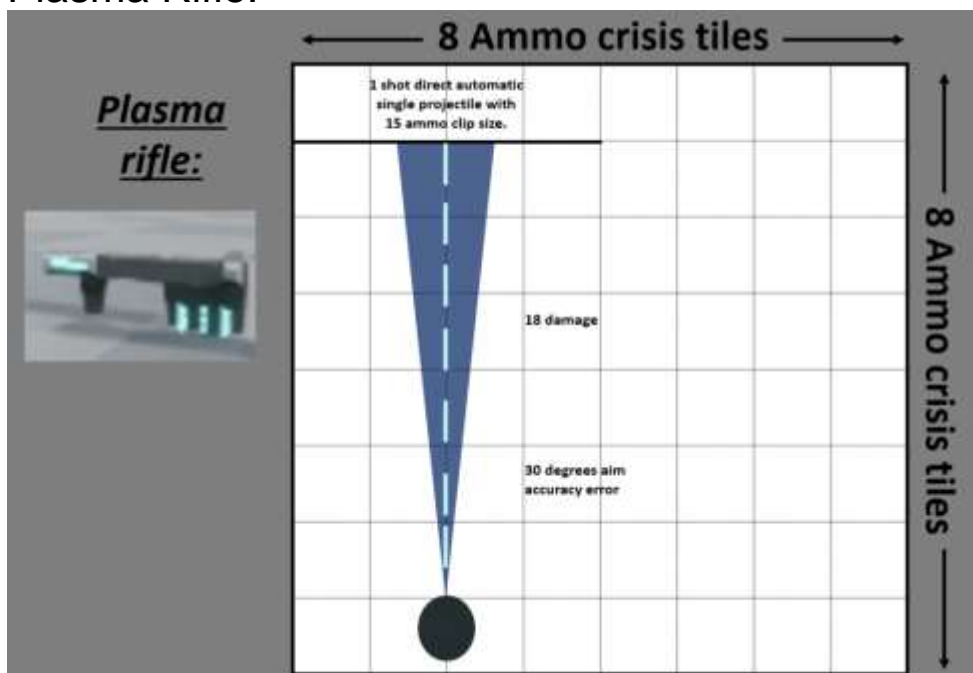
Pistol:



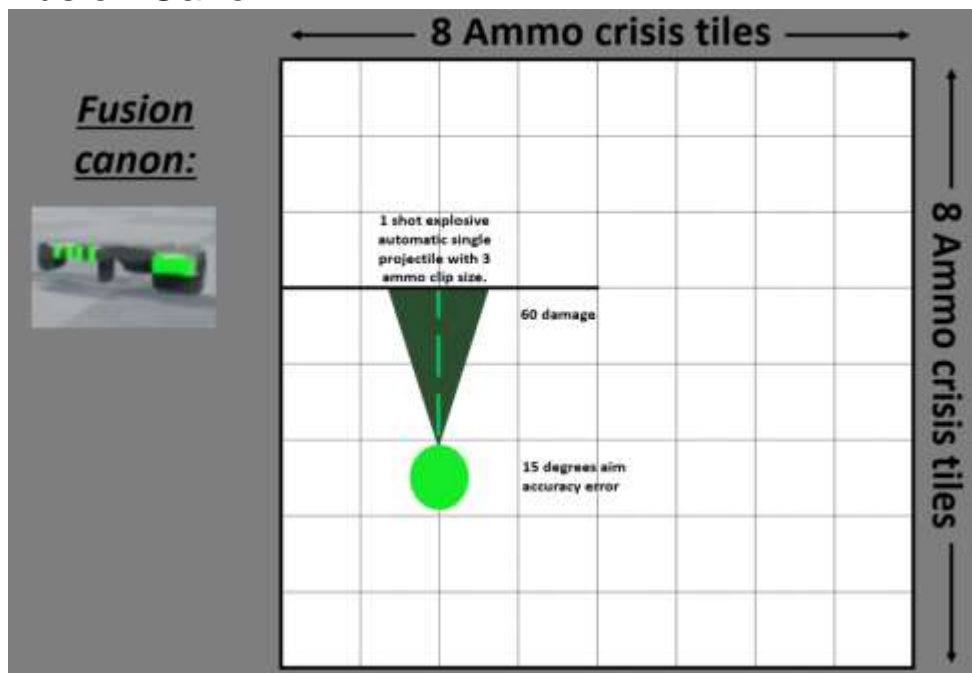
M Launcher:



Plasma Rifle:



Fusion Canon:



User Interface

Wireframe of User Interface:



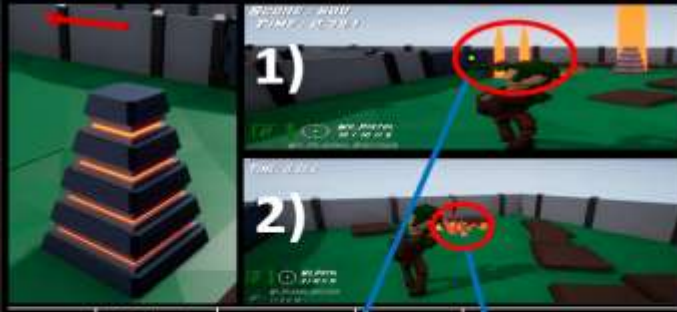
Comparison to in-engine screenshot:



Testing Findings:

Mechanic testing:

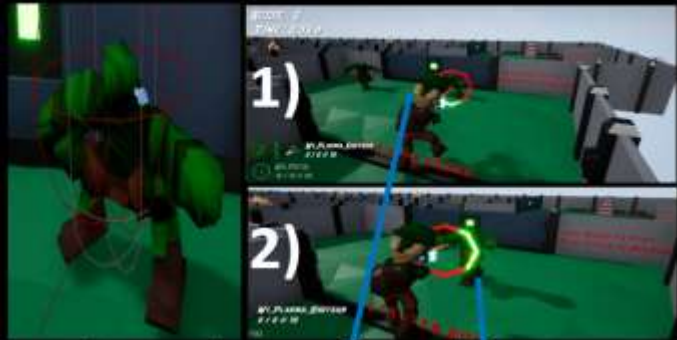
Name:	Mechanic type:	Description:	Rarity:	Key behavioural trait:
Door	Interactive object	Doors open upon players pressing E when directly in front of green button.	Frequently found	As seen from above specific doors when opened will activate spawners.



The diagram shows a 3D model of a Spawner, which is a dark, tiered, pyramid-like structure with orange glowing bands. To its right are two screenshots from a game. Screenshot 1) shows a Spawner in a game environment with a red circle around it and a blue arrow pointing to the 'Name' field of the table below. Screenshot 2) shows a Spawner spawning enemies, with a red circle around the spawning area and a blue arrow pointing to the 'Key behavioural trait' field of the table below.


Name:	Mechanic type:	Description:	Rarity:	Key behavioural trait:
Spawner	Destructible autonomous object.	Spawner can spawn in an enemy type. The specific quantity of said enemy will vary between each section of the level.	Commonly found	Spawners will carry on spawning the enemy type until it has been destroyed.

Enemy testing:



The diagram shows a 3D model of a Goblin, a small green, goblin-like creature. To its right are two screenshots from a game. Screenshot 1) shows a Goblin in a game environment with a red circle around it and a blue arrow pointing to the 'Name' field of the table below. Screenshot 2) shows a Goblin chasing a player, with a red circle around the Goblin and a blue arrow pointing to the 'Key behavioural trait' field of the table below.

Name:	Mechanic type:	Description:	Rarity:	Key behavioural trait:
Goblin	Enemy	Small enemy type that stands stationary unless player enters its radar box.	Frequently found	Upon detecting a player (that has entered within close proximity) it will run after the player and upon collision with player will end in players death.



The diagram shows a 3D model of a Zombie, a large, brown, zombie-like creature. To its right are two screenshots from a game. Screenshot 1) shows a Zombie in a game environment with a red circle around it and a blue arrow pointing to the 'Name' field of the table below. Screenshot 2) shows a Zombie chasing a player, with a red circle around the Zombie and a blue arrow pointing to the 'Key behavioural trait' field of the table below.

Name:	Mechanic type:	Description:	Rarity:	Key behavioural trait:
Zombie	Enemy	Large enemy type that stands stationary unless player enters its radar box.	Commonly found	Upon detecting a player (that has entered within close proximity) it will slowly chase after the player and upon collision with player will result in the players death.

Name:	Mechanic type:	Description:	Rarity:	Key behavioural trait:
Archer	Enemy	Large enemy type that remains stationary unless player enters its radar box.	Moderately rare	Upon detecting a player it will chase after them and once reaching close proximity it will come to a stop. Next it will fire an energy wave which decreases player movement. Thus resulting in the Archer having a more advantageous position to then walk towards player and upon collision results in the players death.

Weapon testing:

Name:	Mechanic type:	Description:	Rarity:	Reasoning:
Plasma shotgun	Pick up weapon	A shotgun weapon type that fires 4 direct projectile burst fire shots with 2 ammo clip size.	Commonly found	Player starts with this weapon and can easily get a lot of mileage out of using this weapon.




Name:	Mechanic type:	Description:	Rarity:	Reasoning:
Pistol	Pick up weapon	A 1 shot direct rapid fire single line tracer with 10 ammo clip size.	Frequently found	Player starts with a pistol in their secondary weapons arsenal. Furthermore there are a couple of pistol pick up weapons available for players to pick up. Thus resulting in the pistol being the least rare weapon.



Name:	Mechanic type:	Description:	Rarity:	Reasoning:
M Launcher	Pick up weapon	A 1 shot explosive automatic single projectile launcher with 5 ammo clip size.	Moderately rare	Can only be located and picked up by the player a couple of times within the level.



Name:	Mechanic type:	Description:	Rarity:	Reasoning:
Plasma rifle	Pick up weapon	A 1 shot direct single projectile rifle with 15 ammo clip size.	Moderately rare	Can only be located and picked up by the player a couple of times within the level.

				
Name:	Mechanic type:	Description:	Rarity:	Reasoning:
Fusion canon	Pick up weapon	A 1 shot explosive automatic single projectile launcher with 3 ammo clip size	Very rare	It can only can be located and picked up once by the player. Making this the rarest weapon for the player to find and pick up.

Balanced Results:

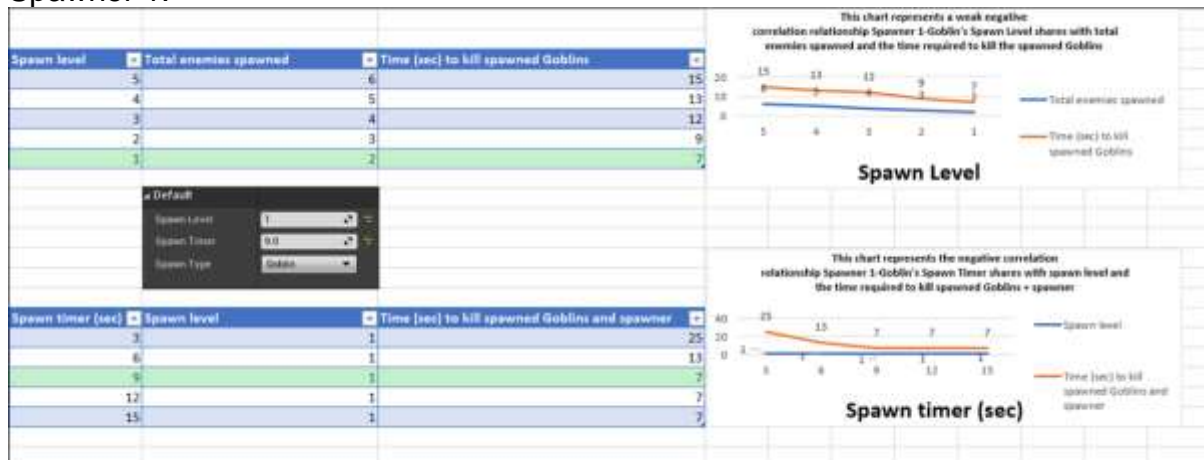
Balanced point tables:

Scale: 1= Poor, 2= Bad, 3= Medium, 4= Good, 5= Excellent					
Weapon:	Damage	Clip size	Ammo count	Reload clip	Range
Plasma shotgun	2	1	2	2	3
Pistol	1	4	3	5	4
M Launcher	4	3	2	3	4
Plasma Rifle	3	5	5	4	5
Fusion canon	5	2	1	1	2

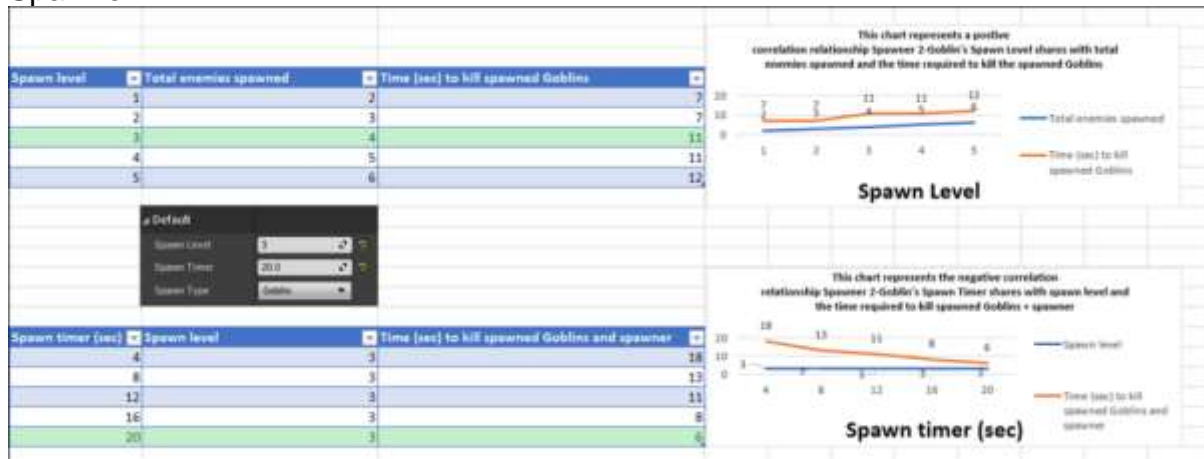
Scale: 1= low, 2= medium, 3= high		
Enemy:	Health	Max speed
Goblin	1	3
Zombies	2	1
Archers	3	2

Mechanic balance graphs:

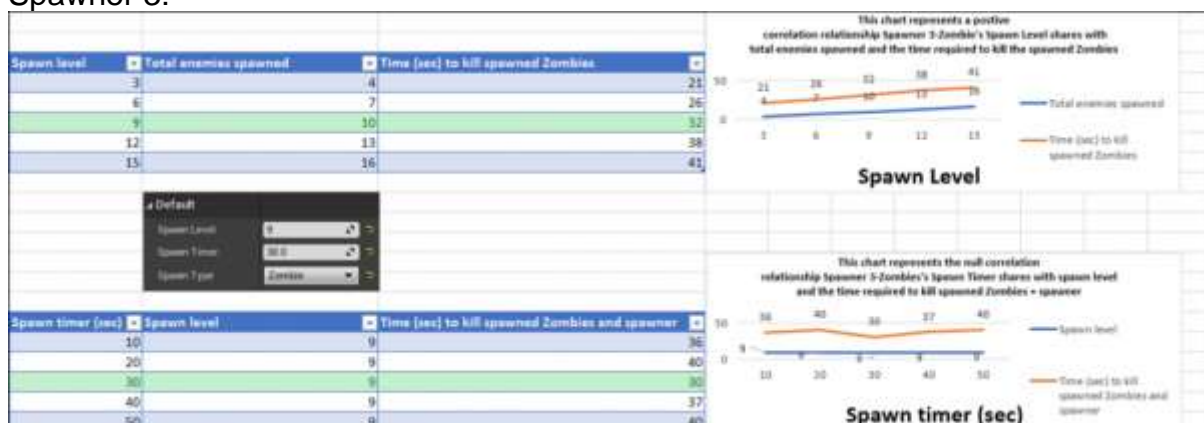
Spawner 1:



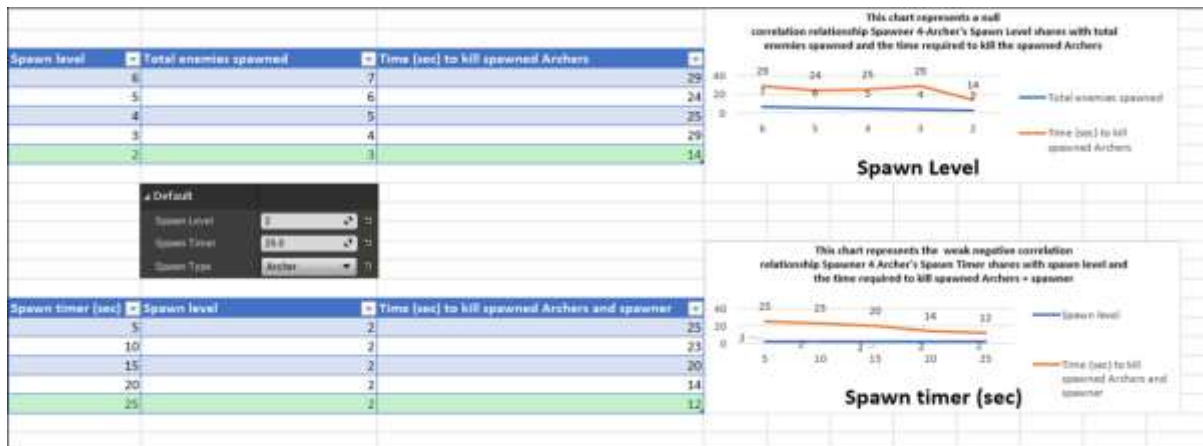
Spawner 2:



Spawner 3:



Spawner 4:



Enemy balance graphs:

Goblin:



Zombie:

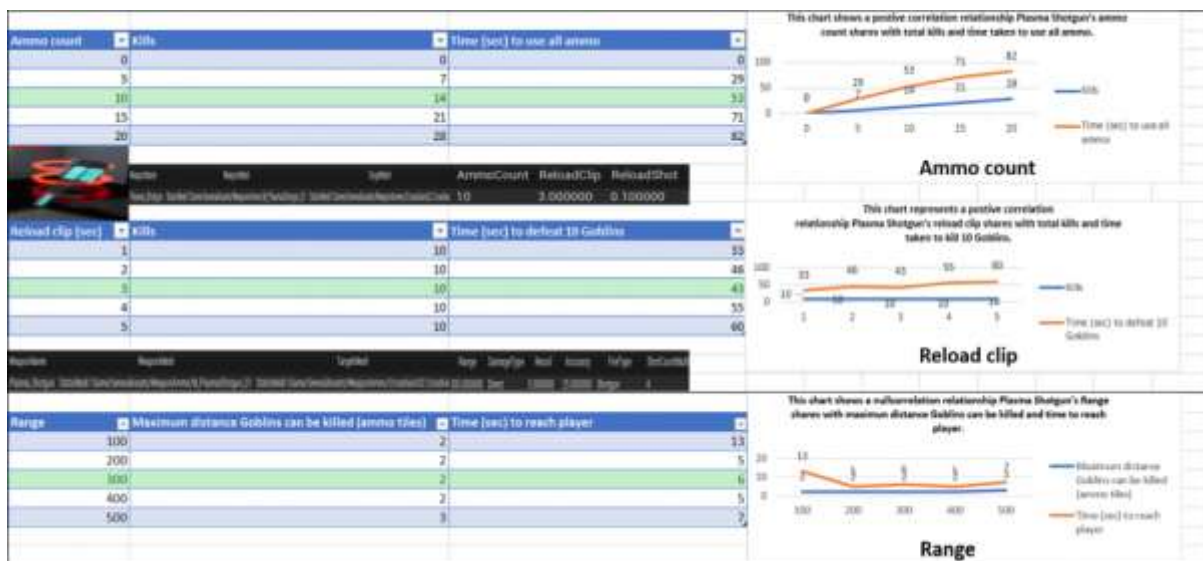
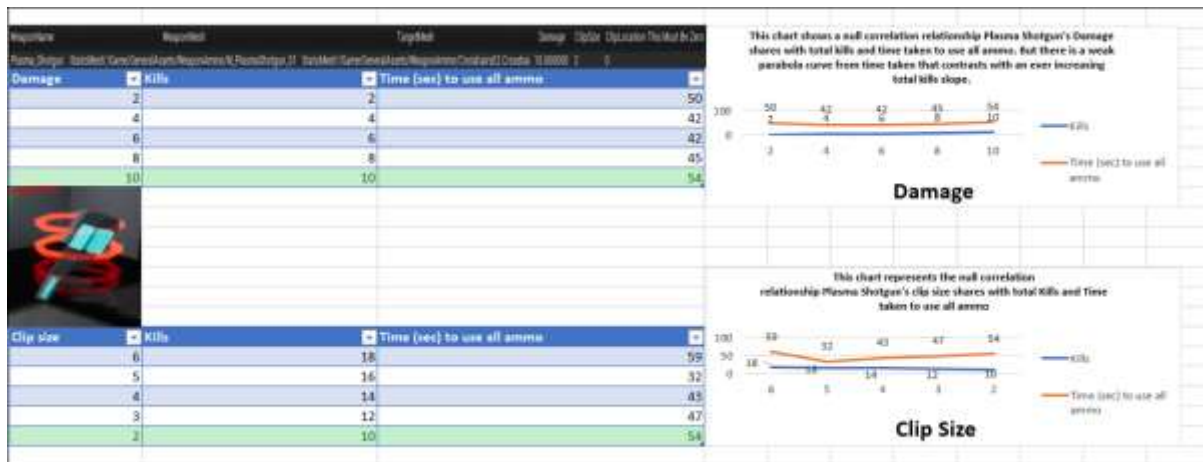


Archer:

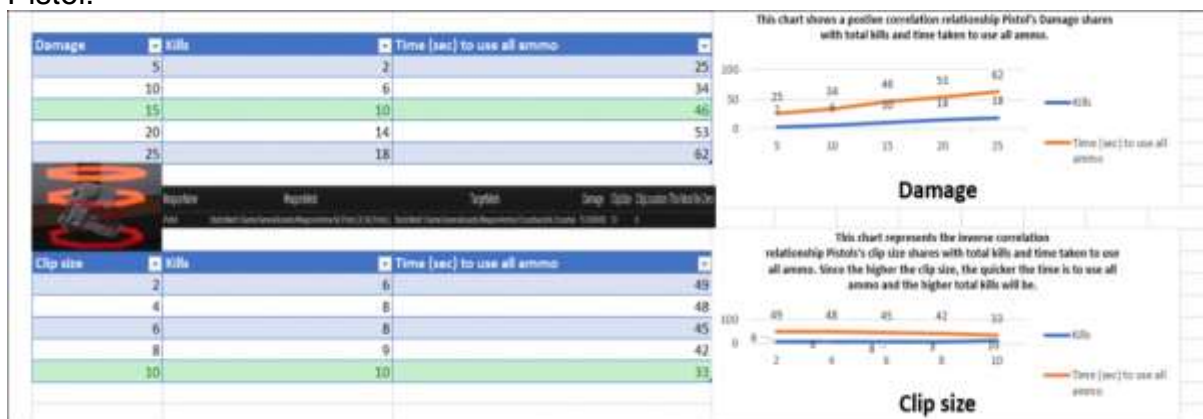


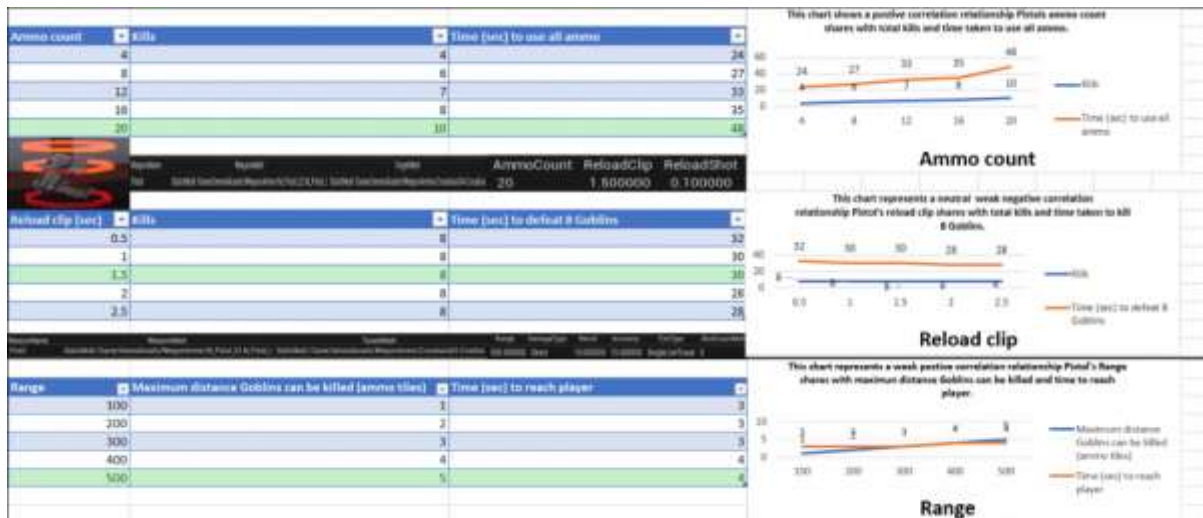
Weapon balance graphs:

Plasma Shotgun:

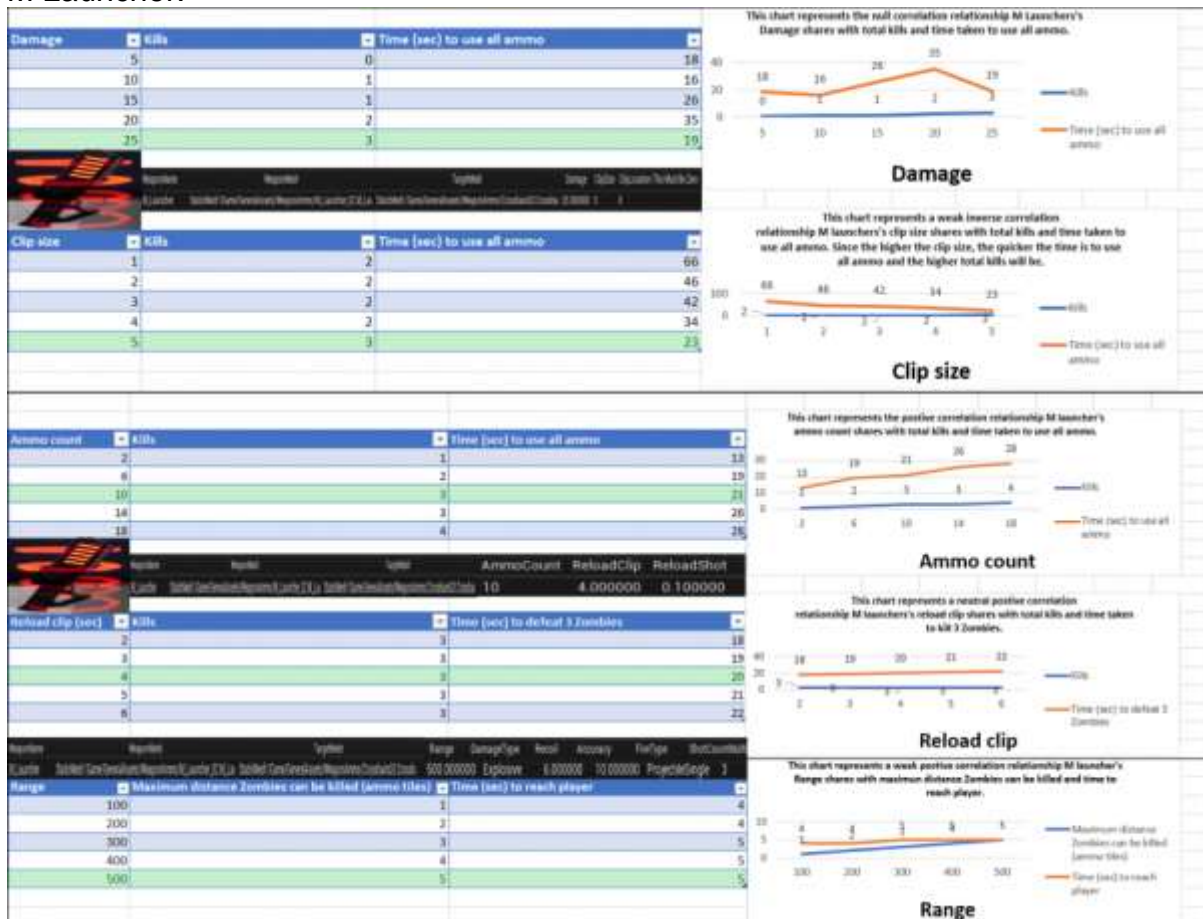


Pistol:

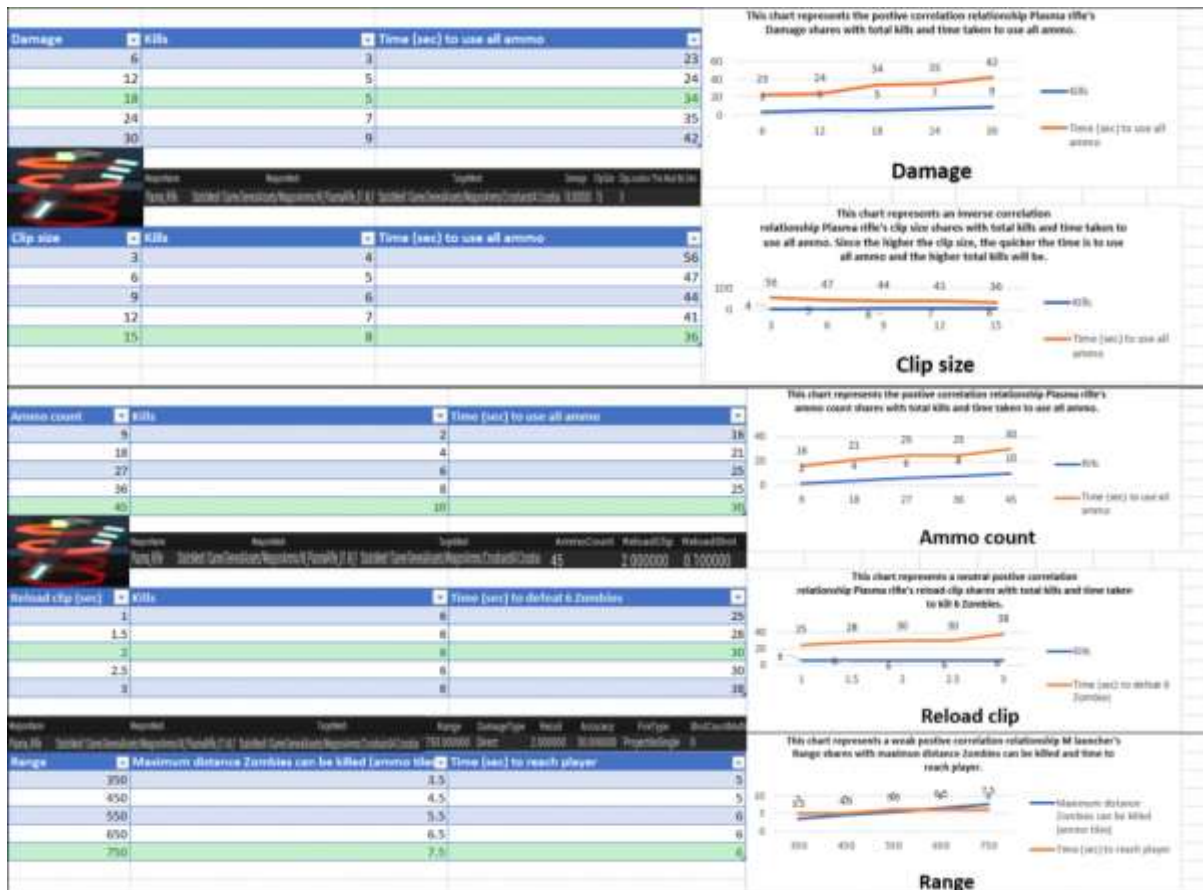




M Launcher:



Plasma Rifle:



Fusion Canon:

