Games Design Document

Game Name: Brog's escape

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High Concept

Elevator pitch

The game is a top-down shooter combining two different genres. Avoid deadly pits and nasty traps in frantic platforming sections, once through get yourself ready to battle waves of enemies in an intense bullet hell by avoiding enemy fire with quick reflexes and skill to escape the enemy base and become the ultimate badass.

Theme/environment/setting

The game takes place in an industrial futuristic location full of neon lights, taking inspiration from games such as The Ascent and using the Spaceship interior environment pack from the Epic store. The player will be immersed in this gritty yet colourful cyberpunk world.

The Ascent (left) Asset pack (right)





The weapon projectiles from the player and enemies will match the theme by being brightly coloured/neon, this will also be important to the gameplay. The game Nex Machina shows a good example of this.



Nex Machina

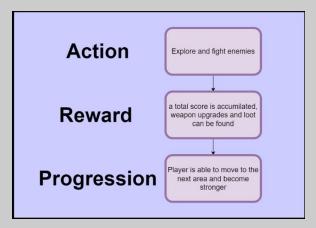
Unique Selling Point/s and Key Mechanics

The game combines two genres, the platformer and arcade shooter to create a unique experience for players. The player must enter and defeat the enemies within the challenge rooms, using abilities to help them to progress through the level and avoid its obstacles and traps. This will also give access to secret locations rewarding the player with hidden weapon upgrades.

Gameplay Summary

Player explores the environments, until reaching an unpassable scenario and is unable to progress for the allocated time. At this point the player must fight waves of enemies inside of the challenge room in a fast-paced bullet hell. Once the player has survived the enemies for the allocated time, they will be able to exit the room and make their way to one of the three switches they need to press to escape the enemy base. Below is a chart to show the gameplay loop.

Gameplay Loop



World Summary

The player will be exploring a mysterious and immersive world full of atmosphere and interesting sights to behold. From large landscapes of the city set into the background to dark tunnels only lit by the colourful neon signs luring the player forward. Perhaps not so inviting will be the many traps the player will have to avoid such as pitfalls as far as the eye can see, spiked balls attached to swinging chains and steel pipes leaking hazardous material. The city will also contain hidden areas only available once the player has the correct ability to discover them and in doing so will find discarded weapons from a war previous fought many years ago.

Production Overview

I plan to use <u>Trello</u> to plan out the project and prioritise what is needed starting with the main mechanics. The player movement, enemy movement and gunplay will be the most crucial to get working. Next will be the power ups for the player to collect after each challenge room is completed and how they can be used to progress through the level. Then I will design the traps such as the swinging spiked balls and pipe leaks for the player to avoid. Last of all will be the level layout including the pacing, secrets, enemy/trap placement etc. When all of that is completed, I will be able to decorate and maybe customise characters and textures a little more, make tweaks and do some overall playtesting and bug fixing.

Player Characteristics Outline

The player takes control of a mean, ugly, green ogre. Despite his size the ogre is quick on His feet and very nifty with a plasma rifle.

Player Persona

The character is a no-nonsense type, he is focused on his mission and hellbent on destroying the enemy. He may even take a pleasure in killing the enemies. The question is would he be happy once the war is over, or would he miss the killing and destruction... (he would).

Story (How, why, What)

There is an ongoing war between the two dominate races in the galaxy mankind vs the ogres, the player will take control of Brog an ogre soldier searching for the human military base located in the city of Linblum. Brog is struck down by a human patrol craft in his spaceship whilst searching for the enemy base. Luckily for Brog his ship landed in the enemy base, he must find his way out and into the city below whilst taking down as many of the enemies as possible.

Brog will deal as much destruction as possible with the weapons he finds whilst manoeuvring through the enemy's base above the city with his agile movements such as jumping and dashing.

Gameplay Influences

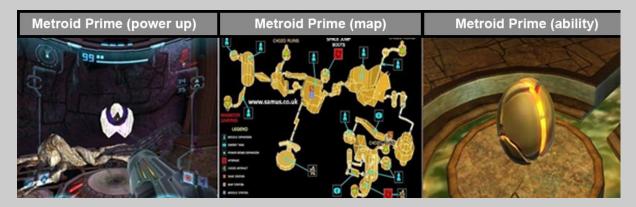
Bullet hell arcade games such as, Nex machina, xeno crisis and Dead Nation (Lots of fast gameplay, dodging bullets, lots of enemies, top-down view)



Platformers such as the mainline Crash bandicoot and 3D Mario games (jumping over pits, dodging traps)

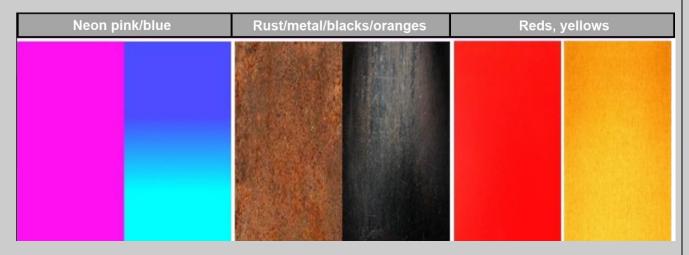


Exploration inspired by the Metroid games (need an ability to progress, unreachable areas being reachable after ability acquired).



Colours Palette

Environment: The game will feature bright neon colours taken from the "cyberpunk" style. Dark black and brown industrial walls contrasting neon pinks and yellows from signs. Weapon projectiles: Similar to the neon signs, brightly lit, the main weapon will be a bright blue.



Lighting

Dark dirty alleyways lit by pink neon signs, equally depressing as it is beautiful.



The table above demonstrates how the colours used will look in the environments. The pictures are taken from the Bladerunner movies (huge cyberpunk influence).

Asset List

Spaceship interior environment

Soul: City

Modular Sci-Fi starter bundle

Level Design documentation

Goals of level, key areas and level plans

A flowchart to show the player's main goals as they play through the game



The key areas will be the challenge rooms, platforming sections and pure exploration areas (hidden weapons can also be found here). concept for the areas:

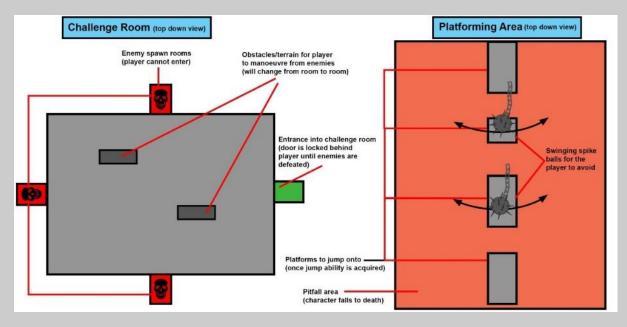
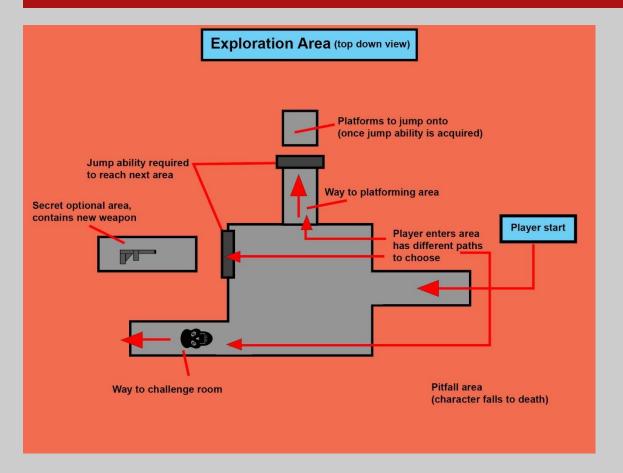


Figure 7: Exploration area concept

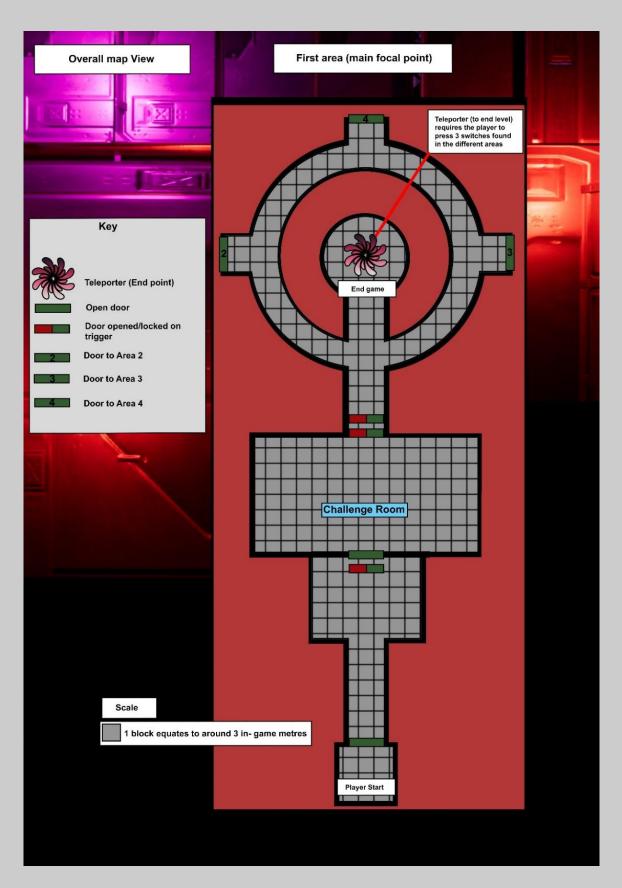


Level design maps

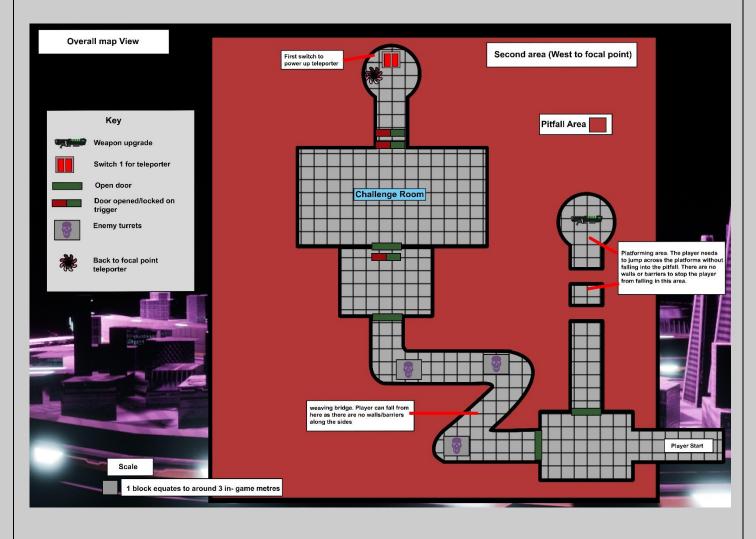
Maps: Overall area

Focal Point Location (Area one)

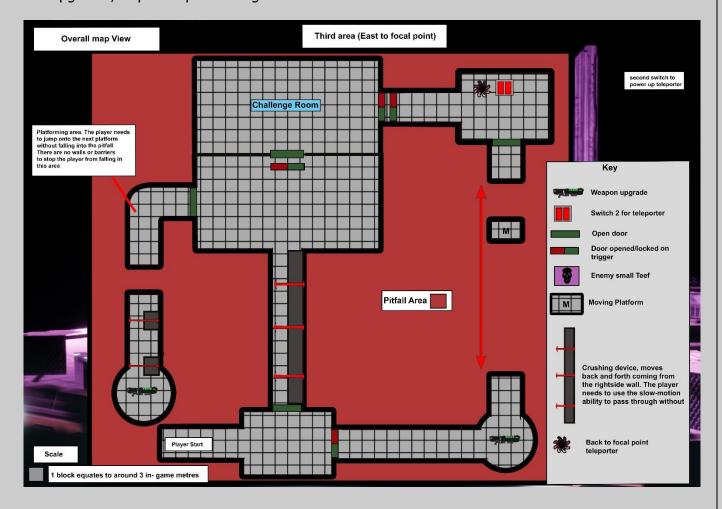
The main focal point is the circular area. This contains the teleporter to escape, the player will branch off from here and return each time they find and press a switch:



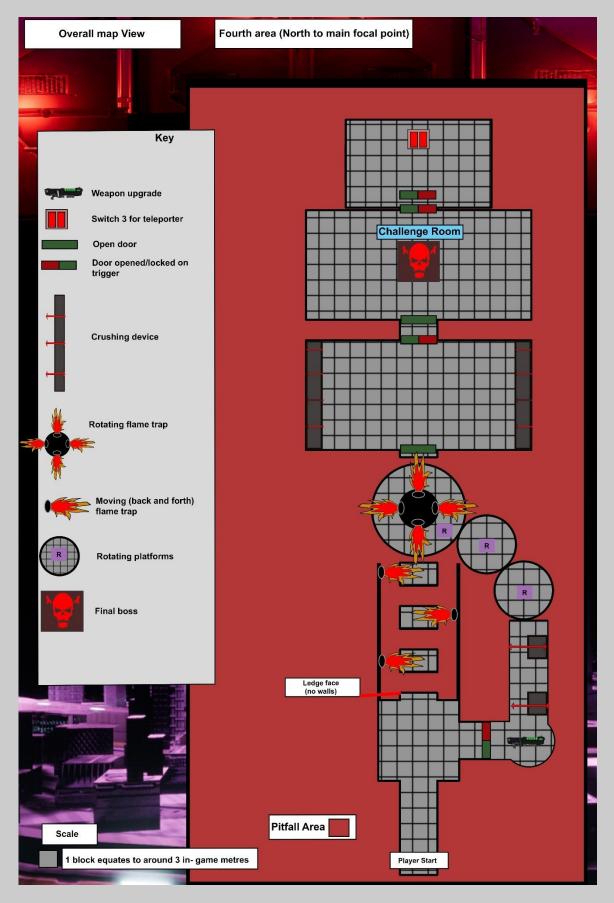
Overall view of the area two map. This contains switch one, a challenge room, a weapon upgrade and platforming sections:



Overall view of the area three map. This contains switch two, a challenge room, two weapon upgrades, traps and platforming sections:

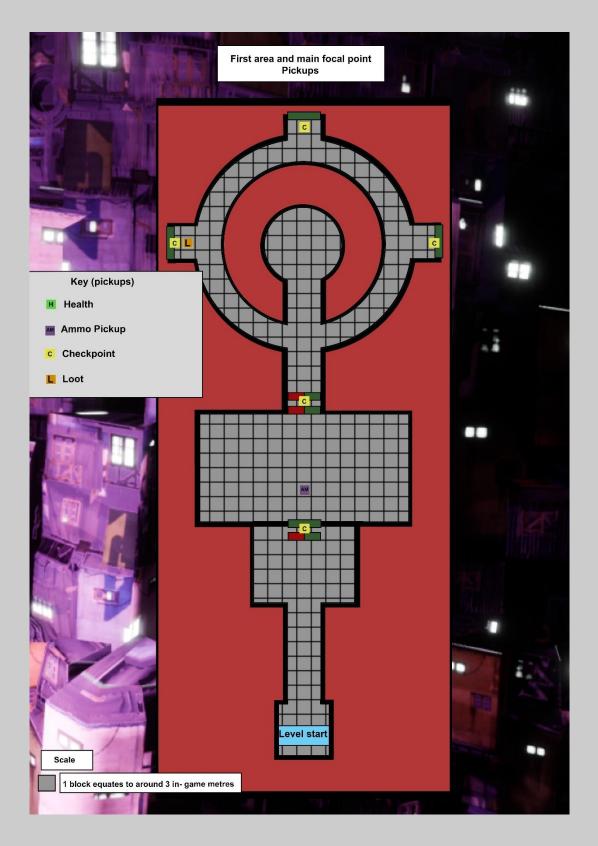


Overall view of the area four map. This contains switch three, a challenge room containing the boss enemy, a weapon upgrade, traps, and platforming sections:

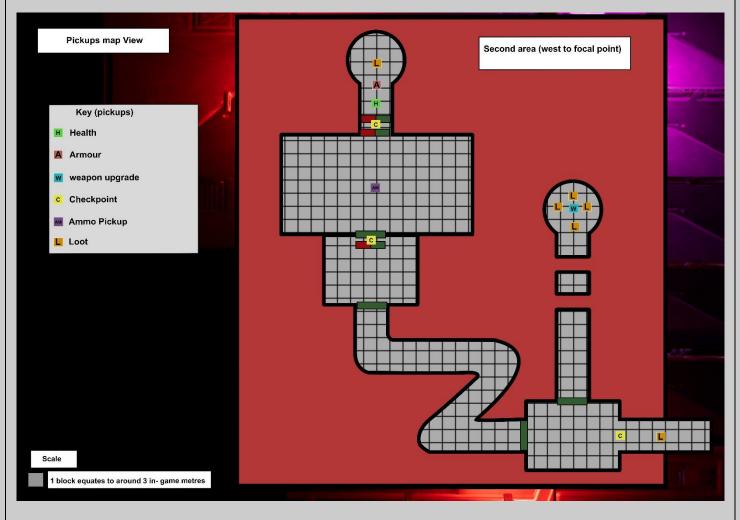


Maps: Area pickup and checkpoint location

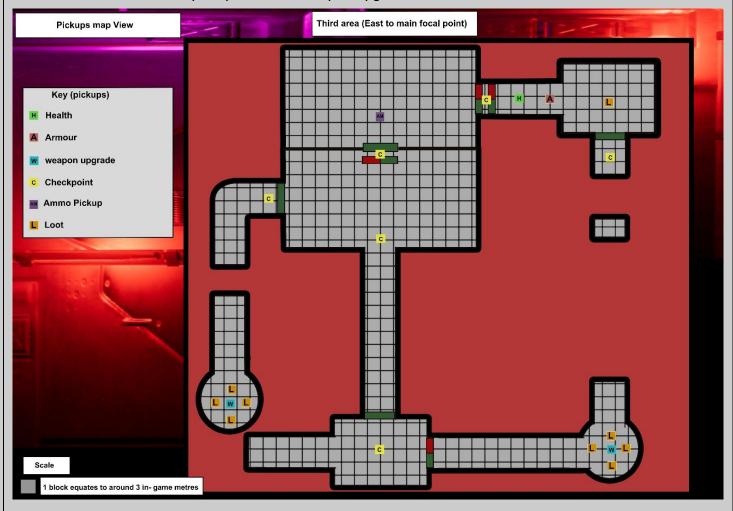
Area one pickup map: contains loot, an infinite respawning ammo pickup and checkpoints



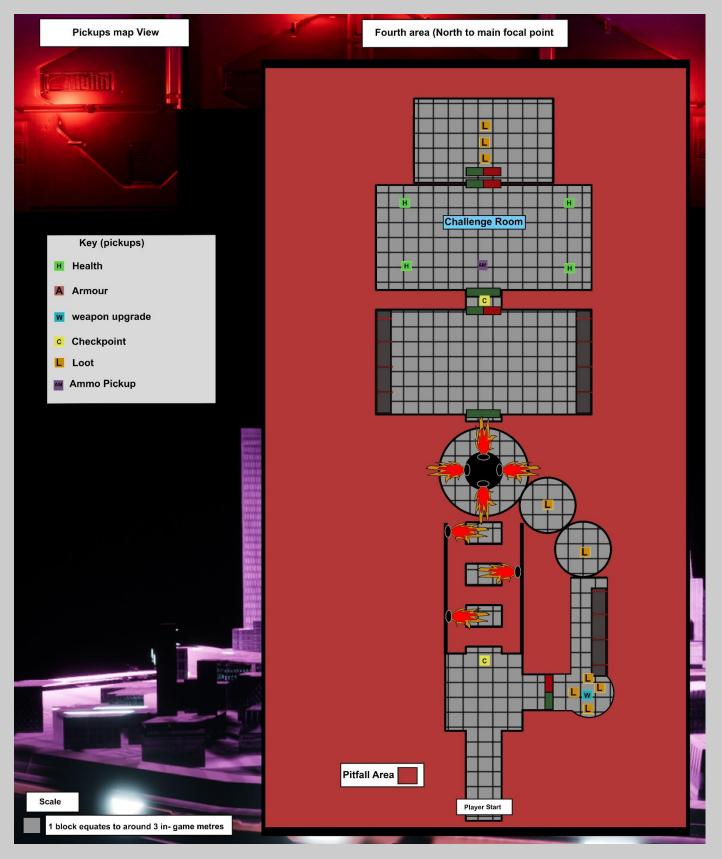
Area two pickup map: contains loot, an infinite respawning ammo pickup, checkpoints, a weapon upgrade and health and armour pickups



Area three pickup map: contains loot, an infinite respawning ammo pickup, checkpoints, armour and health pickups and two weapon upgrades



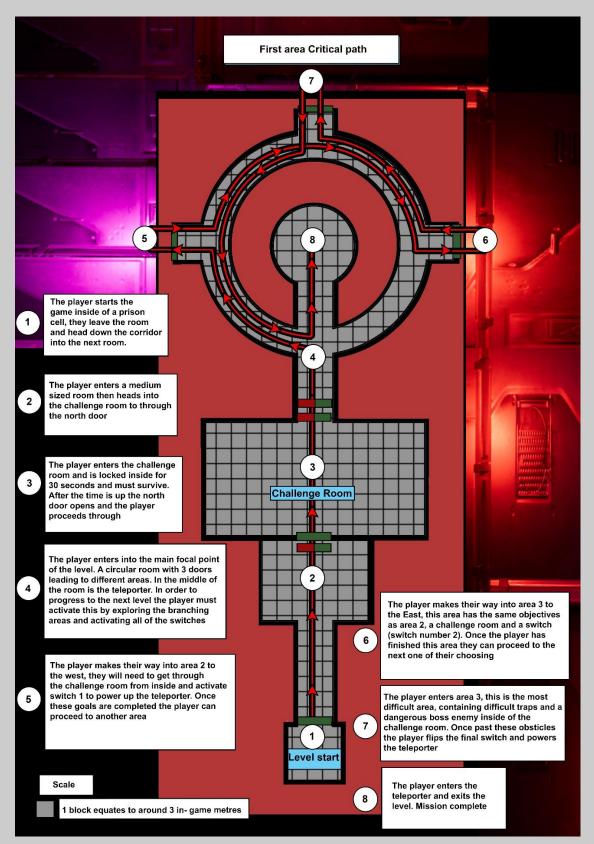
Area four pickup map: contains loot, an infinite respawning ammo pickup, four infinite respawning health pickups, checkpoints, and a weapon upgrade



Maps: Critical path

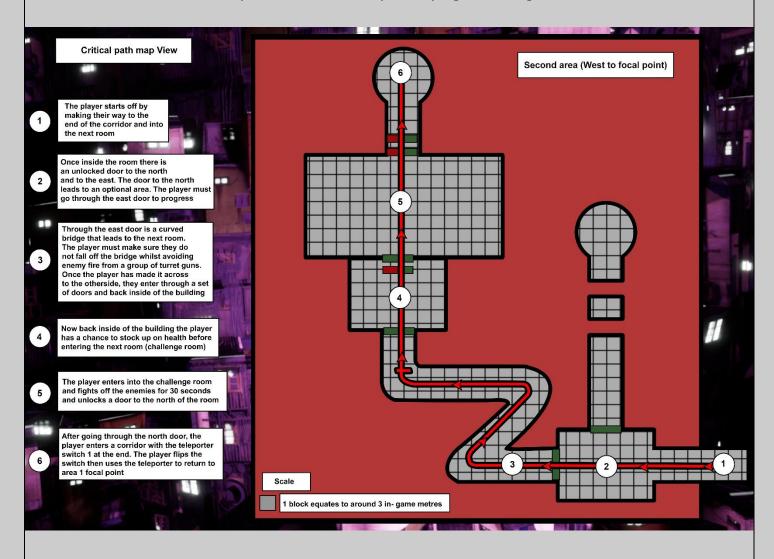
Focal Point Location (area one)

This is the area one map to show the critical path to progress through the level:



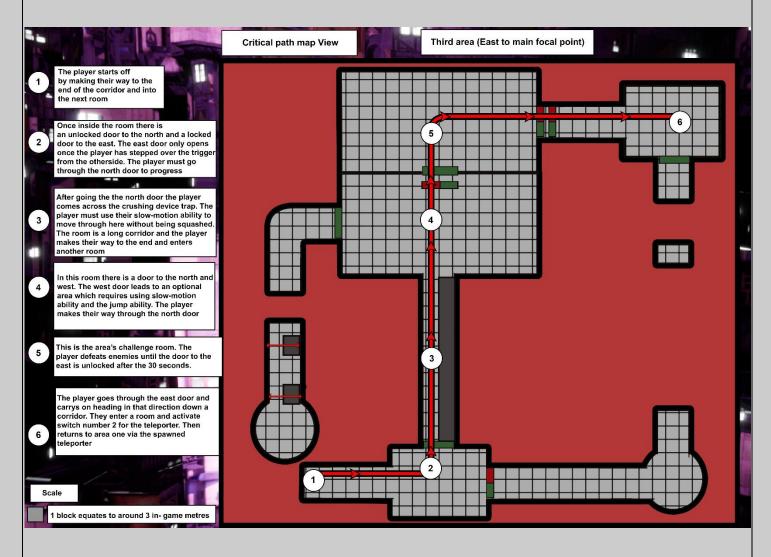
Area two critical path map:

This is the area two map to show the critical path to progress through the level:



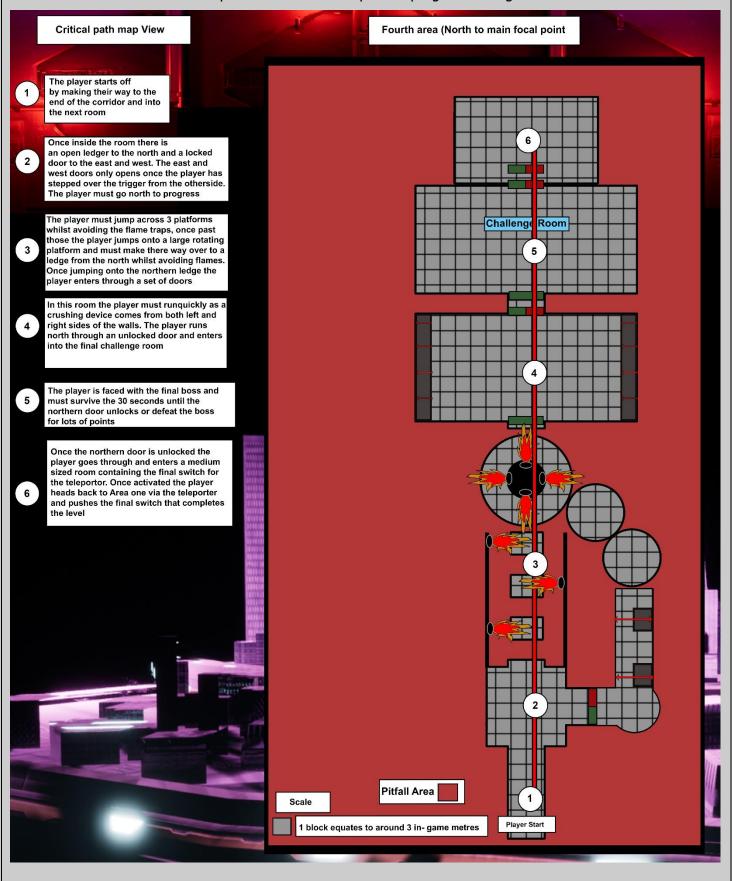
Area three critical path map:

This is the area three map to show the critical path to progress through the level:



Area four critical path map:

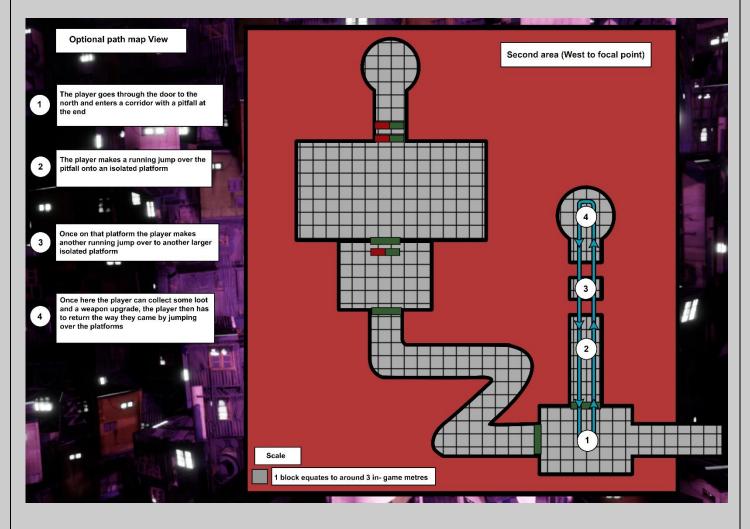
This is the area four map to show the critical path to progress through the level:



Maps: optional path

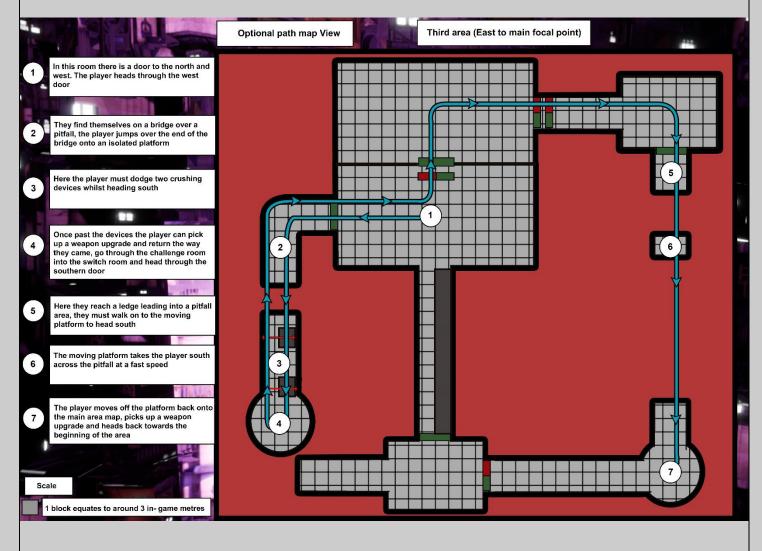
Area Two optional path map:

This is the optional path to acquire the weapon upgrade in area two



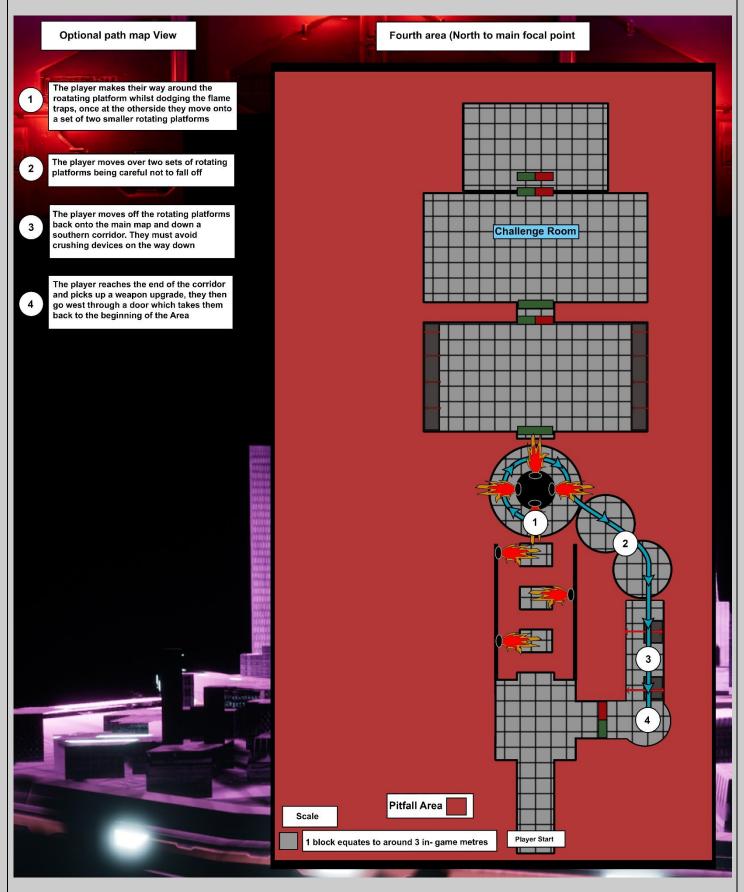
Area Three optional path map:

This is the optional path to acquire the weapon upgrades in area three



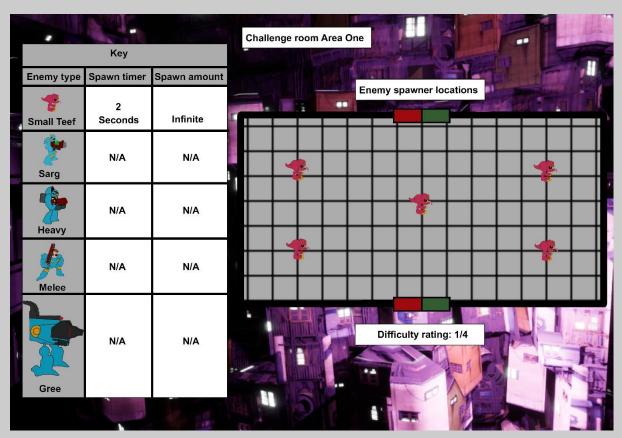
Area Four optional path map:

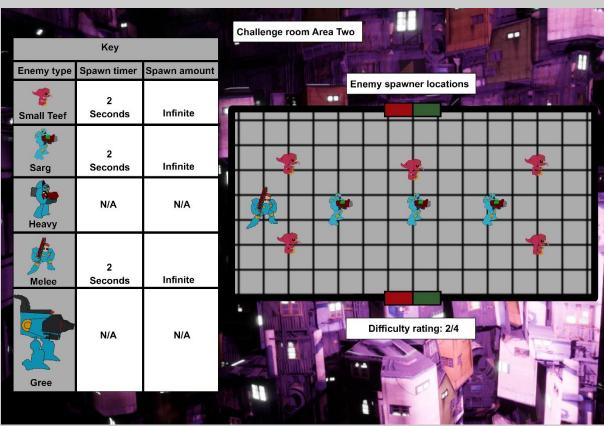
This is the optional path to acquire the weapon upgrade in area four

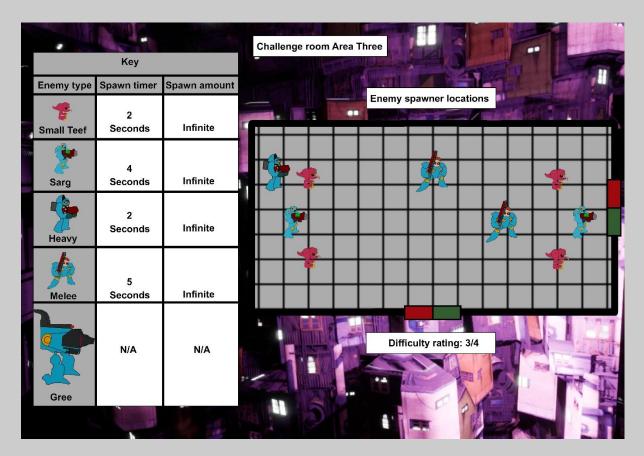


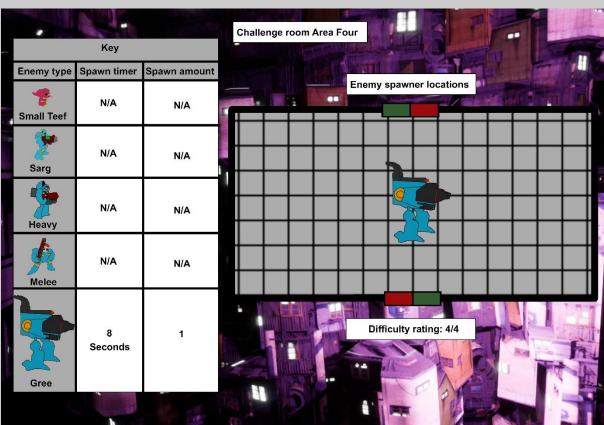
Challenge Room Designs

Maps to show each area's challenge room enemy spawn layouts



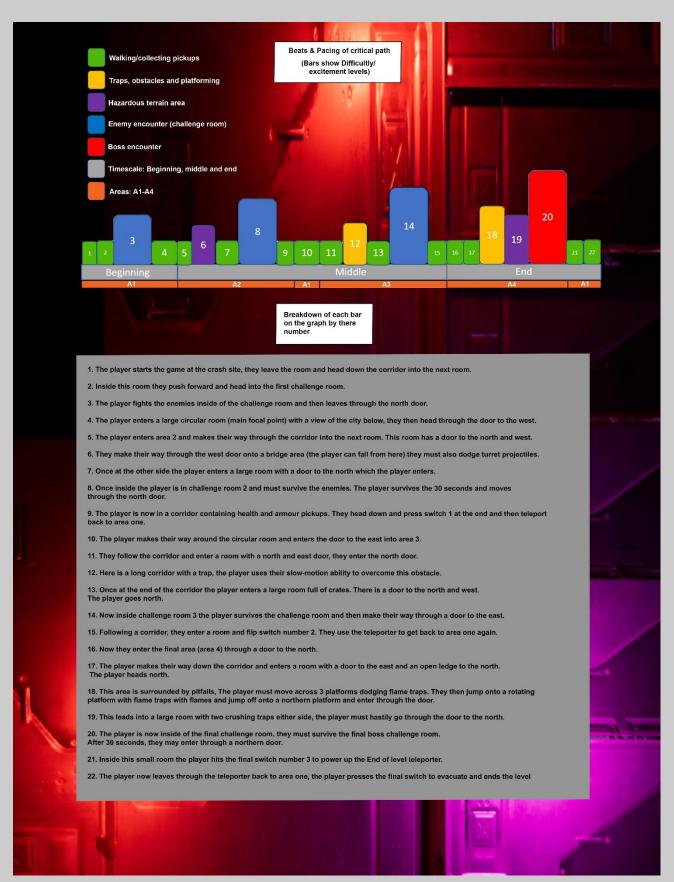




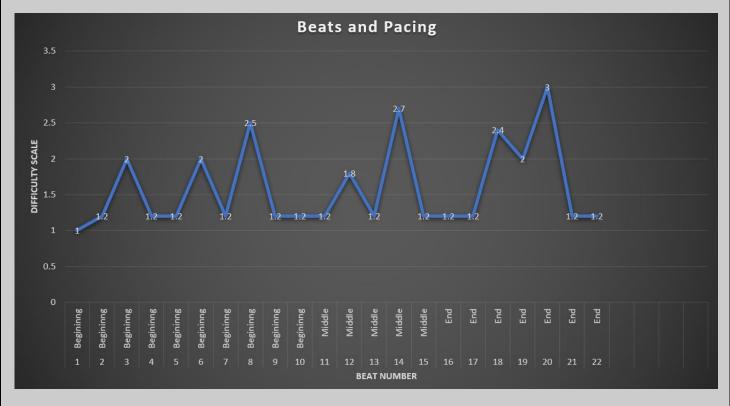


Critical Path Analysis

This graph shows the beats and pacing of the critical path, showing the excitement/difficulty levels whilst playing through the level

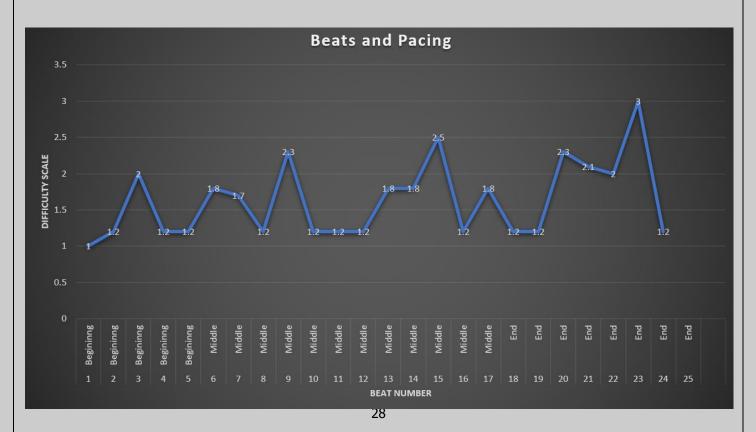


This graph also shows the beats and pacing of the critical path, showing the excitement/difficulty levels whilst playing through the level

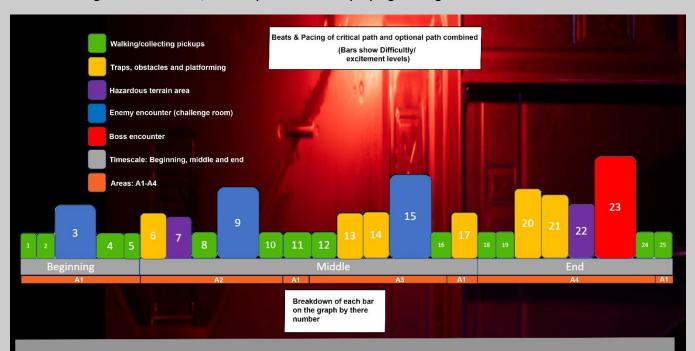


Critical Path and Optional Path Combined Analysis

This graph shows the beats and pacing of the critical path, showing the excitement/difficulty levels whilst playing through the level



This graph also shows the beats and pacing of the critical path and optional paths combined, showing the excitement/difficulty levels whilst playing through the level



- 1. The player starts the game at the crash site, they leave the room and head down the corridor into the next room
- 2. Inside this room they push forward and head into the first challenge room.
- 3. The player fights the enemies inside of the challenge room and then leaves through the north door,
- 4. The player enters a large circular room (main focal point) with a view of the city below, they then head through the door to the west.
- 5. The player enters area 2 and makes their way through the corridor into the next room. This room has a door to the north and west.
- 6. The player goes through the door to the north and enters a corridor with a pitfall at the end, the player makes a running jump over the pitfall onto an isolated platform.

 Once on that platform the player makes another running jump over to another larger isolated platform, the player can collect loot here and a weapon upgrade, they then make their way back over the platforms into the first room of area two.
- 7. They then make their way through the west door onto a bridge area (the player can fall from here) they must also dodge turret projectiles.
- 8. Once at the other side the player enters a large room with a door to the north which the player enters
- 9. Once inside the player is in challenge room 2 and must survive the enemies. The player survives the 30 seconds and moves through the north door.
- 10. The player is now in a corridor containing health and armour pickups. They head down and press switch 1 at the end and then teleport back to area one.
- 11. The player makes their way around the circular room and enters the door to the east into area 3.
- 12. They follow the corridor and enter a room with a north and east door, they enter the north door.
- 13. Here is a long corridor with a trap, the player uses their slow-motion ability to overcome this obstacle.
- 14. Once at the end of the corridor the player enters a large room full of crates. There is a door to the north and west. The player finds themselves on a bridge over a pitfall, the player jumps over the end of the bridge sothwards onto an isolated platform. Here the player must dodge two crushing devices whilst heading south. Once past the devices the player picks up a weapon upgrade and returns back to the crate room.
- 15. The player now enters the door to the north. Now inside challenge room 3 the player survives the challenge room and then make their way through a door to the east.
- 16. Following a corridor, they enter a room and flip switch number 2. They then head soth through a door that leads to a ledge over a pitfall.
- 17. The player moves onto a moving platform that quickly takes the player south back onto the main map, the player then collects a weapon upgrade heads west down a corridor and back into the first room of the area. They then make their way back to area one focal point.
- 18. Now they enter the final area (area 4) through a door to the north.
- 19. The player makes their way down the corridor and enters a room with a door to the east and an open ledge to the north. The player heads north.
- 20. This area is surrounded by pitfalls, The player must move across 3 platforms dodging flame traps. They then jump onto a rotating platform with flame traps with flames and onto two more rotating platforms, they then go south down a corridor avoiding crushing devices and collect a weapon upgrade at the end. They then head west through a door into area four's first area and heads north again.
- 21. This area is surrounded by pitfalls, The player must move across 3 platforms dodging flame traps. They then jump onto a rotating platform with flame traps with flames and jump off onto a northern platform and enter through the door.
- 22. This leads into a large room with two crushing traps either side, the player must hastily go through the door to the north.
- 23. The player is now inside of the final challenge room, they must survive the final boss challenge room. After 30 seconds, they may enter through a northern door.
- 24. Inside this small room the player hits the final switch number 3 to power up the End of level teleporter.
- 25. The player now leaves through the teleporter back to area one, the player presses the final switch to evacuate and ends the level

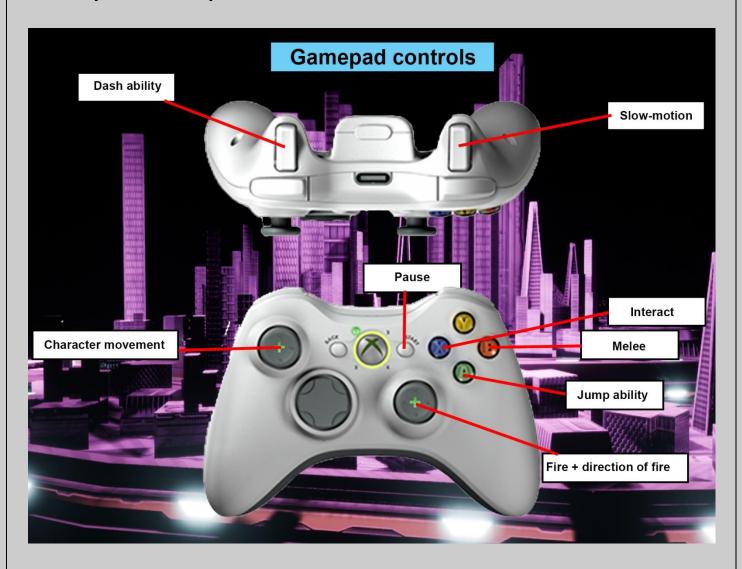
Story Element Locations

Initial starting point for the player (a prison cell) this will reveal why the player is captured, where he is captured and what he/she needs to do to escape.

The next and last scene will be when the player enters the teleporter, escaping the enemy base.

Controls

Player Controls Map

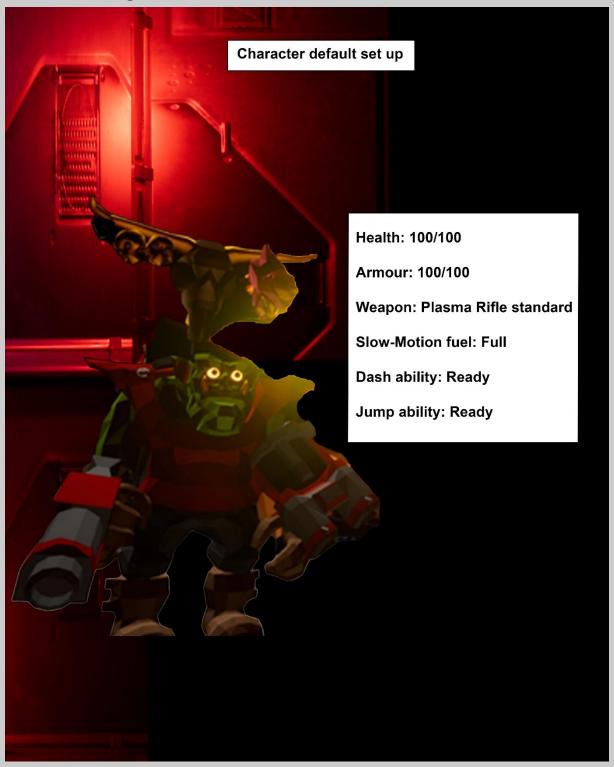


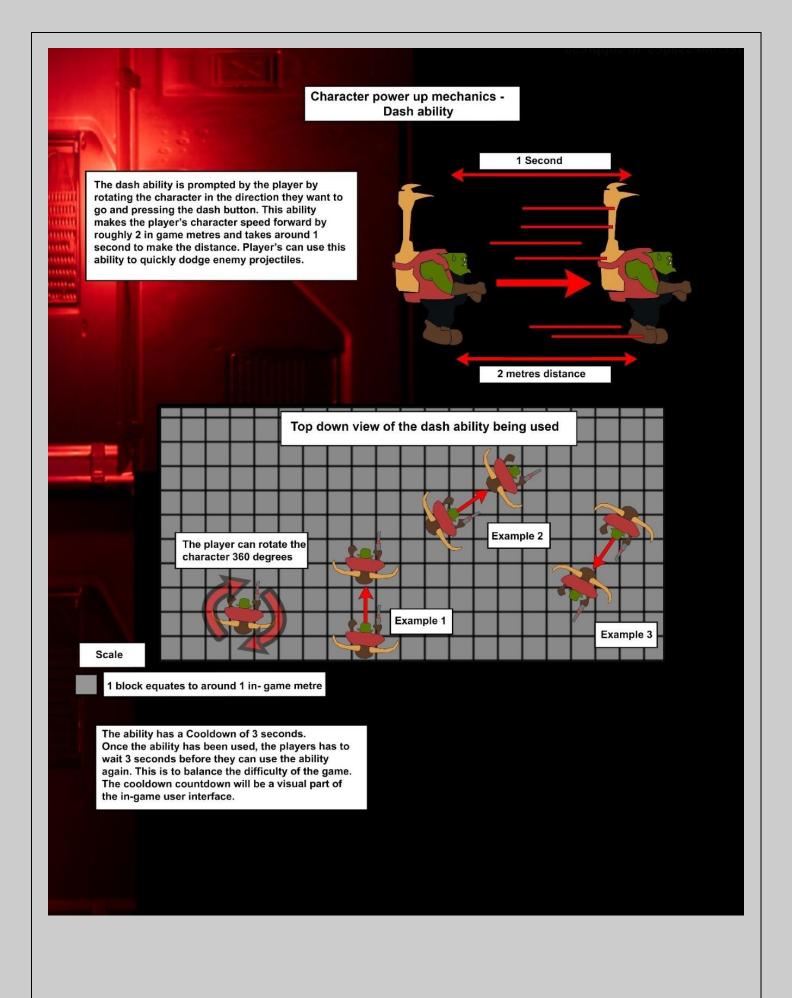
Player Camera

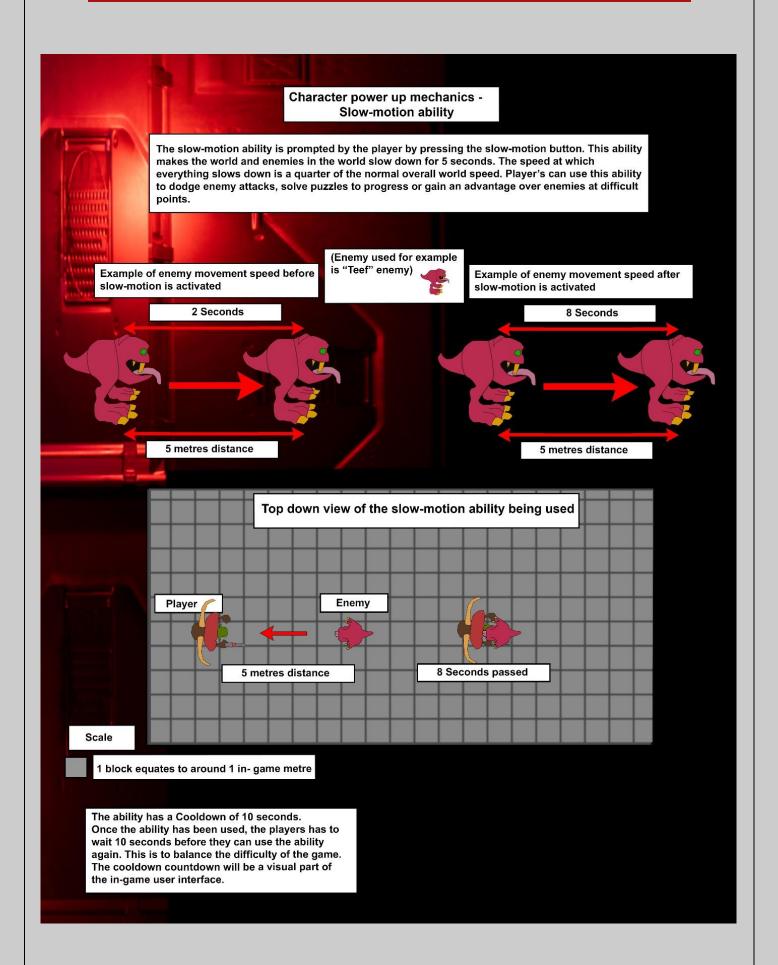
Top down third person perspective

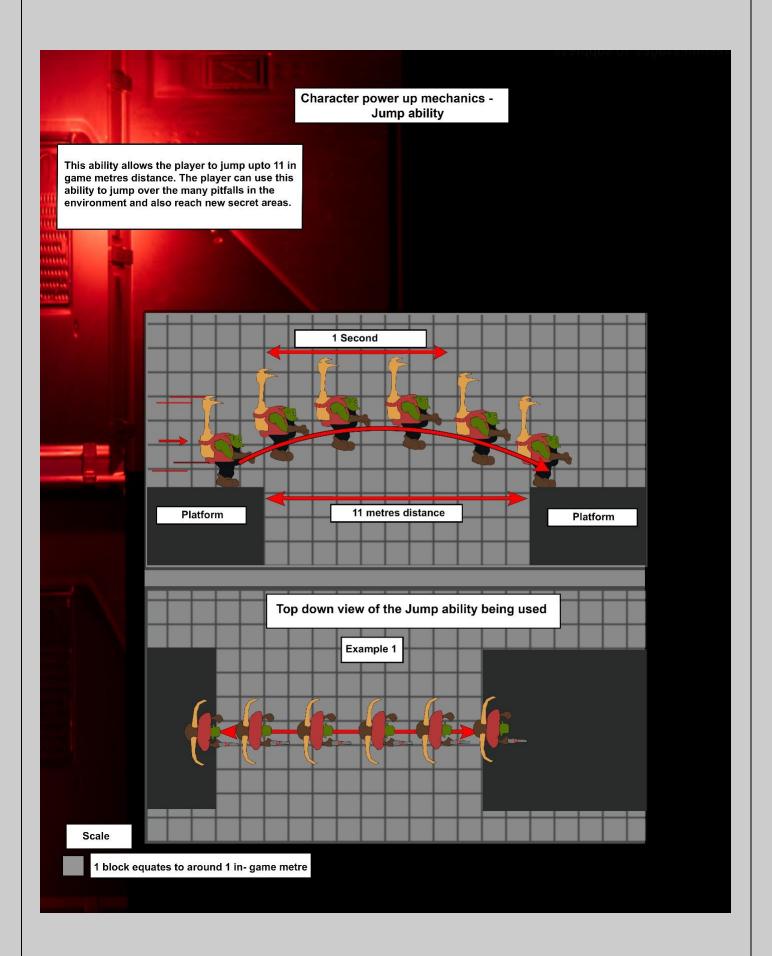
Design mechanics

Character design mechanics & abilities

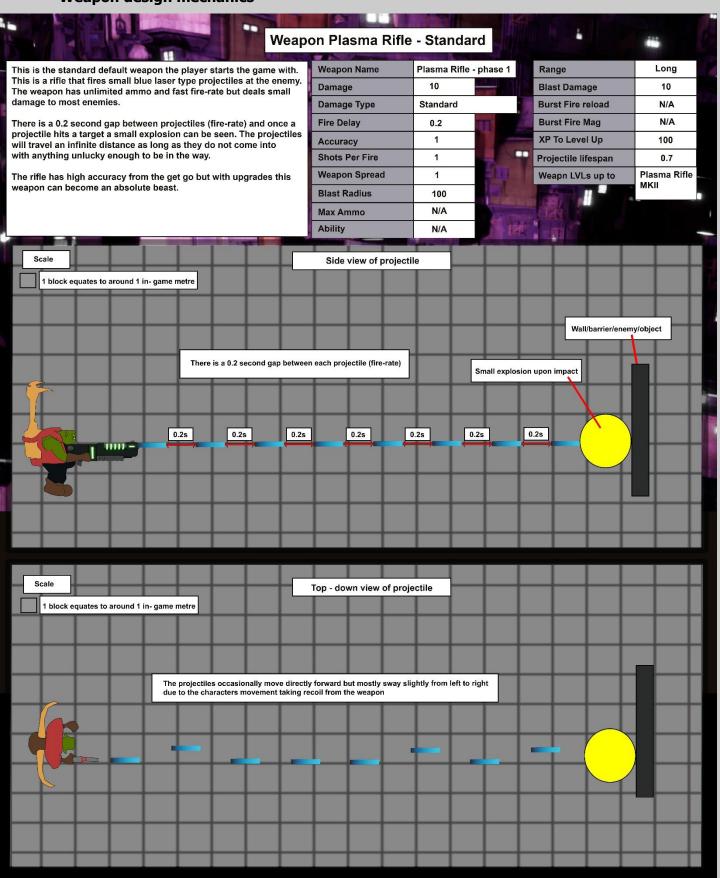


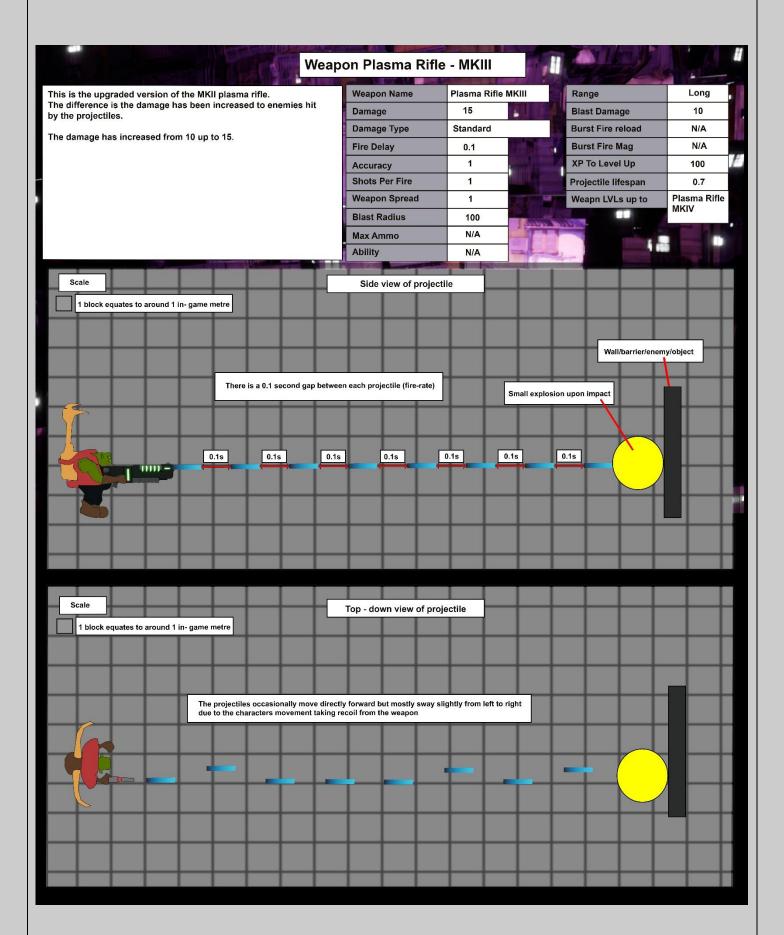


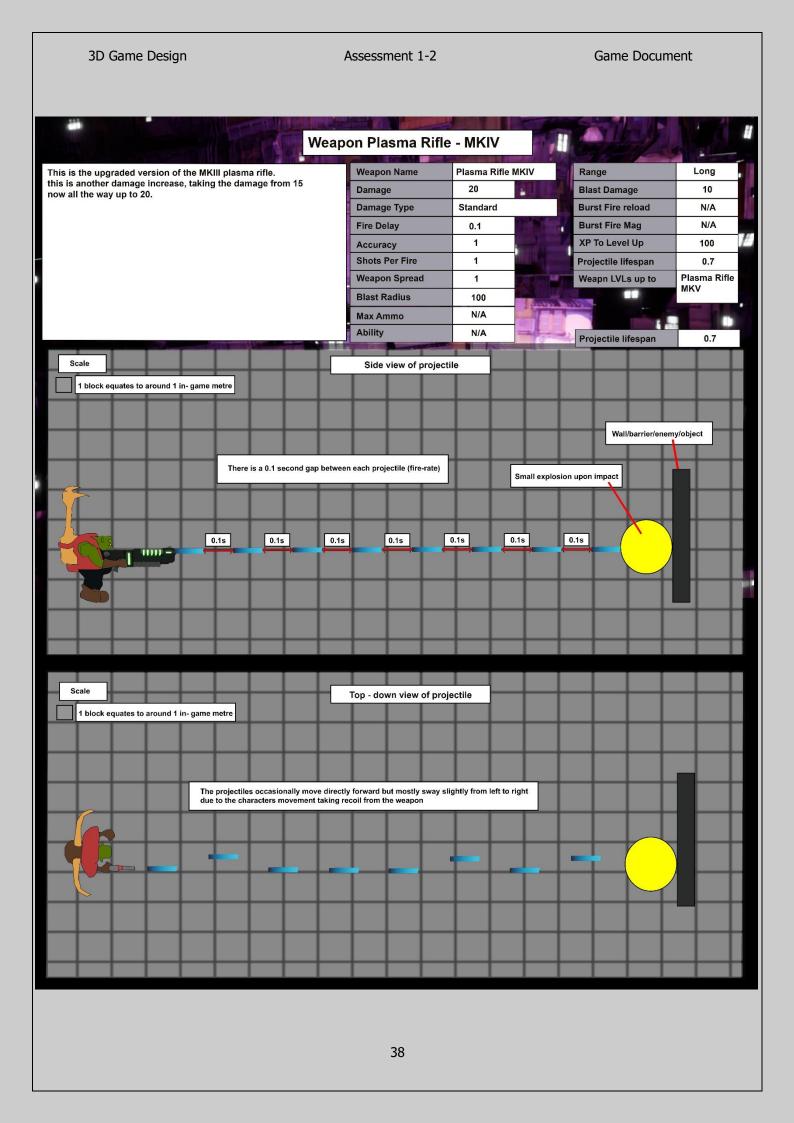


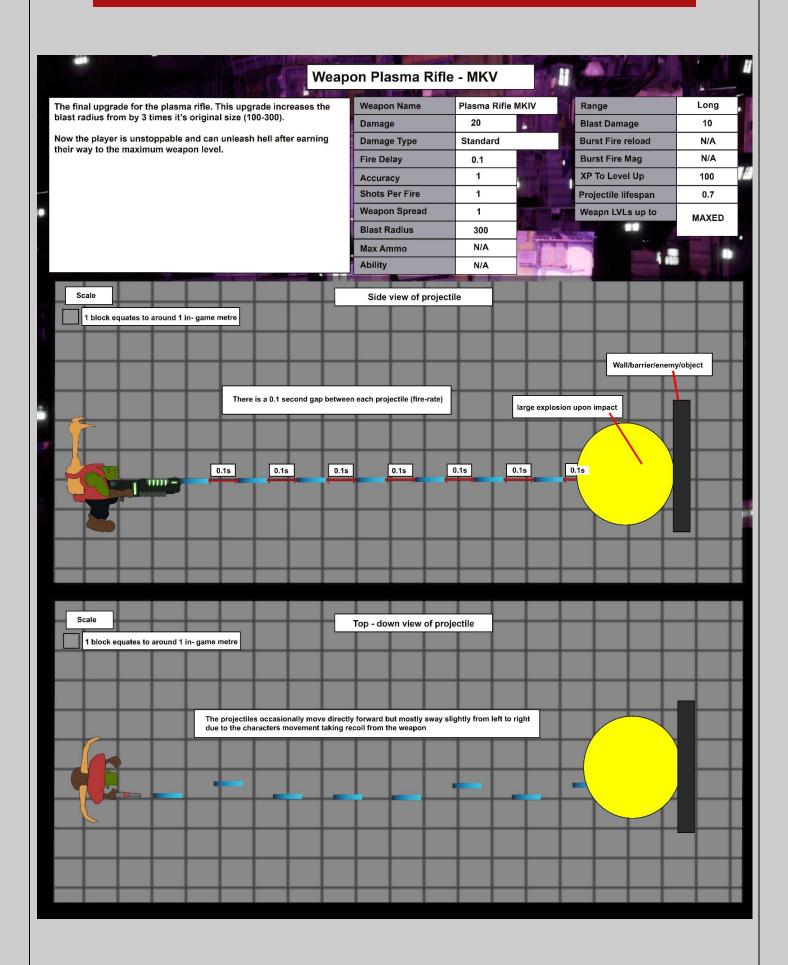


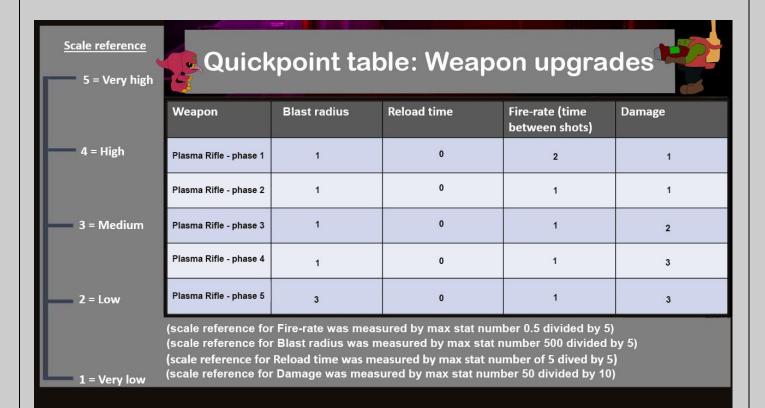
Weapon design mechanics





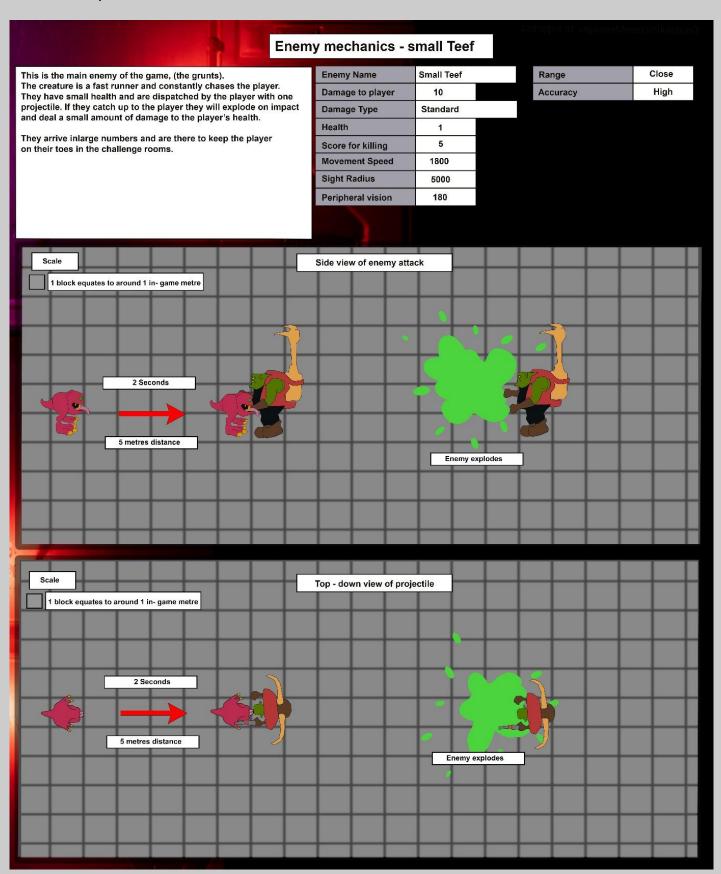




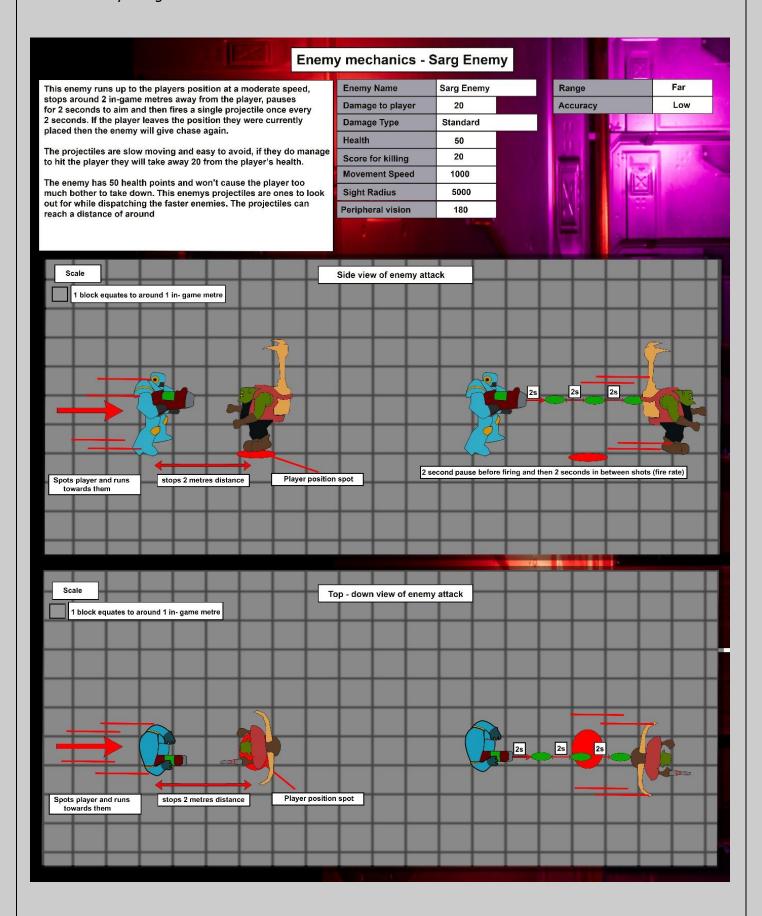


Enemy design mechanics

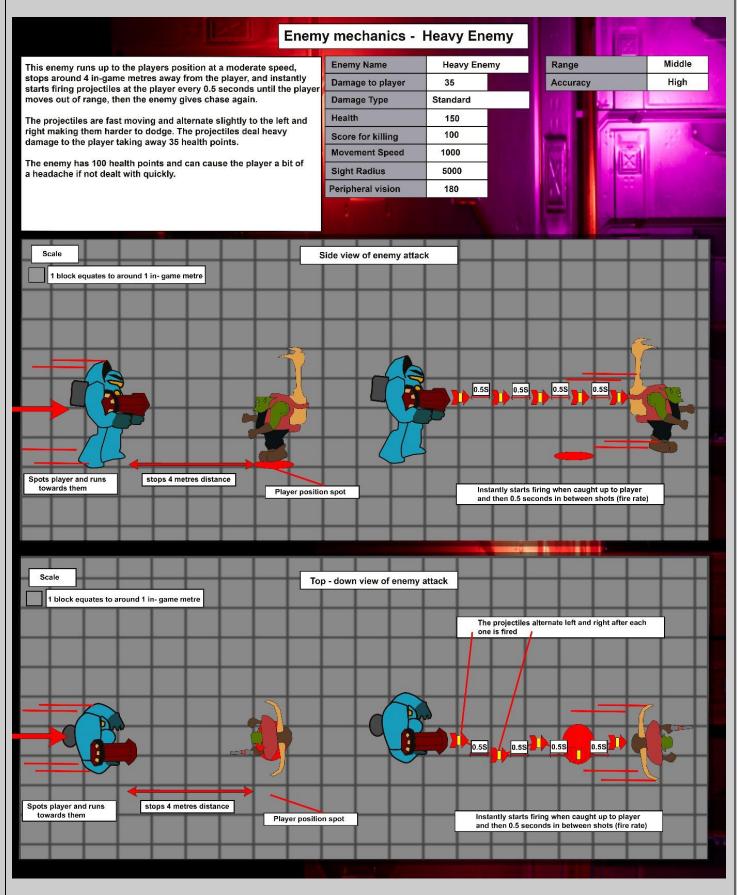
Enemy: Small Teef



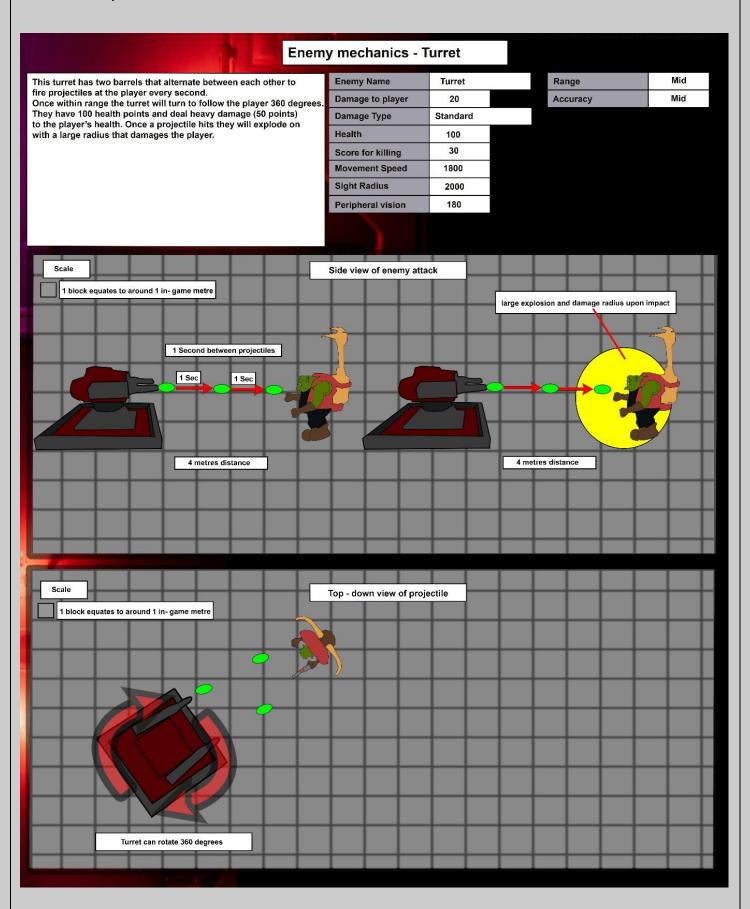
Enemy: Sarg



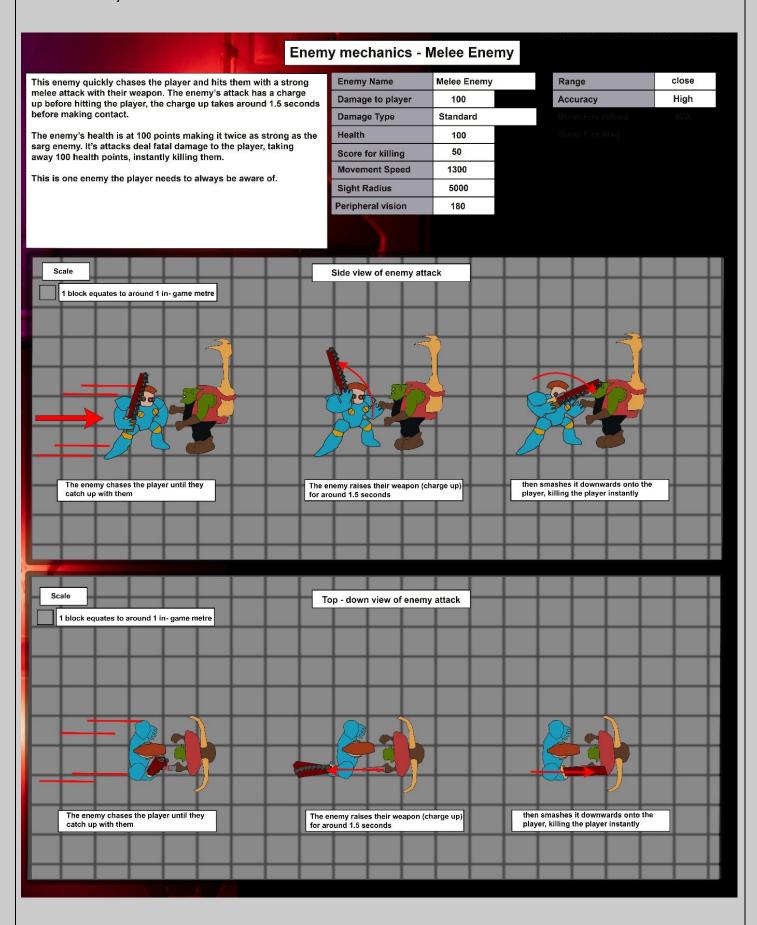
Enemy: Heavy



Enemy: Turret



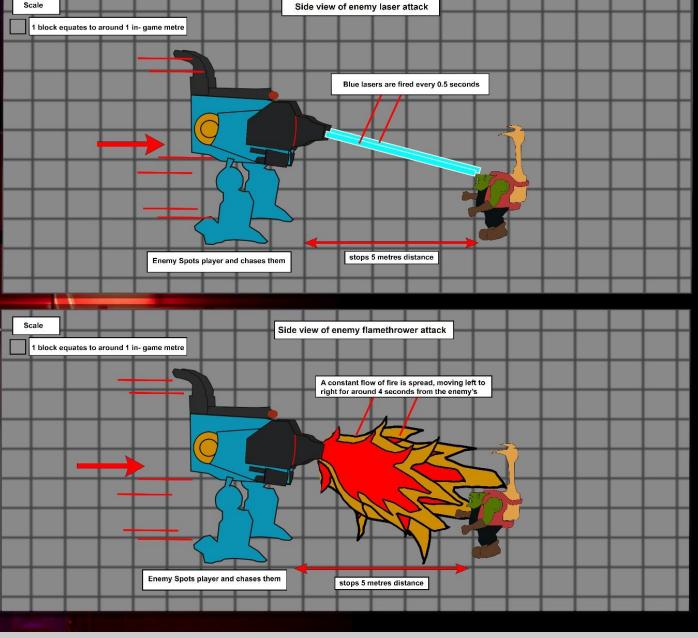
Enemy: Melee

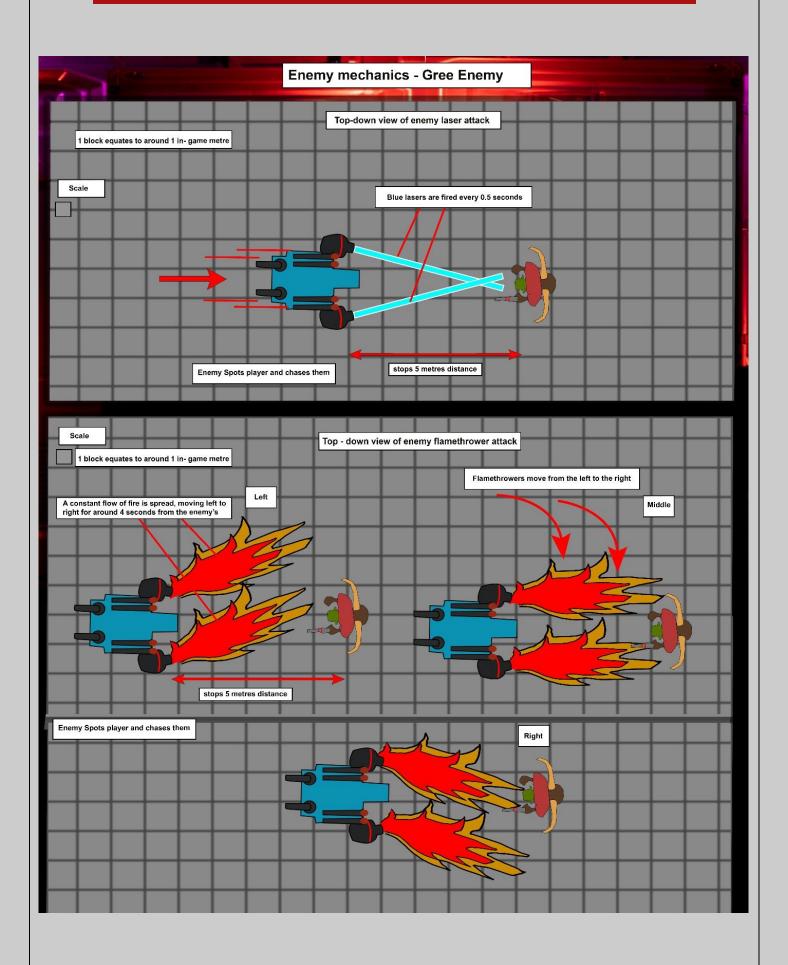


every 0.5 seconds. The lasers reach the full 5 metre length between th player and take 5 health points away for every hit. This enemy also packs two flamethrowers which have the same reach as the lasers but also a much wider spread (around 1 in game metre for each turret width wise). The enemy slwoly moves the flamethrowers from left to right for 4 seconds before stopping. Every second the player is hit with the flames, 5 health points are The enemy has a high amount of health points (2000) but is quite a slow mover with a speed of only 500.

Enemy Name	Gree Enemy
Laser damage to player	5
Flamethrower damage to player	5
Damage Type	Standard
Health	2000
Score for killing	1000
Movement Speed	500
Sight Radius	5000
Peripheral vision	180

Range	Middle
Laser Accuracy	High
Flamethrower Accuracy	Low



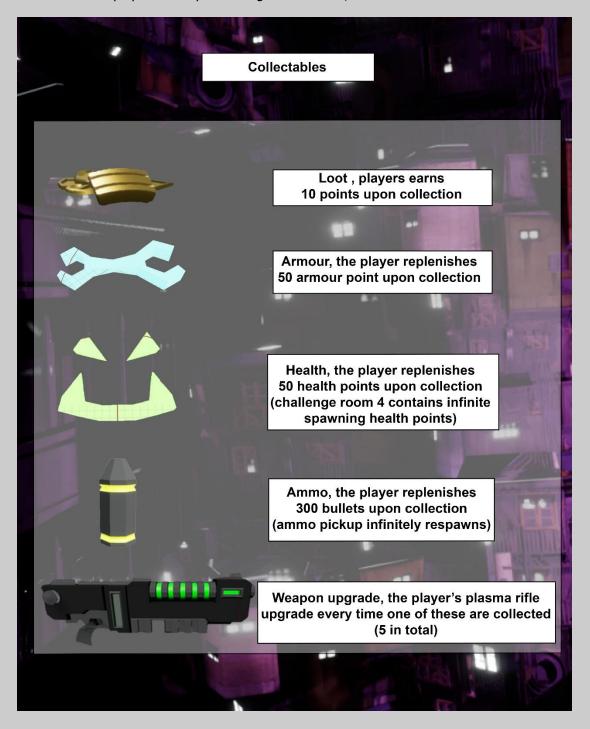


Rewards and progress

The player is rewarded by exploring the environments, overcoming traps and obstacles by using their abilities and uncovering weapon upgrades and loot. The main focus is the challenge rooms designed for the player to rack up as many points as they can through each run.

Collectables

Collectables the player can acquire throughout the level, some hidden in secret areas



Challenge rooms

The main focus to accumulate and rack up points to count towards the player's total score



Total score

The final accumulated score (one to beat with multiple playthroughs)

