

# Game Design Document

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## Game Overview

### Working Title

Incognito

### Elevator Pitch

A unique cyberpunk rogue-like which allows the player to explore a procedural level system in first person using a variety of gadgets. If the player wants a challenge, they can try to run and gun through the game, but this will trigger a punishing lockdown mechanic which would challenge even the best players.

### Concept

**Genre** – Stealth/Rogue-Like

**Target Audience** – People that enjoy other rogue-likes or stealth games and enjoy a cyberpunk world

**Platforms** – PC

### Theme and Setting

Cyberpunk Noir

### Our Team

Arnav Mehta – Project Manager/Lead Tech

Daniel Hemming – Lead Art

Jack Shaw – Lead Design

Amrit Cheema – Senior Tech

Emmanuel Yeboah – Senior Art

Andrew Tsang – Senior Art

Amy Cotton – Senior Design

Christian Preston – Junior Tech

Caitlin Fawcett – Junior Character Art

Callum Huxtable – Junior Character Art

Sofia Mashkova – Junior Character Art

Emily Ferguson – Junior Concept Art

Kylie Phillips – Junior Concept Art

Tom Hutton – Junior Environment Art

Annabel Maw – Junior Hard Surface

Chris Hopkins – Junior Design

Sam Redfern – Junior Design

Lemarr Moffatt – Junior Design

Guvvy Atwal – Junior Design

Daniel Pires – Junior Design

Billy Green – Junior Animator

Aniket Bansal – Junior Animator

## **Game Setting**

### **Story**

The story of Incognito involves the infiltration of a corporate tower in the centre of a sprawling, rundown city. Held within Butler Tower is a tree of data, holding the last hope of rebuilding society for all who are oppressed by Prometheus; the shadowy corporation that operates within the tower itself. Taking control of one of two main characters, the players are tasked with finding their way through the tower as stealthily (or not) as they like all with the ultimate objective of retrieving the all-important data tree.

### **Locations**

The player is inside the Butler Tower, home and operating centre of Prometheus. This is where most of the game takes place. The player will sneak and kill their way through botany labs, data centres, offices and armouries.

### **Characters**

Two protagonists – you never heard them enter; you never saw them leave.

Maverick – The stone-cold silent killer. Maverick holds a grudge against Prometheus after a raid on his community left him abandoned and close to death. Now a self-taught master assassin, he has shouldered the burden to recover the data tree held by Butler Tower.

Noire - The gunslinger. Strong and deadly, she ties herself to no one, relies only on her own instincts. She seeks the data tree of Butler Tower as a means to liberate the slums, her home, away from the oppression of Prometheus.



# Gameplay & Mechanics

## Gameplay

### Game Progression

Each full 'level' is a sequence of procedurally generated room modules that may spawn in any valid sequence (Valid being determined by possible room connections on each side). Progression in the game is achieved by successfully navigating a full set of room modules and advancing to the next level. Levels get progressively longer and more difficult the further through the game the player traverses, encouraging players to conserve their gadget usage.

### Objectives

Within each room module in the sequence, the player must find their way through to get closer to the final room, and the data tree. The progression to the next room is always locked by a key that is located at one of several potential locations within the room. In order to find the key, the player must remain hidden as they move throughout the room, or silently kill the enemies in order to get closer to the key and subsequent escape from the room. If the player is detected by an enemy, the room will enter 'Lockdown' mode, in which the doors will remain locked until all enemies in the room have been killed and the key has been found. Enemies may be distracted or slowed down with the limited gadgets at the players disposal.

It is possible to complete a room and progress without killing all enemies, but only if the player remains undetected and avoids Lockdown mode.

## Mechanics

### Physics & Movement

**Walking** – The default movement setting will be walking; this will be relatively quiet so that the player isn't heard from long distances by the AI.

**Sprinting** – The player will have the ability to sprint, this will be limited by the player attributes system to prevent players from just running around the level. This will be more audible than walking to punish players that try to sprint near enemies.

**Crouching** – This will be the quietest movement for the player, a bit slower than walking but will allow players to get close to the enemies presenting them with instant kill melee attacks for preserving bullets and rewarding stealth.

**Leaning** – Leaning will allow the player to look around corners without triggering any of the AI sight responses, this is crucial to provide the player with options in a first-person environment.

### Objects

**Gadgets** – The player will have access to a variety of gadgets to aide them in getting through the levels, these will range from non-lethal to lethal, this factor will determine their rarity, maximum capacity and cost.

**Doors** – There will be doors between each of the levels, this will assist in the procedural system linking each level together. They will lock behind the player preventing them from backtracking through the run, they will also be locked when the player triggers 'lockdown'.

**Keys** – Keys will be hidden throughout the rooms which will allow the player to get through the door should a lockdown be triggered, allowing them to remain a pacifist.

### Actions & Combat

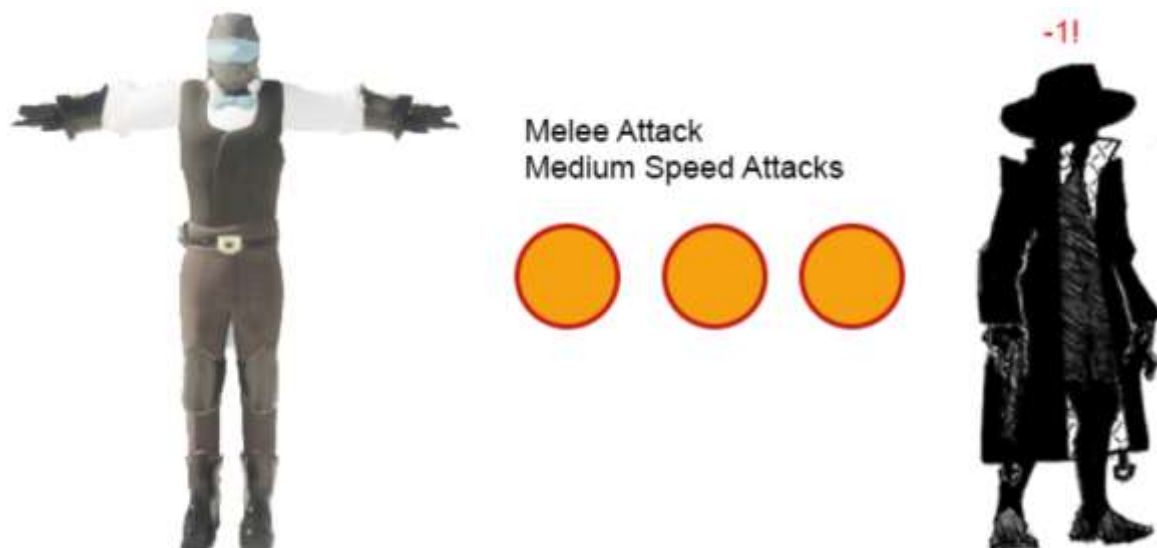
**Player Shooting** – The player will have access to a silenced gun allowing them to take out enemies quietly, should the player trigger 'lockdown' this will be their best option for survival. However, the

player will be limited in their access to ammo so they can't beat the game just shooting every enemy they see.

**Enemy (Ranged)** – This will be the standard enemy within the game, they will carry an assault rifle that fires in three-round bursts as to not quickly kill a max health player. They will have standard sight and hearing and will tend to move away from the player should they get too close to prevent melee attacks.



**Enemy (Melee)** – The melee enemy will carry a melee weapon and attempt to constantly gain ground on the player when detected, it might be worth reducing their sight and improving their hearing to make them a bit more unique.

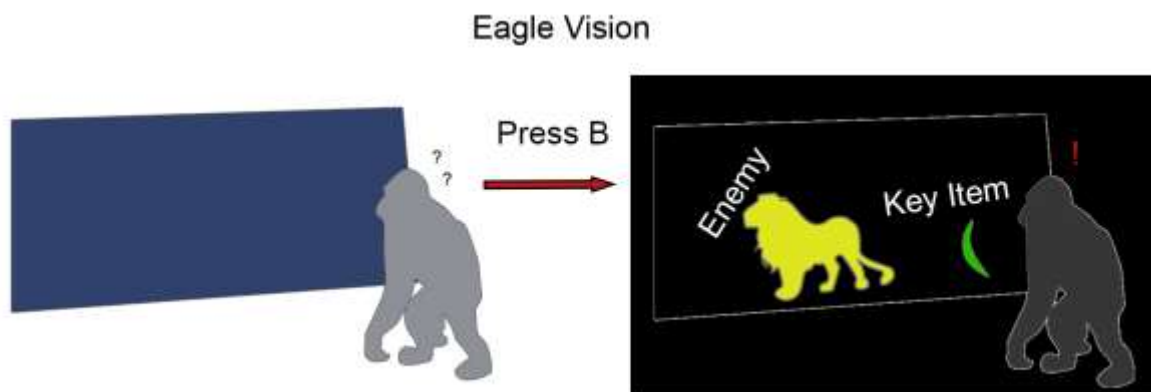


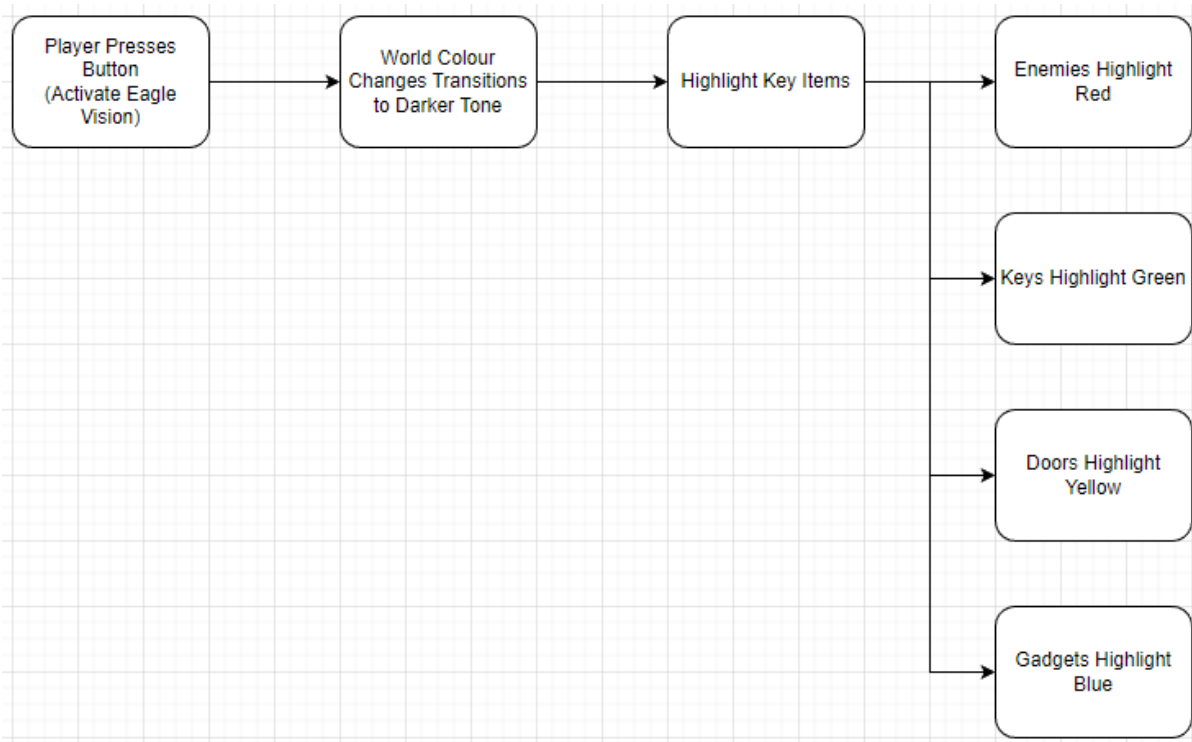
**Enemy (Sniper)** – The sniper enemy will wield a sniper and stay close to their spawn unlike the other two active enemies, they could have a longer sight stat but a reduced hearing to compensate for this. Their damage will be high and punishing for any player caught out by them, ending a lot of runs before health upgrades.



**Lockdown** – The lockdown mechanic is a system that will take place when the player has been caught out by the enemies, if an AI reaches a button the lockdown will be triggered. This will reduce the lighting in the room and any remaining lights will be red, all enemies will be alerted to the players location and the door will lock. The only way out will be to clear the room of enemies or find a key to leave, however leaving during a lockdown will start the next room in lockdown to heavily punish the player for getting caught.

**Eagle Vision** – This ability will be a system used in many games to assist the players in exploration and identifying the goals of the game without explicitly stating them. The player will always have this ability to help find doors, enemies, gadgets and the key. This ability will be activated/deactivated at the press of a button or upon the player shooting, placing a gadget or receiving damage, aside from this the duration will be unlimited.





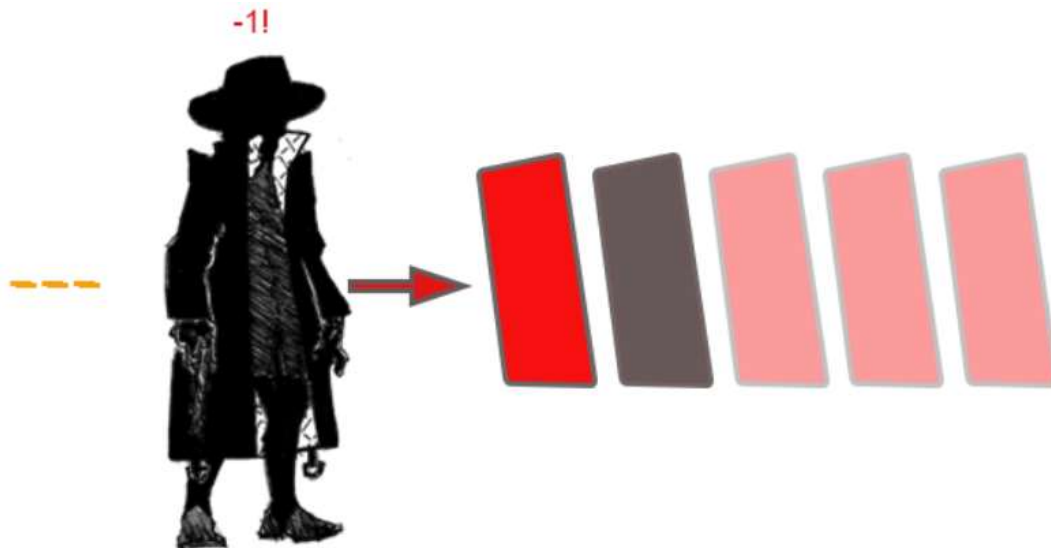
### Player Attributes

Some of the player attributes that have been designed are intended to be upgraded throughout the game, when the player returns to the shop in the subway between runs they will have a chance to spend the points earned from clearing rooms of enemies on upgrading their character. The attributes that can be upgraded like this will be shown clearly in their diagrams and descriptions.

**Health** – When determining the players health, we initially agreed on using a numerical value starting at 50 health the player can upgrade this between runs in the train station up to a maximum of 150. This was changed to a system of health chunks, this will aide in simplifying the damage system and balancing within the game. The player will start with 2 chunks of health as to make the early game quite tough when caught out by the enemy, this will be upgradable to 6 chunks which will give the player more survivability but not to the extent of a regular first-person shooter (FPS).



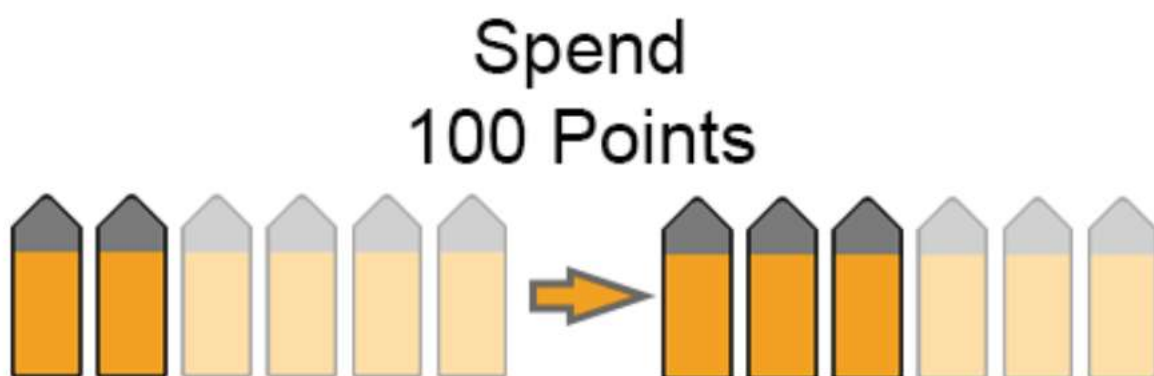




**Health Regeneration** – We have considered adding an upgradable health regeneration stat, this would limit the amount of health a player can health between fights. Starting this at one chunk would always ensure the player is deterred from fighting and sticking to stealth, when upgraded the player would eventually be able to get back to maximum health between fights allowing long time players to be a bit more careless.

**Starting Bullets** – Having a stat to control the starting bullets rather than having a generic ammo shop would allow the player to start each run with a set amount as they progress through the game rather than starting each run with a random amount/remembering to buy at least one bullet.

We have not come to a set amount but there might be extra capacity for the player to carry extra bullets external to the magazine, but this amount wouldn't be upgradable as we want to restrict the players ammo to prevent a run and gun attitude early on.



**Gadget Capacity** – A few ideas occurred around gadget capacity due to some gadgets being inherently more powerful than others, originally it was designed so that they player would hold: 1x Invisibility, 1x Berserk Dart, 3x Traps, 3x Emp, 5x Smoke and 5x Sound gadgets.

**Player Speed** – We contemplated adding player speed but quickly decided against this to avoid making the game feel like a standard FPS rather than a stealth game.

**Jump Height** – Similar to player speed we decided against using jump height as we would have to ensure each level has a reason for additional jump values.

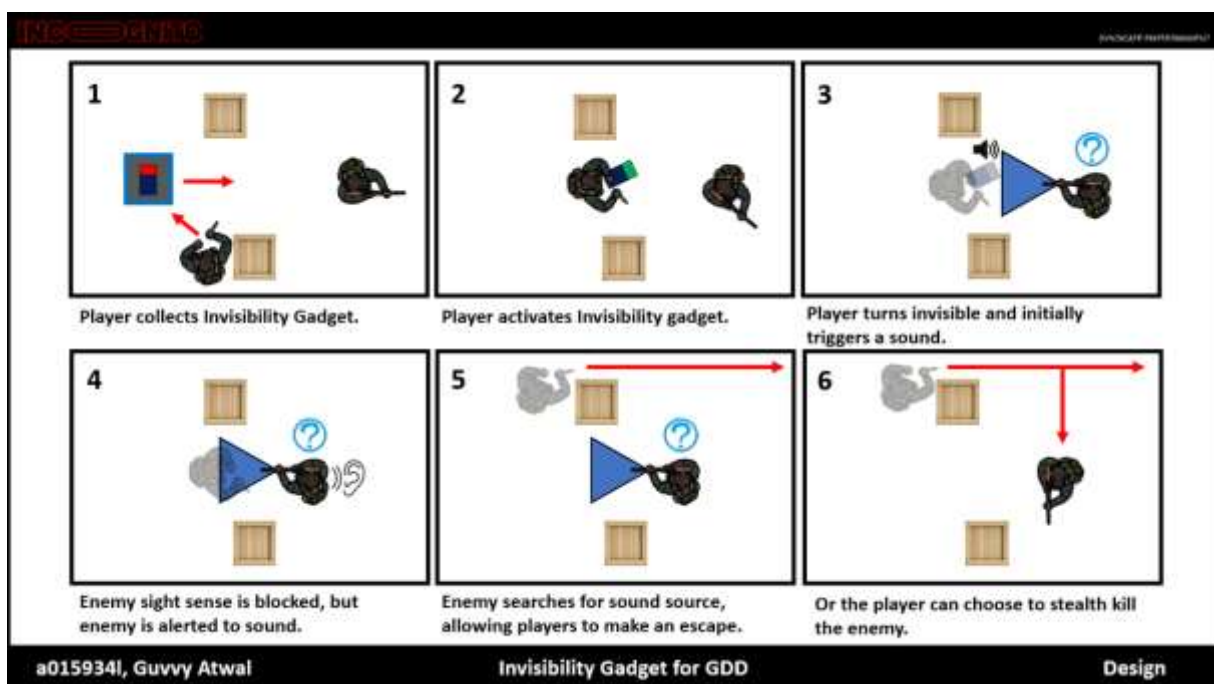
## Gadgets



This is the first iteration flowchart for the gadget system, the original idea was that the player can only possess one gadget at a time to make them think strategically and promote usage so you can cycle through them each level. This has been changed to an inventory system where depending on the style of gadget the player can only hold a maximum amount of each gadget, non-lethal distractions having a large capacity whereas potentially lethal options have a lower capacity.

## Invisibility

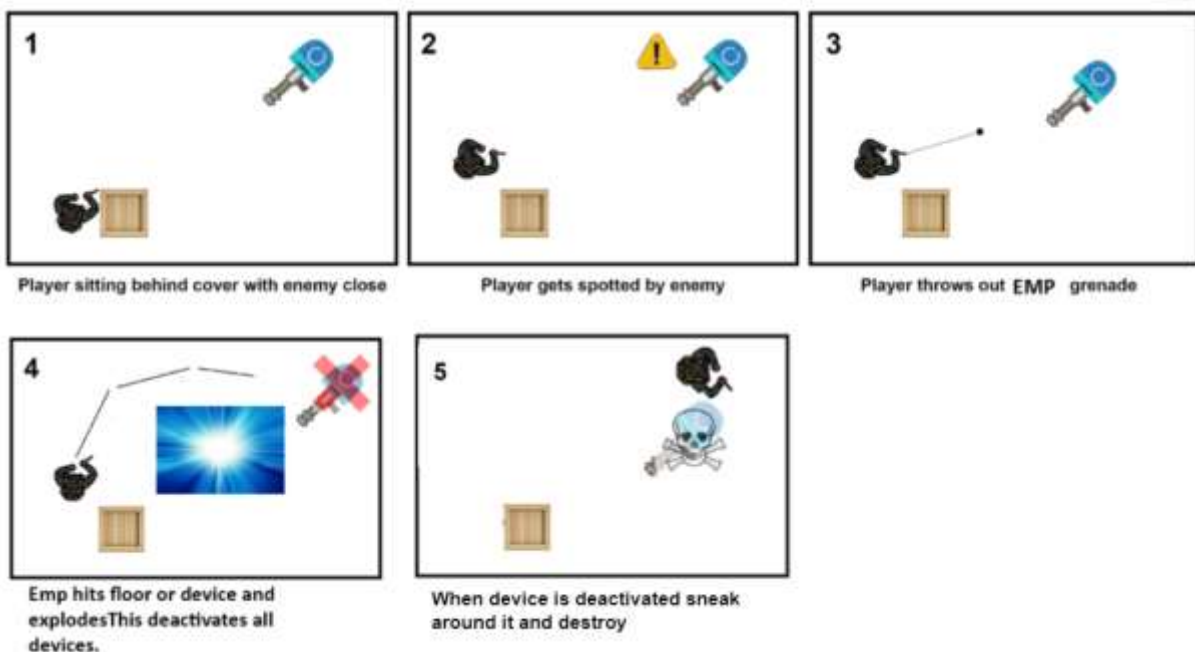
- Appearance – Cylindrical tube filled with liquid/nanomachines that leaks out onto the player upon activation
- Ability – Upon pressing the activate button the player would become translucent and no longer trigger the enemies sight sense however still trigger sound
- Drop rate – If drop rate and restrictions are in place then this gadget will appear less frequently and could be capped at only holding one at a time due to the nature of the gadget
- Balancing – Due to being a rarer drop there needs to be some balancing considerations, the fact players can still be heard does not make this all powerful however it could be further hindered with systems to deactivate upon receiving damage and the player being visible at close distances



Flowchart

## EMP

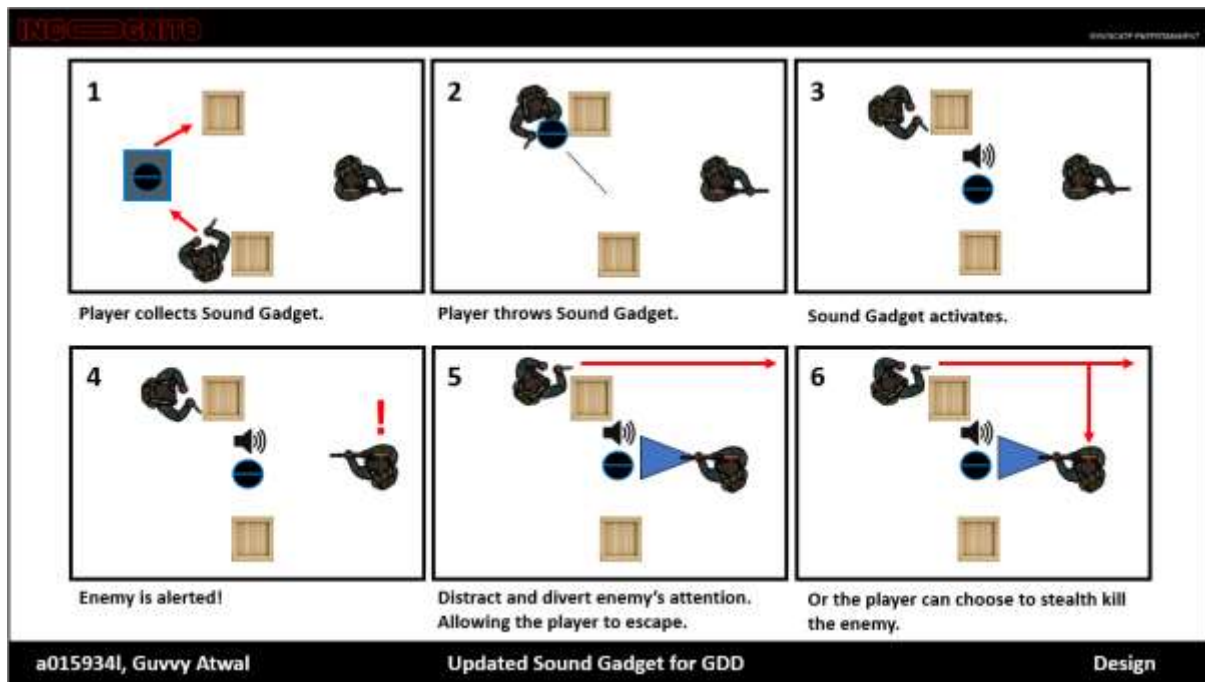
- Appearance – The base shape of the EMP should be similar to a grenade with more tech incorporated, to differentiate between the grenades in our game, this could have external wiring for decoration alongside a screen saying ‘EMP’ showing the grenade is more technical/advanced
- Ability – The device will be thrown like a grenade, upon detonating all hostiles within the area will stop moving and lose their detection senses of sight and hearing, this will be restored after a short amount of time
- Drop rate – Due to the strength of this gadget it would be a nice middle ground where it appears semi-regularly throughout the playtime as it does have the potential to be quite lethal, if there's a restriction in capacity then the player holding a max of 3 would be a generous amount.
- Balance – When balancing this object, the main factors are the detonation time, range of effect and how long it disables hostiles, this will need some in game experience but in general the detonation time should be quite fast with a small area of effect (AoE) with the effect lasting for a while



## Flowchart

### Sound Device

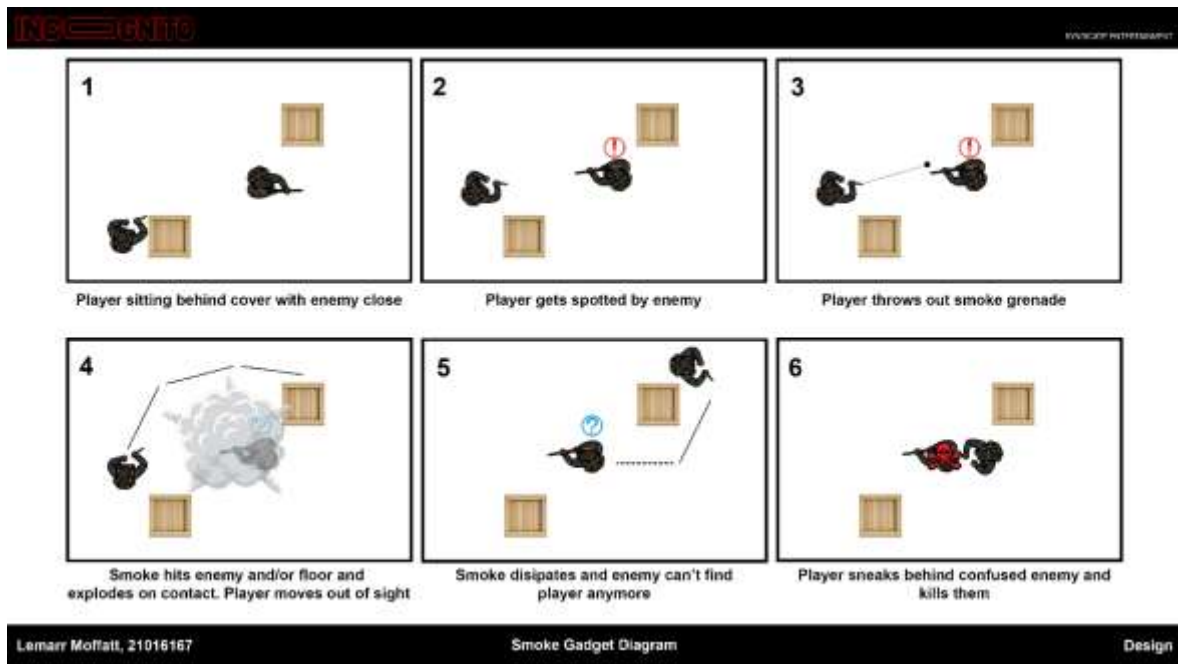
- Appearance – This gadget should resemble a handheld speaker, as there are two methods in mind for it to be either thrown like a grenade or placed like a trap this should be considered when making the asset
- Ability – The device will be thrown or placed, after the player has been given enough time to move away it will begin emitting sound, hostiles that hear this will investigate and make their way towards the device
- Drop rate – As this device is non-lethal a common drop rate and larger storage capacity can be considered
- Balance – In terms of balance a few factors can be altered such as the range of the sound and duration, regarding the range I feel that it can be quite large as you want the enemies to leave the player's path and the duration should also cater to this



Flowchart

### Smoke Grenade

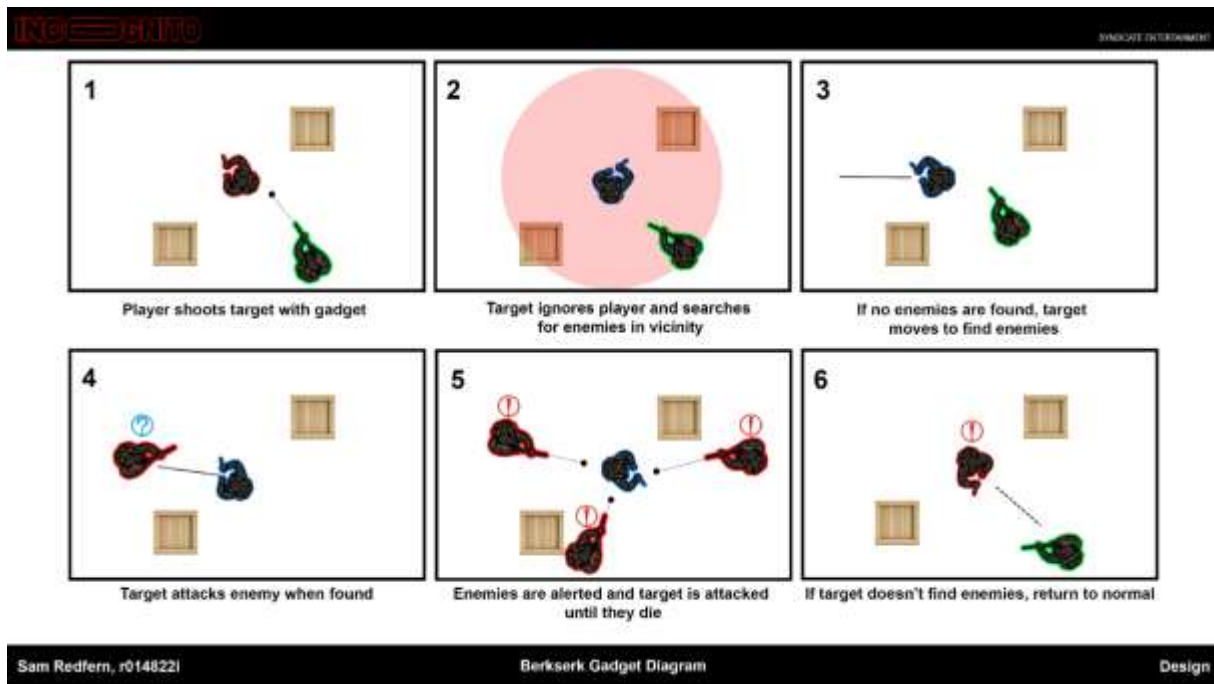
- Appearance – Two aspects have been considered in the smoke grenade being the grenade and the smoke VFX, in terms of the grenade a basic sphere is all that is needed while the smoke could be stylised, and cell shaded to fit the overall theme of the game
- Ability – Upon throwing the grenade it will explode on impact whether that is the environment or the enemy itself and a cloud of smoke will erupt, this will simply block the enemy's vision
- Drop rate – Considering this gadget is non-lethal and does not directly interfere with the enemy it can be a higher spawn rate with the same expanded capacity similar to the sound device
- Balance – When balancing this gadget, the main consideration is the size of the smoke cloud, this should be large enough for the enemy to essentially get lost within the smoke and lose track of the player potentially lowering the state from attack to investigate



Flowchart

### Berserk Dart

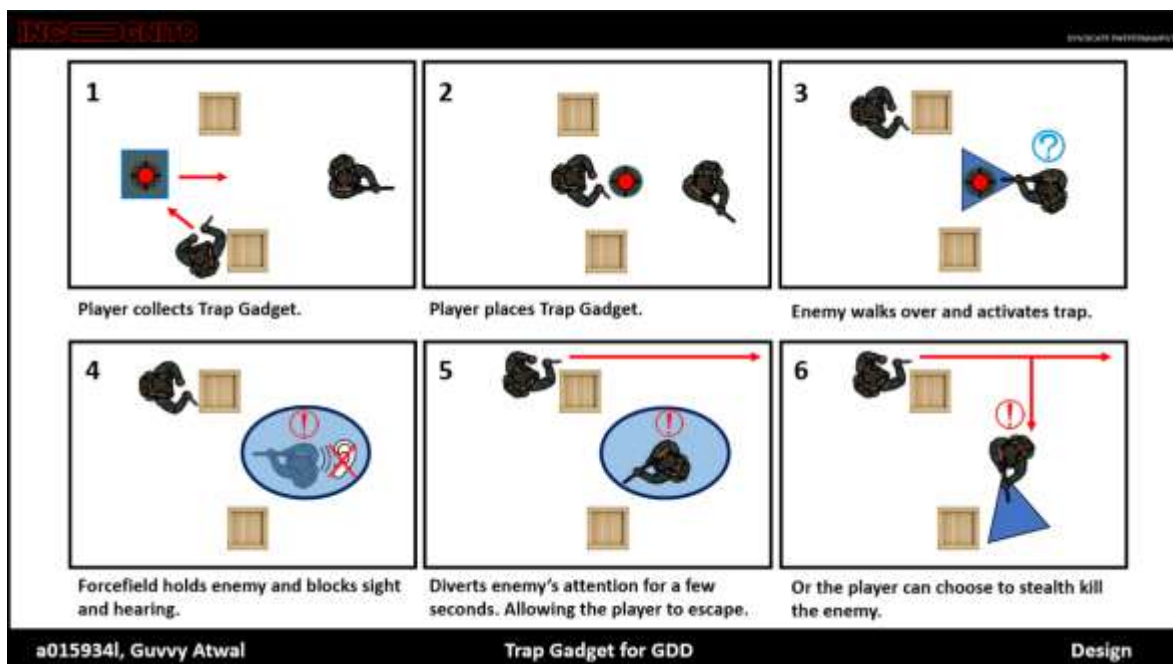
- Appearance – Two concepts have been thought of for this, the initial idea would be a standard dart pistol however after some more thought incorporating the robot theme a finger gun could be used as it would be built into the player and be more unique
- Ability – The dart would overwrite the AI and make them ‘switch teams’ aiding the player and killing enemies for a set period of time
- Drop rate – Due to the strong nature of this gadget having the tougher constraints would be better, a lower spawn rate with the player only having the capacity for one at a time
- Balance – Balancing this gadget will be crucial as we don’t want the AI to just clear the level for the player, finding a good length of time but also limiting the senses to be the same as normal so they can’t just hunt down the other enemies



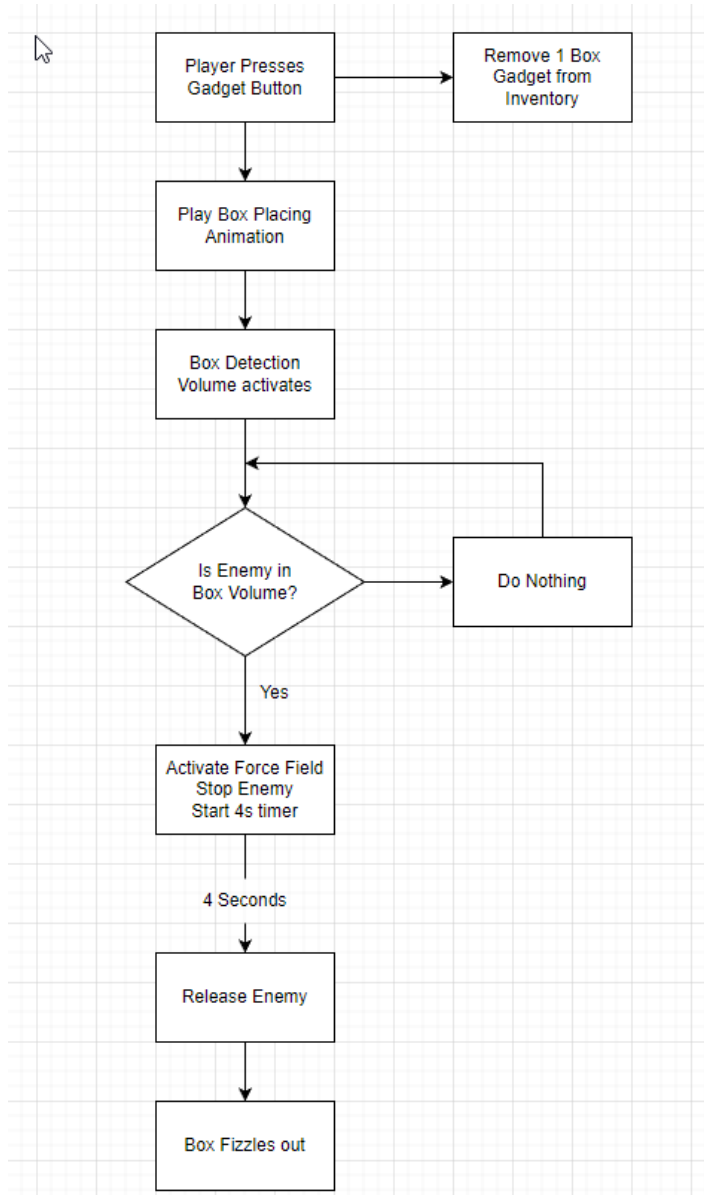
Flowchart

## Trap

- Appearance – The appearance will be similar to a landmine, a rectangular device with a pressure plate on top to detect weight
- Ability – The player will place down the trap, if an enemy walks over the gadget a forcefield will hold them in place for a few seconds blocking their sight/hearing
- Drop rate – Similar to the EMP this gadget would have an average spawn rate as it has the potential to be lethal but allows the player to still be pacifistic.
- Balance – The balance with this gadget is balancing how the AI will respond while trapped and the duration they are trapped for



Flowchart



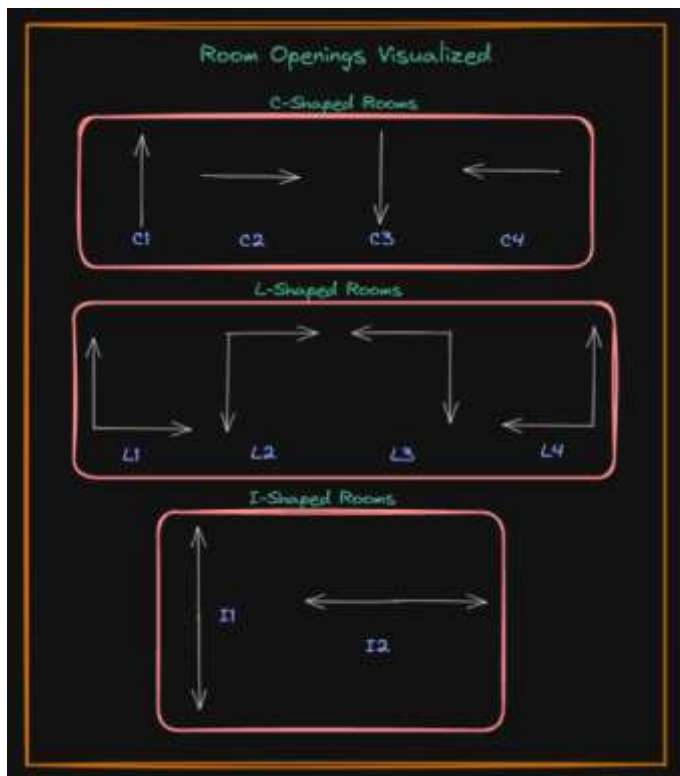


## Levels

### HUB Level

#### Procedural Levels

The way our game is setup revolves around a procedurally generated system, this system will determine how many rooms the run will need and generate a random layout around some constraints. These constraints revolve around the door positions and utilising a data table to determine which modules can be connected. This core system is ambitious and requires a lot of work, it means the designers will need to generate a minimum of eight rooms, but this would make the game feel repetitive quite quickly, so we aim to add more.



#### C Start

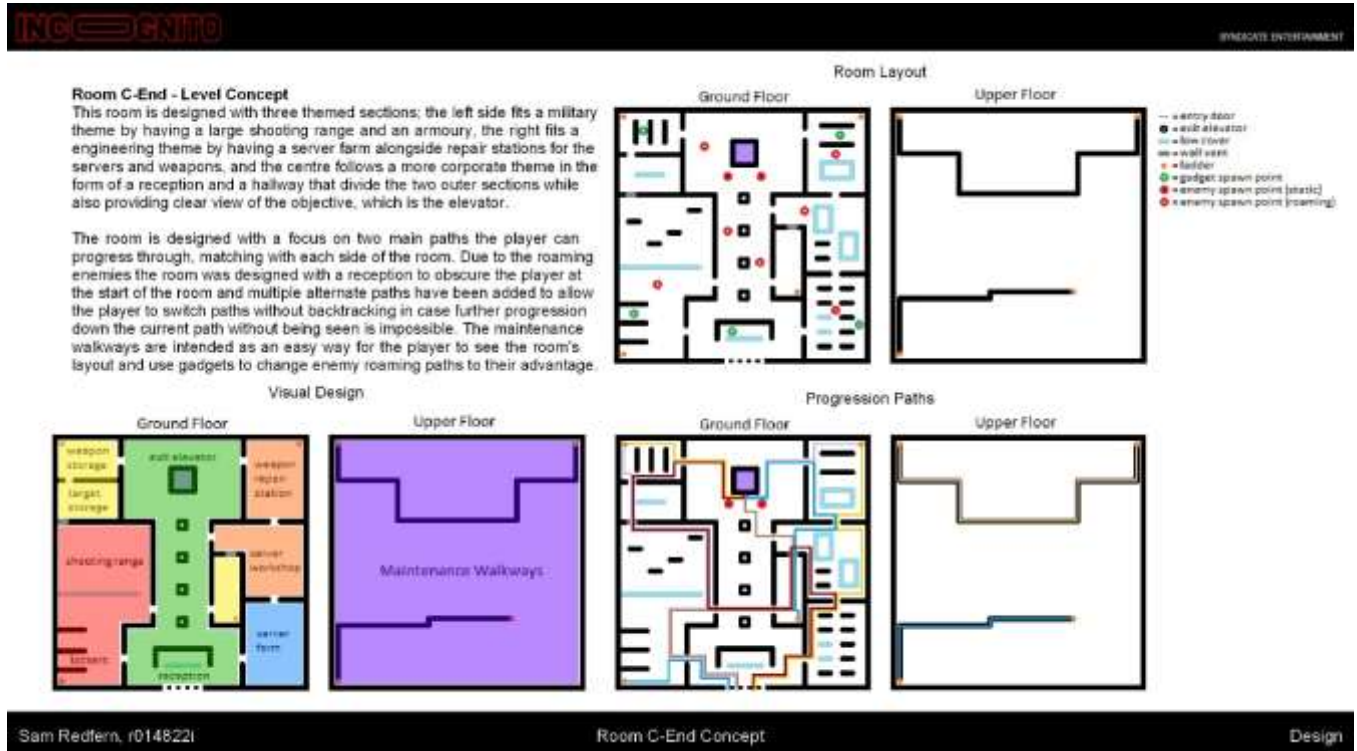




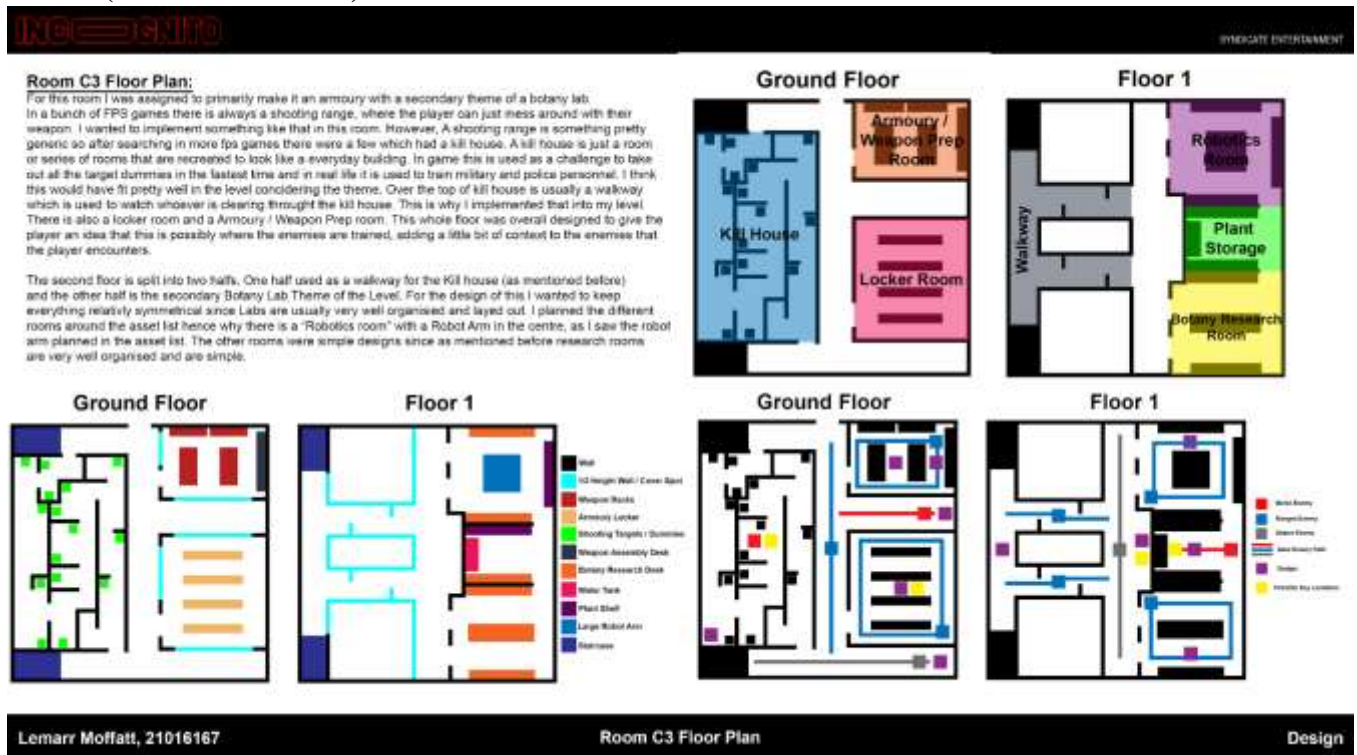
C-Start Room is designed around the theme of a reception/foyer area. As seen by the floor plan diagram the first floor contains areas such as the Foyer, Reception and Hall entry on the 1st floor. With the second floor containing a Balcony and Office area. Thematically speaking this theme highly resonates with the geography of the tower in Incognito. As all levels are inside this tower. C-Start room will be the first level players playthrough. Therefore, it makes sense for this level to be a reception/foyer. Because most buildings are designed to have a reception or foyer be the first room you go to, when entering a building.

From a design perspective this level operates as a tutorial level, by introducing many of Incognitos gameplay mechanics players will experience. For example, the foyer area has containers and pieces of furniture to use as cover for the player, if they wish to take a stealth approach. However, the foyer is also designed for players to immediately take a more hostile approach by going up the stairs. As the stairs operate as the shortest path to exit, but also with the most enemy resistance. Since the player is more exposed to enemies spotting the player because of the reduced cover. In addition to these areas like the Office have many stealth cover options and various usage of affordance to entice players to take a stealth approach to avoid or take out the enemies. Finally, it should be noted the balcony area provides a great opportunity for players to choose between a safe or hostile play. Because they can opt to stealth kill the sniper enemies or run straight past them.

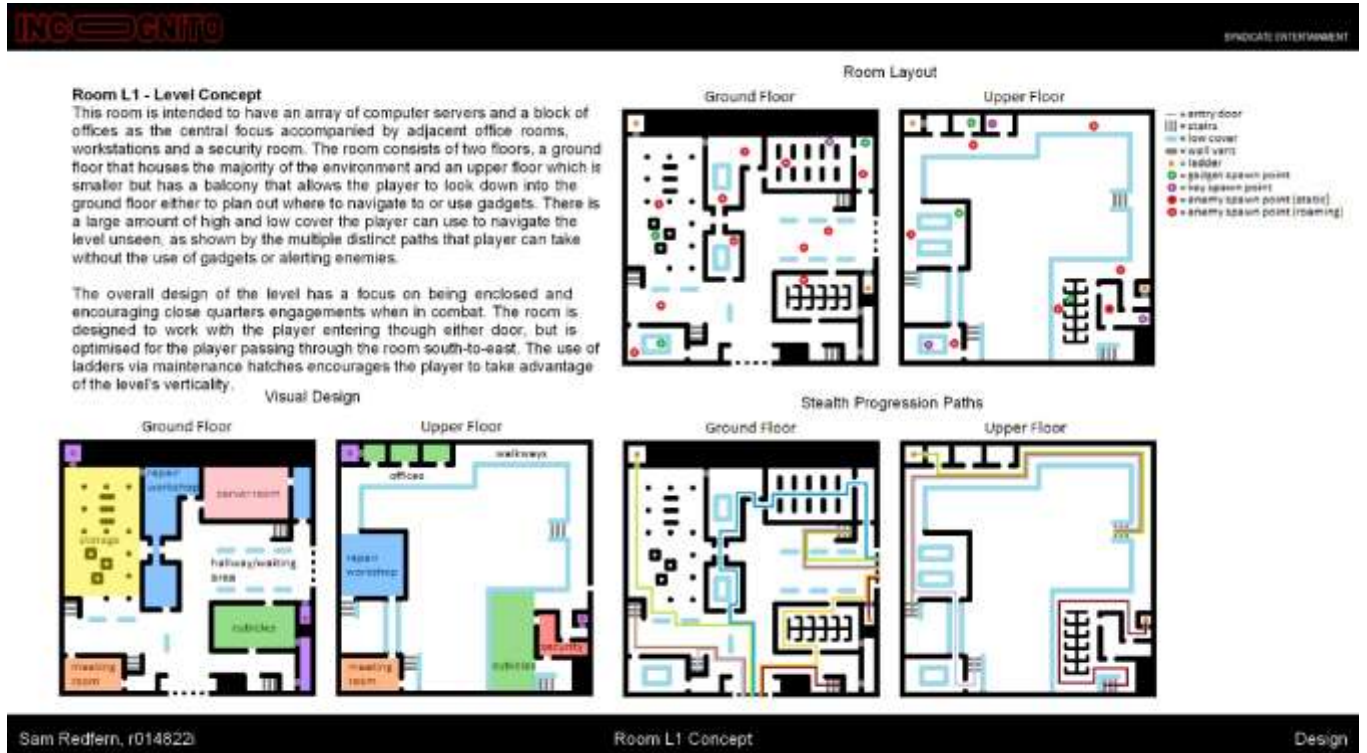
## C End



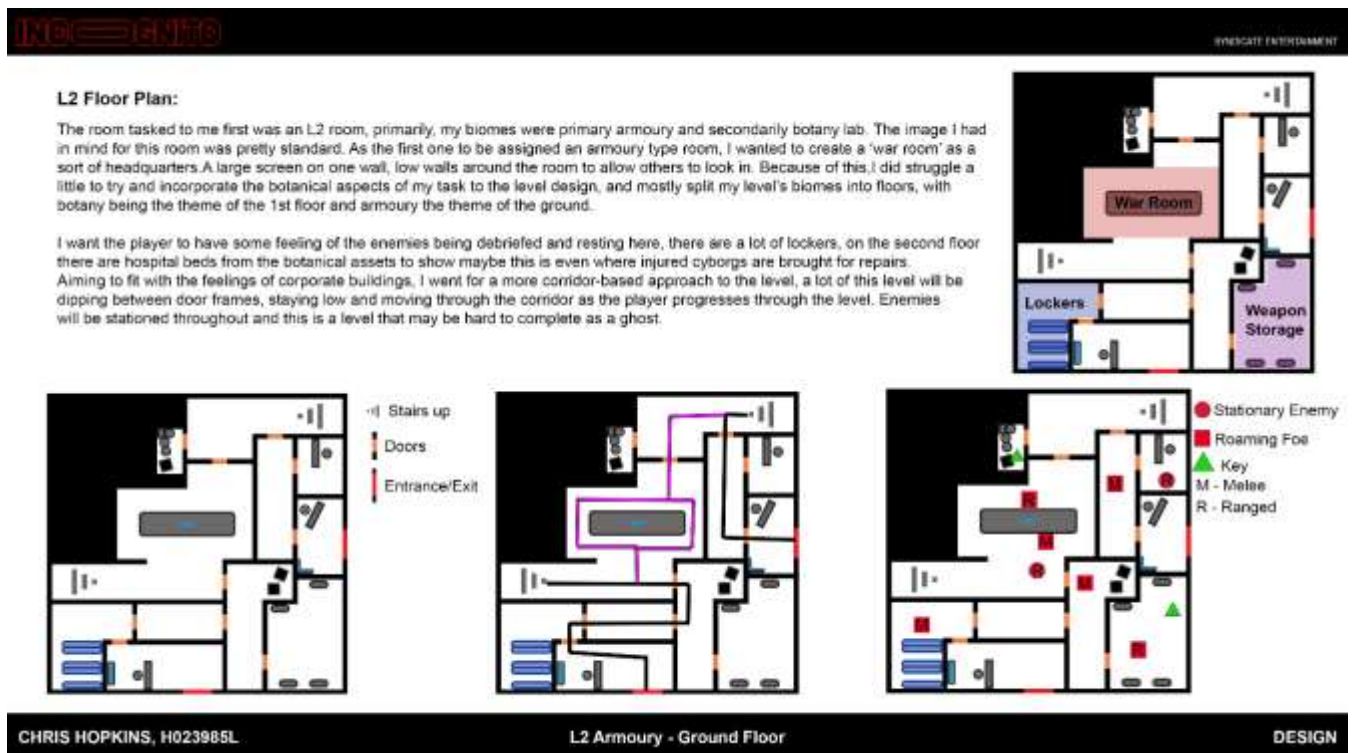
## C End (Second Variation)

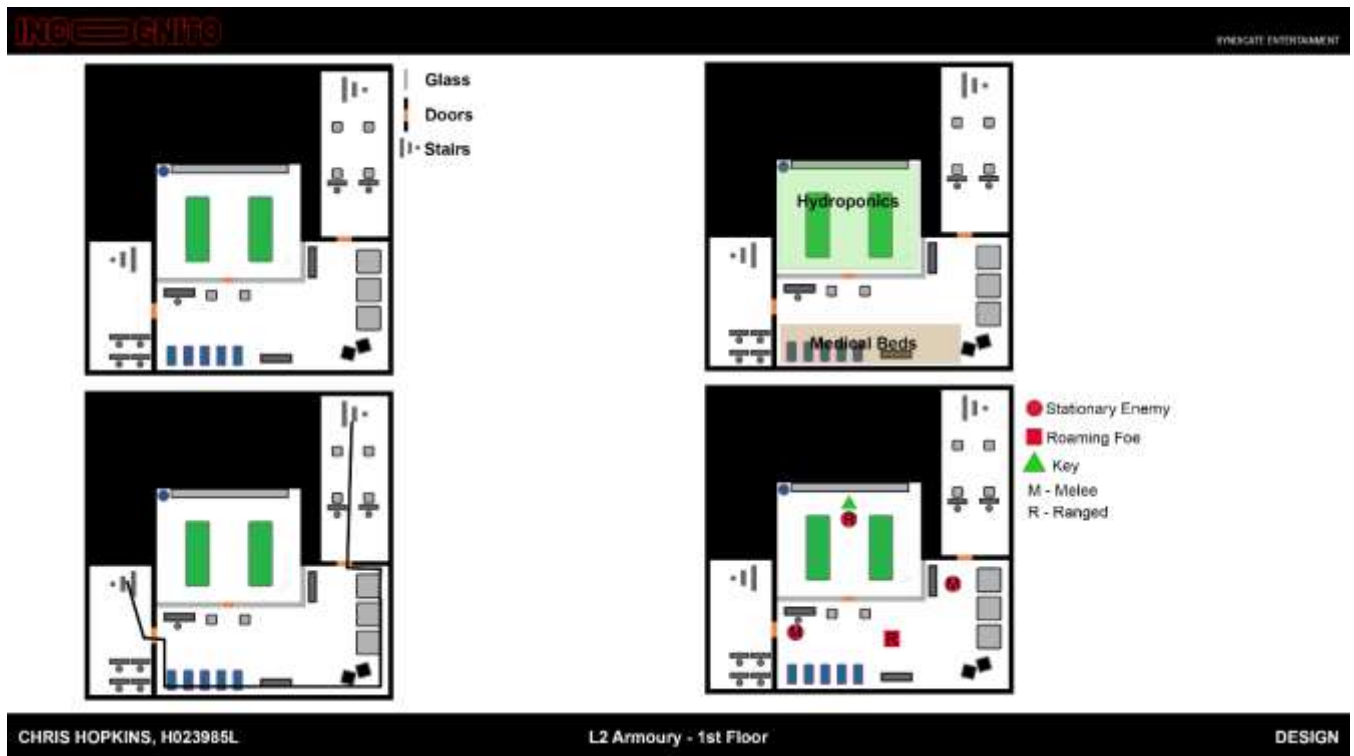


## L1



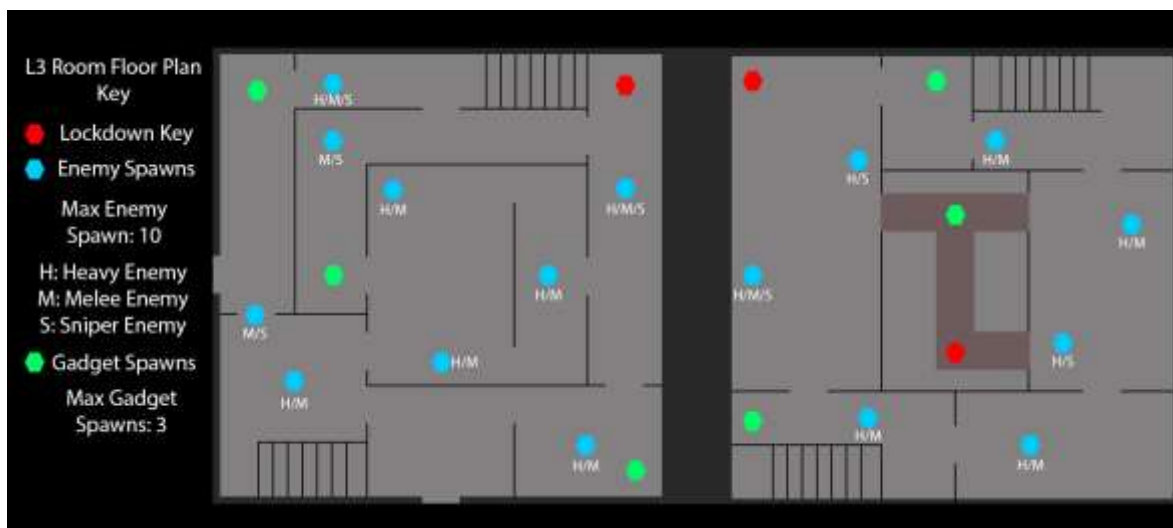
## L2





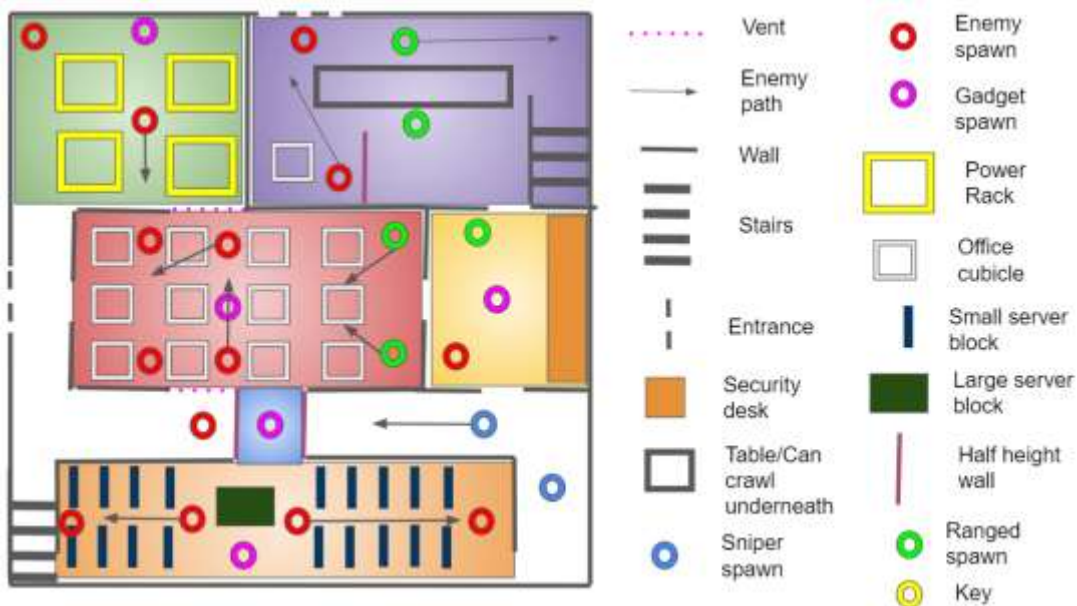
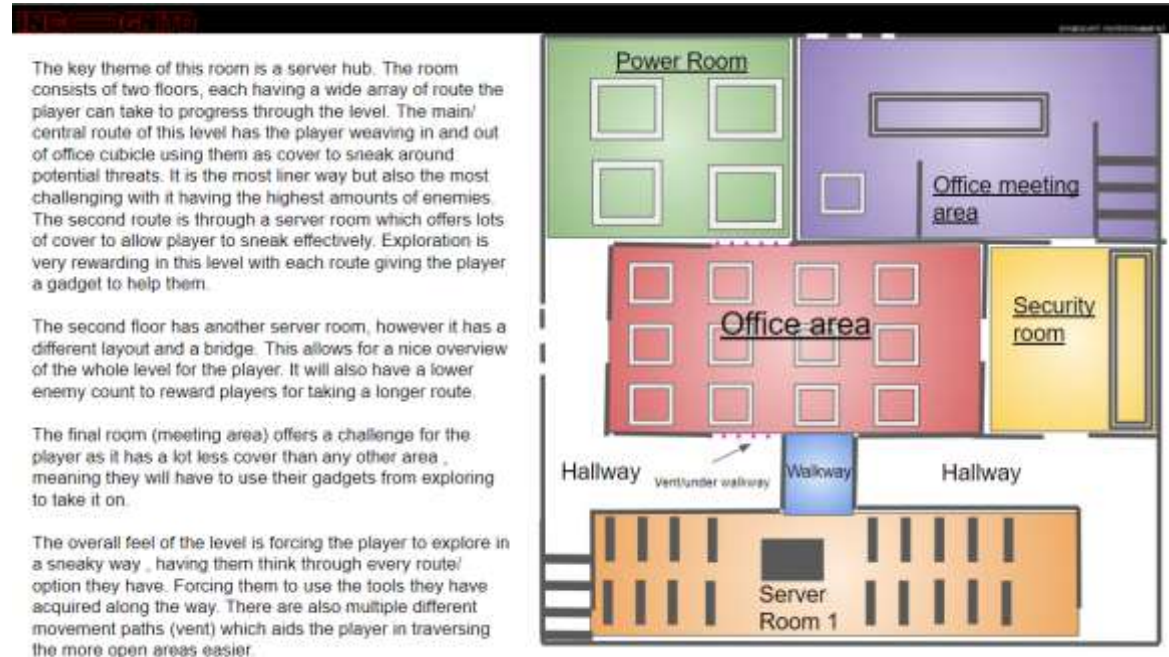
### L3

The L3 room module is designed around an office space with a large conference room situated in the centre of the module. Several rooms offer sparse cover from enemies in the confined spaces with only the employees' desks to rely upon to stay hidden. The player has a large advantage however in the space of maintenance catwalks above the conference room, offering the player a view above the room to evaluate their moves wisely. To balance the open spaces of the offices a server room and messy storage room exist on the upper level, and the lower level includes numerous long open corridors that encourage gadget usage to slip by enemies.

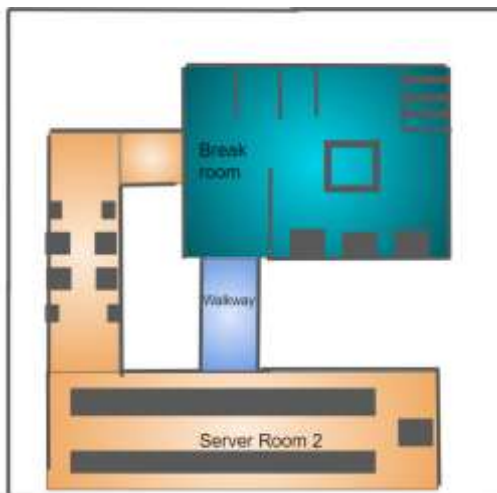




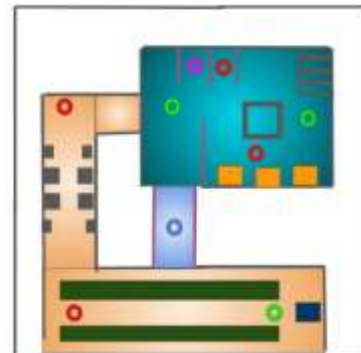
## L4



Second Floor:

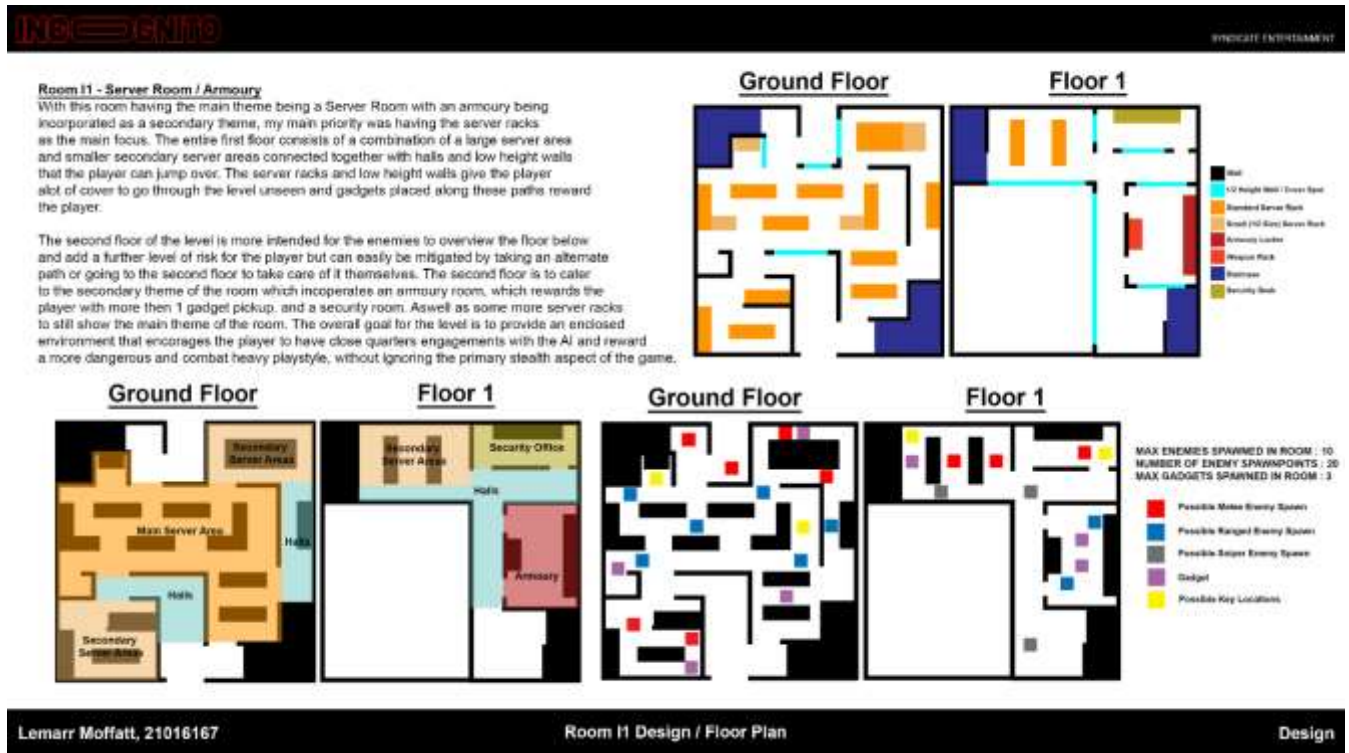


- Molo spawn
- Ranged spawn
- Sniper spawn
- Gadget spawn
- Vent

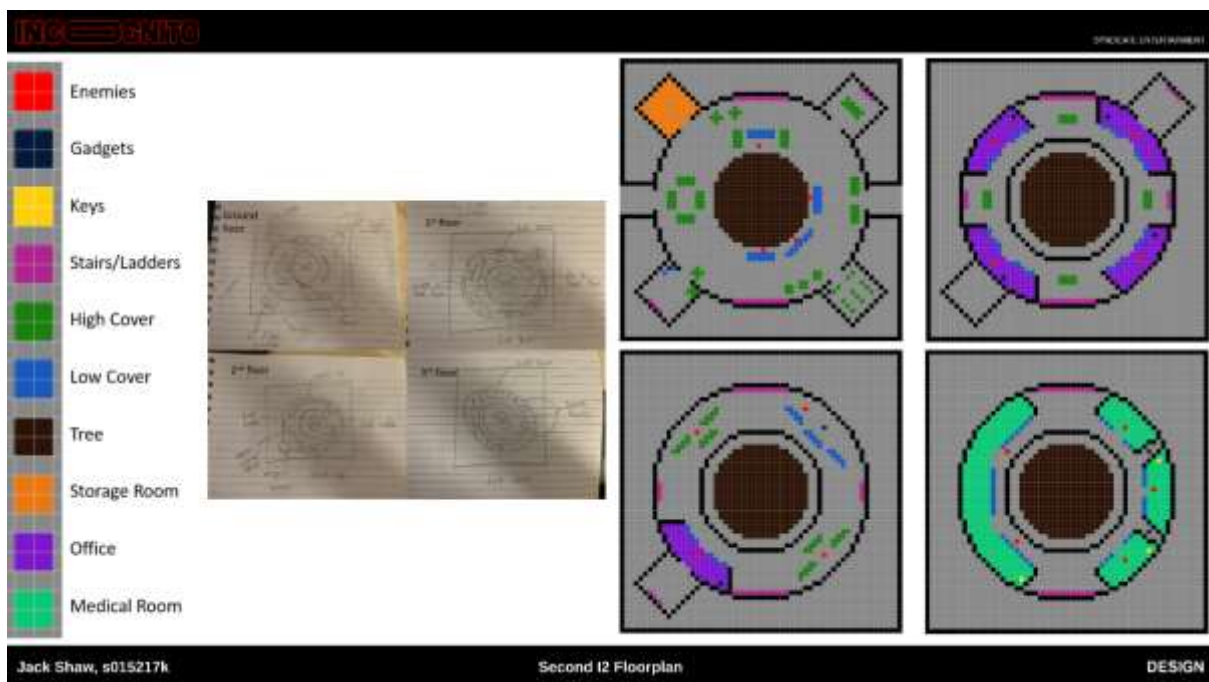


- Large server block
- Small server block
- | Half height wall
- Vending machine or water
- Table (can crawl under)
- ≡ Stairs

## I1



## I2



The first I2 level was built around an idea from the first week, making a level revolving around a tower, this was tricky not only to plan but also make due to the custom assets. The I2 themes are primarily a botany lab but has a section for office spaces and a small data room on the ground floor. When designing the room the focal point was on the centre piece, a large tree that would wrap around the towers structure and provide ample cover for the player to navigate, instead this was changed to a holographic tree meaning a lot more cover needed to be placed around the level and some symmetry was used to make

this process a bit easier. Due to the way spawning works this level could vary in challenge as the enemies could all spawn on a single floor, to counterbalance this, ample gadgets were added and the enemies were evenly divided between the floors. However, the player will need to reach the top floor each run to access the key.

## I2 – Variation 2



This is a second version of I2, this was created due to the eager scope of the earlier version and was made with the same theme but in a much simpler format of a typical square based room. It is designed much more as a hybrid with the office/foyer being on the left and botany on the right, a variety of cover height is used to provide the player with multiple options leaving the upper floors as dead ends, but necessary visits due to key spawns.

## Boss Level 1

There were plans at the start of the project to create a boss arena at the end of each run, beating this boss would allow you to progress up the tower. On each floor a new enemy type would be introduced, so for the first run only grunt enemies would appear, after beating the sniper boss, sniper enemies would be scattered among the levels.

Ultimately this idea was scrapped due to the eager scope of our project and as a team we wouldn't have time to design, create and implement a system this complex.



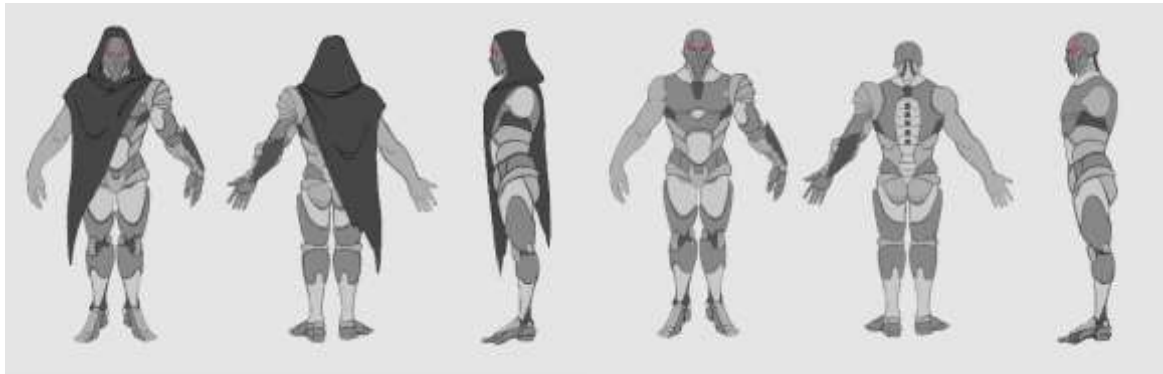
## Assets

### Art

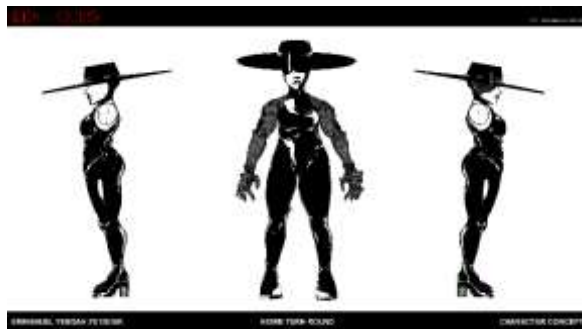
#### Concept Art

##### Sniper original Concept Art

Below was the original concept piece for the sniper many aspects got taken over to the final character such as the cloak, The idea for the mask/Helmet piece and followed many parts like the chest and arms etc.



##### Main characters Concept art



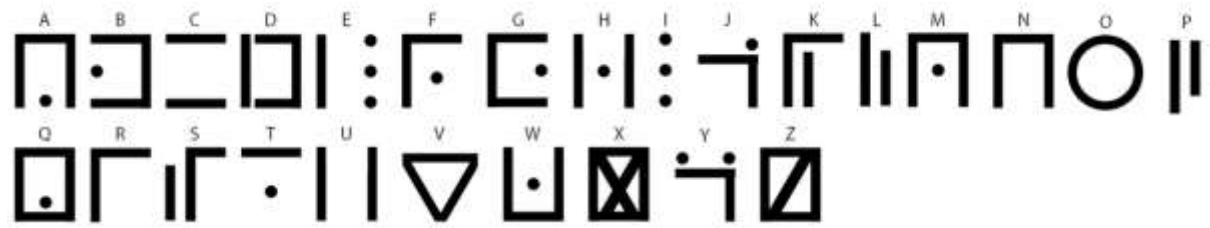
##### Extra Concept Pieces



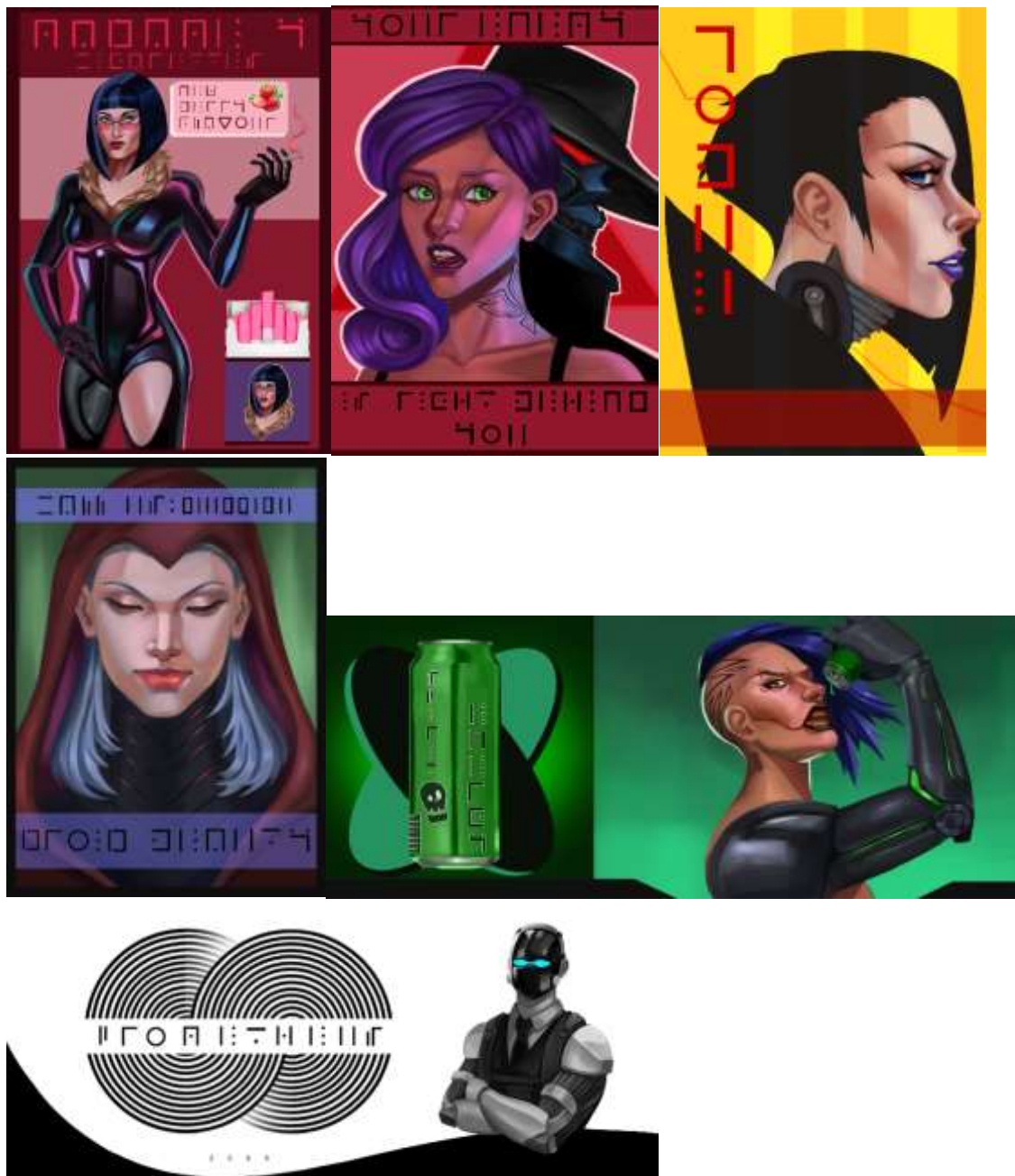
##### Room Concept art

##### Alphabet

This is the Alphabet that was used for everything art and was used for the posters, models and any text present in the vertical slice.



## Ad Posters



## UI and Icons

Below are the Icons used for the shop as well as the Main game play UI to showcase your gadgets and other pieces. The icons are:

- EMP
- Sound Gadget
- Trap Gadget
- Bullets
- Pistol



## Final UI shots





### Background images



### Character Select Cards



## Death Screen



## Models & Textures

## First Person Arms and Enemy Characters



For characters

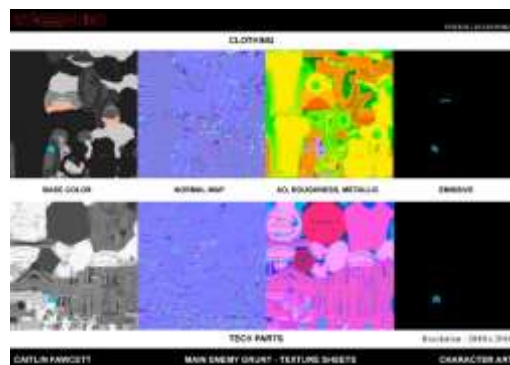
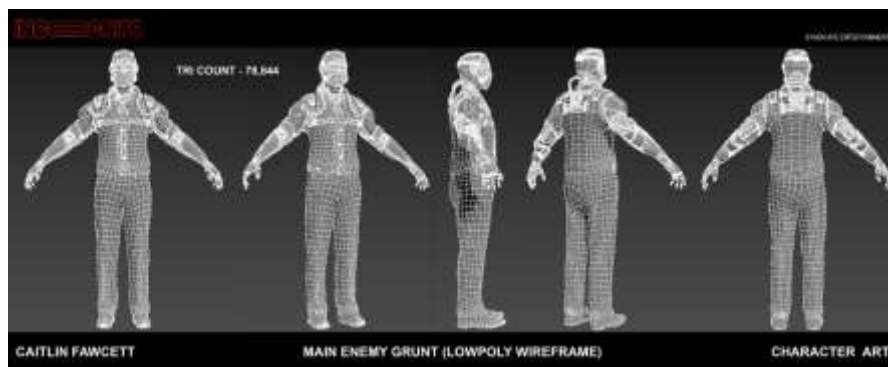
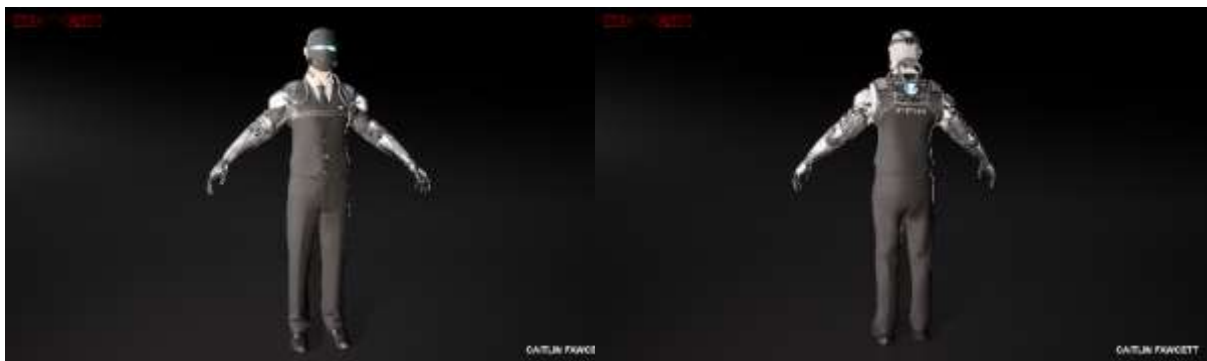
### Maverick First Person Arms



### Noire First Person Arms



### Main Grunt



## Sniper Enemy

## Heavy Enemy



## Maverick Idea Sculpt



## Hard Surface art

## Silenced Pistol



## Sniper





**Assault Rifle**



**Sledgehammer**



**EMP Grenade**



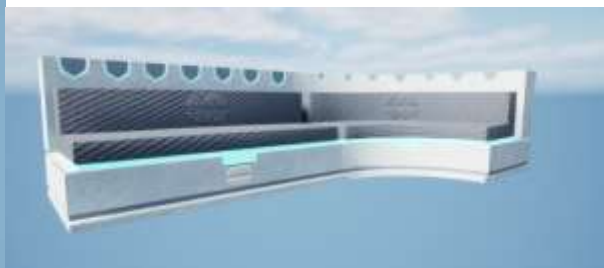
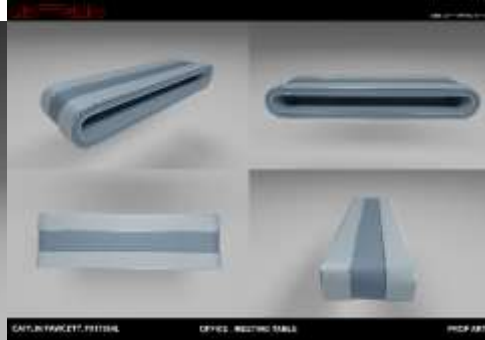
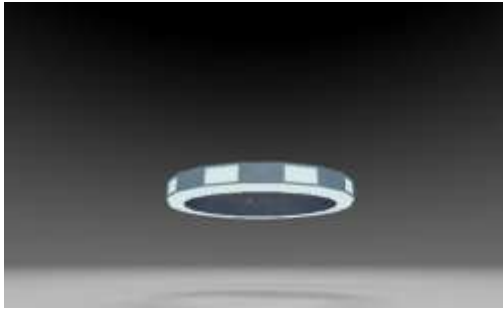
**Sound Gadget**

**Trap Gadget**

**Train Station Set**



**Office Set**



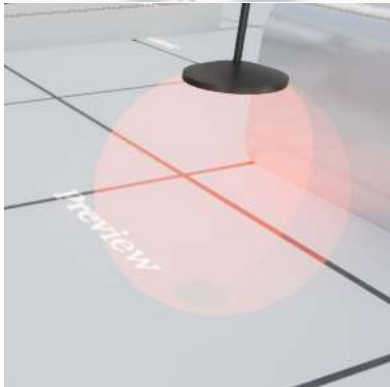
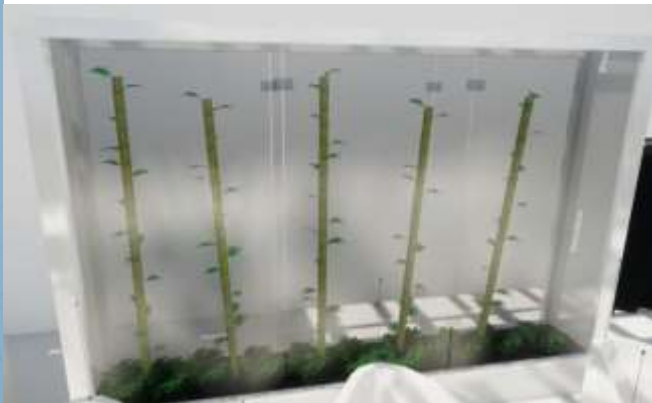
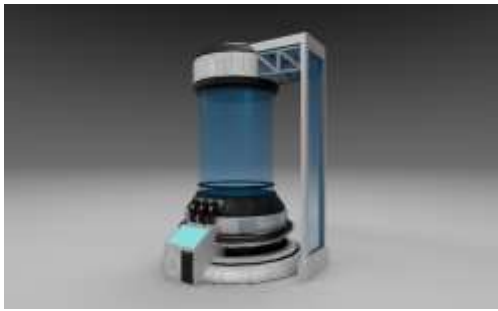


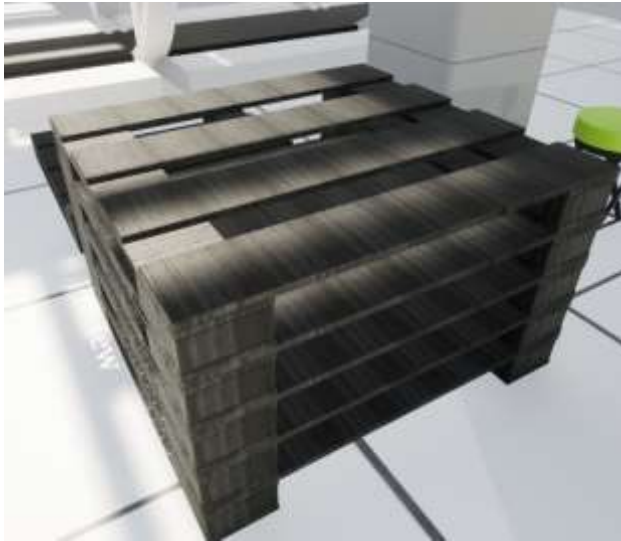
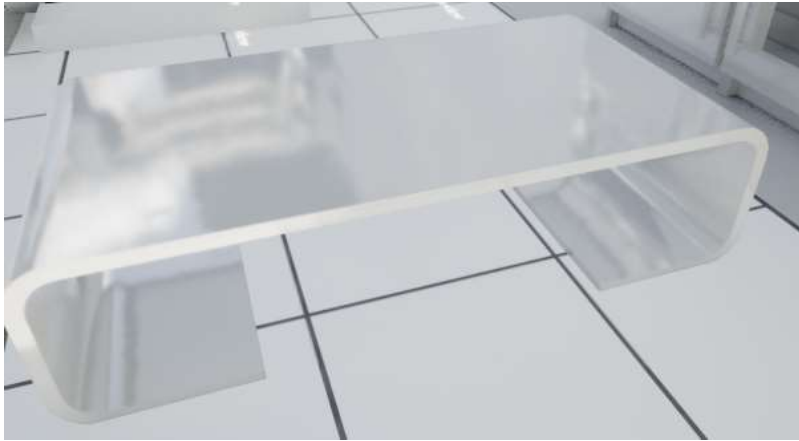
### Barracks Set



### Data Centre Set

### Laboratory Set





## Modular





**Animation**

**Sound**