

Deep Storage

Eiran Keating



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High Level Overview

Design Goals

Deep Storage is a custom level for the game Prodeus, built using the official level editor. The goal was to create a level that could act as the second level of a campaign where the player is descending into an underground facility. As the second level, there is less of a focus on tutorialisation, and more on further establishing the core mechanics with new weapons and encounters.

Level Goals

The overall goal of the player is to simply get to the end of the level, and all other goals stem from this. Their secondary goals are to kill all enemies, but this often feeds into the primary goal, with forced combat encounters and the fact that killing enemies makes it easier to explore the level

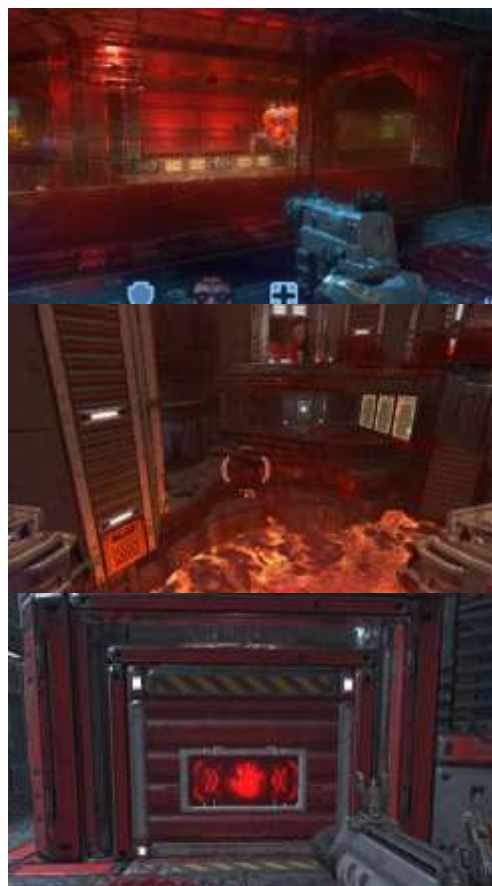
Design Considerations

Prodeus levels consist of several combat arenas connected in a maze like fashion with progression gated with keys and locked doors. While each level is different, there are several reoccurring features.

Levels make heavy use of windows and vantage points, allowing players a preview of where they're heading. Along with a sense of direction, this gives the player a sense of anticipation, and makes the level feel more cohesive.

Players are also constantly revisiting the same areas. When they return, it will often be with keys to doors or from an alternate vantage point to gain access to new areas. This makes levels feel less linear, while also allowing for tight control over the pacing and progression. This also gives players a better understanding of the space, allowing them to make informed decisions on where to go.

Prodeus also very strongly follows the principle of showing players the door, then sending them after the key. This means players know what their goal is, rather than stumbling around blindly with no purpose.





Key Elements

Weapons

There are three main weapons that are the focus of this level

- Pistol
 - Starting weapon
 - Good for 1on1 fights
 - Uses bullets
- Shotgun
 - Close range single target
 - Good for spread out enemies
 - Uses shells
- SMG
 - Long range multi-target
 - Good for crowd control
 - Uses bullets

The player starts with the pistol (presumably from the previous level), collects the shotgun after it is dropped by an enemy, and finally collects the SMG after finding it on the ground

Enemies

Prodeus uses a range of enemies with different abilities. For combat encounters. Each enemy in isolation is trivial, but create interesting combat encounters when combined

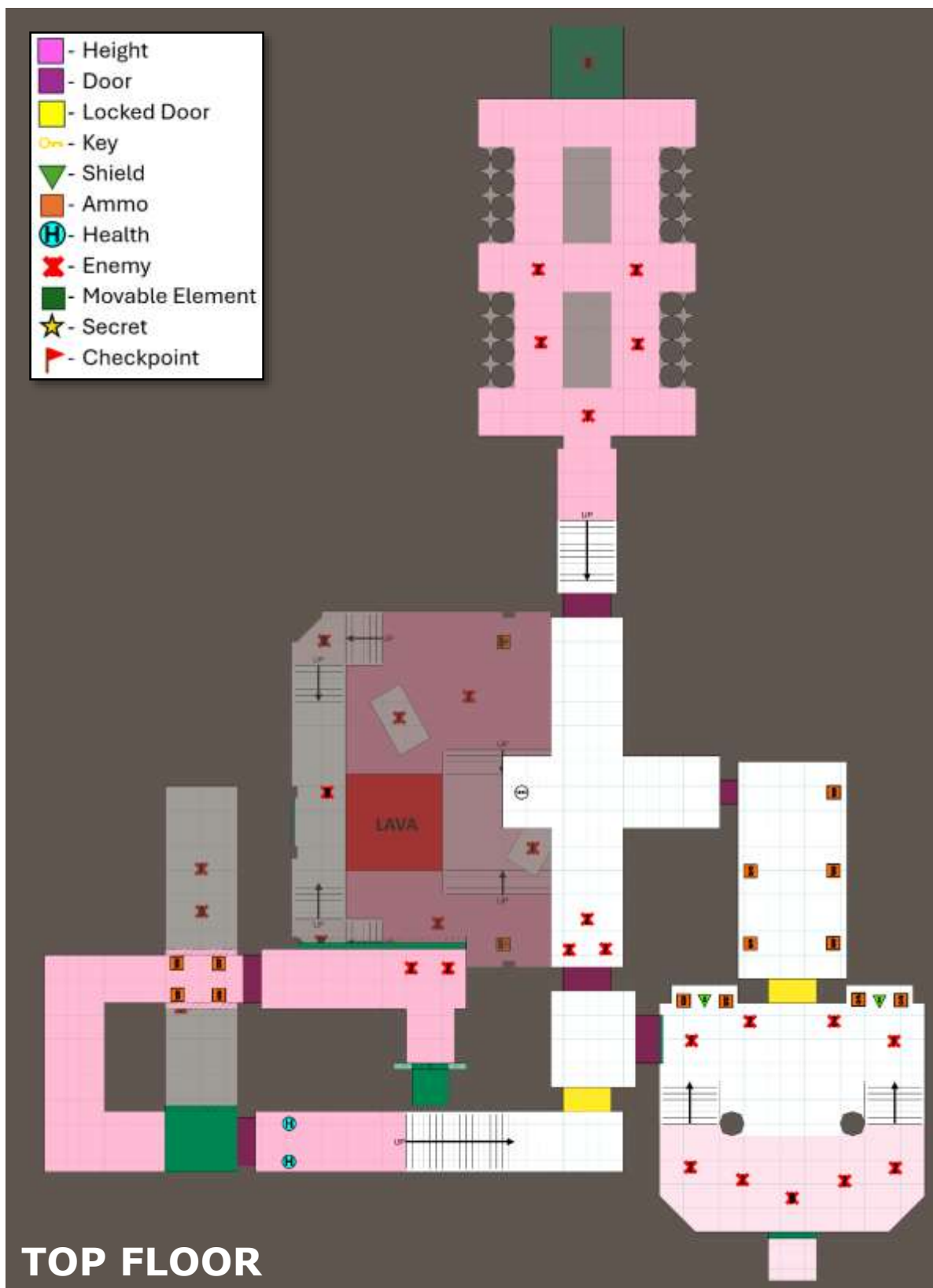
- Zombie(Z)
 - 40hp
 - Melee attack
 - Easy on their own, deadly in crowds
- Soldier(S)
 - 50hp
 - Ranged attack
 - Drops shotgun when killed
- Dog(D)
 - 100hp
 - Charge melee attack
 - Large hitbox
- Fiend(F)
 - 60hp
 - Ranged attack



- Usually stationary
- Bloater(B)
 - 150hp
 - Ranged attack that leaves puddle of acid
 - Flies around
 - Large hitbox
- Skull Fish(K)
 - 10hp
 - Melee attack
 - Flies toward player
 - Explodes on impact

Pickups

- Ammo
 - Refills ammunition for weapons
 - Comes in multiple types depending on the weapon
 - Can be small or large
 - Orange colour
- Shield
 - Refills players shield meter
 - Can be small or large
 - Green colour
- Health
 - Heals player when they are damaged
 - Can be small or large
 - Blue colour
- Runes
 - Bonus collectible for players
 - Optional challenge/secret
 - Provides re-play content

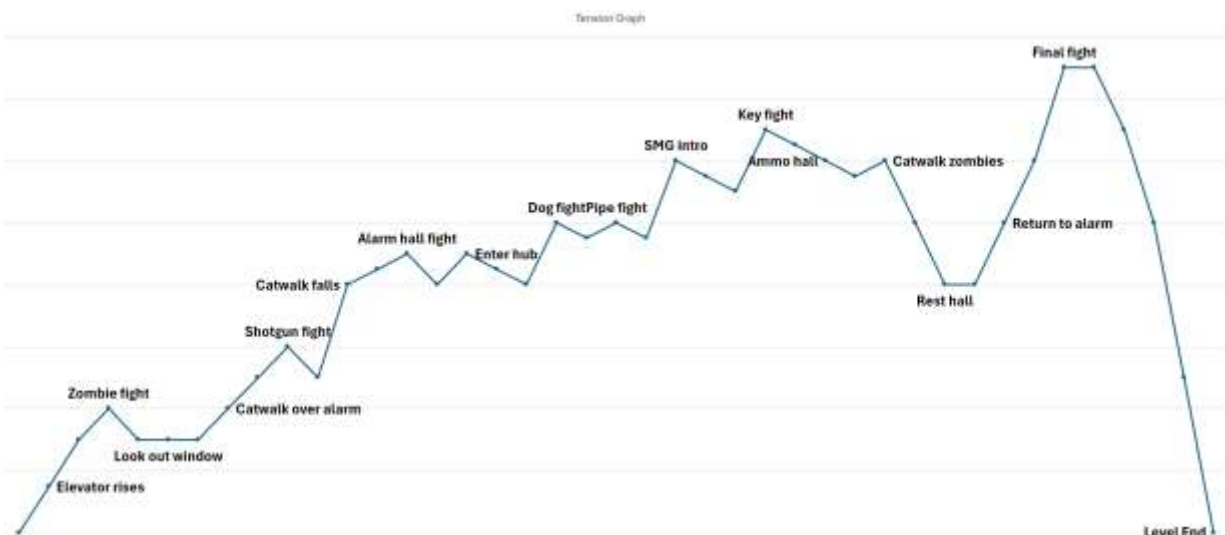


(1sq=1unit)



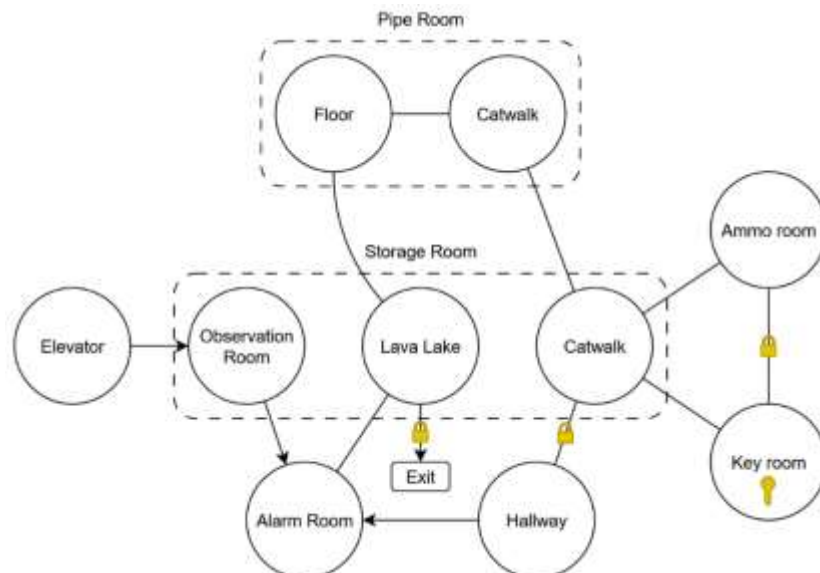
Beats & Pacing

Below is a graph of the expected tension at key points in the level. It's important to make sure that the tension in the level is increasing with the difficulty, while making sure not to drop or rise too abruptly. However, there are certain points where the tension is reduced for thematic reasons. After the fight in the key room, it is good to let the player relax for a moment and give them some healing items, which makes the final fight feel more intense.



Spatial Design

Below is a high-level diagram of how the different rooms fit together. Prodeus levels are all about loops, where pathways often connect back to rooms the player has already been. This structure can end up feeling confusing and maze like if not constructed carefully, but when done well, gives the player the feeling that they're freely exploring the space, rather than being led along a railroad.



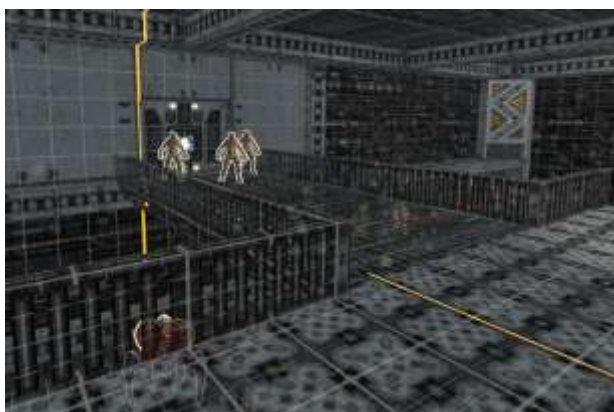


Affordance & Guidance

In line with Prodeus conventions, this level uses enemy placement to direct player attention. In the storage room for example, this fiend throws a fireball at the player, which directs their attention to the door it's guarding, and leading them in that direction.



These zombies on the catwalk serve the same purpose, leading the player to the left and towards the next area of the level



This light above the yellow door helps to catch the players attention. The door is also located directly across from where the player enters the room, keep in it centralized in their vision



Rooms are lightly colour coded, which helps the player mentally categorize them. This also helps to form mental links in the players mind about related locations. The room where the player gets the yellow key is the same colour as the room they need to use it in, and the hallway where the bridge falls is the same colour as the healing room, signalling to the player that they're returning to a place they've already been to.





Resources & Pick Ups

The level mainly places pickups within combat arenas, allowing the player to grab them if needed during a fight. The exception to this is the health items, which show up only once in the level before the final fight. This is because the players shield negates some of the incoming damage, so replenishing it is more important. It also creates an interesting system where the players shield represents their capacity to fail in the short term, while health represents their capacity to fail in the long term.

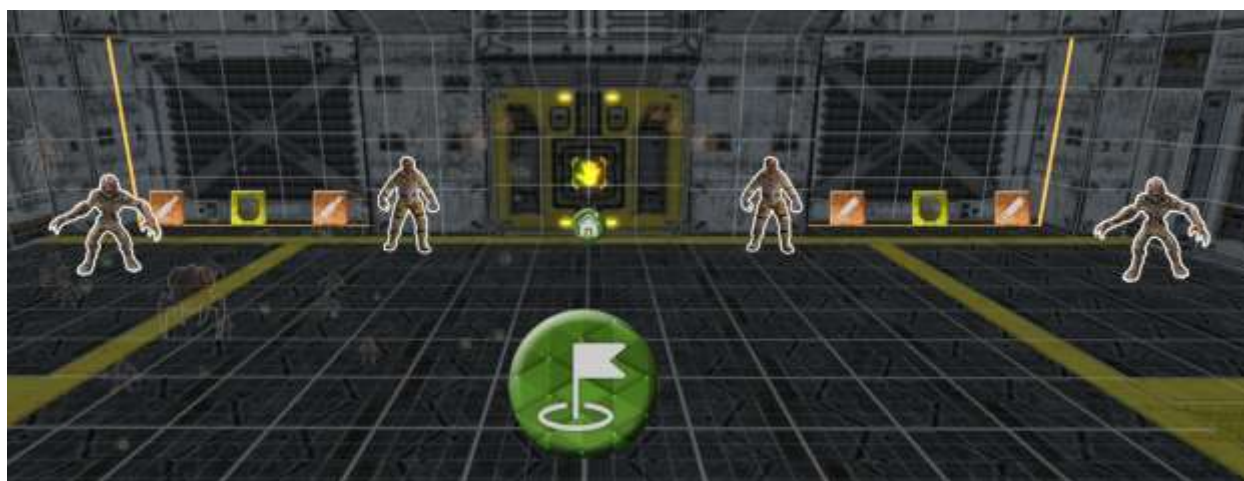
Points of Interest

The whole level is centered around the hub area, with the player leaving and returning several times. The strong use of yellow helps associate it with the yellow door, creating a mental link in the players' mind, and reminding them that this area is where they need to bring the yellow key.

Challenges & Obstacles

Encounters & Enemies

In order to create a truly interesting combat encounter, it's best to use a variety of enemies at the same time. Consider this example in the yellow key room. Using a ranged enemies(fiends) prevents the player from remaining still, forcing them to move around more, while the melee enemies (Zombies) act as a constant threat if the player moves into them, forcing the player to think carefully about where they are



The final fight uses this concept too. The first wave consists of Bloaters (flying ranged) and zombies (melee). These enemies require a different approaches in order to take them down, forcing the player to quickly switch between fighting styles and weapons. The second wave uses dogs and fiends, yet again combining ranged and melee enemies to create an interesting combat encounter.



Balance

Mission & Narrative

Theme & Visuals

As the name suggests, this level is set largely in a storage area. Prodeus relies heavily on its sci-fi and industrial theming, so the level uses a similar visual style. The use of grey as a base colour also helps the gameplay elements stand out, as they are much brighter than the background.

Narrative Story

Like Doom, Prodeus is light on story, with minor narrative beats that serve to connect levels together. Since Deep Storage is a later level of a larger campaign, it's important to focus on helping the player learn the mechanics, so there's little to no narrative in the level.



The player walks along this catwalk, getting a peak at some zombies below, before a quick fight where the player receives the shotgun.



This bridge falls, dropping the player into combat. Here, there's a chance the player will find the secret tucked away in the corner.



The player then proceeds to the storage room, and quickly guns down these two skull fish. This fiend then fires at them, drawing their attention to the door to the pipe room.





The player fights the dog in the pipe room, before riding the elevator up for the catwalk fight. There's another secret here for the player to find.



A bloater spawns in after the player picks up the SMG on the catwalk, giving a quick demonstration of the weapons effectiveness.



Proceeding forward, the player ends up in the key room, where they are forced to fight two waves of enemies





After grabbing the key, the player collects some ammo, then returns to the catwalk where a trio of zombies direct them to the next area



The player is given a moment to relax and heal, before returning to the alarm room for another fight. Here, they have a chance to collect some extra ammo and a shield resupply.



The player re-enters the storage room one last time for the final fight, before ending the level at the yellow door.

