

Eris Escape

Game Design Document V.1

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Vision

Eris Escape is a game in which the player is a prisoner on the space cruiser *Eris*, and is being transferred between colonies. When unexpected and dangerous complications arise, all the inmates are subsequently released into the ship's bowels, and chaos descends. The player must navigate through obstacles such as faulty equipment, violent enemies, and frantic guards, to reach the emergency pods and escape.

Genre

The design for this game is a stealth-based puzzle solving experience, with a third person perspective. While this is the main genre, there will also be aspects of adventure as the player discovers more of the *Eris* and interacts with the world.

Platform

Ideally, this game will be better suited for a PC platform, rather than console or mobile platforms.

Type of Play

This game will only be available in single-player.

Chief Emotions and Experiences

The primary emotions the player will feel during gameplay would be tension and anxiety, due to the emphasis on stealth to get through the levels and avoid enemies. The player will also experience both frustration when attempting to solve the puzzles, as well as excitement and exhilaration when they overcome them.

Mood, Style, and Visual Treatment

As the game takes place on a damaged spaceship crawling with enemies, the mood itself will be rife with underlying danger, however, the style of the game would be rather low-poly. The almost-cartoonish appearance of the characters within the game, and the interior of the ship itself will complement the overall experience players will have throughout the game.

Main Character(s)

The main character in *Eris Escape* is an unnamed prisoner, identified only by their designated number *O-140895*. They are a medium-risk prisoner, due to their skills as a thief and hacker, and the number of crimes accredited to them.

Basic Story

Prisoner *O-140895* was captured and transported to the space cruiser *Eris*, with the intention of being sent to the colonies. Due to an unspecified attack, *O-140895* – along with all other inmates – is released from their cell and is determined to escape from the *Eris* before the guards have a chance to regain control of the ship.

Major Goals and Challenges

The main goal of this game is for the player to successfully reach the emergency pods and escape from the space cruiser without dying. The challenges they must overcome range from dangerous fellow prisoners, the guards, and the puzzles they must solve to progress through the levels.

Key Features

The key features of *Eris Escape* include:

- The player can sustain damage if encountering dangerous enemies
- There are two main enemies: the guards and the other inmates, with the inmates being categorised by colour in order of their danger levels
- The player is able to pick up and move certain objects in the environment
- The player has the ability to jump and crouch, as well as run for short bursts
- The player is unable to inflict damage on enemies without a weapon

Core Audience

Those who have played *Hello Neighbour* and the *Henry Stickman Series* would find this game enjoyable, due to the stealth required to traverse through the levels and the puzzle solving nature of the levels; as well as the general theme of escaping from authorities.

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Moment – To – Moment Gameplay

The theory from Sweetser and Wyeth (2005) deals directly with the notion of 'game flow'. Game flow is, simply, the feeling of being 'in the zone'. It is the concentration and increased efficiency the player experiences when fully engaged in a game's challenges; and what pushes them to succeed in the gameplay so they might stay in this state for longer.

Eris Escape, as a puzzle-based game, should provide this constant 'in the zone' sensation by engaging players mentally, and keeping them occupied with the challenges presented. Players will be concentrating on trying to accomplish the main goal of the game and thus will increase their own efficiency when completing the tasks.

Single-Player Gameplay Modes

Classic Mode

In Classic Mode, the player is striving to get as far through the game as they can without being killed by the enemies. The game takes place in third-person perspective, with the camera following the player in an over-the-shoulder manner. As the player moves through each level, they have the opportunity to collect a number of items that will further their progress, such as key-cards, small weapons, and trade-able objects to act as currency. The main challenge of the game is avoiding dangerous enemies, avoiding taking damage, and navigating their way to the escape pods. The player has the option of taking non-violent routes in dealing with certain NPCs by 'bribing' them with valuable objects they have collected through gameplay. This mode is dedicated to the player completing the game and is not particularly story-driven as the player is only striving to complete the main goal of the game. The difficulty of the game will increase as the player progresses through the

The overall design of *Eris Escape* incorporates small aspects that would appeal to all four of the player types, as described by Bartle (2009). The only player type that might find this game unsatisfying to some degree would be socialisers, as there is a distinct lack of in-game communication between other players. As this game is only a single-player, it eliminates a crucial aspect that socialisers need. However, by including more dialogue options with the other NPCs, hopefully this does satisfy the need for socialising for that player type (Bartle, 2009).

challenges.

Multi-Player Gameplay Modes/Social Features

Due to the fact that *Eris Escape* is a single-player game, there are no multi-player modes available. The ideal concept of the game is to be a quick, challenging experience that requires no continuous play to accomplish. It is very much a casual game, not needing hours of play to complete or be understood. There is also a lack of social features for *Eris Escape*, because it is not an online competitive game. The only form of competitiveness would come from the player, challenging themselves to succeed better than they had in previous attempts; or through challenging friends and

As mentioned earlier, there is no multi-player aspect in *Eris Escape*, and there is no in-game competition between different players. Despite a majority of players preferring some form of competition (Bartle, 2009), that does not necessarily mean this game will suffer due to a lack. This game is meant to provide only a small means of entertainment for the player, and therefore does not require many social features.

family to 'beat' their own successes.

Avatar Actions and Abilities

Movement

In *Eris Escape*, the player controls *O-140895* through use of the arrow keys, or the 'W', 'A', 'S', 'D' keys, as well as the occasional input command to pick up items or interact with obstacles/NPCs, using the 'E' button. The player is also capable of jumping, crouching, and running for short bursts.

Items

There are a variety of items that the player is able to either interact with, collect, or trade during gameplay. If it is a collectable item, the player will have a carry-limit of three so as to provide more difficulty throughout the game. Examples of collectable items would be:

Item	Function	Notes
Med-kits	Provide health boost for the player	Are a one-use item Player has a carry limit of only three med-kits
Weaponry	Provide the player with short-term attacks	Limited hits
Cigarettes	Acts as in-game currency	As in-game currency, the player is able to bribe enemies with this item to either leave them alone, distract them, or gain an ally
Medicine	Acts as in-game currency	As in-game currency, the player is able to bribe enemies with this item to either leave them alone, distract them, or gain an ally
ID cards	Provides the player with a means to access previously off-limit areas	ID cards, or key-cards, are typically in the possession of the guards, and can be taken, or found by the player

Similarly, there are items that the player is able to interact with, to either activate, or gain access to something.

Item	Function	Notes
Buttons	Allows the player to activate something	If the player interacts with a button by pressing it, it will trigger a specific event to occur, such as a door opening/closing
Computers/Scanners	Allows the player to activate something	By interacting with computers or scanners, the player is able to do a variety of things, such as unlock certain areas, use ID cards to progress

Weapons

There are a number of different weapons that are available to the player for pick-up. Each with varying stats and damage. Examples of these weapons would be:

Weapons	Number of Hits	Damage Inflicted	Notes
Shiv	Two	+ 2	Shivs will be the most common form of weapon. They only allow for two hits against enemies and provide only minimum damage.

Baton	Five	+ 4	Batons are the primary weapons of the guards, but can be pilfered from them. They work with an electrical charge, allow for five hits against enemies, and cause significant damage.
Spiked Mace	Five	+ 5	Spiked maces will be one of the least common weapons available to players. They are carried by only the most violent inmates, and are very difficult to acquire. They allow for five hits to an enemy, and deal massive damage.
Knuckleduster	Three	+ 1	Knuckledusters will be the second most common weapon for players. They are by far the least effective against enemies, however are still useful. They allow for three hits against enemies, and only cause minimal damage.

Skills

As the character *O-140895* is an accomplished thief and hacker, the player is capable of bypassing all manner of technological obstacles. The player must simply approach a computer or scanner, interact with it, and is able to hack into the code to override whichever security systems are in place. While this is happening, the player is defenceless, unable to attack any enemies that approach them. If the hacking is interrupted, the player must start again. As a thief, the player is capable of increased stealth.

Along with these skills, the player is also charismatic, meaning there is an increased chance of them

“All of the core mechanics work together to provide a good game experience even though players don’t know what core mechanics are and can only infer the functionality of core mechanics from the way the game behaves.” (Adams, 2010)

Eris Escape is not a complicated game to play. Its core mechanics are very simple to learn, and better yet, are very common controls with PC games. The simplicity of it is what makes this game excellent to play.

negotiating with potential enemies to avoid damage, as well as gaining allies.

Main HUD and Control Scheme

The main HUD for *Eris Escape* can be viewed in the image below (Figure 1). As this game is specifically designed with a PC platform in mind, the HUD is shown in this manner. The HUD has been designed to only contain the bare essential information while the player is actively playing the game.

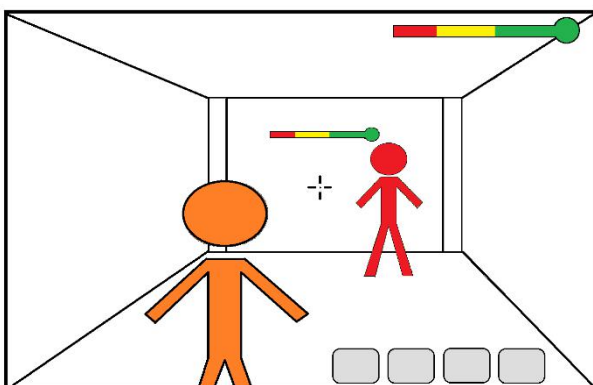


Figure 1 Basic HUD Design for *Eris Escape*

As shown, the screen capture is of the player encountering an enemy. The pieces of information available to the player immediately are those of the health bars. The player’s health bar will always stay in the upper right-hand corner, where it is both out of the way, yet easily visible for the player at any time. The colour coordination of the health bar is simply for the player’s benefit to better measure their remaining health. The enemy’s health bar will appear just above their head whenever the player

encounters them to provide a visual clue of their strength.

The camera view, as stated previously, is over-the-shoulder of the player. This is done to allow the player to have a constant field of vision not limited to that of the character. This camera view gives the player an extra measure of protection from enemies, as it allows them to see danger coming from a wider range.

Towards the bottom of the screen is a simple items list. These slots will show which items the player currently has in their possession and provide a quick means with which to access desired items. The slots are along the bottom edge of the screen for similar reasons to the health bar. They are out of the way, not blocking the player's view and not adding unnecessary clutter to the screen by being too large or too distracting.

Finally, the player's point of focus is controlled by the mouse. This is shown with the small cross-symbol in the middle of the HUD. The player simply must move the mouse to control the direction of their character. This allows the player to take actions such as: attacking enemies, interacting with objects and NPCs, picking up items and turning.

Table of Controls

Control	Action	Notes
W, A, S, D	Move avatar	By pressing 'A' or 'D', the player is able to control the left and right movements of the avatar. By pressing 'W' or 'S', the player can either move forward or backwards.
E	Interact	By pressing 'E', the player is able to carry out which action corresponds with what they are focussing on. There are a number of actions that can be completed depending on what the player looks at, such as: picking up an object, interacting with an NPC, activating a computer/scanner.
Q	Access items list	By pressing the 'Q' button, the player is able to quickly access their items list and navigate to whichever object they need in whatever moment.
Mouse	Focus the avatar	By moving the mouse, the player is moving the avatar's point of focus. This allows the player to rotate, focus on certain objects or NPCs, and navigate the game world.
P	Pauses the game	By pressing 'P', the player is allowed to pause the game for however long they require.

Enemies

There are a large variety of enemies in *Eris Escape* that the player must overcome or outsmart to accomplish their main goal and win the game; and they are both *guards*, and *inmates*.

Guards

Enemy	Description	Movement Directions	Movement Speed (cm/sec)	Movement Type	Health (units)
Guards	Prison Guard, will typically be carrying a baton weapon and have some form of protective armour. Some will have ID cards	Forwards, left, right, and backwards.	6	Walk	7

Guards are only capable of moving at a standard pace due to the their armour. They will attack the player on sight, and actively areas of the ship. They cannot be negotiated with and are highly the player.



weight of patrol certain dangerous to

Figure 2 Potential Prison Guard Design
http://www.rolepages.com/grop/space-underworld?commentId=2164411%3AComment%3A6546117&xg_source=activity

Inmates

Unlike with the previous enemy, the inmates can be categorised into several sub-types.

Enemy	Description	Movement Directions	Movement Speed (cm/sec)	Movement Type	Health (units)
Inmates (High Risk)	These inmates will be easily identified due to their colour of <i>red</i> .	Forwards, left, right, and backwards.	3	Walk, run or patrol.	5
Inmates (Medium Risk)	These inmates will be easily identified due to their colour of <i>orange</i> .	Forwards, left, right, and backwards.	3	Walk or run.	4
Inmates (Low Risk)	These inmates will be easily identified due to their colour of <i>yellow</i> .	Forwards, left, right, and backwards.	3	Walk or run.	3

In addition to these stats, there are a number of conditions for each of the inmate enemies.

Enemy	Additional Notes
High-Risk Inmates (Red)	These inmates are very violent towards all other characters and will attack with no provocation. They will typically be carrying pilfered weapons.
Medium-Risk Inmates (Orange)	These inmates can be negotiated with through trading valuable items. They are still prone to attack but are not actively seeking conflict.
Low-Risk Inmates (Yellow)	These inmates are easily negotiable, and will only ever attack if they are provoked, but are easily subdued.



Figure 3 High-Risk (Red), Medium-Risk (Orange), Low-Risk (Yellow) Prisoner Uniform Designs

The main challenge in *Eris Escape* is directly connected to the two types of enemies in the game. To keep players engaged, it is particularly important to make sure the challenges they are presented with are stimulating and enjoyable (Bartle, 2009).

Incorporating two separate enemy types, with sub-categories for one of them, increases the difficulty of the game as a whole, and will provide the player with a more intriguing challenge to overcome. The differences in Inmate temperament in particular is a unique mechanic, as it changes how the player has to handle each individual enemy they encounter.

Interactive Environmental Elements and Obstacles

Eris Escape takes place on a damaged space cruiser, and as such, is confined to earth-based physics. The environment of the *Eris* ship will include a range of elements and obstacles that are there to both interact with the player, as well as hinder their progress.

Environmental Element/Obstacle	Role	Relationship with the Player
Doors	Open and close	The player must approach a door and activate it to trigger the event.
Computer Terminals	Trigger events	The player interacts with the computer terminals to cause certain events to take place.
Broken Equipment	Harmful	Broken equipment has the potential to inflict damage on the player, taking -2 health from them when they come into contact.
Blockages	Stop progress	Act as hindrances to the player progression. Hallways or doorways that are closed or blocked by ruins.
Holes	Gaps in the floor	The player must jump these obstacles to progress.
Crates	Climbable object	The player is able to climb crates to give them a boost for jumping, or to escape an attack from an enemy.
Escape Pod	End goal	Once the player approaches the escape pod at the end of the game, the door will open and allow the player to enter the pod. This will then trigger the end events to

		occur.
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NPCs and Allies

Through *Eris Escape* many of the NPCs that the player encounters will firmly be established in the *enemy* category due to the danger they pose, and their lack of reliability in their temperament towards the player.

That being said, there is one category of inmates that they player will be able to safely interact with, without the threat of damage. These inmates, while not necessarily *allies*, will still be the least dangerous NPCs due to their passive behaviour.

Enemy	Description	Movement Directions	Movement Speed (cm/sec)	Movement Type	Health (units)	Additional Notes
Inmates (Very Low-Risk)	These inmates will be easily identified due to their colour of <i>white</i> .	Forwards, left, right, and backwards.	3	Walk	2	These inmates will neither attack nor defend themselves and are the easiest of enemies to overcome if needed.



Figure 4 Very-Low Risk Prisoner Uniform
http://www.screenused.com/index.cfm?item_id=3520

By incorporating the different Inmate types in *Eris Escape*, another level of immersion is present for the player to enjoy (Vorderer & Bryant, 2006). Having the lower-ranked Inmates as potential allies also increases this presence, as it mirrors how prisons actually operate in real life, with the forming of groups and forging of alliances to protect themselves. By allowing the player to experience this touch-and-go approach, it merely adds to the sensation of being a prisoner.

Rewards

Initially, there was no planned reward system for *Eris Escape*, however after reviewing the original game design, it was decided that some manner of reward system could in fact benefit the game overall. There will not be any large-scale system in place however, only a simple point-based one.

The player, during gameplay, will come across a number of computers and terminals. A majority of these items will gift the player with achievement awards, or non-currency points to encourage their progress.

The player will not gain any particular skills or abilities from the collecting of points, as this reward system has no actual in-game value and is chiefly for the player's own sense of accomplishment or enjoyment.

At the end of the game, after the player has either died, or has successfully escaped the ship, their

As Adams (2009) describes, *Eris Escape* includes a rewards system, however it is not expansive, or aimed at giving the player anything more than the personal satisfaction of collecting these points. This small level Positive Feedback loop will still encourage certain player types (Bartle, 2009) to actively go on the search for these points, as mechanics such as these truly appeal to them.

score would be displayed on the screen for them.

Typical Player Experience

Level Example: Initial Escape

This level is the first one the player is confronted with in the beginning of the game, showing their initial escape from their cell and into the main sections of the ship.

Gameplay Overview

This level is very much acting as a tutorial for the player, to give them their first taste of the game mechanics, as well as the overall look and feel. The player is introduced to a few low-level enemies, and encouraged to approach and communicate with them. As well as this, the level is where the player begins to understand the necessity of stealth, and the importance of avoiding the more volatile enemies.

Mood and Visual Style

As mentioned in an earlier section, the desired mood for and style for *Eris Escape*, while they may seem initially contradictory, will actually blend nicely together. The mood will give the player a sense of anticipation and danger as they must carefully navigate their way through the level. However, the style is quite cartoonish in nature, and low-poly in design. This conflicting nature of threat and childishness will draw the player in, make them feel vulnerable, but still provide an amusing and enjoyable experience.



Figure 6 Potential *Eris* Design Style

<https://au.pinterest.com/pin/521432463085787873/>

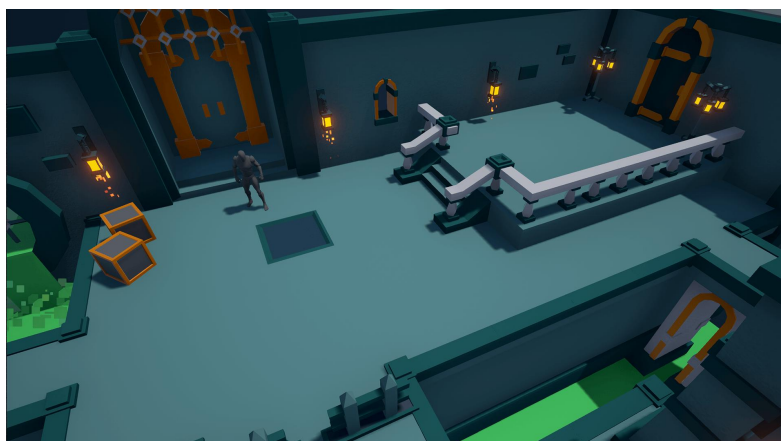


Figure 5 Potential Design Styles for Eris Escape

<https://au.pinterest.com/pin/521432463085787873/>

<https://www.cgtrader.com/3d-models/interior/other/low-poly-sci-fi-control-room>

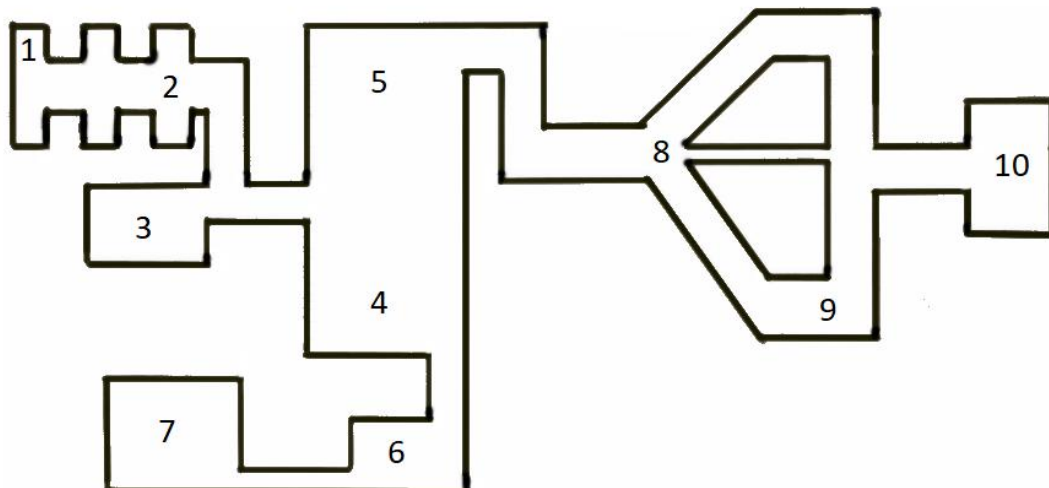
<https://www.unrealengine.com/marketplace/desk-dragons-low-poly-dungeon#&gid=1&pid=5>

Enemies, Obstacles, Items and Environmental Elements

In this level, the player would only encounter Very Low-Risk Inmates, as well as one of two guards. These opponents are intended to be easily defeated, or avoided; presenting minimal danger to the player. The only obstacles the player must deal with during this first level would be a locked door, and the corresponding computer terminal that unlocks it. The player must work through the environment, and activate the computer terminal to gain access to the next level. During this level, the player is also able to begin collecting currency-items, such as a pack of cigarettes, and a simple weapon (i.e. shiv).

Schematic

Below is a small schematic of this very first level of *Eris Escape*, including a rough outline of the area, and a table listing areas of interest, objects and items, and enemies present.



Key	Feature	Note
1	Player Starts	Player begins in their prison cell, and emerges when the door opens.
2	Very Low-Risk Inmate	Very Low-Risk Inmate provides brief explanation of what happened to the <i>Eris</i> , as well as a warning about guards and other inmates.
3	Weapon Collection	Player can pickup two shivs in this location.
4 & 5	Enemy Guard	The two enemy guards will be watching for inmates, the player must outrun them and get out of the room.

While the puzzles in *Eris Escape* are not particularly difficult to complete in theory, there is an increasing level of danger for the player in each one. The steadily increasing enemies of higher quality is one example. However, this increase in difficulty is a gradual curve, so as not to overwhelm the player too quickly (Adams, 2010).

This consistency is important to maintain, as it will keep the player engaged and invested in the game no matter how often they fail in completing a challenge or task.

6	Med-kit Collection	Player has the option of picking up a med-kit if they come in this direction.
7	In-Game Currency Collection	By crawling through a vent, the player can gain some in-game currency, such as a packet of cigarettes.
8	Small Vent	The player can crawl through this vent to escape enemies.
9	Patrolling Inmate Enemy	This enemy will be patrolling the triangular section and will attack the player on sight.
10	Elevator	Getting into the elevator ends this level and the game progresses to the next.

Player Experience Walkthrough

This following section will explain in depth what the overall player experience will be while playing *Eris Escape*.

The first level the player enters once the game begins is very much an introductory one, where the player is allowed to, in a sense, dip their toes in and get a feel for the game mechanics, and the difficulty involved. Through the use of short pop-up boxes, simple movement instructions will be given, and initially, similar prompts will occur whenever the player is confronted with a new situation.

Eris Escape begins with the player being released from their cell, and loud alarms blaring. The player leaves their cell and enters a hallway lined with other cells. They are confronted with a white-dressed inmate, who informs the player that the ship has been compromised and all the prisoners have been accidentally set loose from their holdings.

This NPC acts as more of an information guide than an enemy, and as such, takes the time to explain the different types of enemies that the player will encounter throughout the ship (i.e. the Guards, and the different Inmate categories), and the best methods on dealing with them.

After this conversation takes place, the player then begins to move through the level, where they are quickly shown into a room with two prison guards inside. These enemies call out for the player's surrender, and attack the moment they spot the player, charging with their batons ready. The player has two pathways they could turn down. One path leads to a series of rooms where the player can collect both a med-kit, two small shivs, and some in-game currency; and ultimately forces the player to re-enter the area with the Guards, but now with some means to defend themselves.

The second path forces the player to outmanoeuvre the two Guards and disappear through the second opening. This leads the player into another hallway, successfully escaping the Guards as they cannot follow past the door.

Regardless of how the enemies are dealt with, the player will eventually find themselves in this second hallway, and be confronted with another enemy. This new opponent will be the first Medium-Risk Inmate the player meets, and will be patrolling the next section of the level. The player has two available options for handling this new problem. As Medium-Risk Inmates are capable of being bribed, the player can approach the Inmate and offer to give them a collectable they possibly acquired earlier. If the player does have an item, the enemy Inmate will allow them to pass without incident.

However, if the player did not find any collectable currency earlier, approaching the Inmate will lead to an attack. Without valuable items to bribe the enemy with, the player has the option of sneaking their way around the Inmate by using a small vent system to avoid them entirely. This level ends when the player successfully reaches the elevator just after this Inmate.

Once the player has arrived at the next level of the ship, they are immediately thrown back into danger. In this level, there are several High to Very High-Risk Inmates blocking the path through. Each of these Inmates is armed with weapons that will deal serious damage to the player if hit. To

progress, the player must use their stealth skills to sneak through the vent systems again to get to a computer terminal on the far side of the room. The player will then be able to hack through the terminal to activate the door and move on.

Continuing past this, the player is once again met with a number of guards that are systematically patrolling the entire level. Before stepping into danger, the player has the option to collect several more weak-class weapons. The player must utilise their stealth skills to navigate their way through the volatile Guards and reach the next elevator.

The next level the player enters is the kitchen, where three Very High-Risk Inmates are contained. There will be no significant hiding areas in this level, and the player will be forced to attempt to hack their way out of the room while dodging the attacks of these enemies.

The player will then proceed to complete several small-scale levels that all follow the similar pattern of dodging enemies, hacking through computers and avoiding sustaining damage from obstacles like broken equipment. The player will have to overcome obstacles such as blockages and holes in the floor by manipulating objects in their environment (e.g. crates) to progress forward, while also occasionally trading valuable items to get enemies to not attack.

The final level that the player must overcome will be the hardest by far. The entire floor will be overrun with both guards and all categories of Inmates. The player must make their way through the level with extreme caution, as to alert one enemy would alert all of them. The player will be required to locate and obtain a stolen ID card from one of the other prisoners, either through force or by stealing it away.

With the ID card, the player is able to access the closed-off section of the ship belonging solely to the guards. Once inside this section, the player must avoid detection by the seven different guards within and reach one of the escape pods. These Guards are all armed with the strongest weapons available, meaning one hit is a kill.

Once the player has avoided all the enemies, and activates the escape pod, the game is complete, and their overall score (if they actively attempted to gain points) will be displayed for them.

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