Prison Escape

Game Design Document

Revision 0.3

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1. Project Overview

1.1 Concept

The goal of Prison Escape is to create a challenging, brain twisting puzzle game that heavily focuses on communication and teamwork between two players

1.2 Platform

Prison Escape will be sold on Steam for Windows PCs

1.3 Target Audience

Prison Escape targets puzzle enthusiasts, co-op gamers who enjoy solving complex challenges, working together in a cooperative environment

1.4 Story

1.4.1 Setting

The game is set in a Prison located in the United States of America in the late 70s

1.4.2 Characters

The main characters in this game Cole and Peter are brothers who grew up in a rough environment who always worked hard to make ends meet until they were blackmailed into completing a job for a local gang. This job led to them getting caught and sent to prison, after a year in prison studying law books and building a defence the brothers, fed up with their situation, thought they would be able to prove their innocence from the outside.

2. Gameplay

2.1 Core Gameplay Loop

Observe ⟶ Communicate

Progress ⟵ Act

(Observe → Communicate → Act → Progress → Observe)
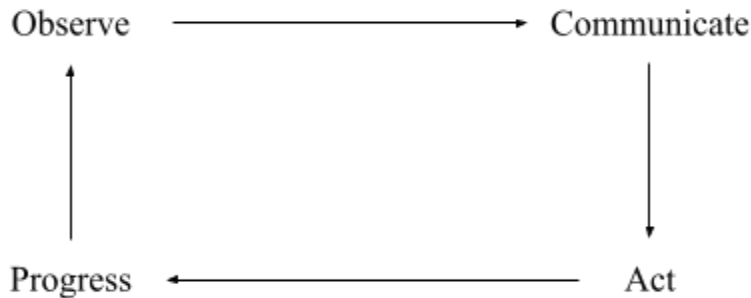
Observe
- Each new area a player enters in Prison Escape their first task is taking in the environment and all the tools and clues they have accessible to them.

Communicate
- Since each puzzle requires cooperation from both players, players must then communicate to their partner what they have available to them and vice versa.

Act
- Once all intel is gathered players can use the clues and tools they have discovered to solve the puzzle

Progress
- After completing a puzzle a new area of the map will be opened to a player allowing them to advance to the next puzzle, then restarting the loop.

2.2 Core Gameplay Mechanics

Voice Chat
- Provides players with a means to communication

Object Interaction
- Allowing players to pick up, inspect and drop items will play a crucial role in completing puzzles.

Levers and Buttons
- Interactable levers and buttons will also be a key component of the puzzles

Locked Doors
- Locked doors will manage the progression of the game restricting areas of the map from the player until they have completed the current puzzle

2.3 Game Structure

Both players will be located in the same prison but they will be separated for most of the game. This will force players to rely strictly on their communication, describing their scene, surroundings and puzzle components to the other player. Each area of the map will be separated, the goal of the map being

separated is to avoid confusion with puzzle clues (e.g. A player using a clue from a future puzzle to solve the current puzzle).

3. Puzzle Design

3.1 Puzzle Breakdown

| Puzzle	Concept	Mechanics	Clues
Puzzle 0 Walkie Talkies	This is the first task of the game, it is not necessarily a puzzle. Players must both respectively open the carved out book in their cell to find their walkie talkies. This will allow the players to start the game.	- Interacting with objects (Carved out book) - Picking up objects (Walkie Talkie)	The carved out book will have text written on the book explaining the interact control to the player "Press E to open".
Puzzle 1 Hidden Tool	In this puzzle *Player 1* will have to locate a chisel hidden in his cell. They can then use the chisel to break a break that contains a key to their cell.	- Picking up objects (Chisel & Cell Door) - Interacting with objects (Brick)	*Player 2* will have arrows pointing to where the chisel is hidden in the cell of *Player 1*. *Player 1* will have a symbol on the floor which matches a symbol that *Player 2* will have on a brick in his cell to determine which brick to break.
Puzzle 2 Hall Sneak	This puzzle comes down to timing and coordination. One player will have to navigate the prison halls avoiding a guard.	- Guards walking & spotting the player	*Player 2* will have sightlines on Player 1 to tell them when the coast is clear.
Puzzle 3 Cell Controls	Once *Player 1* reaches the cell controls they will have to find the correct lever to pull to release *Player 2*.	- Interacting with objects (Lever)	*Player 2* will have a riddle that will guide the player through a grid which corresponds with the levers *Player 1* has in front of them.
Puzzle 4 Keypad	*Player 2* will have to figure out a 4 digit code to get into the guards locker room.	- Interacting with objects (Keypad)	*Player 2* will have a sign that mentions 4 different items that *Player 1* can find in the room they are located. The code is the count of the objects in order

			that they appear on the sign.
Puzzle 5 Disguise	*Player 2* has to equip the correct uniform to get past the guard uniform scanner.	- Picking up objects (Equipping outfits) - Uniform Scanner	*Player 1* will have different posters showing prison guards, however only one of these outfits are possible with the clothing items provided to *Player 2*.
Puzzle 6 Unscrewing	When trying to open the vent there are four unique shaped screws holding it in place. *Player 1* will have to figure out which screwdriver to use for the correct screw.	- Interacting with objects (Screws)	Located in the halls will be coloured shapes (e.g. a blue star) that indicate which colour screwdriver to use for that shaped screw.
Puzzle 7 Tower Stairs	Next to access the guard tower *Player 2* will have to use 3 different keyboards with the corresponding doors.	- Picking up objects (Keycards) - Interacting with objects (Doors)	*Player 1* will have to spy on the guards and describe to *Player 2* which guards are on-duty so they can use their keycards. To determine which keycard needs to be used on what door, *Player 1* will have to see what order they appear in photographs on the wall.
Puzzle 8 Vent Maze	*Player 1* will have to navigate their way through the vents to find the correct exit.	- Interacting with objects (Vent panels)	*Player 2* will have the vent blueprints to use as a map to guide *Player 1*.
Puzzle 9 Search Lights	To get through the courtyard *Player 2* will have to control the searchlights allowing *Player 1* to get by unseen.	- Interacting with objects (Light Controls)	The lights will have 4 set patterns, *Player 1* must memorize the patterns and communicate which pattern *Player 2* should activate.
Puzzle 10 Electrical Work	To deactivate the electric fence players will have to cut the power using the electrical breakers and cutting wires	- Interacting with objects (Breakers & Wires)	The breakers are labeled using symbols that match the symbols on the walls of the prison. To determine the correct wires to cut the player must calculate which wires add up to the correct voltage.
Puzzle 11 Parking Lot	By comparing the cars in the parking lot and the cars in the log book, the players will have to find the correct	- Interacting with objects (Plate number entry machine)	Cars will have unique license plates and some will feature key distinctions (e.g. a scratch on the cars side)

|	license plate numbers to open the gate.		

3.2 Visual References

Puzzle Location Sketches

This showcases the interior of the prison using the circled numbers to plan where players will be located during each puzzle with *Player 1* represented by the blue numbers and *Player 2* represented by the red numbers.
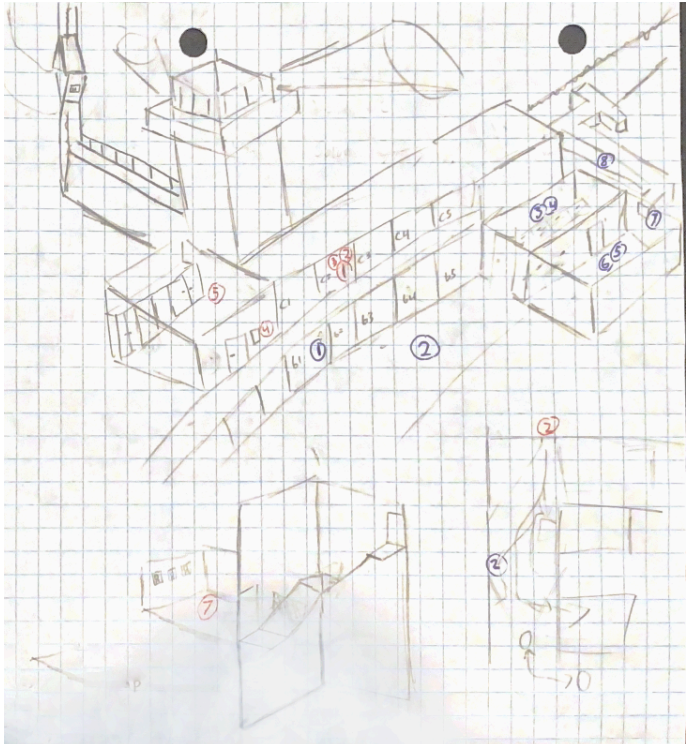
**Puzzle 11 Parking Lot Planning**

This is a small sample of what the car log book pages will look like, featuring an image of the car, a plate number, the car model, and a brief description of any notes that might be worth mentioning. Some of the data will be crossed out forcing players to match the missing data with the physical cars to see if they can find a match that would allow for the gate to be authorized for opening.
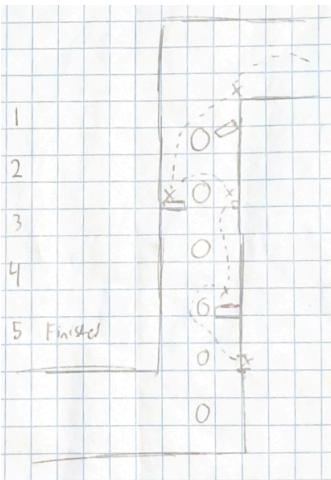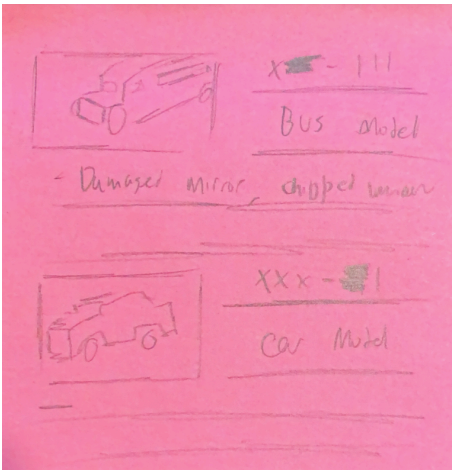
Puzzle 2 Hall Sneak Planning

This is a plan for the hallway that will be used for puzzle 2 where the player has to sneak through the hall. The plan is to include various points of cover that allow the player to hide when the guard is approaching. Also including obstacles such as tables, laundry carts and boxes to slow down the player

forcing them to run in a zigzag pattern as seen rather than a quick sprint down the hall.
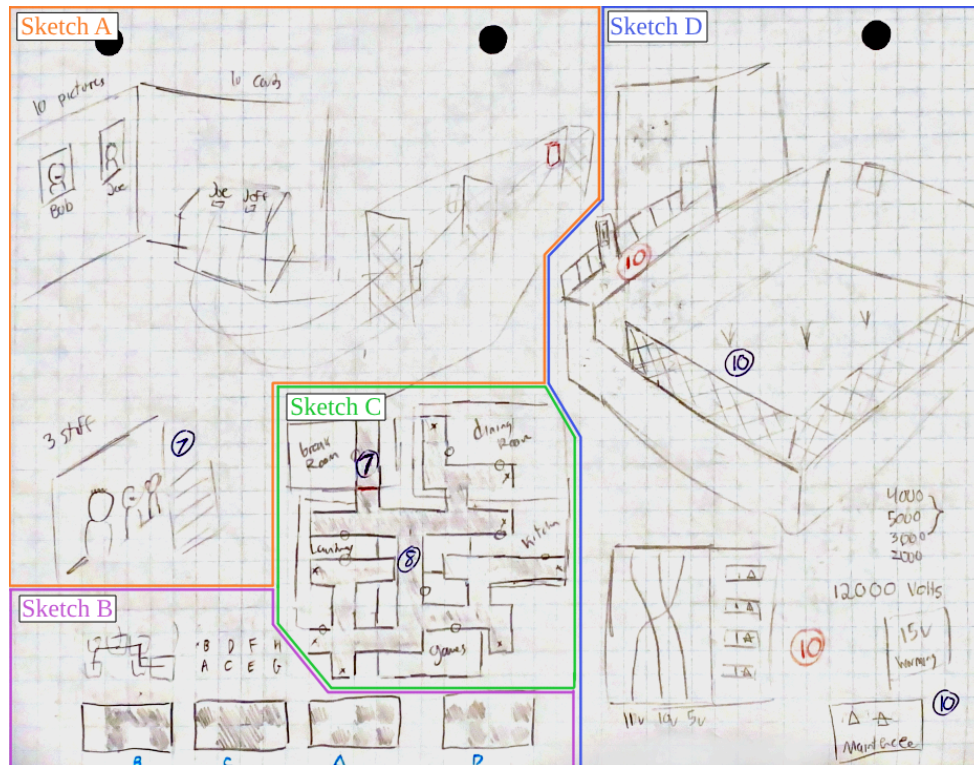
Puzzle 7, 8, 9 and 10 Planning
This sketch shows the planning for puzzles 7, 8, 9 and 10 divided into four separate sketches.

Sketch A: This is a sketch of puzzle 7 the tower stairs (Note: the stairs are not visualized as stairs in this early sketch). The sketch shows the basic loop of the puzzle where *Player 2* will be going from the keycard room referencing the pictures on the wall to choose the correct keycard for each door.

Sketch B: Sketch B showcases puzzle 9 the search light puzzle, the puzzle will operate on a 4x2 grid where the player will have to get from the left side to the right side. Players will have a small time frame where they have to go from one section of the grid to the next so they will need to be positive that they have selected the correct pattern.

Sketch C: This sketch shows the vent maze, this replicates the blueprints that *Player 2* will be looking at as he guides *Player 1* through the maze. The vent will have grates to look through to allow the players to describe their surroundings easier.

Sketch D: Sketch D shows the outside courtyard where puzzle 10 electrical work will be completed. At the bottom is the breaker box interface the player will be faced with. They first must flip the correct breakers to disable the wires and then they can rip out the wires to shut down the electric fence.

4. User Interface & Visual Design

4.1 HUD & Player Feedback

The goal is to keep the player HUD uncluttered to enhance immersion while providing necessary feedback for interaction and communication..

Crosshair
-    A simple dot in the center of the screen to visually indicate exactly where the player is aiming

Item Tooltips
-    When the player is looking at an item they can interact with or inspect the game will show the control and tell them what actions they can perform (e.g. Press [E] to pick up)

Communication Indicators
-     Display when the player is speaking via voice chat.

Player Hand
-    When the player is holding an item the will be able to directly see it in their characters hand

4.2 Visual Style & Atmosphere

4.2.1 Art Direction

The goal is to create a Pixar inspired art style with realistic textures but cartoon proportions to the characters

4.2.2 Lighting & Mood

I am planning to use lighting to set the moods of the scenes, using a lot of blue and yellow lights. The lighting will be the primary source of colour to an otherwise dull and grey scene. The lighting is going to help guide the player through the hallways as they work towards the rooms with yellow lighting. The hallways are meant to feel unsafe, uneasy and somber which is why they will be blue lit. Where the puzzle rooms should make the player feel hopeful as they push towards their goal of escaping. The final puzzles are played outside where I wanted to keep it dark with realistic night lighting to emphasize that even though they are getting out of jail, life might not get easier as they are on the run.

4.2.3 Environmental Storytelling

The world is going to be fairly gritty, dark and as mentioned the lighting is hoping to imply sadness. This is to tell the story of the environment the protagonists have been locked in, emphasizing why they want to escape.

4.3 Menu User Interfaces

The menus are going to be fairly simple keeping it easy for players to navigate the various options, this will allow players to get through the menus quicker getting to the gameplay faster.

4.3.1 Menu Options

- Create Lobby
    - Creates a server allowing users to host a game. This opens the option for them to invite a friend via Steam.
- Server Browser
    - Opens server browser showing all games that users can join
- Settings
    - Volume Settings
        - Master Volume Slider
        - Environment Volume Slider
        - Music Volume Slider
        - Sound Effects Volume Slider
    - Graphics Settings
        - Fullscreen Toggle
        - Post-Processing Toggle
        - Vsync Toggle
        - Resolution Options
    - Gameplay Settings
        - Sensitivity
        - Keybindings
- Quit
    - Closes the application