
Fog Hill Bunker

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| | |
|--|----|
| Game Overview..... | 2 |
| Original Game Design | 2 |
| Game Concept..... | 2 |
| Concept..... | 2 |
| Inspirations..... | 2 |
| Setting and Environment | 3 |
| Setting Description..... | 3 |
| Setting references and inspirations..... | 4 |
| Floorplan (draft 1, only bunker) | 6 |
| Floorplan (Draft 2) | 7 |
| Key Gameplay Features | 8 |
| Mechanics | 8 |
| Justification..... | 8 |
| Game Rules | 9 |
| Rules..... | 9 |
| Balance | 9 |
| Game Progress..... | 9 |
| Game Flow | 9 |
| Game Controls | 9 |
| Objects | 10 |
| Game Assets management..... | 10 |
| Process..... | 10 |
| Asset References | 11 |
| Models & Textures..... | 11 |
| SFX & Music | 11 |
| Walk Through..... | 12 |
| References | 12 |

Game Overview

Title: Interactive Bunker

Target Audience: Casual Puzzle Players 14+

USP: Unique Puzzles

Original Game Design

Game Concept

Concept

A first-person puzzle game with the goal of entering a usual bunker to find clues on how to get out of this mysterious cold foggy mountain. The game consists of the man arriving at a desolate house and weird looking bunker. The player must first enter the bunker by picking up a crowbar, then they must find the secret digit and key of each room within the bunker to progress to the final room that has the map to get out.

Inspirations

I have decided to create a mountainous icy environment with fog that will limit visibility beyond the small area allowed for the player. I chose this because like the atmosphere of mountains, snow, and fog combined into one especially in the images seen in figure 3-5.

I have found many inspirations within the escape memoirs games, especially since they closely share the same aesthetic and gameplay themes. A large part of my bunker will be similar in appearance to the "Escape Memoirs: Mini Stories – Bunker Scenario" examples seen in figures below.

Many of the puzzles will be inspired by common puzzles like keylocks, padlocks, and code locks. However, there may not be a reference to these basic components even if they were inspired by other games or the real world.

FIGURE 1 – ESCAPE MEMOIRS: MINI STORIES – BUNKER SCENARIO



Setting and Environment

Setting Description

The setting of my game is a snowy icy and foggy mountain, with a rugged and iced over road that disappears into the snow nearby the mysterious looking bunker.

The bunker itself has an unusual room structure and basic lighting that is powered by a fuel-based generator, the size of the bunker rooms is relatively small with ordinary concrete construction, with unusual hidden rooms and oddly placed furniture that seems to contrast the feel of the bunker.

The core goal of the setting is to create a sense of mystery and confusion with the player, while limiting the area of the mountain that is displayed by using fog, the bunker itself has a feeling of being created by a very eccentric person with unusual structure and choice of furniture.

Setting references and inspirations

FIGURE 2 – CNN



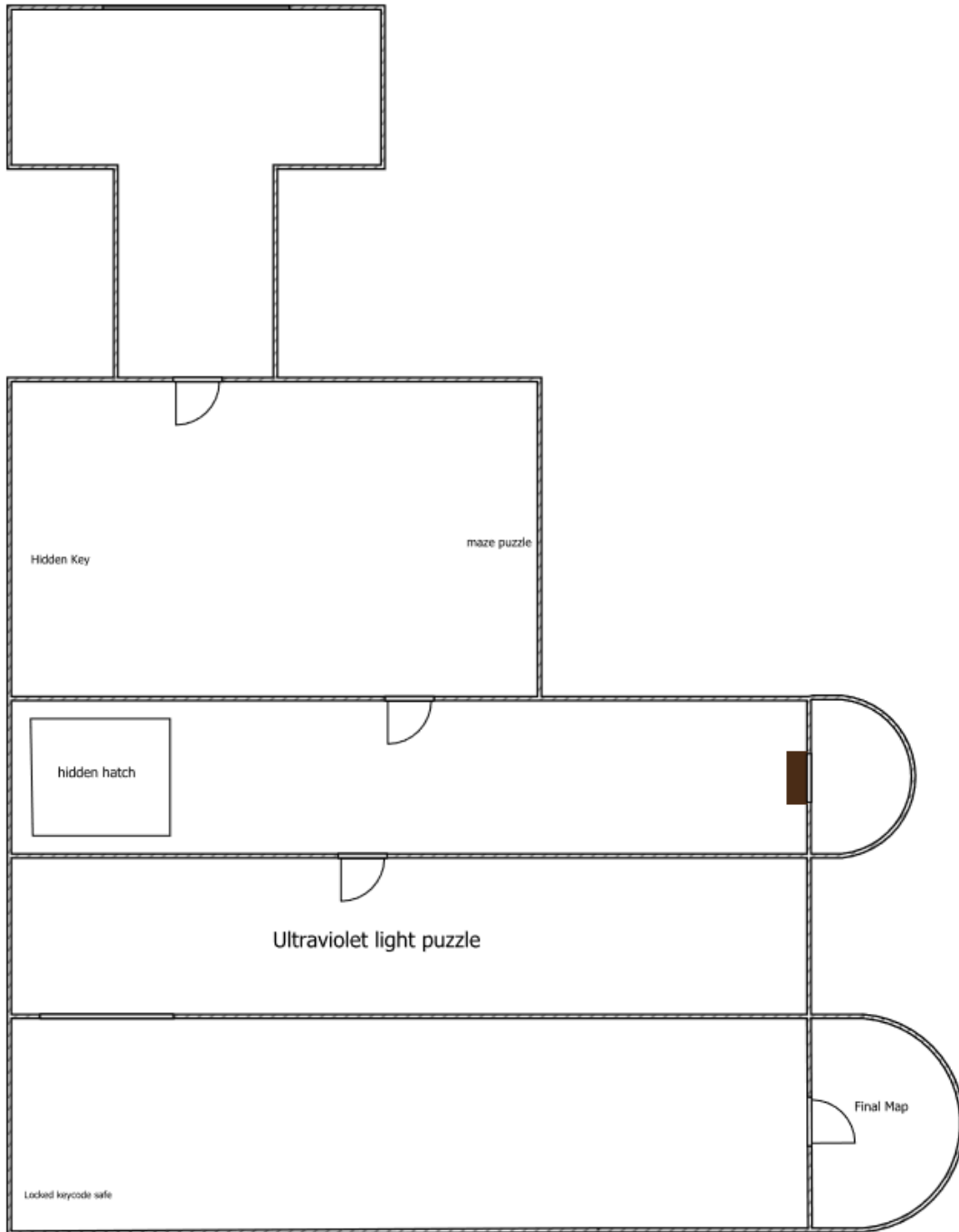
FIGURE 3 – WEATHER.GOV



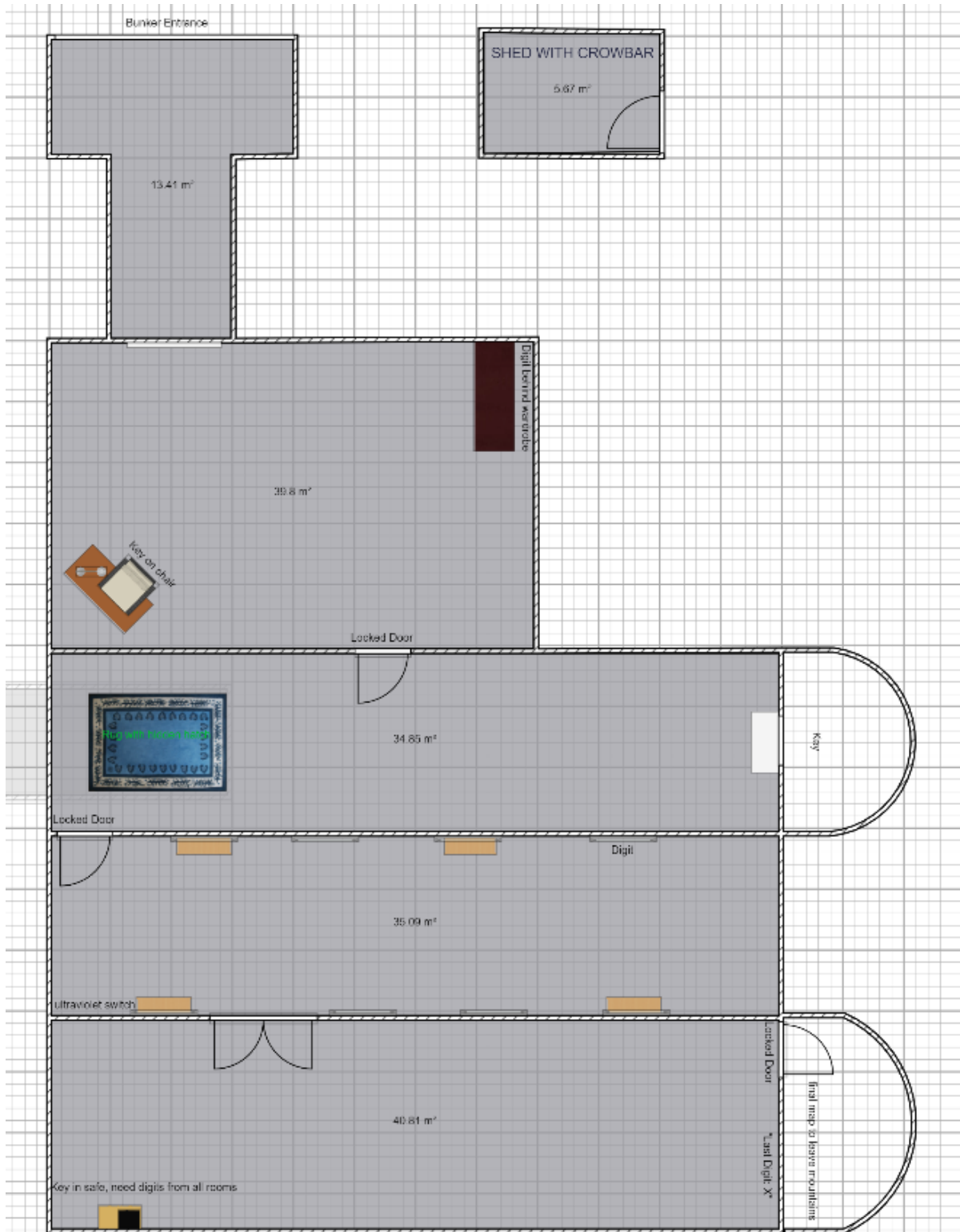
FIGURE 4 – PEXELS.COM



Floorplan (draft 1, only bunker)



Floorplan (Draft 2)



Key Gameplay Features

Mechanics

The movement is basic side to side, front to back, jumping and crouching.

There are multiple interactive objects in my game with different purposes these are:

- Picking up items.
- Entering the bunker by using a crowbar.
- Interacting with a generator by filling it with fuel to turn on the power.
- Moving a chair to pick up a key on the seat.
- Unlocking doors using keys.
- Pushing specific objects like a wardrobe to reveal hidden rooms.
- Opening a hatch leading to a hidden room after moving a rug.

The inventory is a simple collection of items that can only be used in specific interactable locations, items are added by interacting with them and taken out by interacting in the area they can be used.

The Notebook is also simple it automatically notes down the digits the player finds allowing the player to check them at any time.

Justification

The justification for these mechanics is that most of them are based on the same core system of interactions which mostly moves, collects, or uses objects. The movement follows traditional game movement. The notebook is like the inventory it just stores the digits the player has found showcased in the correct order.

Game Rules

Rules

- Player cannot leave small area near bunker and inside it.
- You can interact with specific things within the game.
- Items that can be collected are automatically added to the inventory when you interact with them.
- When an interaction requires an item, it is automatically removed.

Balance

There is no specific requirement for balance in my game outside of determining the difficulty, in my case I have chosen to make it easier for the player by showing interactable areas with text, Aswell as noting down digits they interact with in the correct order in the notebook.

Game Progress

The player must interact to unlock areas; for example, find a crowbar and use it to open the bunker. Within the bunker to progress the player must find the hidden key that unlocks the door to the next room, there are also hidden digits that are required to unlock the object at the end so they may have to back track.

Game Flow

The challenges within my game are simple, just finding the interactable objects and finding the items required to interact with them, finding the digit that is noted into the notebook, Aswell as the key to unlock the next area; repeating the process until the end.

Game Controls

Movement with traditional WASD controls.

Interact with f key, usable in every interactable object automatically picking up and using items if needed.

Notebook with TAB key showcases the notebook which shows collected digits.

Menu navigation with mouse and WASD, ENTER to submit.

Objects

| Object | Purpose |
|--|---|
| Locked Doors & Keys | Limit accessible area to player. |
| Crowbar | Like a key required to initially enter the bunker. |
| Lights | Provide lights and special interaction with infrared light. |
| Generator and Fuel | Powers lights within the bunker. |
| Movable objects like chair, closet, carpet and hatch. | Used to reveal hidden areas with interactable or collectables. |
| Digits & Safe | Digits that can be noted down and used to open the safe near the end. |
| Hidden switch & ultraviolet light | Hides notes and digits in a unique way. |
| Final Map | Ends the game after being collected. |
| Other assets; like ice cliffs, rocks, shelves, and tables. | Enviromental and decoration. |

Game Assets management

Process

My process for the assets is the following, create basic assets like cubes, rectangles and so to allow implementation of blueprints and logic. I then use a modelling extension with unreal to create a basic but reasonable asset which may require adding collision boxes, fixing things like UV and adding materials. For any imported assets, a new material needs to be created using the provided textures and applied to the asset as well as ensuring the sizing and other requirements fit the needs of the game.

Asset References

Models & Textures

- Paper Material Assets - <https://ambientcg.com/view?id=Paper003>
- Crowbar asset & textures - <https://void1gaming.itch.io/free-3d-assets-collection>
- Unreal Starter Content for materials
- Quixel Bridge Assets
- Carpet Material - <https://www.fab.com/>
- Generator Asset & Texture - <https://www.cgtrader.com/free-3d-models/electronics/other/generator-7855f5dd-b7c9-40eb-8046-e782b7add9f8>

SFX & Music

- Unlocking Door by Nox_Sound - <https://freesound.org/s/768656/> - License: Creative Commons 0
- Light Switch by TheWoodlandNomad - <https://freesound.org/s/363084/> - License: Creative Commons 0
- industrial generator by kyles - <https://freesound.org/s/406310/> - License: Creative Commons 0
- Opening small safe by john721 - <https://freesound.org/s/202717/> - License: Creative Commons 0
- Garage door by SoundsLikeYukon - <https://freesound.org/s/723888/> - License: Creative Commons 0
- Snow Footsteps by Nox_Sound - <https://freesound.org/s/613849/> - License: Creative Commons 0
- Mysterious Piano Ambience by Nancy_Sinclair - <https://freesound.org/s/750215/> -- License: Creative Commons 0
- mysterious piano #2.mp3 by ZHRØ - <https://freesound.org/s/608399/> - License: Creative Commons 0
- RokZRoOm - Fuhr Elisee Piano Loop by RokZRoOm - <https://freesound.org/s/191862/> - License: Creative Commons 0
- Dark Evil Piano by memz - <https://freesound.org/s/323495/> - License: Creative Commons 0
- funnel filling jerry-can by gecop - <https://freesound.org/s/522118/> - License: Creative Commons 0

Walk Through

Player enters a very basic start menu, presses the play button to spawn into a foggy somewhat mountainous area with a large metal bunker and a small shed. They would collect the crowbar from the shed, collect the fuel next to the closed door, place it into the generator, open the door and enter the first room.

In the first room they will find a hidden note behind a bookshelf with the first digit, and a chair that can be pulled, after pulling the chair they will get the key for the door of the next room.

In the room they will find an interaction with the carpet allowing them to move it revealing a hidden hatch which can be opened, inside another note with the second digit. In the same room a movable wardrobe reveals a hidden room with a key to the next room.

In the room is an array of shelves and a hidden switch which enables ultra-violet light revealing hidden notes which have unusual messages, except one of them holds the third digit that can be collected.

The door to the next room is already unlocked and can be opened, in the room there is a safe, and a locked door with text next to the door "The 4th digit is ..." which can be collected.

If you have collected all 4 digits you can open the safe which holds the key to the door. Behind the door is a map which sends the player to a win; otherwise, the player will have to search for the digits they have missed.

References

Figure 1 -

https://store.steampowered.com/app/2222460/Escape_Memoirs_Mini_Stories_Bunker_Scenario/

Figure 2 - <https://edition.cnn.com/style/article/doomsday-luxury-bunkers/index.html>

Figure 3 - <https://www.weather.gov/safety/fog-mountain-valley>

Figure 4 - <https://www.pexels.com/photo/thick-fog-over-the-mountain-14238465/>