Voodoo

Gate 2

Game **D**esign **D**ocument

by **Tobias Connor Schuster**

Contents

Change Log

Date	Changed by	Change
10.04.2018	Tobias Schuster	Initial creation
18.04.2018	Tobias Schuster	Restructured document (asset list and vision document outsourced into separate documents)
23.04.2018	Tobias Schuster	Mechanics elaborated (Spirit energy)
30.04.2018	Tobias Schuster	Mechanics elaborated (Voodoo-powers)
08.05.2018	Tobias Schuster	Mechanics elaborated (Characters)
09.05.2018	Tobias Schuster	Mechanics elaborated (Characters) HUDs/Menus elaborated
11.05.2018	Tobias Schuster	Signs & Feedback updated Edge Cases updated Level Design updated
22.05.2018	Tobias Schuster	Review and slight corrections
27.06.2018	Tobias Schuster	Level 2 added Assets needed for level 2
28.06.2018	Tobias Schuster	Player paths updated
29.06.2018	Tobias Schuster	Corrections of mechanics Controls updated
02.07.2018	Tobias Schuster	Signs & feedback updated Menus updated
03.07.2018	Tobias Schuster	Edge cases updated

Change Log

Vision Statement

"Voodoo is a 3D puzzle-adventure for lovers of the occult with minimized stealth-elements.

The player discovers his surroundings from the perspective of a small doll, finds different items to strengthen his voodoo-powers and possesses guards to ultimately flee from the underground bunker.
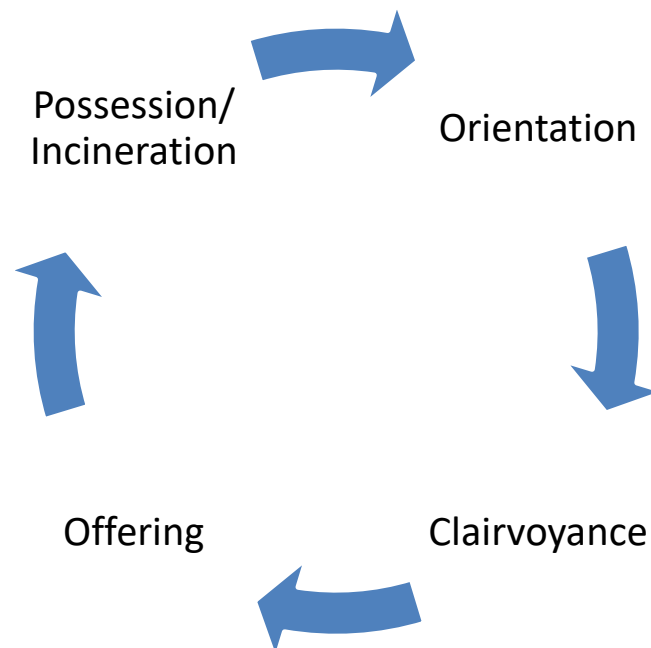
The low camera perspective and dark atmosphere in the beginning make the player feel vulnerable but the interesting mechanics and fun elements within the game lighten up the mood."

Story & Setting

For a detailed story see ***Voodoo_StoryDocument***.

Gameplay

Core Game Loop

Orientation includes:

- Entering a new room
- Getting a first impression of where your objectives (fetish and control item) are located

Clairvoyance can be used anytime. It includes:

- Switching into a voodoo mask and getting an overview of the level

Offering includes:

- The way to the fetish
- The way to the control item, consisting of several alternative routes
- Bringing the control item back to the fetish and activating the possession/incineration

Possession includes:

- Doing a quick-time-event for achieving control over a guard
- Opening the door to the next room, as the guard
- Pushing objects (like shelves) around to create new ways for the doll to move

Incineration (Nice-To-Have feature) includes:

- *Alternative to possession mechanic*
- *Setting a focus to the guard (mechanic parallel to possession)*
- *Transferring self-inflicted damage to the guard (automatically)*

Detailed Gameplay Mechanics

Characters

Doll 13

- The voodoo doll is the player character
- Is the thirteenth doll that got experimented on
- It is **40cm** tall

Standard Interactions

Feature	Purpose	Priority
Movement	Be able to move	MH
Jumping	Reach higher positions	MH
Climbing	Reach higher positions	SH
Open drawers	Create steps	SH

Movement
- The PC is able to move in all directions
- Its movement speed is **15cm/s**

Jumping

- The PC is able to jump
- The max jump height is at **10cm**
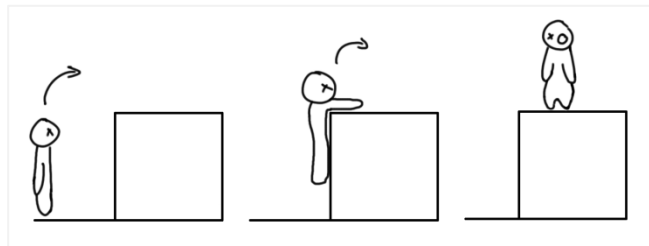- The max jump width is at **45cm**

Figure 1 - Climbing

Climbing

- The PC climbs edges after jumping on them
- If the PC jumps to an edge, it will automatically pull itself up
- Climbable edges must have a max height of **40cm**
- Open Drawers
  - The PC can open drawers of desks or filing cabinets
  - If the PC stands in front of a drawer (**5cm distance**) the drawer will open on button press

Signs & Feedback

Action	Signs	Feedback
Movement	N/A	- Run-animation - Sound of footsteps (fabric on ground)
Jumping	N/A	- Jump-animation - Sound of impact (fabric on ground)
Climbing	N/A	- Climb-animation - Sound of impact (fabric on wood) - Moaning sounds
Open drawers	- Coloured outlines when in range	- Drawer opens

Guard

- The Guard is **170cm** tall

Standard behaviour

- The guard is either still standing or patrolling
- He moves with a speed of **35cm/s** when patrolling
- The PC is spotted, when it is in the guard's field of view
    - The PC is only spotted, if no object is hindering the view of the guard
        - The PC can hide behind objects and will not be seen by the guard
    - While the PC is spotted, the spirit energy will be reduced rapidly (see '*Spirit-Energy*')
    - After **3 seconds** the guard will walk to the PC and pick it up (SH) This results in the end of the game
- The guards field of view is represented by a cone in front of him
    - The cone has an angle of **30°**
    - The length of the cone is **200cm**
- When standing still the guard looks into different directions
    - The directions are specific to each guard
    - The frequency in which a guard turns around is specific to each guard

Possession Interactions

The guard can be controlled by the player through '*Possession*'. While possessing a guard the player has the following interactions available:

Feature	Purpose	Priority
Movement	Be able to move	MH
Open Door	Create an exit	MH
Guard Interaction	Restrict player movement	MH
Pushing	Open or block ways	NTH
Carry Doll	Reach higher positions	CH

Movement

- The guard can move in all directions
- His movement speed is **35cm/s**

Open Door

- The guard can open doors by using the handle
- He must be in interaction range (**10cm distance**) to open the door

Guard Interaction

- If the guard comes into range (**150cm**) of another guard, possession will end immediately

Pushing (NTH)

- *As the guard, the player can push large tables and shelves*
- *He has to stand in front of the object (**10cm distance**) to push it*

Carry Doll (CH)

- *As the guard, the player can grab the doll from different heights, these are:*
    - *Floor level (0cm – 20cm)*
    - *Desk level (70cm – 90cm)*
    - *Shelf level (140cm – 160cm)*
- *As the guard, the player can put the doll down on different heights, after picking it up. The heights are:*
    - *Floor level (0cm – 20cm)*
    - *Desk level (70cm – 90cm)*
    - *Shelf level (140cm – 160cm)*

Signs & Feedback

Standard behaviour

Action	Signs	Feedback
Walking	N/A	• Walk-animation • Sound of footsteps
Turning around	• Lights flickering	• Turn-animation • Sound of footsteps
Spotting PC	N/A	• Spirit energy quickly decreasing • Exclamation by the guard (short "huh?" or "hmm?" • Gamepad will vibrate slightly

Possession interactions

Action	Signs	Feedback
Movement	N/A	• Walk-animation • Sound of footsteps
Open door	• Coloured outlines when in range	• Open-door-animation • Creaking sound
Guard interaction	N/A	• Exclamation by the guard (short "huh?" or "hmm?"
Pushing	• Coloured outlines when in range	• Push-animation • Groaning sounds • Dragging sounds
Carry doll	N/A	• Pick-up animation

Edge Cases

1. <u>Problem</u>: When a puzzle consists of several guards, the player could just open the door using the first available guard he possesses.
   <u>Solution</u>: Some can only be opened by a specific guard who has the **keys to that door**. Additionally the **guard interaction** mechanic hinders the player to pass other guards while possessing.

Spirit-Energy

Goal/Purpose
- The player will feel pressured by the energy that is constantly running out
- Possibility for rewarding high risks with additional energy and punishing mistakes or bad decisions with the loss of energy

Description
- Spirit-energy represents the "life" of the voodoo doll
    - It is equal to a certain **amount of seconds** the PC has before dying
- When it runs out the game is over
- The spirit energy is steadily decreasing
    - **1 point per second**
- Being seen by a guard accelerates the rate of energy loss
    - **3 points per second**
- Spirit energy is refilled completely when the PC is in range (**20cm**) of the fetish

Signs & Feedback
- The amount of energy will be represented by an energy bar on the screen
- The bar is divided into several segments
    - Each segment represents a certain **15 seconds**
- Every time a segment **runs out**, there is the sound of an **igniting flame** and a small **particle effect** on the connection point between segments
- When the energy is **refilled** the bar will **flash up**

Edge Cases
1. Problem: The player is not pressured by the game.
   Solution: Spirit energy mechanic.
2. Problem: Not every puzzle requires the same amount of spirit energy. In later levels, the player needs more time to complete puzzles.
   Solution: The player gains spirit energy after completing the QTE (see '*Possession*').

Fetishes

Totem-Fetish
- Unlocks voodoo-powers or enables the player to use a voodoo-power
- Always needs an item to be activated (*OFFERING*)
- At least one is placed per level
- The player must be in range (**10cm**) to be able to interact with the fetish

There are <u>three types</u>, distinguished by the veve (symbol) and the colour of the respective loa spirit:

Ghede Doubye – Clairvoyance:

- **[BG-Info]** Is said to gift people with clairvoyance
- Enables the player to use clairvoyance in return of a button eye
- Represented by the colour **green** and **eyes**

Damballah – Possession:

- **[BG-Info]** Creator of life; ruler of mind, intellect and cosmic equilibrium
- **[BG-Info]** Makes hissing sounds when speaking and is hard to understand
- Enables the player to possess a specific human (guard)
- Expects a personal object or part of that human in return (*OFFERING*)
- Represented by the colour **white** and **snakes**

Kalfu – Incineration (NTH):

- ***[BG-Info]*** *Controls evil forces and allows the crossing of bad luck, deliberate destruction, misfortune and injustice from the spirit world*
- *Enables the player to transfer damage to a specific human (guard*
- *Expects a personal object or part of that human in return (OFFERING)*
- *Represented by the colour **red** and the **moon***

Voodoo Mask
- At least one is placed per level
- Can be used by the player to get an overview of the level and identify where objectives are located (*CLAIRVOYANCE*)
- It is possible to switch between the masks, if more than one is present in the same level

Voodoo-powers

Clairvoyance

Goal/Purpose
- The player needs to know where the objectives are located and how to get there

Description
- Can be activated **anytime**
- There is at least one mask per level
- It is possible to switch between the masks in a certain level, if several are present
- The player takes the perspective of a voodoo mask on the wall
  - The field of view of the voodoo mask is **90°**
  - He can look around to observe the room
    - The angle in which the player can look around must be adjustable for each specific mask in a **vertical** and **horizontal** angle
- The player does not control the voodoo doll while using clairvoyance (the doll is idling)

Signs & Feedback
- The screen has a **foggy effect** on the borders
- While using clairvoyance the player hears a **faint mumbling**
- **Small arrows** on the side of the screen indicate if there is more than one mask in a room
- Objects like fetishes and control items have **glowing outlines**
- The player sees slowly **fainting footsteps** behind the guard, indicating the path he is walking

Edge Cases
1. <u>Problem</u>: The player has no way of seeing where objectives are located.
   <u>Solution</u>: Clairvoyance mechanic.
2. <u>Problem</u>: The player cannot get a good overview of the level with only one mask.
   <u>Solution</u>: If necessary there will be more than one mask in a level, allowing the player to switch between perspectives and getting a better overall overview.

Offering

Goal/Purpose
- Before the PC can use possession or clairvoyance, he must bring the fetish an appropriate offering

Description
- The PC can interact with the fetish in two ways:
  - Without offering: the player is "told" what the fetish wants
  - With offering: the player gives the offering to the fetish and activates his voodoo powers, either possession or incineration
- An offering/control item is either a **personal item** (e.g. pocket watch) or **part of a human** (e.g. strand of hair)

Signs & Feedback
- An **icon** on the screen indicates whether or not the player **holds the control item**
- A **sign** indicates what item the fetish expects
- The fetish will **glow** in its respective **loa colour**
- After giving the offering to the fetish, the player will hear a **confirmation sound** from it
  - **Incineration** fetishes respond with the sound of an **igniting flame**
  - **Possession** fetishes respond with the sound of **deep, mumbling laughter**
  - **Clairvoyance** fetishes respond with the sound of **water drops**

Edge Cases
N/A

Possession

Goal
- The player must have a way to open doors (MH) or to push large objects (NTH)

Description
- Requires a possession fetish
- The guard that the control item belongs to is possessed after a quick-time-event was completed by the player:
  - The QTE must convey the feeling of **breaking through** the mental barrier of the guard
  - The player has to press a button repeatedly
  - This will move the two indicators (left and right) to the middle (see '*Figure 2*')
  - The indicators will move to the border, when the button is not pressed
  - This will be increasingly difficult with each encountered guard
  - The QTE stops after **5 seconds**
    - This counts as a failure
    - The player can try again
    - On each try the QTE will become easier to complete
  - After completing, the player will be rewarded with **additional spirit energy maximum**
    - Completing it on the first try results in **20 seconds** additional energy
    - Completing it on the second try results in **15 seconds** additional energy
    - Completing it on the third try results in **10 seconds** additional energy
    - Completing it on every following try results in **5 seconds** additional energy

Figure 2 – possession QTE reference

- The player controls the guard
  - The voodoo doll falls down and cannot be controlled
  - For all interactions during possession see '*Guard - Possession Interactions*'
- Possession ends automatically after the door has been opened
  - The guard returns to his default position or movement pattern
- Possession ends automatically after the possessed guard comes into range (**150cm**) of another guard
  - After completing the quick-time-event, the guard is possessed again
- When possession ends, the player controls the guard

Signs & Feedback

- During the QTE:
  - The camera is **focused on the guard**
  - The guard holds his head in **agony** and will groan occasionally
  - The gamepad will **increasingly vibrate**
  - The button in the middle of the UI will be **glowing**, while the player is still able to complete the QTE in **perfect time**
- When possession ends, the guard will make a **puzzled exclamation** (e.g. "huh?", "what happened?")

Edge Cases

1. <u>Problem</u>: The player is not able to finish the quick time event due to the difficulty.
   <u>Solution</u>: After 5 seconds the QTE ends and the player can try again with decreased difficulty.

Incineration (Nice-To-Have)

Goal/Purpose
- *This is an alternative to the possession mechanic*
- *Instead of controlling the guard, the player can inflict damage to a guard and clear the way*

Description
- *Requires an incineration fetish*
- *The guard that the control item belongs to is focused*
- *When the voodoo doll is damaged, the damage is instead transferred to the focused guard*
- *Sources of damage are:*
  - *Falling from a great height*
  - *The flame of a Bunsen burner*
  - *Cutting with a scalpel*
  - *Stinging with needles*
- *Damage is only transferred if the distance between PC and focused guard is less or equal to* ***10m***
  -

Signs & Feedback
- *The focused guard will have thin **coloured outlines***
- *The reaction of the guard depends on the source of damage:*
  - *Falling   –   the guard becomes **unconscious***
  - *Burning   –   the guard **flees** the room **in agony***
  - *Cutting/Stinging –   the guard **flees** the room*

Edge Cases
1. <u>Problem</u>: The player might not be able to identify the focused guard.
   <u>Solution</u>: The guard will have highlighted outlines.

Controls

The game only supports gamepad controls. Keyboard and mouse are not included.

Characters

Action	Control
Voodoo Doll	
Movement	Left Stick
Camera	Right Stick
Jump	[A]
Open Drawer	[B]
Interact with Fetish/Item	[X]
Activate Clairvoyance	[Y]
Guard	
Movement	Left Stick
Camera	Right Stick
Open Door	[X]
Push/Pull	[B] + Left Stick

Clairvoyance

Action	Control
Look around	Right Stick
End Clairvoyance	[B]
Switch to next Mask	[Y]

Quick Time Event

Action	Control
Press	[X]

HUDs/Menus

Menus

- Main menu
    - Play
    - Settings
    - Credits
    - Exit
- In-game menu
    - Continue
    - Settings
    - Return to main menu
- Settings
    - Music volume
    - SFX volume
- Credits

Scaling and Proportions

Every asset and character will be measured in centimetres (cm). Everything has a height, a width and depth.

For the specific measurements of each asset see '*Assets Needed*'.

Camera

The camera is a typical third person camera

Standard Mode

- The camera is placed **50cm** behind the PC
- The height of the camera at 0° is at **30cm** height
- The camera rotates around the PC
    - The PC turns in the same direction as the camera, when rotating horizontally
    - The camera is limited in vertical rotation at angles of **50°** and **-18°**
- While colliding with objects, the camera will move towards the player

Possession

- The camera is placed **150cm** behind the guard
- The height of the camera at 0° is at **180cm** height
- The camera rotates around the guard
    - The guard turns in the same direction as the camera, when rotating horizontally
    - The camera is limited in vertical rotation at angles of **50°** and **-18°**
- While colliding with objects, the camera will move towards the guard

Screens/Perspectives

- Voodoo doll perspective
  - The PC is in the middle of the screen
- Mask perspective
- QTE perspective
  - The guard is in the middle of the screen and holds his head groaning
- Possession perspective
  - The guard is in the middle of the screen

UI Elements

- Voodoo doll perspective
  - Spirit-energy bar
  - Control item Indicator
- Mask perspective
  - Arrows on the left and right border
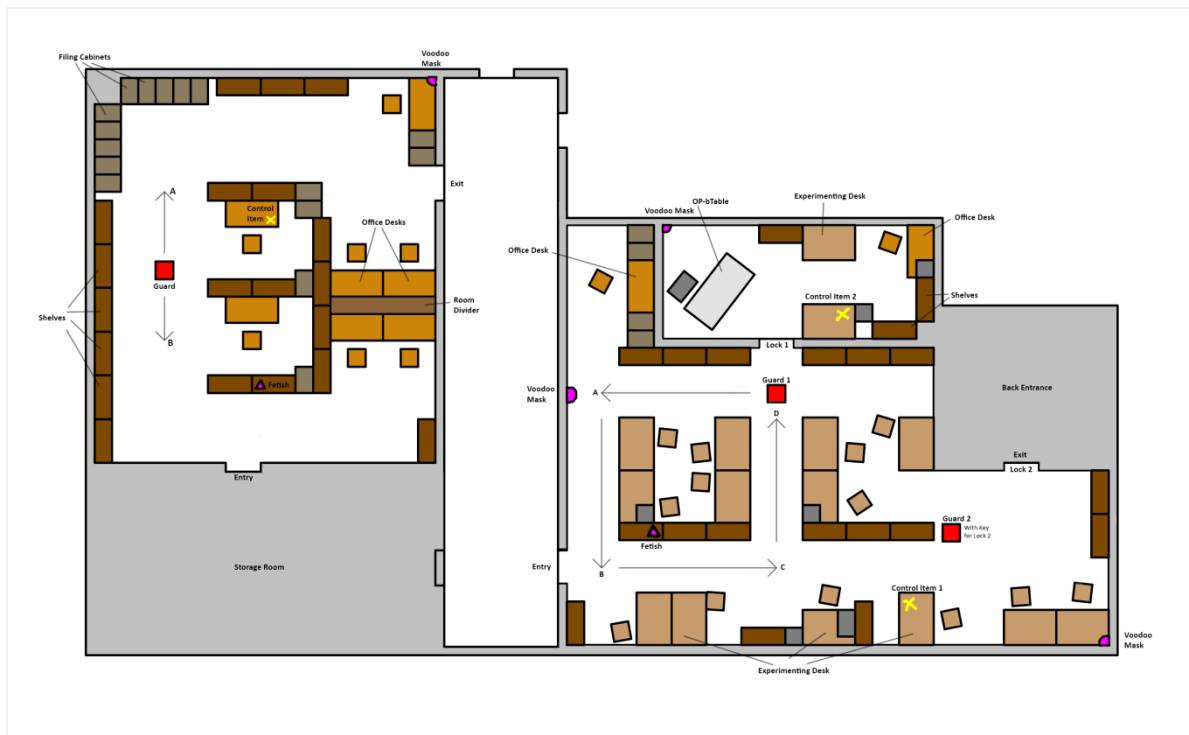- QTE perspective
  - QTE elements on the bottom side (see '*Figure 2*')

Level Design

Figure 3 – Level Overview

Level 0 – Awakening

Level 0 is the tutorial level. The voodoo doll awakes and has to orient itself in the new environment. The player will learn the basic mechanics.

This is the only level in which the clairvoyance fetish will occur, since the player will offer an eye of the voodoo doll in return of the voodoo-power.

Used mechanics:
(Newly introduced mechanics in bold letters)

- **Orientation**
- **Clairvoyance**

Level 1 – The Office

The bureau is the first level and full with desks, shelves and filing cabinets.

The room is divided into separate departments and offers different paths to get through it.
The guard patrols between the points **A** and **B**.

Used mechanics:

- Orientation
- Clairvoyance
- **Offering**
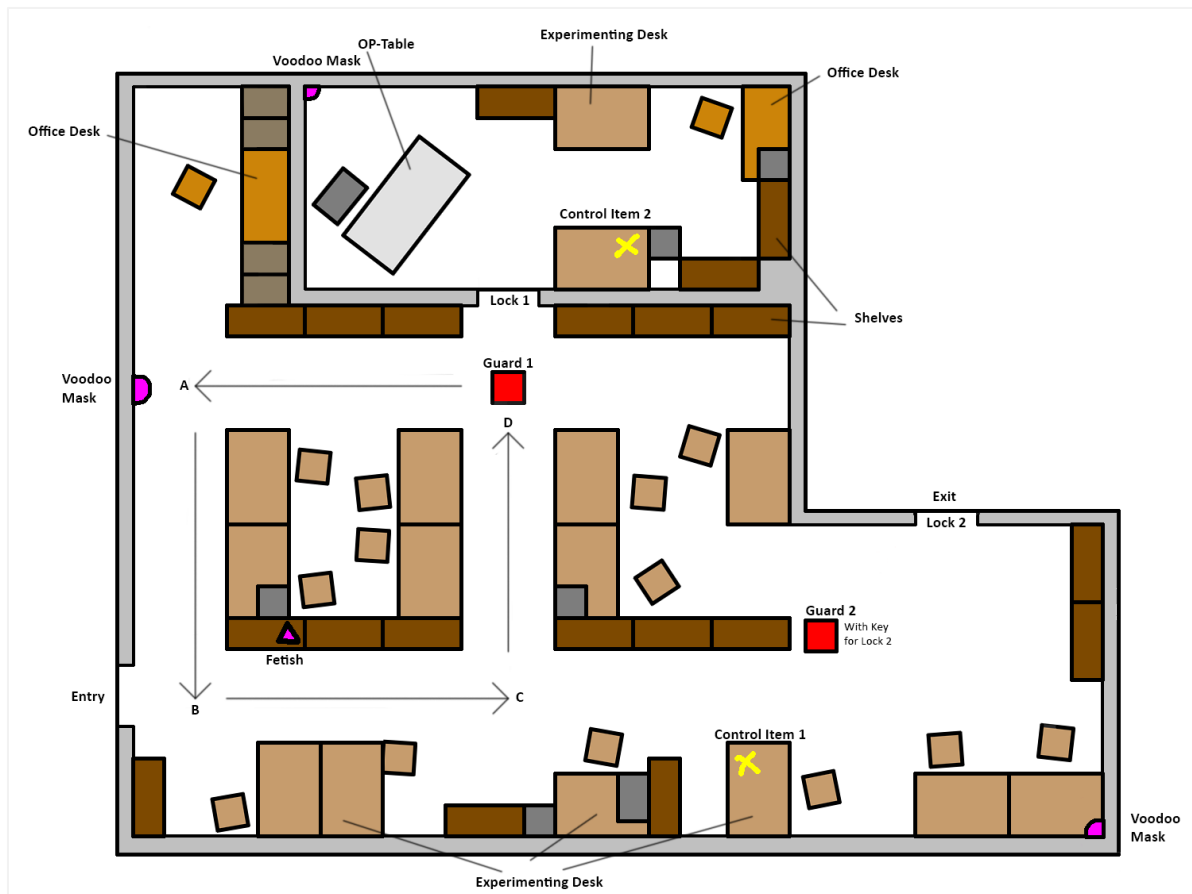- **Possession**

Layout
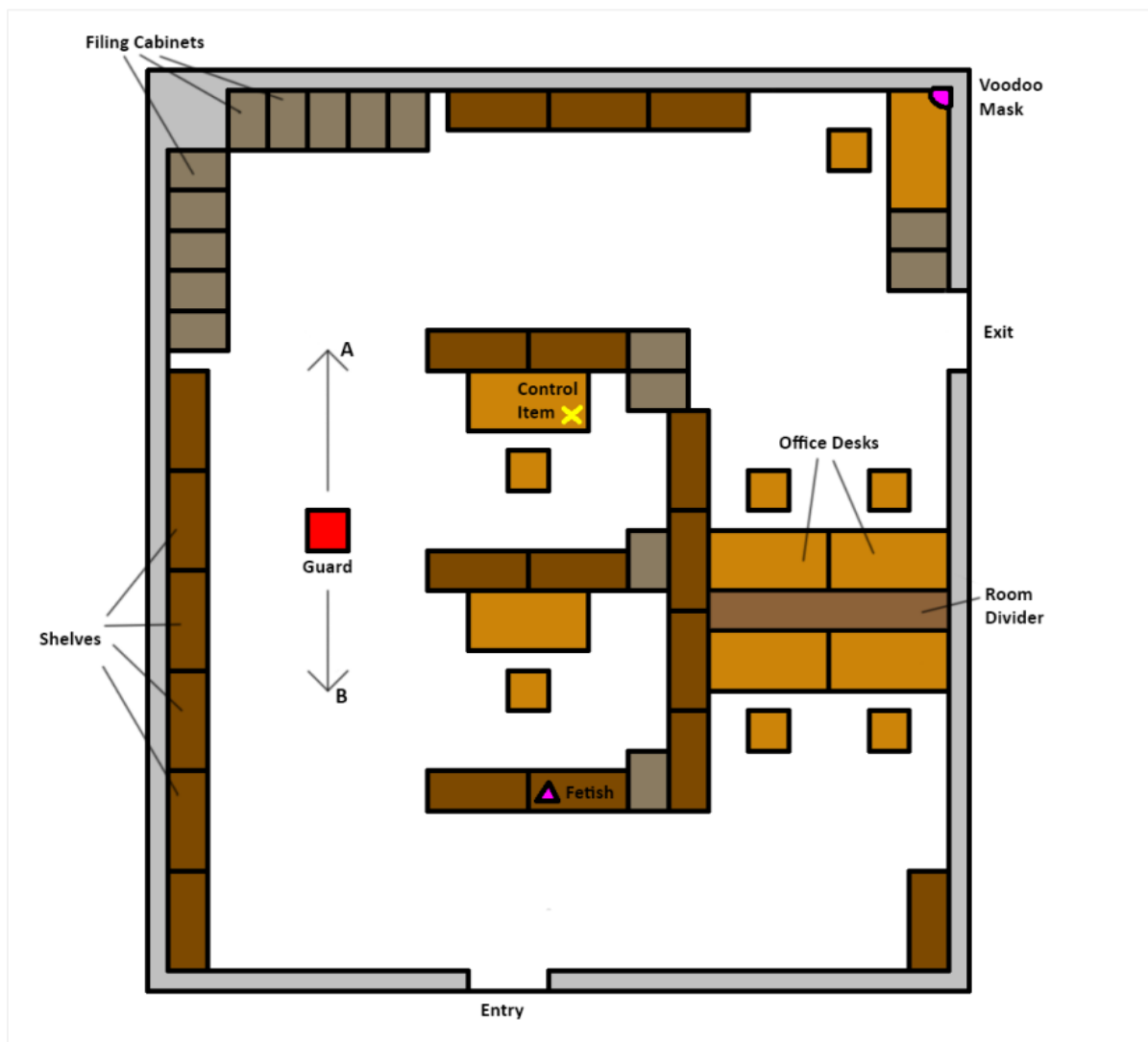

Figure 4 – Level 1 layout

Player Paths

The yellow cross represents the position of the control item.

The pink triangle represents the position of the fetish.
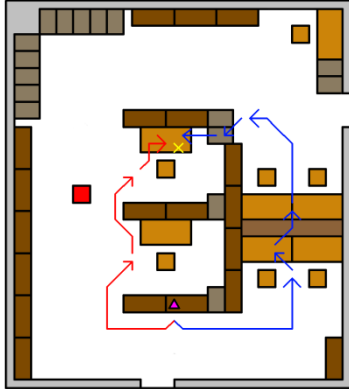
Player Path	Comment
	Way to the control item Red path • Shorter, takes less time to complete • PC might be seen by the guard Blue path • Longer, takes more time to complete • Safe from the guard • More jump passages
	Way to fetish Red path • Longer • PC might be seen by the guard Blue path • Shortcut back to the fetish • Safes valuable time
	Possessing the guard Green path • Way straight to the door to open it
	Way out of the room Red path • Longer • PC might be seen by the guard Blue path • Safe • Short, direct way to the door
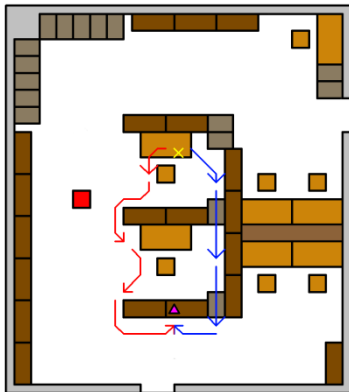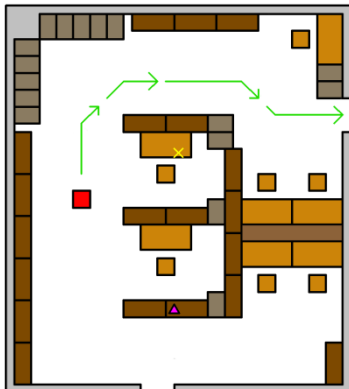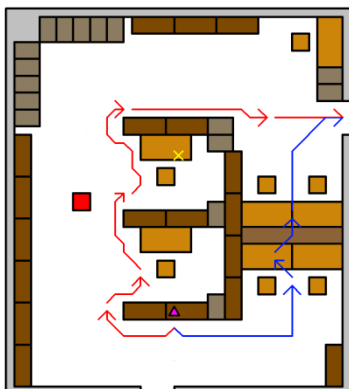
Level 2 – The Laboratory

The laboratory is the second level. This room is used for experimenting and researching.

The level consists of two rooms and the player needs to figure out a way to get past two guards.

To open the exit, the player must possess the second guard because he holds the keys for this door. The control item for this guard however, can only be accessed using the first guard.

Used mechanics:

- Orientation
- Clairvoyance
- Offering
- Possession
- **Guard interaction**

Layout

Figure 5 – Level 2 Layout

Player Paths

The yellow cross represents the position of the control item.

The pink triangle represents the position of the fetish.
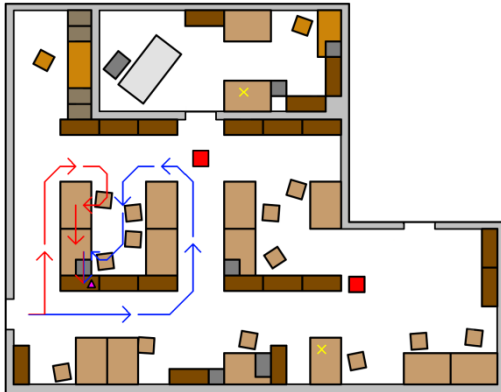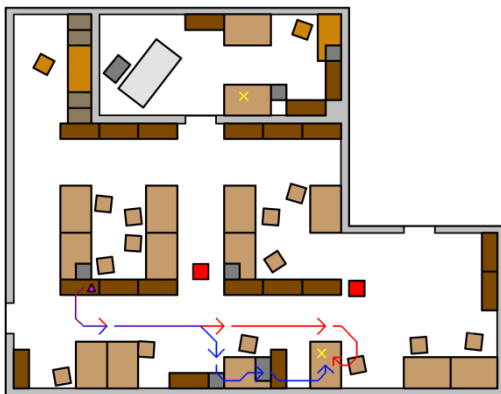
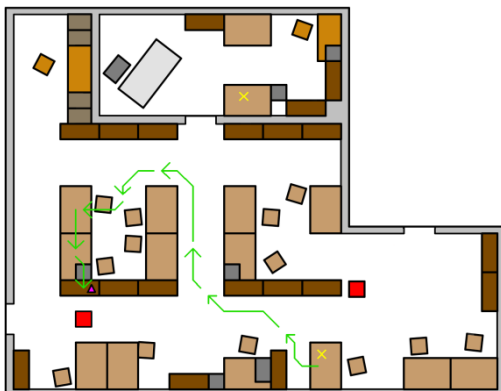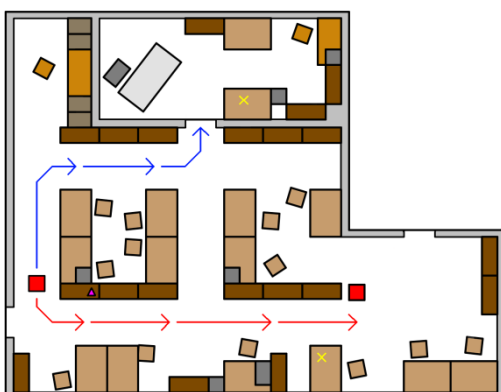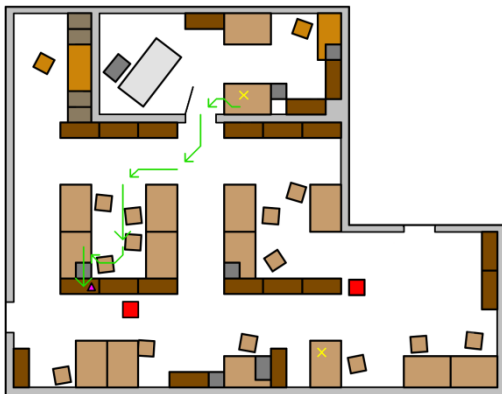| Player Path	Comment
	Way to fetish Red path • Shorter • PC might be seen by the guard, as the guard walks towards the PC Blue path • Longer • Safer, as the guard walks away from the PC
	Way to the first control item Red path • Easier to overcome • PC might be seen by the guard Blue path • Harder to overcome • PC is safe from the guard
	Way back to the fetish Green path • Way straight back to the fetish
	Possessing the first guard Red path • Way straight to the second door • Will result in the end of possession Blue path • Way straight to the first door to open it
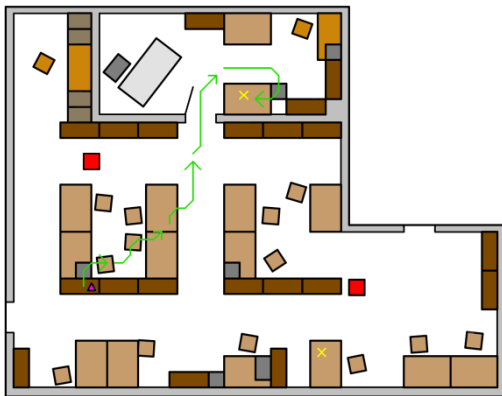
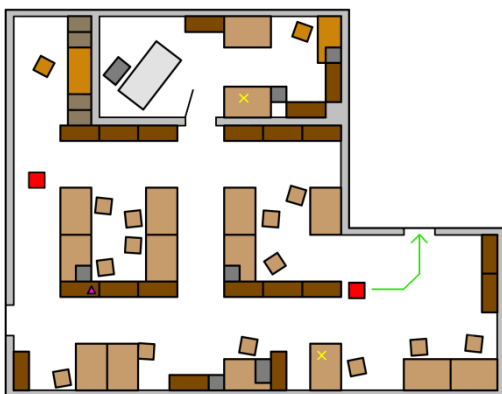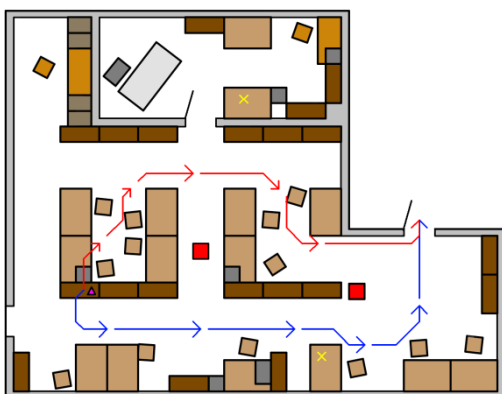| Player Path	Comment
	Way to the second control item Green path • Way straight to the control item
	Way back to Fetish Green path • Way straight back to the fetish
	Possessing the second guard Green path • Way straight to the second door to open it
	Way out of the room Red path • Might cross ways with the guard Blue path • Might cross ways with the guard

Assets Needed

See *AssetListe* for a complete list of assets with measurements and other specifications.

Below is a list of the must-have assets for each specific level:

Level 1

- **Shelf** (*200cm* height, *200cm* width, *40cm* depth)
- **Office desk**
    - *With* pull-able drawers (highlighted)
    - *With* door
- **Office chair**
- **Filing cabinet**
    - *With* pull-able drawers (highlighted)
- **Pin board** (*115cm* height, *240cm* width, *5cm* depth)
- **Fetish** (highlighted)
- **Voodoo masks**
- **Desk lamp**

Level 2

- **Shelf large** (*200cm* height, *200cm* width, *40cm* depth)
- **Shelf small** (*160cm* height, *200cm* width, *40cm* depth)
- **Office desk**
    - With pull-able drawers (highlighted)
    - With door
- **Experimenting desk**
- **Operations table**
- **Filing cabinet**
    - With pull-able drawers (highlighted)
- **Office chair**
- **Stool**
- **Crate**
- **Fetish** (highlighted)
- **Voodoo masks**

Glossary

Index

BG-Info	Background information
CH	Could-Have – describes a feature or component that could be added to the game.
Control Item	An item that is required for possessing a guard
Fetish	From *https://en.wikipedia.org/wiki/Fetishism*:
	"A fetish […] is an object believed to have supernatural powers, or in particular, a human-made object that has power over others."
Loa	From *https://en.wikipedia.org/wiki/Loa*:
	"Loa (also spelled lwa) are the spirits of Haitian Vodou and Louisiana Voodoo. They are also referred to as "mystères" and "the invisibles" and are intermediaries between Bondye […] and humanity."
MH	Must-Have – describes a feature or component which is necessary for the game to function. The lack of a must-have is game breaking.
NTH	Nice-To-Have – describes a feature or component which would improve the game quality- or fun-wise.
PC	Player Character
QTE	Quick-Time-Event
SH	Should-Have – describes a feature or component which is necessary for the game to be complete. The lack of a should-have is finance breaking.
Veve	From *https://en.wikipedia.org/wiki/Veve*:
	"A veve (also spelled vèvè or vevè) is a religious symbol commonly used in different branches of voodoo throughout the African diaspora such as Haitian voodoo. [..] The veve acts as a "beacon" for the Loa, and will serve as a loa's representation during rituals."

List of Figures