Game Design Document

The Silver Fox

Pablo Pueyo Poves, Thomas Nelson, Taylor Jett, Tingjun Cai, Luke Farmer, Lauren Karns, Liz Schell, Andrew Fulton

The Straten Herald

STRATEN, WEDNESDAY, JUNE 10, 2020

MOST WANTED
WORLDWIDE INFAMOUS ROBBER THE SILVER FOX STRIKES AGAIN!

Yet another museum fell victim to the old thievish mastermind yesternight. This recent slew of incidents comes decades after The Silver Fox's last recorded heist.

In his prime, the still unidentified man robbed an average of 15 museums per year. Now, with his recent return to action, many museums have implemented the most advanced security measures, including the latest security drones, in an attempt to finally put an end to his cruel devices.

Warning: if you spot him, call 911 immediately. Do not try to face him alone. Picture on the right is a computer-generated approximation.

SMAD: CONTROVERSY AROUND ARTWORK SUBJECT MATTER SPARKS VIOLENT FIGHT

A group of interns started a fist fight at SMAD headquarters that resulted in three injuries after a debate over putting a non-standard subject matter artwork in the museum's main exhibition. SMAD president Guy McPerson called it "sad, but also very funny."

LOCAL CAT MISSING

A brown house cat went missing yesterday night in the Thunderbolt district. It can be easily identified by a single white spot on its right eye and an uncharacteristic love for boba milk tea.

If spotted, call (404) XXX-XXXX

FUTURE OF GAMES

Starting today, all loot boxes will be officially banned from all video games. Many industry professionals fear the implications of this new law and the way in which it will affect their careers in the future. Will this ban bring prosperity, or will it bring doom?

STOLEN SCOOTER

A red mobility scooter was stolen from local 'Handy Stuff", Straten's number one store for people in need of, really, anything at all. An eyewitness pointed out the scooter was "moving unrealistically fast" when she saw it drift off. If spotted, call 911.

Designed by José Poves for *The Silver Fox*.

Table of Contents

1. – Summary

Years after his last heist, The Silver Fox—the worldwide infamous thief with an international search and arrest warrant—returns to the Straten Museum of Artifacts and Discoveries and the National Exhibition of Cryptids and Rare Oddities. Now an old man, his legs don't hold up like they used to; so he must ride around the museum on his mobility scooter, gathering precious items while avoiding the watchful eye of several security cameras and drones.

Being careful to select only the most valuable items, The Silver Fox must ransack as many precious articles as possible and escape before the police arrive. Progressing through the museum, he will need to solve increasingly complex puzzles in order to continue his raid and make his claim as the most successful museum thief of all time.

Despite its simple concept, The Silver Fox offers a challenging and endlessly entertaining gaming experience where players will find themselves caught up in a visually immersive and highly detailed world.

2. – Gameplay

2.1. - Level 1: Straten Museum of Artifacts and Discoveries

2.1.1. – Overview

The player—controlling The Silver Fox in third person—must explore and steal exhibited items from the Straten Museum of Artifacts and Discoveries, a classical museum with five differently themed spaces: Ancient Egypt, Feudal China, Pop Culture, Classical Greece, and Space.

When the game starts, the Silver Fox parks his van backwards at the museum's main entrance and exits through the back of the van on his scooter, entering the museum with the van's back doors open behind him.

Once in the museum, the Silver Fox moves quickly to dump as many items as possible into his scooter's basket. When the basket is full, he goes back to the van and drops the

items inside it. He repeats the process and continues to steal until he decides to escape with his loot or he runs out of time, and the game ends.

Along his itinerary, the Silver Fox must avoid the security cameras and patrolling drones' field of view. The cameras are located in each of the four display rooms and have blind spots that the player can take advantage of to get past them; the drones roam around the museum's halls in set paths.

2.1.2. – Player Goal

The player's goal is to reach the highest possible score by robbing as many expensive items as possible and escaping before time runs out and the police arrive on the scene. The player needs to take the desired articles, put them in his scooter's basket, keep the goods well balanced in the scooter basket—to prevent them from falling out—and finally escape the museum without being caught.

2.1.3. - Level Objectives

2.1.3.1. - Main objective

The main objective of the player is to beat the game and escape the museum before the time is over. The player has to focus on escaping without being caught and stealing as many art pieces as possible.

2.1.3.1. - Secondary objectives

The secondary objective is to end the game with the highest score possible. The player has to focus on stealing as many expensive and highly protected art pieces. To achieve their goal, the player has to learn how to reach these art pieces and avoid getting spotted by their enemies.

2.1.4. – Character (Protagonist)

The Silver Fox, a thief controlled by the player in third person.

2.1.5. – Enemies

They call for a patrol unit if they spot the Silver Fox.

- Security patrol units (drones): They follow a fixed patrol path. They have a cone vision detection range, with a circular noise detection range.

- Stationary Security Cameras: They watch over a zone like a spotlight.

2.1.6. - Level Gameplay Detail

- The game starts with the player at the entrance of the museum.

- The game ends when the player either leaves the museum through the entrance while the timer is still running or when the timer reaches "0."

  o If the player leaves the museum, they earns points based on the number of items robbed and their value.

  o If the player runs out of time, the police arrive and the game is over.

2.1.7. - Rough Level Map
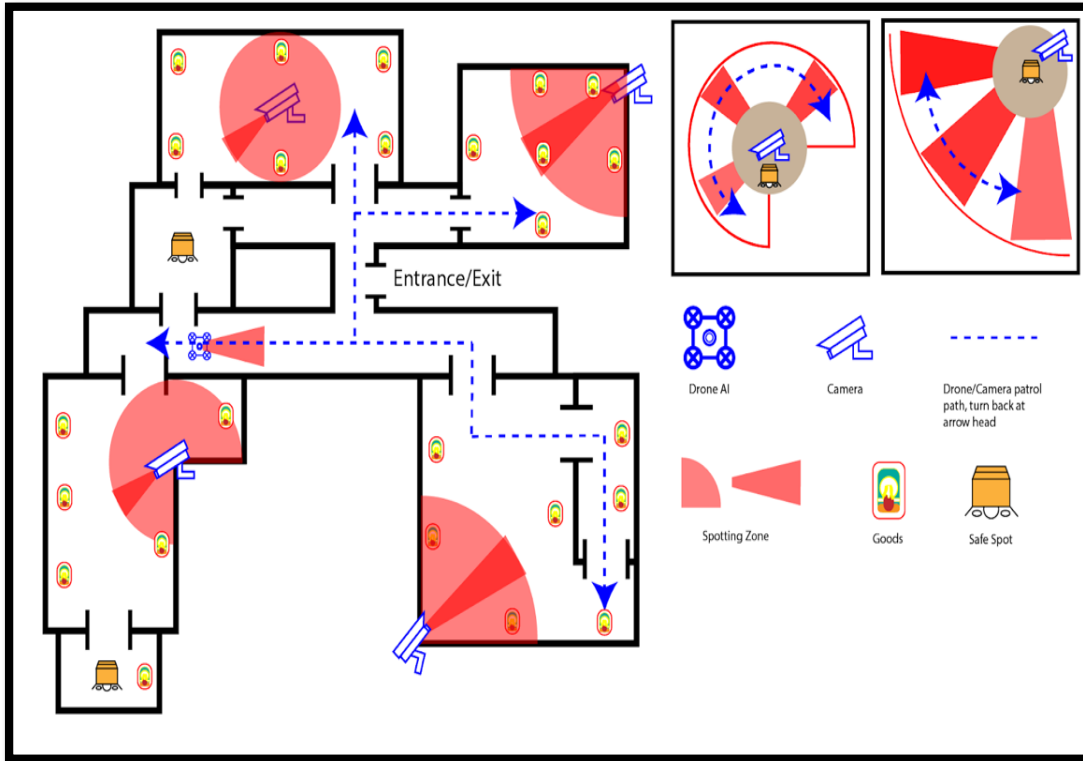
Designed by Liz Schell for The Silver Fox
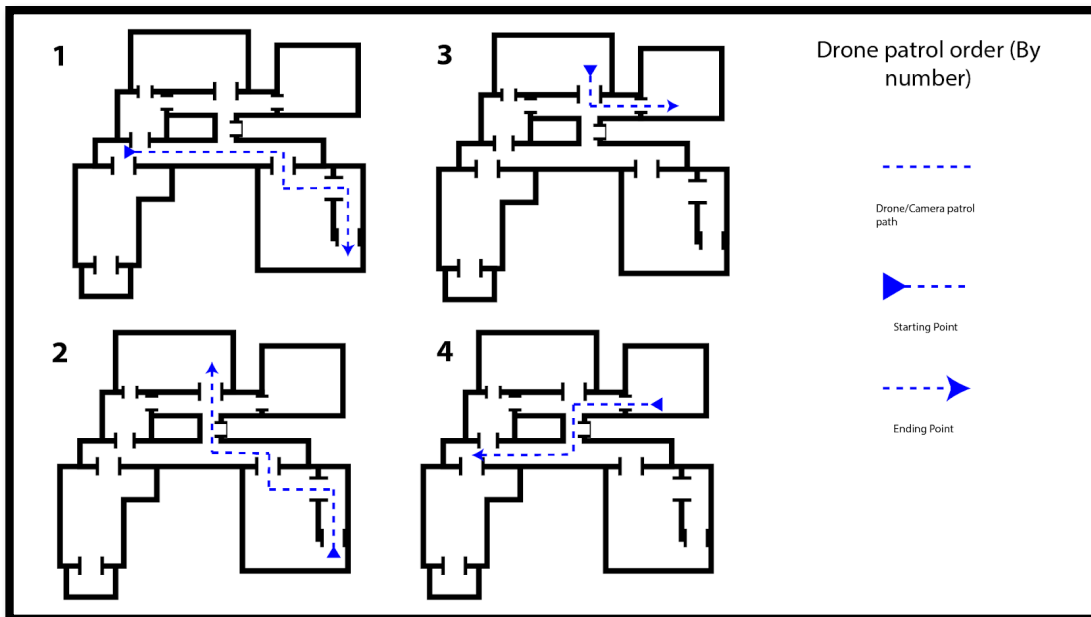
Designed by Liz Schell for The Silver Fox

2.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

2.2.1- Overview

The player, trough controlling The Silver Fox, has to explore and steal from the National Exhibition of Cryptids and Rare Oddities, a spooky museum with three different themed display rooms—Death, Witches and Cryptid.

The Silver Fox drives a van to transport his scooter and later transport his loot. When the game starts, the Silver Fox parks at the main entrance of the museum, he exits the van driving his scooter and enters the museum leaving the van's back doors open. Once in the museum, he travels around taking as many items as possible. Once the scooter's basket is full, he goes back to the van and drops the items inside it. He returns to the museum again and continues stealing until he decides to quit or if he runs out of time and the game is over.

Along his itinerary, the Silver Fox has to avoid being spotted and caught by the patrolling drones' route. Also, he has to avoid entering the vision area of the stationary cameras located in each of the four displayed rooms. The cameras have blind spots that the player can take advantage of to get past them.

2.2.2. - Player Goal

The player's goal is to reach the highest score possible by robbing as many expensive items as possible. The player needs to take the desired articles, put them in his scooter's basket, keep the goods well balanced in the scooter basket to prevent them from falling out, and finally escape the museum without being caught.

2.2.3. - Level Objectives

2.2.3.1. - Main objective

The main objective of the player is to beat the game and escape the museum before the time is over. The player has to focus on escaping without being caught and stealing as many articles as possible.

2.2.3.1. - Secondary objectives

The secondary objective is to end the game with the highest score possible. To achieve their goal, the player has to focus on stealing as many expensive and highly protected goods. To achieve their goal, the player has to learn how to reach these goods and avoid getting spotted by their enemies.

2.2.4. – Character (Protagonist)

The Silver Fox, a thief controlled by the player in third person.

2.2.5. – Enemies

They call for a patrol unit if they spot The Silver Fox.

- Security patrol units (drones): They follow a fixed patrol path. They have a cone vision detection range, with a circular noise detection range.

- Stationary Security Cameras: They watch over a zone like a spotlight.

2.2.6. - Level Gameplay Details

- The game starts with the player at the entrance of the museum.

- The game ends when the player either leaves the museum through the entrance while the timer is still running or when the timer reaches "0."

- o If the player leaves the museum, they earns points based on the number of items robbed and their value.

- o If the player runs out of time, the police arrive and the game is over.

2.2.7. -Rough Level Map
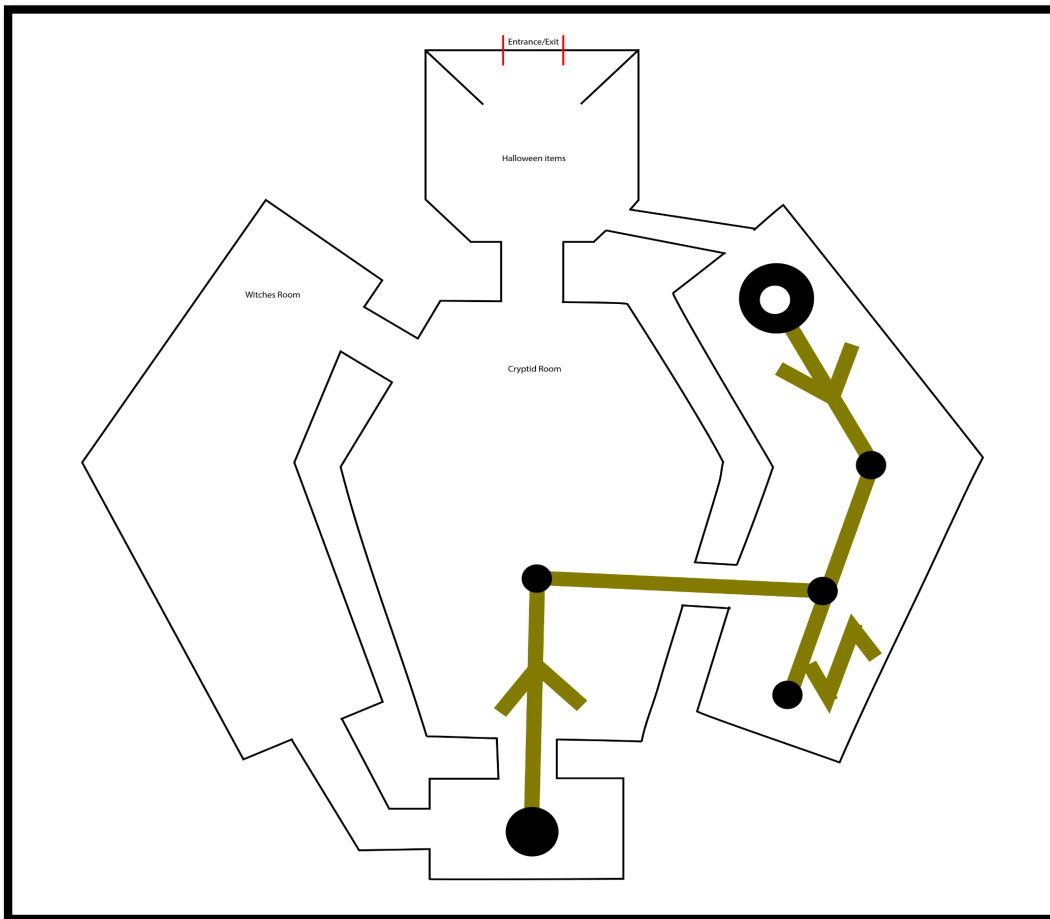
Designed by Liz Schell for The Silver Fox

3. – Setting

3.1. - Level 1: Straten Museum of Artifacts and Discoveries

- The Silver Fox enters the Straten Museum of Artifacts and Discoveries at midnight.

- Once inside, The Silver Fox finds a museum that looks and feels similar to a typical museum with five different sections—a corridor and four rooms—containing famous and valuable artwork related to Pop Culture, Space, Feudal Chinese, Ancient Egypt, and Classic Greece. He finds scarce light—very little light coming from the ceiling and one spotlight focusing on each art piece. He hears a buzzing sound coming from the patrol drones.

3.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

- The Silver Fox enters the National Exhibition of Cryptids and Rare Oddities at midnight.

- Once inside, The Silver Fox finds a museum with the shape of a bat that looks and feels like an old house with different rooms dedicated to Death, Witches and Cryptid—containing various horror creatures' rests and other valuable artworks inspired by horror myths and legends from all over the world. He finds scarce light—very little light coming from the ceiling and one spotlight focusing on each art piece. He hears a buzzing sound coming from the patrol drones.

4. - Target Audiences

The Silver Fox targeted audiences are:

- Casual players

- Indie Game fans

- Players who enjoy a wholesome game

5. - Game Platform

The Silver Fox can only be played on a PC using the mouse, the keyboard, and controls for input.

6. - Environment

6.1. - Level 1: Straten Museum of Artifacts and Discoveries

The Straten Museum of Artifacts and Discoveries offers five sections displayed in four squared rooms and a central hallway that gives access to all of them.

The hallway is full of objects from Classical Greece, such as a helmet, a shield, and a bust.

Each room offers objects related to different themes:

- The Pop Culture room, which exhibits 20th century crafted art pieces

- The Feudal Chinese room, which exhibits objects such as vases, a jade statue, a fan, and many other classical Chinese items

- The Egyptian room, which exhibits objects such as a mummy, an obelisk, and other Egyptian culture related items

- The Space room, which exhibits objects such as a space rover, aliens, and a satellite

The player can only access the rooms through the hallway.

6.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

The National Exhibition of Cryptids and Rare Oddities has the shape of a bat. It offers three sections displayed in three irregular rooms with a central trapezoidal hall giving access to all of them.

- The Death room exhinbits objects related to death, such as a coffin, an Ouija board, and a skull

- The Witchcraft room exhibits objects inspired by the witches of old like a cauldron, fancy blades, and magical books

- The Cryptid exhibits bizarre creatures' rests, such as The Sweaty Chupacabra, The Bigfoot's foot, and several cryptic images

The player can access the rooms through the central hall and from the rooms nearby.

7. – Lighting

## 7.1. - Level 1: Straten Museum of Artifacts and Discoveries

The scarce light of the Straten Museum of Artifacts and Discoveries comes from recessed ceiling spotlights and one spotlight focusing each piece of art.

7.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

The scarce and spooky light of the National Exhibition of Cryptids and Rare Oddities comes from ceiling chandeliers and pending lamps and one spotlight focusing each object.

8. – Characters

The Silver Fox—mounted on his mobility scooter—is the only character and avatar of the game. He is a highly skilled museum thief, able to steal articles carrying them on his mobility scooter's basket without letting them fall. He appears to be a regular old man with a kind face but don't get fooled, 'mercy' does not appear in his dictionary.
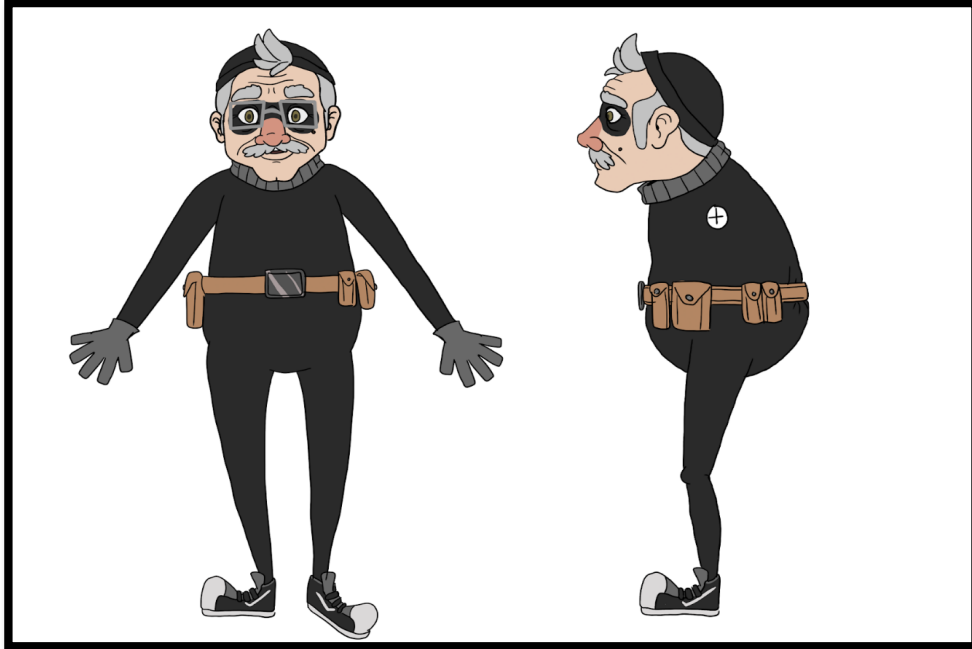
Designed by Taylor Jett for The Silver Fox

Designed by Thomas Nelson & Lauren Kars for The Silver Fox

9. - Player Camera Perspective

The player sees the game in third person. They see the backside of the avatar, with an angle that enables them to see what is in front of it. The player can freely adjust the camera around the center point of the avatar to observe the surroundings.

10. - Enemy Descriptions

10.1. – Antagonists: Security Drones

Every drone has a camera with a visual range of approximately 5 feet, emits a light to delineate its field of view, and follows a set course.

Under normal circumstances, the drones move with a constant speed equal to half the player's speed. If the player is close enough to one of the drones, they will hear a hum similar to that of a remote control helicopter, but a little bit muffled. If one of the drones' camera light hits the player, this drone will enter "capture mode" and start flashing red and blue lights. At this point, it will begin to chase the player and its speed will increase until it reaches 75-85% of the player's speed. If the drone chases the player, they will quickly run out of time. If the player hides in a safe area or runs the drone for 15 to 30 seconds, the drone will exit capture mode and resume to its normal path.

Drone Design:
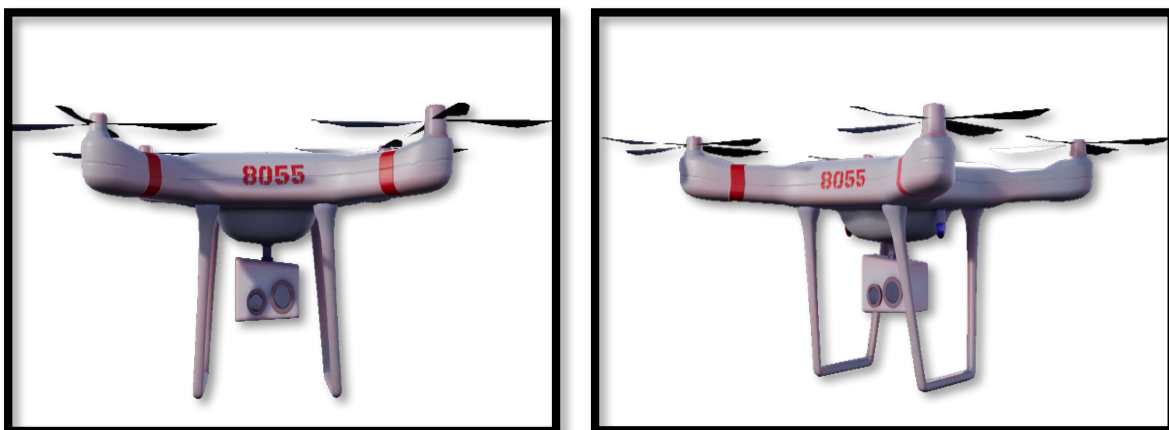
Designed by Lauren Kars for The Silver Fox

10.2. – Obstacles: Security cameras

These cameras are stationary, they are attached to the walls throughout the museum, they only have one simple rotation movement that they repeat on a continuous loop—up and down, left to right, and vice versa—and they move about half to three-quarters the speed of The Silver Fox' scooter. Each camera has a red spotlight that is about two meters in diameter. If a camera catches the player—that is, if the player steps over the red circle—the player's time will quickly run out and the camera will stop moving until the player is out of range of the camera.

Camera Design:
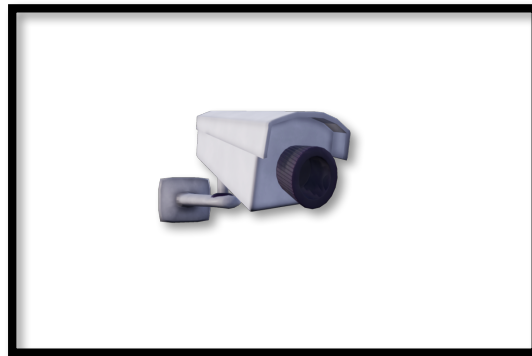
Designed by Lauren Kars for The Silver Fox

11. - Game Mechanics

11.1. - Scooter movement

The movement of a real life scooter inspires The Silver Fox's scooter movement; the player is able to move forward, back up, turn left and right, and turn both sides while driving backwards.

The ride scooter input is "WASD" on the keyboard.

11.2. - Grabbing and dropping

The player has to bump into the pedestals to destabilize the objects located on them and put them in the scooter's basket. If an item falls to the ground, it will shatter and will be permanently gone.

11.3. - Scooter capacity

The scooter's basket has limited capacity. To avoid destabilizing the scooter and loosing the loot, the player needs to introduce in its basket as many objects as they can, being careful not exceed its capacity.

Articles vary in size and designs. Larger items and items with weird shapes are the most valuable and are key to get the highest score possible, thus they will be harder to get into the basket.

11.4. - Hiding zone

A "hiding zone" is a hidden spot that the drone cannot enter even if it is chasing the player. If the player enters a hiding zone, the drone will overlook the area for a moment, then choose to leave, and return to its path.

11.5. - Physics based puzzles

The Silver Fox contains many puzzles based in physics. Their main use is to offer the player different alternatives to interact with the world.

The puzzles normally work by throwing certain non-valuable objects at other more valuable ones in order to obtain a better reward. Given there is a chance they might not achieve their goal or they will run out of time, the player has to choose between getting less valuable items and have more time, or take higher risks in order to have a chance to obtain the most valuable objects.

11.6. - Prices and end game

Each object has a different value. The player needs to find the optimal route to obtain the most valuable objects; especially those that seem impossible to reach. Through trial and error, experience will reward returning players.

When the player is ready to end the game, they will need to return to the entrance and press the key "G." The player can end the game from the very beginning, as the only way to lose is to let the timer drop to "0."

12. - Puzzle Element

12.1. - Artificial Intelligence (AI) behavior

The AI in The Silver Fox are the security patrol drones. The security drones force the player to act fast and agile, rather than slow and methodical. They also serves as a puzzle piece for this game.

The game offers the player a few safe spaces to hide where the drones cannot enter—even if the player is spotted. These secure spaces allow the player to safely observe the drone's movement pattern.

When the player triggers the drone, the drone will move slightly faster than the player, making it hard for the player to escape. The drone will behave consistently with clear visual feedback. If the drone does not spot the player, it will radiate white; if the drone spots the player, the light will be red and blue, turning on and off like a police light.

12.2. - Stationary Cameras

There are stationary cameras in every room. Every camera has a trapezoid-spotting cone (as indicated in the rough level layout shown in the image below) and rotates at a fixed angle, which means that the camera cannot cover all the areas at the same time, creating an opening for the player to slip through.
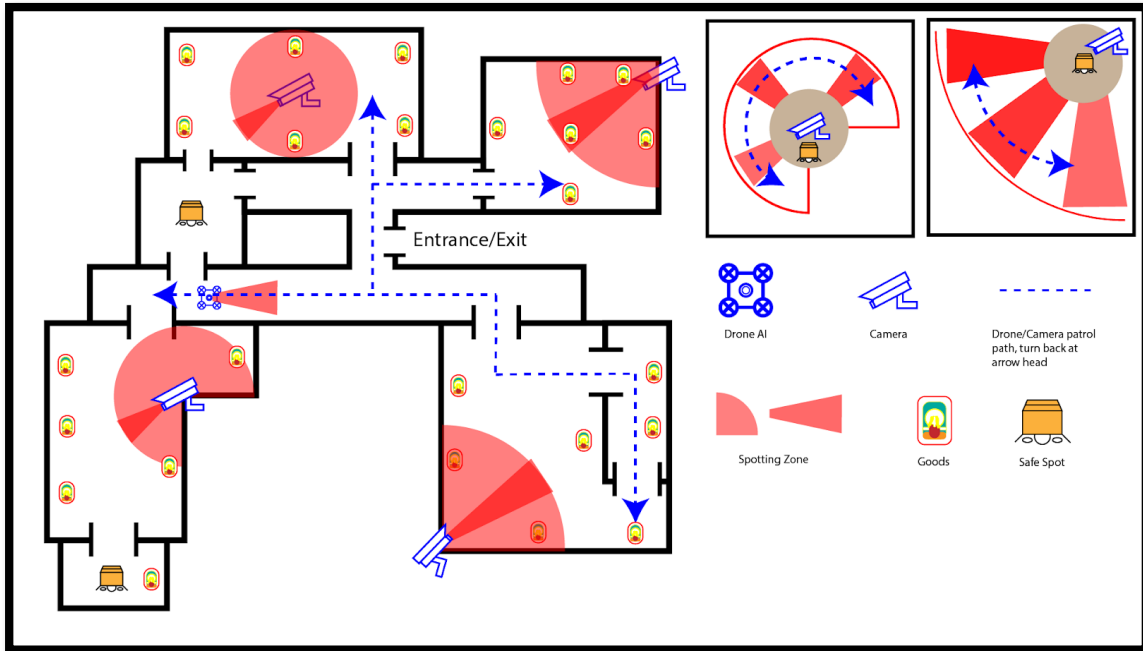
Designed by Liz Schell for The Silver Fox

Since the spotting zone has a trapezoidal form, there is a blind spot right under the camera that provides the player with high risk yet high reward opportunities for getting heavily guarded—thus valuable—objects.

13. - Physics Based Puzzles

13.1. - Level 1: Straten Museum of Artifacts and Discoveries

13.1.1. - Bridge puzzle

This puzzle is located in the Chinese room. The room is divided into two areas by a pod that cuts off access to half of the room. The accessible area contains lower cost art pieces—like the three vases on the corner of the room near the entrance—while the inaccessible area accommodates highly valuable goods.

Four Chinese balloons hold a bridge in the air. If the player gets low-cost items and empties the basket, these items will serve to puncture at least

one balloon and the bridge will lower giving the player access to the area with the most expensive objects.

13.1.2. - Secret room puzzle

The secret room puzzle is located in the Egyptian room. To access the secret room, the player has to step on a certain tile located in the hallway outside the Egyptian room and one of the Egyptian room's walls will open giving access to the secret room..

The player has limited time to enter before it closes; once in, the player will find a gold scooter that will give the player many points.

13.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

13.2.1. - Cauldron puzzle

This puzzle works in a similar way to the bridge puzzle. First, the player must obtain one of the crystals from the starting room. Then, they must go to the Witchcraft room and throw this object into a chandelier. To do this, the player will use a seesaw made with a wooden board that has a cauldron placed at one of its ends. The player must push a nearby object on the seesaw; the cauldron will fly and hit another high value item, which will be exchanged for many points.

13.2.2. - Slippery floor

The Cryptic room has been cleaned recently so the floor is slippery. The movement of the scooter is sloppy, so the player must learn how this hazard works in order to overcome this danger. They have to drive carefully avoiding harsh braking or harsh acceleration to ensure that the scooter maintains stability and prevent items from falling out of the basket.

14. – Menu

The main menu has a simple animated scene showing an old man (The Silver Fox) driving outside the museum on his mobility scooter. The stolen objects are cluttered in the cart. The buttons leading to other menus and gameplay are minimalistic and are located at the bottom of the main menu.
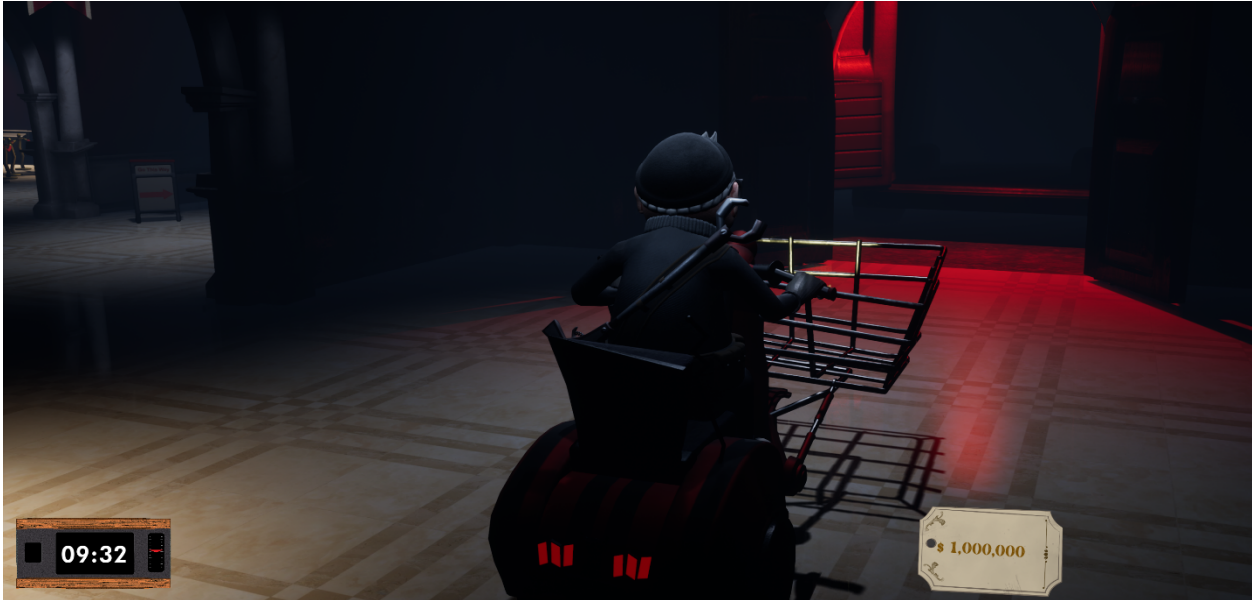

Designed by Luke Farmer for The Silver Fox

## 15. - User Interface (UI)

15.1. - Overall UI Design

The general style for the user interface is minimalist. There is not much information to show; just a clock at the bottom left that displays the time left and a price tag at the bottom right that indicates their score.

Designed by Luke Farmer for The Silver Fox

15.2- Pause UI

This minimalist setting UI shows the player everything they need to know when it comes to the settings of their game, including render resolution and different sound settings' options.
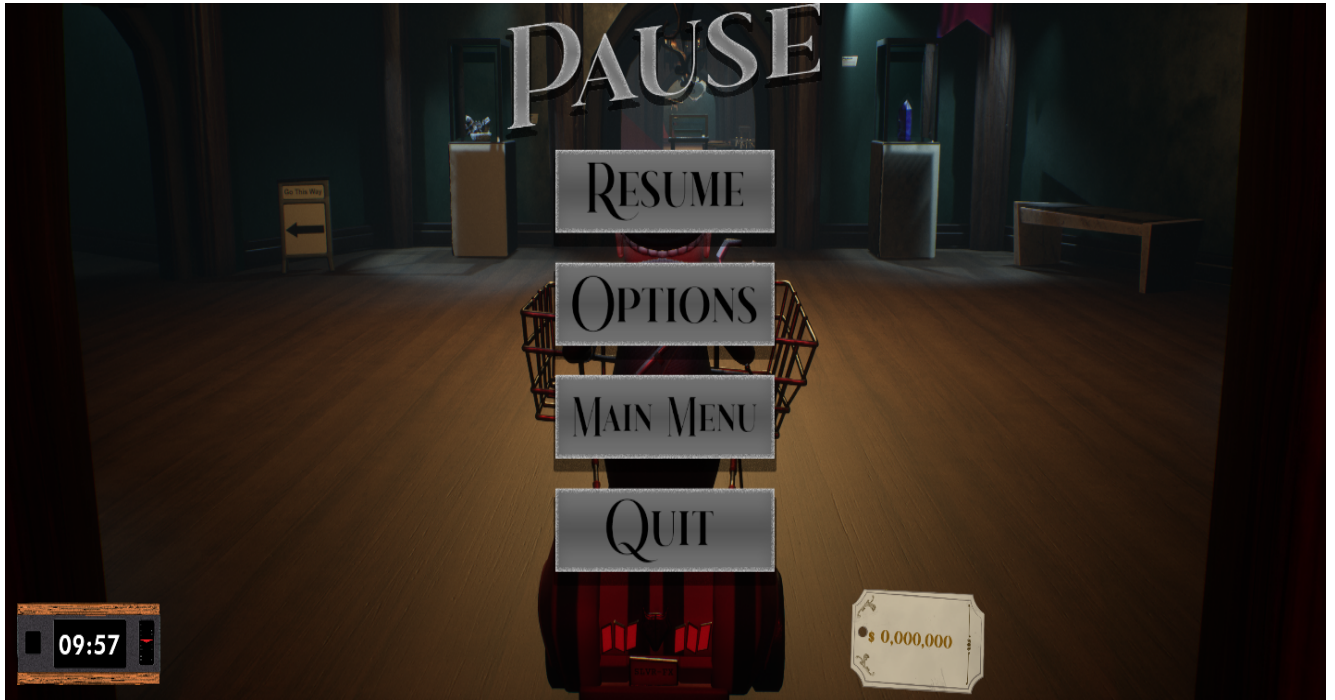
Designed by Luke Farmer for The Silver Fox

Designed by Luke Farmer for The Silver Fox

16. - Music & Sound

The music used in the game is varied; every level and every room within the levels has its own music.

16.1. - Level 1: Straten Museum of Artifacts and Discoveries

The music on the first level is joyful, especially the one that plays when the player is outside the rooms.

As mentioned before, the different rooms offer different music: The pop culture one is the most modern and is close to what one would expect from the 20th century and the Chinese room music reminds us of Ancient China, as it sounds like string elements with a high pitch.

16.2. - Level 2: National Exhibition of Cryptids and Rare Oddities

The music on the second level is everything but joyful, especially the one that plays when the player is outside the rooms, which is "Halloween-like" music.

Each room offers a different music, although they are all spooky and creepy. The creepiest one of all is that of the Death room's music. In this room, there is almost silence until a loud noise sounds making the player feel uneasy. There are also crows yelling at the character.

16.3. –Objects

Every object emits its own sound, both whenever they are picked up and dropped into the ground. These may vary from metal noises to glass noises. When the player drops the items in the back of the van, it sounds like an old cash register when opening.

The game also offers different sounds for The Silver Fox. He says different phrases whenever he obtains, drops on the floor, or cashes an object. Also, there is a sound effect whenever he hits a wall.