Game Design Document Outline

Game Design Document

Version 0.1

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Design History –

1. Version 1
   1. Creation of Document
   2. Added Name and Document
   3. Added overview and pillars
   4. Added Hook, Unique Selling Point, and Settings
   5. Added Game Flow Summary, working on Loops
   6. Added Number of Levels, Areas, weapons, and started NPCs
   7. Added Game Progression for Levels and Bosses.
   8. Added General Movement Mechanics
   9. Added Opening Door Mechanics.
   10. Added the detective character.
   11. Added Game Progression, glimpses.
   12. Added weapons and statistics of the weapons.
   13. Added a few collectibles to the Game World Section.
   14. Added Control System – Keyboard.

Section I - Game Overview

* 1. Game Concept
     1. Overview

The game takes place in a 1930-40s style era, outfitted with era style outfits, clothing, and environment.

The player, a detective of sorts, is tasked with taking out a mob boss, located in a secured complex flooded with henchmen, and optional mini-bosses for the player to uncover.

In order to complete this, the player will fight their way to the boss, utilizing melee and firearms, picking them up via powers, ammo pickups, or other means.

However, not everything is as it appears, as this isn’t the only objective that the player has. There are other things the player is searching for, other things that are hidden and must be hunted down as well.

* + 1. Pillars
       1. Exploration

Exploration is important in the game, as the player not only fights through waves of enemies, but must also enter through various doors leading to different areas of the complex. Each area may contain more enemies, weapons, or other things the player must hunt.

* + - 1. Combat

The player will find themselves in constant combat, shooting or melee their way through enemies.

* + - 1. Pickups and Ammo

Finding weapons and ammo is vital to accomplish the mission. Ammo drops and weapons will be scattered throughout the level, dropping from crates or enemies alike. The player must fully utilize these drops to get the upper hand in combat.

* + - 1. Collectibles

Fighting isn’t the only thing the player will do. Finding and collecting certain collectibles will prove to be fruitful, unlocking certain areas that are out of view.

Also for fun.

* 1. Feature Set
     1. Key Features

1. Ammo
   1. Ammo is dropped from enemies, or crates, in which the player can pick up for their pistol.
2. Weapons
   1. Enemies or crates can drop additional weapons, in which the player can pickup and use until it runs out of ammo.
3. Doors
   1. Player can enter through doors, which takes them to another section of the complex with additional enemies and even hidden mini-bosses.
4. Mini-Bosses
   1. Player can encounter additional mini-bosses, allowing the player to engage in additional challenges.
5. Collectibles
   1. Player is able to collect collectibles, allowing them to progress through the game and unlock certain features or secrets within the complex.
      1. Genre

Shooter Side Scroller.

Has a more 1930-40s style era to it.

Dark, but poppy.

* + 1. Player Perspective / Dimensions

Platformer, 2D

* 1. Players and Audience
     1. Design Goals

* + 1. Target Audience

1. Players who like platformers, and like shorter type games, since this game is designed for a Game Jam.
2. Ages 16-25
   * 1. Player Motivation
3. Collectibles
   1. The player has a set of collectibles that they can collect, allowing them to be motivated to collect all collectibles in the game.
   2. Collectibles can also unlock additional areas, motivating players to collect collectibles if they want to explore the game in it’s entirety.
4. Mini-Bosses
   1. The player will be motivated to take on mini-bosses, creating an exhilarating and additional challenge for the player to play.
5. Exploration
   1. The player would be motivated to continue playing in order to explore, allowing the player to discover additional secrets, mini-bosses, and collectibles.
      1. Hook

There is more than the eye can see. The player, when they collect certain collectibles, will discover more hidden secrets hidden within the complex. Perhaps even…otherworldy.

* + 1. Unique Selling Point

The main Unique Selling Point would actually be the replay ability, as when the player collects collectibles, they can replay the level and discover new secrets as these collectibles unlocks hidden secrets and challenges in the level.

* + 1. Target Platform

PC / Computer, WebGL

Game is part of a game jam, so sticking to computer or PC platform, especially for WebGL, would be preferable.

* + 1. Competitor Analysis
       1. Game 1
       2. Game 2
       3. Game 3
  1. Setting
     1. Style / Theme

The style / theme of the game will be a 1930s-40s style.

* + 1. Interior

The interior of the complex is a large mansion, filled with retro style items fitting the era.

The areas will be brightly lit, with a cleaner environment.

Things that can be included:

* Wooden / Carpeted floors
* Painted walls
* Chandeliers
* Tables
* Stairs
* Radios
  + 1. Exterior

The exterior of the complex can be accessed by the player in certain areas.

The setting takes place during the night, with a full moon present.

Some accessible areas is a garden, a few balconies, and the rooftops.

* + - 1. Garden

The garden is lush with flowers, leaves, and stone pathways winding into the area.

Statues and decorations can be found as well, acting as platforms or cover for the player to use. A large fountain can also be found in the garden center, which can act as a boss arena.

* + - 1. Balconies

Access to the balconies are scattered throughout the area, allowing the player to traverse outside around the complex. Balconies can include chairs (wooden), tables, railings, additional lighting, and doors leading to other places.

* + - 1. Rooftops

The rooftops is accessed through more restricted areas of the mansion.

Rooftops can include a railing, sloped areas on the roof, walkways with railings, and possibly other rooms that are only accessed through the rooftops.

A place on the rooftop can be a large boss arena.

* + 1. Dimensions

The dimensions are accessed through the additional collectibles being collected, opening either portals to other places, or randomly teleporting the player once the designated collectible is collected.

Dimensions can range from a wide area of looks.

* Dark and gloomy, filled with a range of blacks or grays.
* Cosmic areas, filled with stars and a palette of blues or purples with white as stars.
* Dungeons or underground caverns, filled with gray and more medieval style lighting (torches).
* Castle style dungeons or areas, built with stony bricks, libraries, torches, and furniture, but all in a decaying state.
  + 1. Boss Rooms

Boss rooms will vary from place to place in the complex, but will follow the same principle in design:

* Large, open area.
* Some platforms for the player to jump to.
* Decoration or unique designs, giving the rooms a more distinctive look compared to the regular areas of the complex.
  1. Game Flow Summary
     1. Gameplay loops

The player will essentially be running and gunning through the level, collecting collectibles as they do.

* + - 1. Sub-loop
    1. Engagement loops
       1. Sub-loop
  1. Look and Feel
     1. Features
        1. Number of locations

5 Separate Locations

1. Garden
2. Interior
3. Balconies
4. Rooftops
5. Dimensions
   * + 1. Number of levels

1 Entire Level.

Level will be broken down into several separate levels, but will be considered as one entire level.

* + - 1. Number of NPC’s
         1. Enemies

1. Shotgun User
   1. 1 Separate designs
2. Melee Users
   1. Brass Knuckles user
   2. Bat user
3. Pistol user
   1. 2 designs
4. Machine Gun User
   1. 2 designs
      * + 1. Bosses
5. The Enforcer
6. The Bookkeeper
7. The Mole
8. The Boss
   * + - 1. Dimensional Bosses
9. The Eldritch
10. The Genie
11. The Horror
12. The Unknown
    * + 1. Number of weapons
13. Pistol
14. Shotgun
15. Tommy Gun
16. Rifle
17. Heavy Pistol (Revolver)
18. Dagger ( Melee )
19. Fists ( Melee )
    * + 1. Drops
20. Ammo Drop (Pistol)
21. Weapon Drops
    1. Shotgun
    2. Tommy Gun
    3. Rifle
    4. Dagger
22. Health

Section II - Gameplay and Mechanics

* 1. Gameplay
     1. Game Progression
        1. Level Progression
           1. Traversing the Level

The player progresses through the level in a platformer, side-scroller like manner, similar to the Mario Games.

As the player progresses, the player will engage several enemies, shooting or fighting their way through wave after wave in order.

In order to complete the game, the player must reach the end of the level and defeat the boss.

( ***INCLUDE FLOWCHART*** )

* + - 1. Boss / Mini-bosses Battle Progression

The objective of the game is to defeat the boss, located at the end of the level.

The player must drain the boss’s health bar to 0 via damaging the boss with firearms, or melee.

In addition to the bosses, a steady, slow stream of enemies will also engage the player, to provide the player with more firepower and bullets for the boss fight.

( ***INCLUDE FLOWCHART*** )

* + 1. Mission/challenge Structure
    2. Puzzle Structure
    3. Objectives
    4. Play Flow
    5. Collectibles

There are a set of collectibles that the player can collect.

The player collects the collectibles by colliding with them and pressing the designated pickup key.

Amount of Collectibles:

* 5 found in the level
* 1 from each boss
* 1 from each dimensional boss

Collectibles:

* 1. Mechanics
     1. Physics
     2. Movement
        1. General Movement
           1. Walking

|  |  |
| --- | --- |
| Description | The player is able to walk back and forth |
| Control | A and D Key |
| Speed | [int] |
|  |  |

* + - * 1. Jumping

|  |  |
| --- | --- |
| Description | The player is able to walk back and forth |
| Control | W Key |
| Speed | [int] |
|  |  |

* + - 1. Other Movement
      2. Objects
      3. Picking Up Objects
      4. Moving Objects
    1. Actions
       1. Opening Doors

|  |  |
| --- | --- |
| Description | The player is able to open doors to other rooms |
| Control | Press E on a door. |
|  |  |
|  |  |

* + - 1. Picking Up, Carrying and Dropping
         1. Picking Up

|  |  |
| --- | --- |
| Description | The player is able to pick up collectibles or items in the level. |
| Controls | Press E when colliding with a pickupable object. |

* + - * 1. Carrying Weapons

|  |  |
| --- | --- |
| Description | The player can carry a variety of weapons other than their pistol |
| Controls | Press E when colliding with a weapon. |

* + - * 1. Dropping Weapons

|  |  |
| --- | --- |
| Description | The player can drop certain weapons that they are using. |
| Controls | Press G to drop |

* + - 1. Combat
         1. Swap Weapon

|  |  |
| --- | --- |
| Description | The player can swap between their pistol, melee, or carrying weapon. |
| Controls | Press Q to Swap ( Melee, Pistol, Carrying weapon.) |

* + - * 1. Melee / Shooting

|  |  |
| --- | --- |
| Description | The player can melee or shoot. |
| Controls | Left Mouse Click  (Shoot if holding a gun.)  (Melee if not holding a gun). |

* + - * 1. Rolling ( Not important, but nice to have. )

|  |  |
| --- | --- |
| Description | The player can perform a roll, which will reduce player hitbox, and cause the player to travel a short distance at a faster speed than running. |
| Controls | Press A or D while holding S to roll. |

* + - 1. Game Options
         1. Main Menu / Start

Options:

* Start Game
* Exit
  + - * 1. Pause

Options:

* Resume.
* Exit Game
  1. Systems
     1. System Name
        1. Description
        2. Statistics / Techinicals
        3. Screenshots

Section III - Story, Setting and Character

* 1. Story and Narrative
     1. Back story

As a detective and a vigilante, the player learns of a mob boss that has dark secrets, and must take them down in order to eradicate the evil that it hides.

* + 1. Plot Elements
    2. Game Progression
       1. Glimpses

As the player defeats each mini boss, the player may have a glimpse into the other dimensional world, a brief walk through.

Once the player defeats the mob boss and mini bosses in a single playthrough, and collects all the required collectibles, the player can replay another time. This time, however, will doors or portals to the other dimension.

From here, the player can defeat a second phase of the mini-bosses and mob boss, fighting horrors from other worlds in order to beat the game a second time.

* 1. Game World
     1. General look and feel of world
     2. Areas
        1. Area #1
           1. General Description
           2. Physical Characteristics
           3. Levels that use area
           4. Connections to other areas
        2. Area #2
           1. General Description
           2. Physical Characteristics
           3. Levels that use area
           4. Connections to other areas
     3. Characters
        1. The Detective
           1. Back story
           2. Personality
           3. Look
* Wears a gray trench coat
* Wears a gray fedora
* No face ( blank face ).
  + - * 1. Animations
* Melee Animation.
* Shooting Animation
* Running Animation
* Idle Animation
* Jumping Animation
* Rolling Animation
  + - * 1. Special Abilities
        2. Relevance to game story
* The Detective is the vigilante that takes down the mob boss and mini-bosses.
  + - * 1. Statistics

|  |  |
| --- | --- |
| Health | 100 |
| Run Speed | 10 |
| Jump Height | 5 |
| Roll Speed | 15 |
| Melee Damage | 10 |
| Pistol Damage | 15 |

* + 1. Items
       1. Weapons

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Description | Statistic | Image |
| *Hands* | Standard Melee weapon that the player always has. | Damage: 10  AttackSPD: 20  Range: 2  Ammo: N/A |  |
| *Pistol (Colt 1911)* | A standard pistol that the player always has. | Damage: 15  AttackSPD: 15  Range: 10  Ammo: 8 |  |
| *Pistol (Revolver)* | A standard 6 round shooter. | Damage: 20  AttackSPD: 12  Range: 10  Ammo: 6 |  |
| *Shotgun (Pump Action)* | A pump action shotgun | Damage: 20 (Multiply via Distance)  AttackSPD: 10  Range: 5  Ammo: 8 |  |
| *Rifle (Bolt Action)* | A bolt action, wooden rifle. | Damage: 25  AttackSPD: 10  Range: 15  Ammo: 8 |  |
| *Tommy Gun* | A tommy gun with a drum magazine | Damage: 10  AttackSPD: 30  Range: 10  Ammo: 50 |  |
| *Bat* | A regular wooden baseball bat. | Damage: 15  AttackSPD: 12  Range: 3  Ammo: N/A |  |

* + - 1. Collectables

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Description | How to obtain | Image |
| Ledger | A small, black ledger, filled with the accounts of the mob. | Location:  How to Obtain: |  |
| Ring | A golden ring, decorated with circular engravings and a encrusted red jewel. | Location:  How to Obtain: |  |
| Fedora | A gray fedora, decorated with a golden pin. | Location:  How to Obtain: |  |
| Strange Book | A leather book, decorated with red symbols | Location:  How to Obtain: |  |
| Ancient Artifact | An old stone circle, about the size of a fist. Engraved with writing around it’s perimeter and with a small spherical indentation in the center. | Location:  How to Obtain: |  |
| The Void Pendant | A silver pendant with a black center, seemingly appearing into nothing. | Location:  How to Obtain: |  |
| The Cosmic Pendant | A silver pendant, with a view of stairs and space in the center. | Location:  How to Obtain: |  |
|  |  |  |  |

* + - 1. Consumables

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Description | Statistic | Image |
| Health Pack | A medical box with a Red plus sigh on it. Gives the player health | +50 to Health |  |
| Ammo | A set of 3 or 4 bullets positioned next to each other. Gives the player ammo for their pistol. | +10 bullets. |  |

Section IV - Levels, missions

* 1. Level #1
     1. Synopsis
     2. Introductory Material
     3. Objectives
     4. Physical Description
     5. Map
     6. Critical Path
     7. Encounters
     8. Level Walkthrough
     9. Closing Material
  2. Level #2
  3. etc.
  4. Training Level

Section V - Interface

* 1. Screen Flow
     1. Screen Flow Chart
     2. Screen Descriptions
        1. Main Menu Screen
        2. Options Screen
        3. Etc.
  2. Visual System
     1. HUD
        1. Basic HUD
           1. Health Bar:

Circular bar, red indicating health.

* + - * 1. Ammo Count

Shows amount of bullets via sprites.

Ex: 2 bullets in gun, shows 2 bullet sprites on screen.

* + - 1. Vehicle HUD
      2. Etc…
    1. Menus
    2. Rendering System
    3. Screen Size

1920x720

* + 1. Camera

Sidescroller, Unity 2D

* + 1. Lighting Models
  1. Control System
     1. Keyboard and Mouse Controls

|  |  |  |
| --- | --- | --- |
| **Button** | **Action** | **Action Required** |
| A | Walk Right | Hold |
| D | Walk Left | Hold |
| Spacebar | Jump | Press |
| S + A/D | Roll | Press + Press |
| Mouse Position | Aim | None |
| Left Mouse Click | Fire / Strike | Press |
| E | Open Door / Pickup Weapons / Drop Weapons | Press |
| Q | Swap Weapons | Press |

* 1. Audio
     1. Music
     2. Sound Effects
  2. Help System

Section VI - Enemies and allies

* 1. Opponent AI
  2. Enemy AI – Villains and Monsters
  3. Non-combat Characters
  4. Friendly Characters
  5. Support AI
     1. Player and Collision Detection
     2. Pathfinding

Section VII - Game Art

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        3. Interface Sounds
     3. Music
        1. Ambient
        2. “Action”
        3. Victory
        4. Defeat
     4. Voice
        1. Actor #1 lines
        2. Actor #2 lines
        3. Etc.