# Game Design Document Outline

A game design document is the blueprint from which a game is to be built. As such, every single detail necessary to build the game should be addressed. The larger the team and the longer the design and development cycle, the more critical is the need. For your purpose, the intent is to capture as much as possible of your design. I want you to think big…bigger than what you are able to develop. I also want you to be clear about what the software delivers and what the design entails. My recommendation is that you define the ultimate game and then clarify what it is that you have developed. If you are finding it too difficult to do that, you may produce too documents.

1. Title Page
   1. Game Name – Perhaps also add a subtitle or high concept sentence.

The Final Exam

1. Game Overview
   1. Game Concept

You are a student in Majid’s class who fell asleep at the beginning of a test and stumbled into a dream set in a dark, warped version of the school. You must navigate the dark school hallways and classrooms in search of your 4 class notebooks, each located in a different quadrant of the map. There are enemies who patrol the halls and who will kill attack you on sight, and the only way to defend yourself is to run and hide. Your flashlight consumes battery power, which you must replenish by searching the map for battery pickups. There are a limited number of battery pickups scattered around the map, and once you run out of batteries, the only way to possibly win is to run around the map blindly in search of the notebooks, which are dimly lit to allow you to see them without the flashlight. The game is visually dull, relying heavily on audio design and cues to help the player make sense of what’s going on. Enemy proximity is revealed by the various sounds they emit, and serves as the main motivator for the player. The goal of the game is to collect all 4 notebooks and then collect the exit ticket, which is the answer sheet for your test, created by assembling all 4 notebooks.

* 1. Genre

Horror survival

* 1. Target Audience

Fans of SOMA, Slender: The Arrival, Outlast

* 1. Game Flow Summary – How does the player move through the game. Both through framing interface and the game itself.

The player must navigate in first person through the dark map with the assistance of a dim flashlight, and must listen for audio cues that reveal enemy locations. While avoiding enemies, the player must search for battery pickups to keep their flashlight powered, and for the 4 notebooks that make up the answer sheet that will allow them to exit the map and complete the game.

* 1. Look and Feel – What is the basic look and feel of the game? What is the visual style?

The map is labyrinth-style with winding hallways and a dark setting. Horror effect is created by claustrophobic map layout and the sinister audio atmosphere.

1. Gameplay and Mechanics
   1. Gameplay
      1. Game Progression

The map is arranged into 4 quadrants separated by winding hallways. An enemy patrols each quadrant and attacks you on sight. Each enemy has a different speed and sensitivity to enemy detection, and the player dies if they come in contact with an enemy. The player can avoid enemy detection by turning off the flashlight, as long as they still have battery power left. If their battery power reaches zero, they no longer have the ability to hide from the enemy, and the player must then scramble to find any remaining battery pickups to restore their flashlight, or they can choose to run blindly around the map to try and find the notebooks and answer sheet without a flashlight, for added challenge.

* + 1. Mission/challenge Structure

Enemies must always be aware of their flashlight battery level and be aware of enemy location. The player must manage their flashlight usage wisely, as there are a limited number of battery pickups present on the map. The player should, ideally, collect all notebooks and the answer sheet before they run out of battery life.

* + 1. Puzzle Structure

The player must remember where they’ve been and get familiarized with their surroundings in order to be able to effectively outrun enemies and to find all notebooks before dying.

* + 1. Objectives – What are the objectives of the game?

There are two objectives: to find all 4 notebooks, and to find the answer sheet to exit the level afterward.

* + 1. Play Flow – How does the game flow for the game player

The player will not be easily able to flow through the game due to its labyrinth setting. As enemies approach, the player will have to change direction more often to avoid them, which will disorient the player.

* 1. Mechanics – What are the rules to the game, both implicit and explicit. This is the model of the universe that the game works under. Think of it as a simulation of a world, how do all the pieces interact? This actually can be a very large section.
     1. Physics – How does the physical universe work?

Player can only move across the level laterally; no upward/downward movement

* + 1. Movement in the game

Player can only walk or run along the floor

* + 1. Objects – how to pick them up and move them

Pickups are collected by pressing ‘E’ when near them

* + 1. Actions, including whatever switches and buttons are used, interacting with objects, and what means of communication are used

Pickups are highlighted either by reflecting light from the flashlight or by emitting an aura when flashlight cannot be used due to empty battery

* + 1. Combat – If there is combat or even conflict, how is this specifically modeled?

The enemies are in combat with the player. They will kill the player on contact, so the enemy must avoid them.

* + 1. Economy – What is the economy of the game? How does it work?

Flashlight use consumes battery. The player must effectively manage battery resources while avoiding enemy contact and collecting notebooks. There are only 8 battery pickups in the map that don’t respawn.

* + 1. Screen Flow -- A graphical description of how each screen is related to every other and a description of the purpose of each screen.

Main Menu: The entry point of the game. From here, player can start the game or quit to desktop.

Instructions: When player chooses to start the game, they are brought to an instructions screen that explains the goal of the game and the instructions.

Game Over Screen: Upon successfully collecting all 4 notebooks and the answer sheet, the player is greeted with a win message. Upon dying, the player is greeted with a game over message.

* 1. Game Options – What are the options and how do they affect game play and mechanics?

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* 1. Replaying and Saving

?

* 1. Cheats and Easter Eggs

?

1. Story, Setting and Character
   1. Story and Narrative – Includes back story, plot elements, game progression, and cut scenes. Cut scenes descriptions include the actors, the setting, and the storyboard or script.

?

* 1. Game World
     1. General look and feel of world

?

* + 1. Areas, including the general description and physical characteristics as well as how it relates to the rest of the world (what levels use it, how it connects to other areas)

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* 1. Characters. Each character should include the back story, personality, appearance, animations, abilities, relevance to the story and relationship to other characters

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1. Levels
   1. Levels. Each level should include a synopsis, the required introductory material (and how it is provided), the objectives, and the details of what happens in the level. Depending on the game, this may include the physical description of the map, the critical path that the player needs to take, and what encounters are important or incidental.

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* 1. Training Level

‘Instructions’ screen featured in the game’s main menu

1. Interface
   1. Visual System. If you have a HUD, what is on it? What menus are you displaying? What is the camera model?

FPS perspective with OSD that shows battery level indicator and number of notebooks collected

* 1. Control System – How does the game player control the game? What are the specific commands?

WSAD for movement, mouse for camera movement, ‘E’ to pick up items, right mouse to toggle flashlight on/off

* 1. Help System

Pickups are highly reflective and shine in flashlight to help player find them, enemies and pickups will be highlighted with an aura if battery runs out

1. **Audio, music, sound effects** **–** **For this project, this the most important part. Sound should be a central part of the game, a driving force for everything else. Whether its cues for players to better understand what is happening in the game, or sound cues to help a player navigate the scene or avoid enemies, or special effects, or simply to enhance the game and make it more entertaining and fun. Here are some functions of sound in a game to think about as you design your game:**
   1. **Setting the mood**
   2. **Adding realism**
   3. **Providing clues to the surrounding**
   4. **Enhancing entertainment value**
   5. **Creating tactile and interface feedback**
   6. **Establishing brand identity**

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1. Artificial Intelligence
   1. Opponent and Enemy AI – The active opponent that plays against the game player and therefore requires strategic decision making

Enemies follow pre-set paths that restrict each one to a single quadrant (except for the yellow monster which patrols 2 quadrants). When the player enters the enemy’s detection radius, the enemy follows the player until the player leaves the detection radius, after which the enemy returns to its pre-set navigation path.

* 1. Non-combat and Friendly Characters

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* 1. Support AI -- Player and Collision Detection, Pathfinding

Unity’s built in NavMesh system will be used for both enemy patrolling and player detection AI

1. Technical
   1. Target Hardware

N/A

* 1. Development hardware and software, including Game Engine

Unity engine

* 1. Network requirements

N/A

1. Game Art – Key assets, how they are being developed. Intended style.

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