# 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 study sheet, which is torn into 4 pieces, each located in a different quadrant of the map. There are enemies who patrol the halls and who will kill you on sight, and your only tool to defend yourself with is a flashlight with 4 different coloured bulbs. The bulb colours correspond with the colours of the enemies, and are used to stun the enemies as you confront them. To stun an enemy, you must switch your flashlight to the bulb that matches their colour. Your flashlight’s main (yellow) bulb simply illuminates your path and doesn’t consume any resources, but the other coloured bulbs consume battery power, which you must replenish by searching the map for battery pickups. 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 pieces of the study sheet and travel to the exit without dying.

* 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 pieces that make up the study 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. At game start, 1 quadrant is available for exploration while the rest are locked. Quadrants are unlocked by finding study sheet pieces.

* + 1. Mission/challenge Structure

Enemies become stronger with each piece of the study sheet you collect, and new quadrants are unlocked with each study sheet piece collected as well, which makes the explorable area bigger.

* + 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 study sheet pieces before dying.

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

There are two objectives: to find all pieces of the study sheet, and to find the exit once the sheet is complete.

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

The player will be easily able to flow through the game due to its labyrinth setting. As enemies get stronger, 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 walking over 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 player must stun enemies by shining, at the enemy, the flashlight bulb that matches the enemy’s colour.

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

Movement consumes battery (slowest when walking, quickest when running), and use of coloured flashlight bulbs consumes battery quickly. The player must effectively manage battery resources while avoiding enemy contact and collecting study sheet pieces. Batteries spawn randomly around the map at random time intervals.

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

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

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* 1. Replaying and Saving

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* 1. Cheats and Easter Eggs

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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.

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

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* + 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

Possibly an ‘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, current flashlight bulb selected, possibly a mini-map, possibly time elapsed

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

WSAD for movement, mouse for camera movement

* 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

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* 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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