Technical Design Document – Outline

# Title Page

6th Sense: Eternal Abyss

*“Survive the Shadows, Seize the Shade”*

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# Document History

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| Version | Date | Author(s) | Changes |
| 0.1 |  | William Balingit | Initial Draft |
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# Game Summary

"Eternal Abyss" immerses players in a chilling dark ambient survival shooter set within the depths of the Underworld, cloaked in perpetual darkness. Armed with a diverse array of weapons and abilities, players must endure through an eerie environment, facing relentless enemies. The goal: survive the perpetual onslaught or uncover the mysteries hidden within the eternal abyss. To aid in the struggle, players can utilize power-ups like increased light for visibility, slowed-down enemies, quick reloads, and brief periods of unlimited ammo. With atmospheric gameplay, strategic decision-making, and an enticing blend of survival and mystery, "Eternal Abyss" delivers an intense and haunting gaming experience.

# Development Environment

## Development Hardware

* Laptop Computer: 16GB RAM, Nvidia 3050Ti Graphics, Ryzen 7 5th Gen Processor
* Keyboard and Mouse
* Headphones
* Windows 10 Home

## Programming Languages

* C++

## Development Tools

* Visual Studio IDE
* Macromedia Flash Pro 8 – Image editor
* Audacity – audio editor
* Texture Packer
* Github – version control software

## Game Engine

SFML (Simple and Fast Multimedia Library, version 2.6.1

# Architectural Analysis

## Classes

Describe the classes that will have to be implemented. For each class, provide:

* Its responsibilities
* How it collaborates with other classes

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| --- | --- | --- |
| Class | Responsibilities | Collaborations |
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Present class diagrams that show the relationships between classes. Show only the most essential attributes and methods for each class.

## Behavioral Analysis

Present state charts, flow charts (activity diagrams), sequence diagrams, etc. that model complicated behavior. If your game has actors that implement a state machine, this would be the section where you’d present the state chart.

## Game Loop

Describe, in order, the sequence of activities that happen during each game loop. You must document this even if you’ll be using the “Clown Cannon” game engine.

# Technical Risks

List all technical risks that could make it difficult or impossible to complete the game. Examples:

* Uncertainty on how to implement a certain feature
* Uncertainty on if a certain feature can be executed fast enough in real time
* First time using a certain library

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| Risk | Severity | Mitigation (what is to be done to eliminate or minimize this risk) |
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