Technical Design Document – Outline

# Title Page

# Document History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author(s) | Changes |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Table of Contents

# Game Summary

A brief description of the game. You may borrow content from your Game Design Document.

# Development Environment

## Development Hardware

List the hardware resources (including operating system) needed for game development.

## Programming Languages

Specify the primary programming language(s), including version (e.g. C++03), to be used for development. Also specify any scripting languages that are used (if applicable).

## Development Tools

List the software needed for development, such as IDEs, compilers, debuggers, version control software, graphical editors, sound editors, etc.

## External Code

List the libraries to be used, including the URLs of the official library site, and the version number of the library used in this project.

## Game Engine

Describe the game engine to be used (or implemented), as well as modifications that need to be done to it.

# Architectural Analysis

## Classes

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

* Its responsibilities
* How it collaborates with other classes

|  |  |  |
| --- | --- | --- |
| Class | Responsibilities | Collaborations |
|  |  |  |
|  |  |  |
|  |  |  |

Present class diagrams that show the relationships between classes. Show only the most essential attributes and methods for each class.

## Behavioral Analysis

Present statecharts, 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 statechart.

## 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

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