

# Template – Technical Design Document

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## 1.0 Revision History

<As you revise the document, list what was changed and when it was changed>

| Version | Description      |
|---------|------------------|
| 1.0     | Initial document |

## 2.0 Development Environment

2.1 Programming Language and Graphical Framework

2.2 IDE

2.3 Source Control procedures

2.4 Third Party Libraries

2.5 Project Management Tools

<URLs for Trello, Hack 'n' Plan, Discord, etc.>

2.6 Other Software

<2d art assets, audio, etc.>

## 3.0 Timeline

### 3.1 Milestones

<List the dates for your Alpha, Beta, and Gold releases. Include playtesting sessions.

Alpha: core features implemented, placeholder art

Beta: no new features; testing and polish

Gold: version to be released>

## 4.0 Game Overview

### 4.1 Gameplay

<A brief description of the game you are making.>

### 4.2 Game Objects and Logic

<A list of logical elements in the game, i.e. door, button, pistol, ammo, light, bullet, wall, character etc. and description of their behaviour and purpose>

### 4.3 Game Flow

<description of what the player can do (actions) from the start menu to playing the game, through to hitting quit. Include how to win, how to lose, how the player is moved, and what programmer things might need to be considered>

## 4.0 Mechanics

<A list of the core game mechanics. I.e., what the player can do and how they achieve this, and what this triggers in the game. For example, shooting enemies is a core mechanic in an FPS>

## 5.0 Game Architecture

<If game design patterns have been used, this is an appropriate place to include a discussion of your implementation>

### 5.1 Core Data Structures

<A brief discussion of what data structures will be used to implement the mechanics listed above>

### 5.2 Classes

<A list or description of key game classes. A class diagram may be used instead of a text description.>

### 5.3 Algorithms

<A list of any key algorithms used within the game.>

## 6.0 UI and HUD

### 6.1 Heads-Up Display

<Screen mock-ups of HUD elements in your game. These could be the score, health, ammo count, etc.>

### 6.2 User-Interface

<Screen mock-ups of any other User Interface elements used in your game, if present. For example, the main menu.>