**GAME DESIGN DOCUMENT**



ENTER THE DUNGEON

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# Game Analysis

Enter the Dungeon is an exhilarating fusion of roguelike dungeon crawling and twin-stick shooting that promises endless excitement and strategic depth. Set in a dark and immersive pixel-art world, players embark on a perilous journey into procedurally generated dungeons to retrieve ancient artifacts and vanquish powerful foes. The core loop revolves around exploration, intense real-time combat, and permanent character progression through relics and upgrades. What sets this game apart is its seamless blend of challenging gameplay, rich storytelling, and the ever-present thrill of risk and reward. As players conquer hordes of monsters, solve puzzles, and face formidable bosses, they'll uncover the game's captivating narrative, driving them to push further into the treacherous depths. Enter the Dungeon offers a relentless test of skill and strategy, ensuring that each playthrough feels unique and satisfying, making it an irresistible adventure for seasoned gamers and newcomers alike.

# Mission Statement

Enter the Dungeon is a pulse-pounding roguelike dungeon crawler, available on PC and consoles, where you become a hero facing relentless hordes of monsters, cunning traps, and epic bosses to reclaim ancient artifacts and restore light to a world shrouded in darkness.

# Genre

Genre: Roguelike Dungeon Crawler.

Perspective: Top-down.

Gameplay Style: Twin-stick shooter.

# Platforms

The game will be initially developed for PC.

# Target Audience

Enter the Dungeon is designed for gamers aged 16 and above who enjoy challenging gameplay, procedurally generated content, and a mix of strategy and action.

# Art Style

The game will feature a visually striking, pixel-art style with a dark and moody atmosphere, emphasizing the ominous feeling of exploring ancient, treacherous dungeons.

# Storyline & Narrative

1,147 years prior to the Hunter's adventure into the Gungeon, she travelled to Blacksword Manor to defeat Dr. Wolfenclaw; however, she was captured and stored in a Cryo Pod until the events of Enter The Gungeon. It is unknown how she escaped the Cryo Pod.

***Past Kill***

If the Bullet That Can Kill The Past is used on The Hunter, she will be brought back to the front entrance of Blacksword Manor before her capture. After entering the manor the Hunter will eventually come across a strange machine. Dr. Wolfenclaw will appear and greet the Hunter, saying that he's thrilled to be able to use her in his latest experiment. The Hunter responds by saying that she will not let him have his way with her and that she's come to stop him and his twisted religion. Dr. Wolfenclaw will then summon a circle of bullets, trapping The Hunter. The player will be given the option to use a Blank to destroy the trap. Dr. Wolfenclaw will initially be surprised by such advanced technology, but claims that it won't matter and decides to unleash his monster upon The Hunter. Should The Hunter defeat the monster, she will be relieved that it is finally over and leave the manor with Junior.

In her search for the kill the past, she has gone through many dungeons with different types of environmental cultures, each influenced by the events of Enter The Gungeon. It was an event cursed by Bullet That Can Kill The Past that made all the creatures living in these dungeons gradually become a form of bullet.

# Core Gameplay

## Overview

The core gameplay is moment-by-moment action in the game, mainly movement and shooting mechanics. They are primarily about the ability to master the individual and defeat the enemy.

Key gameplay features include dynamic twin-stick combat, permanent character progression through relics, challenging boss battles, atmospheric pixel-art visuals, and a compelling narrative. Enter the Dungeon offers a captivating solo adventure that challenges players to explore the depths of treacherous dungeons, delivering an unforgettable experience that combines the best elements of multiple genres.

## Main Character

|  |  |  |  |
| --- | --- | --- | --- |
| Character | Description | Characteristics | Misc. Info |
| The Hunter | The Hunter is one of the Gungeoneers in the game Enter the Gungeon. The Hunter is equipped with the Rusty Sidearm, Crossbow, and Dog. | The Hunter is a resilient and agile Gungeoneer, making her mark in the Gungeon with her resourcefulness. Armed with a Rusty Sidearm and a potent Crossbow, she excels in precision combat. | Non. |

## Weapons and Items

* Weapons

|  |  |  |
| --- | --- | --- |
| Weapons | illustration | Description |
| Rust Sidearm |  | Starting gun of The Hunter. |
| Crossbow |  | The Crossbow is a gun that fires a single high-damage bolt. The Hunter starts with this gun. |
| AK-47 |  | Rifle with high speed and powerful damage. |
| Blasphemy |  | Starting weapon of The Bullet. Swings destroy nearby bullets. At full health, swings send out a piercing sword projectile. |
| BubbleGun |  | Fires bubbles which move slowly towards enemies. Reloading the gun launches bubbles away from the player at high speed. |
| CactusGun |  | Fires needles. |
| CrystalGun & CrystalGun2 |  | Fires laser shots at enemies. The last bullet of magazine fires a crystal, which splits into 5 small crystals on impact |
| ElectricRifle |  | Fires a zap of electricity. |
| FossilizedGun |  | Fires a stream of oil. Reloading spits fire, which can ignite the oil. |
| Magnum |  | 5 Shots Or 6? |
| Phoenix |  | Shooting creates a small cone of fire in front of the player that burns enemies. |
| Shotgun |  | Large damage but small range. |
| ShotgunSawOff |  | Large damage but small range. |
| Siren |  | Fires a shotgun blast of bullets that leave pools of water. Negates fall damage and goop effects while equipped. |
| SuperSoaker |  | Fires a stream of water. |
| TommyGun |  | Shoot fast! |
| Trident |  | Fires a long-range laser that pierces one enemy. Destroys nearby bullets and pushes enemies away while reloading. |

* Items

|  |  |  |
| --- | --- | --- |
| Items | illustration | Description |
| Hegemony Credits |  | Standard currency throughout Hegemony of Man controlled systems, can be found upon finishing the tutorial, defeating bosses, etc. Can be used to purchase items in The Breach that will show up in future runs. |
| Shells |  | Shells (also referred to as casings or coins) are the game's main form of currency, and are often dropped by enemies upon their death. They can be used to purchase items in Shops and make wagers with various NPCs. |
| Ammo |  | Ammo is required for the player to use their weapons. The player can collect ammunition from defeated enemies, find it in treasure chests, or purchase it from vendors. |
| Keys |  | Keys are required to open locked doors and chests found throughout the levels. The player can collect keys from defeated enemies or purchase them from vendors. |
| Health |  | The player has a health bar, which decreases when the player takes damage from enemies or hazards. The player can collect health items, such as hearts and health kits, to restore their health. |
| Blanks |  | Blanks are special items that the player can use to create a shock wave that will clear all the bullet that them from enemy bullets for a short period of time. Blanks are special items that the player can use to create a shock wave that will clear all the bullets that shoot from enemy and prevent them shooting for a short time. |
| Armor |  | Armor is appended to the end of the player's health bar upon pickup, and the player can carry multiple pieces of armor. Armor absorbs one hit, after which it is destroyed. Whenever armor is destroyed, a Blank is activated for free. |

## Enemies and AI

• Enemies

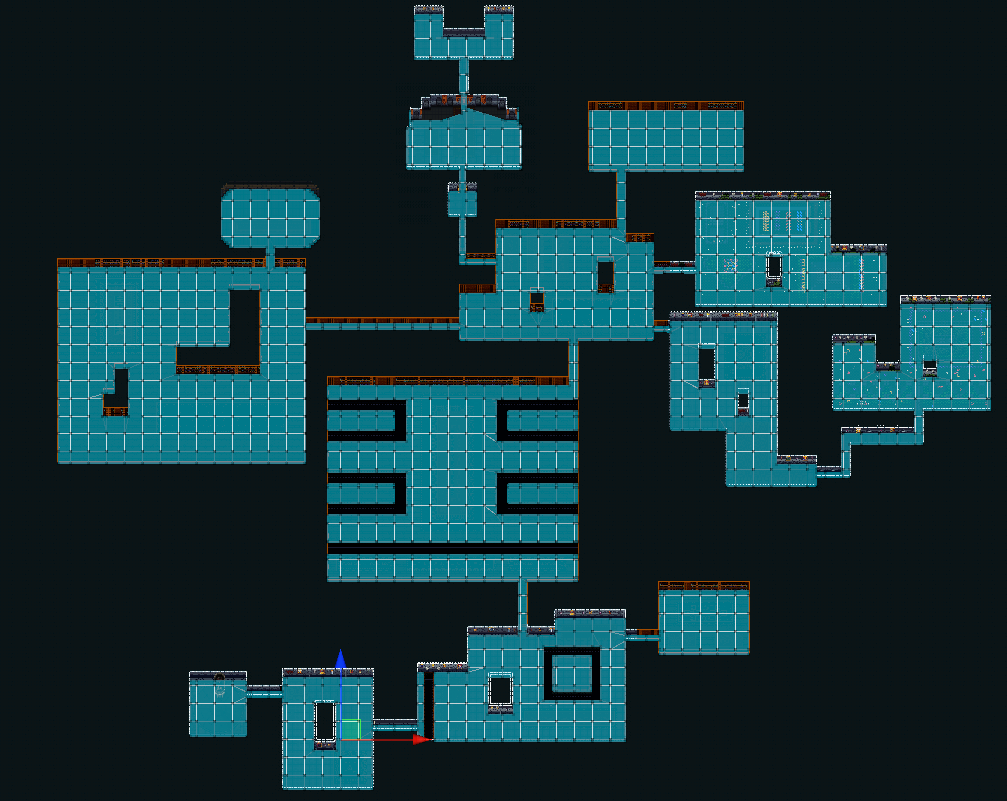
|  |  |  |
| --- | --- | --- |
| Enemies | illustration | Description |
| Bullet Kin |  | Slowly walks towards the player, firing bullets. |
| Blue Shotgun Kin |  | Slowly walks towards the player, occasionally firing a wide spread of 5 bullets quickly followed by a wide spread of 4 bullets. |
| Red Shotgun Kin |  | Slowly walks towards the player, occasionally firing a tight spread of 5 bullets. |
| Bandana Bullet Kin |  | Slowly walks towards the player, rapidly firing bullets. |
| Blue Bookllet |  | Occasionally fires bullets towards the player in circle patterns with various radio. |
| Hollowpoint |  | Floats towards the player, rapidly firing bullets. |
| King Bullat |  | Periodically fires bouncing bullets in all directions. |
| Gigi |  | Occasionally fires bullets towards the player in circle patterns. |
| Muzzle Wisp |  | Occasionally fires bullets towards the player in circle patterns. |
| Cubulon |  | Occasionally fires bullets towards the player in circle patterns. |
| Bullat |  | Launches itself at the player |

• Bosses

|  |  |  |
| --- | --- | --- |
| Bosses | illustration | Description |
| Blobulord |  | Blobulord is a boss found in the chamber 1. |
| Gatling Gull |  | Gatling Gull is a boss found in the chamber 2. |
| Lich |  | Gatling Gull is a boss found in the last chamber. |

• Enemy movement

In this project, we use NavMeshPlus made by h8man in github, NavMesh building components provide ability to create navigation meshes that are generated automatically from your Scene geometry, which allows characters to move intelligently around the game world.



## Game Objectives

This is where you present more details on how the gameplay will motivate the player to progress through the game. Discuss rewards and penalties and the difficulty level. You can use the table below to help break down objectives and rewards.

|  |  |  |
| --- | --- | --- |
| Rewards | Penalties | Difficulty Levels |
| List ways of how the player is rewarded and when. | Discuss things that hinder the player on progressing | Discuss the difficulty levels within the game |

## Core Loop

Information about core loop.

## Game Flow

Information about game flow.

## Gameplay Mechanics

This is the where you start getting more specific on how some of the systems in the game will work. This includes how characters move in the game, what gameplay actions are available, item inventory and attributes, and how the game progresses from level to level.

|  |  |
| --- | --- |
| **Character Attributes** |  |
| **Character** | **Movement Abilities / Actions Available** |
| Name of character | List the characters abilities & how the player can perform them |
|  |  |
| **Game Modes** |  |
| Game Mode / Difficulty Name | Describe the objectives, hazards in the game mode. And discuss how the player progresses from level to level |
| **Scoring System** |  |
| **Points/Coins/Stars/Grades/Etc.** | **How it’s Awarded & Benefits** |
| List the scoring attribute | Describe how the player obtains this and the benefits. For instance, does getting more points unlock a special level. |

## Level Design

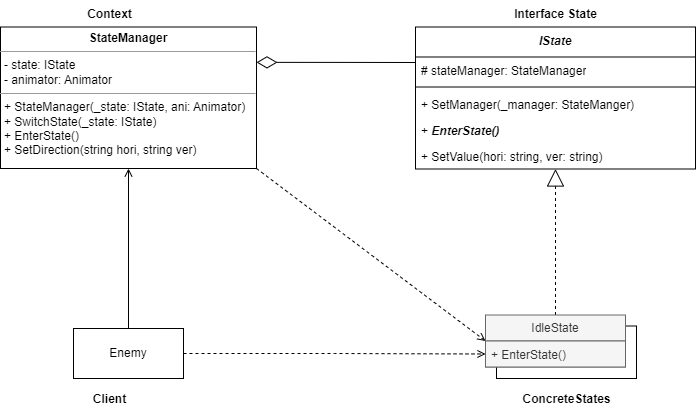
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## Design Pattern System

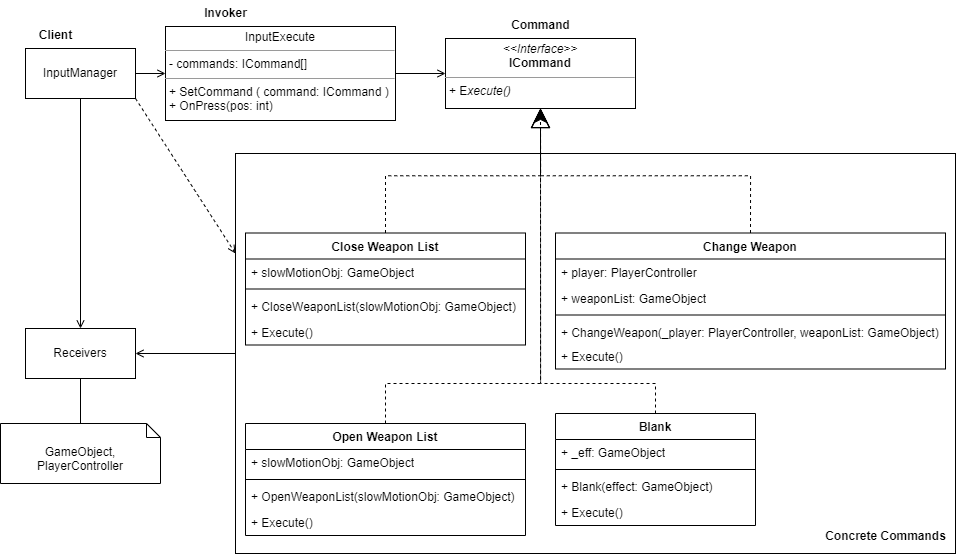
* State Pattern

State is a behavioral design pattern that lets an object alter its behavior when its internal state changes. It appears as if the object changed its class. In this project, We use to manage the states of characters, enemies, etc.



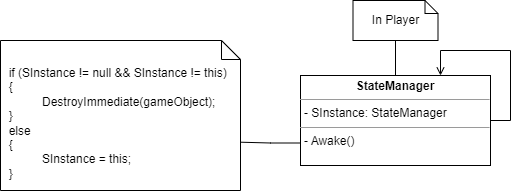
* Command Pattern

For Input Controller, command is a behavioral design pattern that turns a request into a stand-alone object that contains all information about the request. This transformation lets you pass requests as a method arguments, delay or queue a request’s execution, and support undoable operations. In this project, we use to handle key press events for special features.



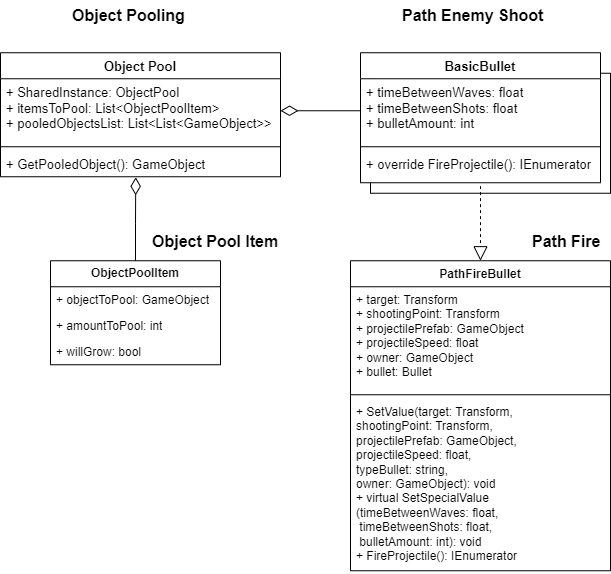
* Singleton Pattern

Singleton is a Design Pattern that ensures each class has only one instance, and provides a global access point for this instance (Controllers, Player, UI, sound, etc) for game controller.



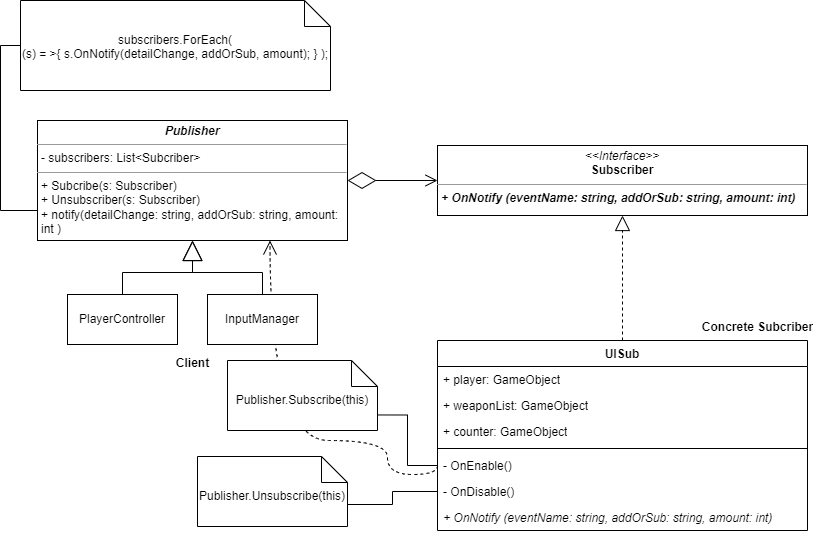
* Object Pool Pattern

Object Pooling is a great way to optimize your projects and lower the burden that is placed on the CPU when having to rapidly create and destroy GameObjects. It is a good practice and design pattern to keep in mind to help relieve the processing power of the CPU to handle more important tasks and not become inundated by repetitive create and destroy calls.



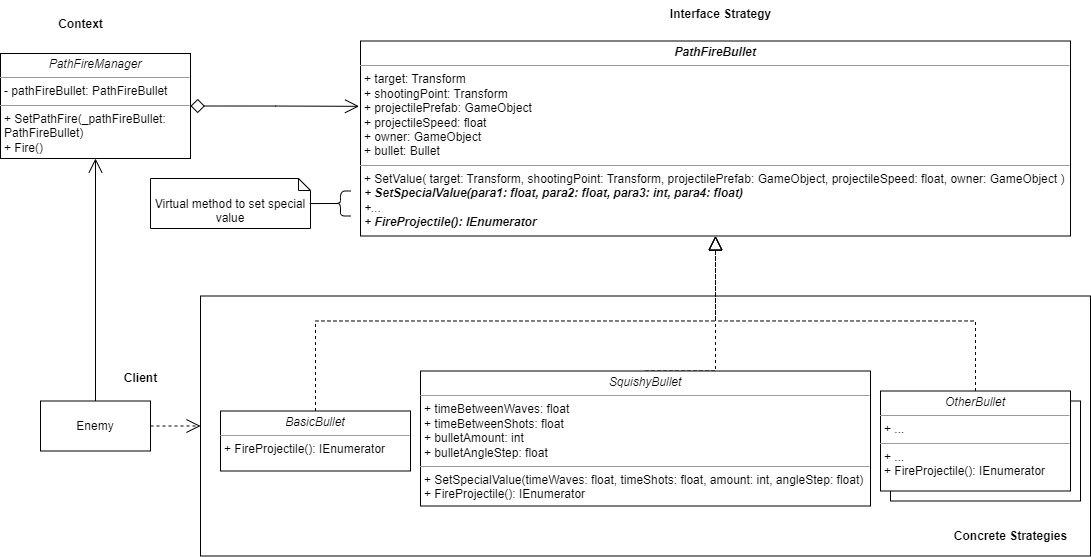
* Observer Pattern

Observer is a behavioral design pattern that lets you define a subscription mechanism to notify multiple objects about any events that happen to the object they’re observing. In this project, we use to update UI when player's health or other parameters change.



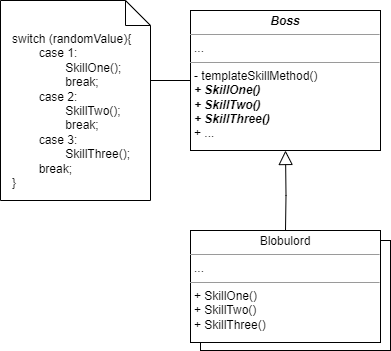
* Strategy Pattern

Define a family of algorithms, encapsulate each one, and make them interchangeable. Strategy lets the algorithm vary independently from the clients that use it. In this project, we use this pattern to define the path fire bullets.



* Template Pattern

Template Method is a behavioral design pattern that defines the skeleton of an algorithm in the superclass but lets subclasses override specific steps of the algorithm without changing its structure. In this project, we use to define to choose the skills for boss.



# Control Scheme

|  |  |
| --- | --- |
| **Button/ Touch Input** | **Action it Performs** |
| Shoot | Left Click |
| Dodge | Right Click |
| Interact | E |
| Reload | R |
| Move Up | W |
| Move Down | S |
| Move Left | A |
| Move Right | D |
| Use Blank | Q |
| Next Weapon | Scroll Wheel Up |
| Previous Weapon | Scroll Wheel Down |
| Slow Time | Left CTRL |
| Pause | ESC |

# Game Aesthetics & User Interface

Discuss the design techniques to be used. Describe the look & shape of the characters, environment and pathways. Will the game look realistic or have some other art style. Discuss what type of theme the game will have & what type of emotional impact you are hoping players experience. Discuss how the player’s gestures/interactivity has an affect on the visual experience.

Present a general overview of the UI. How will the buttons be laid out, how will the HUD work, how does the menu system function, and so on. It is a good idea to insert photos, diagrams or concept art to help explain the UI.

## HUD

Include information of HUD

## Menus

Include information of all menus.

# Art and Visuals

## Art Direction

Include information on the game genre and how it is different, similar, or a hybrid of existing genres. Discuss what platform the game will be on, if it is going to be on multiple platforms discuss ways the game will be modified for each platform. Also, provide a general overview of the game modes available in single player and multiplayer. Also, list the Key Gameplay Features (selling features) of the game.

## Character Design

Include information on the game genre and how it is different, similar, or a hybrid of existing genres. Discuss what platform the game will be on, if it is going to be on multiple platforms discuss ways the game will be modified for each platform. Also, provide a general overview of the game modes available in single player and multiplayer. Also, list the Key Gameplay Features (selling features) of the game.

## Map Design

Include information on the game genre and how it is different, similar, or a hybrid of existing genres. Discuss what platform the game will be on, if it is going to be on multiple platforms discuss ways the game will be modified for each platform. Also, provide a general overview of the game modes available in single player and multiplayer. Also, list the Key Gameplay Features (selling features) of the game.

# Audio and Sound

## Sound Effects

Include information on the game genre and how it is different, similar, or a hybrid of existing genres. Discuss what platform the game will be on, if it is going to be on multiple platforms discuss ways the game will be modified for each platform. Also, provide a general overview of the game modes available in single player and multiplayer. Also, list the Key Gameplay Features (selling features) of the game.

## Music Backgrounds

Include information on the game genre and how it is different, similar, or a hybrid of existing genres. Discuss what platform the game will be on, if it is going to be on multiple platforms discuss ways the game will be modified for each platform. Also, provide a general overview of the game modes available in single player and multiplayer. Also, list the Key Gameplay Features (selling features) of the game.

# Schedule & Tasks

List the tasks that need to be completed along with the basic timeline to complete them by. The task list can be as detailed as you like to fit your studio’s needs. The table below can be substituted for the excel file. This table is a great start but the tasks should be much more detailed.