Not so Alone

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Definitions & Notation

Many terms used may have multiple meanings that differ from those meant when used in a software development environment.

Gameplay Terms

- **Roguelike Game** - A genre of video games where every playthrough is meant to be a fresh start that is unique and does not depend on any specific progress made before. Typically based on some Fantasy narrative largely inspired by the table-top Dungeons and Dragons.
- **Top-Down** - Video games where the perspective the player sees is from above, looking down. The game starts with an overall view of the entire system and then gradually breaks into subsystems.
- **Cooldown** - A cooldown is the time the player must wait before they can perform another action. A cooldown often follows the usage of an item and/or command for the purpose of game balance.
- **Active Item -** An active item is exactly as its name entails. The player carries this item and gets no bonuses out of it until they activate it. The effects of active items can vary and have a cooldown.
- **Passive Item** - A passive item, like an active item, is carried by the player; however, contrary to an active item, a passive item cannot be activated but instead provides the player with some sort of special skill or effect while the player possesses the item.
- **Mob/Trash Mob** - A term that is often used to describe the common enemies that the player encounters. These enemies are generally easy to kill and have basic movesets.
- **Boss -** An enemy that is significantly more challenging compared to the common mob enemies. Bosses have the tendency to have larger health bars, inflict more damage to the player, and have unique movesets that the player must learn in order to overcome them.

Programming Terms

- **C#** - A memory safe, object-oriented, compiled programming language used to implement Unity Projects
- **Unity** - A widely used game engine.
- **Unified Markup Language** - A design language used to model and demonstrate the infrastructure and objects of the code.
- **Sprite** - A computer graphic which may be moved on-screen and otherwise manipulated as a single entity.

Game Details

Target Audience - Players of top down, dungeon crawler, or roguelike video games. People who are looking for a unique experience every time they play.
Premise - Solo Astronaut on ship. Ship is attacked by an unknown enemy and you must make your way through your ship clearing enemies and looking for a way to escape.
Monetization: No current plans for monetization.

Game Description

Not so Alone is a Roguelike dungeon crawler game that takes on a new environment that many others in the genre have yet to experiment with. Set in space, The player is a lone astronaut in deep space travel. After years alone you awaken to a loud explosion aboard the ship. Through the security cameras you see you have been boarded by hostile aliens. Make your way floor by floor, room to room, throughout your ship clearing the enemies as you make your way to the cockpit to make your escape. Along the way pick up items and weapon modifications you find along the way to aid your fight against the unknown enemies. Will you escape? Will you fall to the invaders? Is it all real or has your mind finally betrayed you after years of isolation?

Inspiration from Other Games

This section describes other media used for inspiration for this game.

The Binding of Isaac

The Binding of Isaac is one of the most popular top down roguelike video games. Taking on a unique interpretation of the bibles "Binding of Isaac." The gameplay takes on the typical top down aspects of many other roguelikes while implementing a liberal interpretation of Isaac, the son of Abraham, had he not been stopped when asked for his sacrifice.
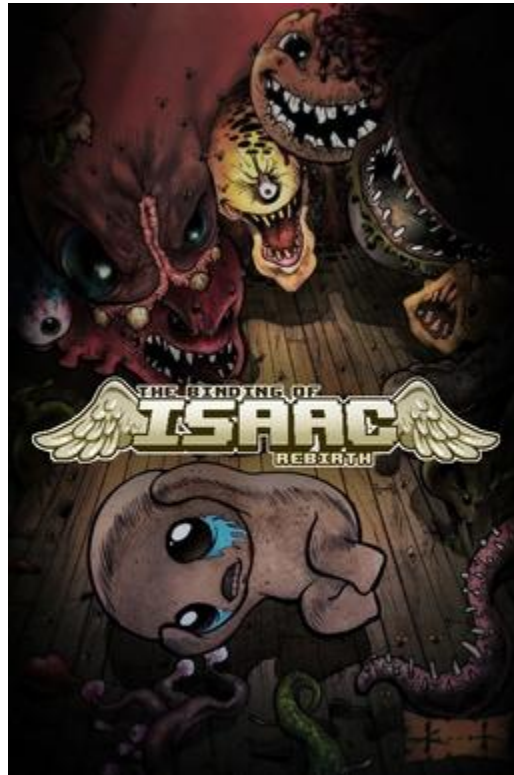
 From this game, we got inspiration from having a top-down and fixed camera setup. A character is moving up, down, left and right and we incorporated that into our space game. There are also different rooms where the main character progresses through and we incorporate a pre-generated map and the main character will move through it. Room edges static and rectangular with layout changing within.

Enter the Gungeon

 Enter the Gungeon is a Shoot-em-Up with Roguelike features. Choosing from select classes the player is able to use unique weapons and abilities as they work their way through the Gungeon searching for the gun that can kill their past. This game features a top down point of view that follows the player instead of a static camera. As a result, level design is a flat 2D layout with multiple rooms per level that allows you to approach edges with the camera.

This section gives a brief overview of Not So Alone's gameplay

Gameplay

Starting Game

The game starts with the player in an empty barracks area. You are alerted to the intrusion and must make your way through the ship toward your cockpit to escape. No items are given on fresh playthrough. Initial weapon is a single shot projectile. Items and upgrades must be found throughout the levels.
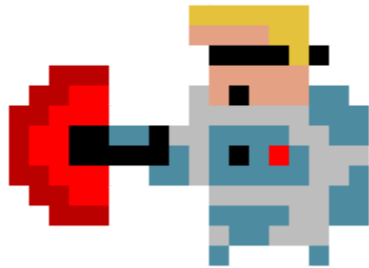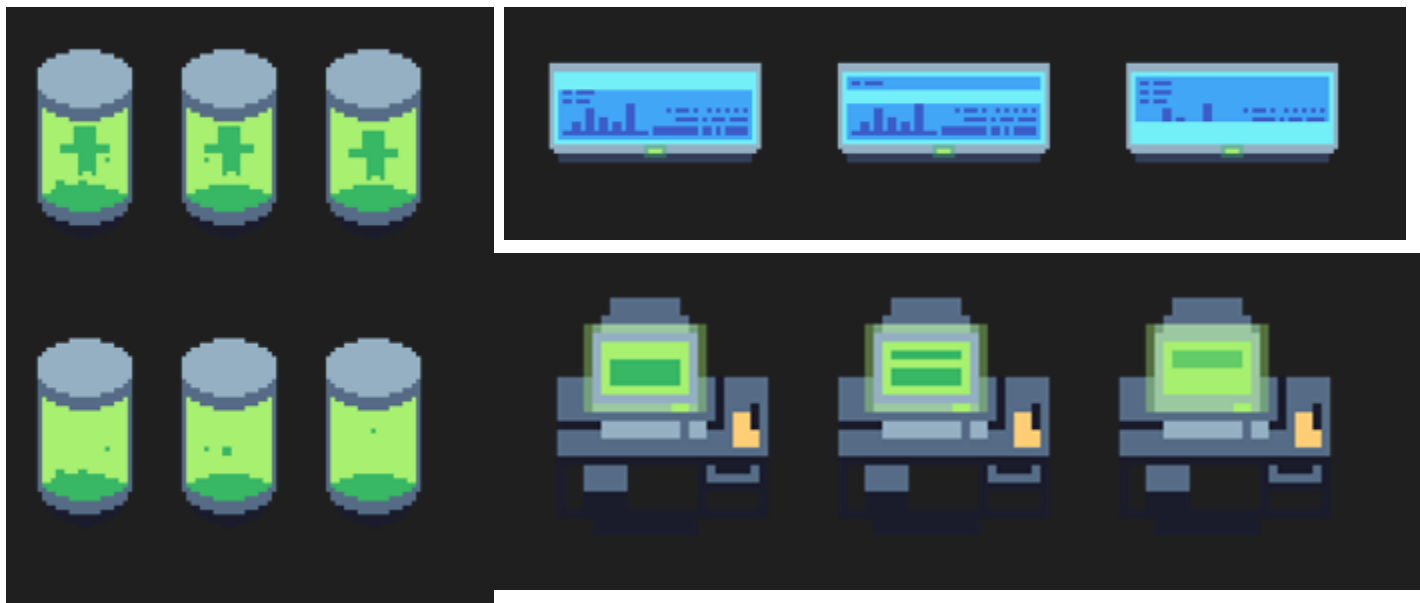

Movement

Like many other top down roguelike video games we plan on moving in a semi gridlike fashion. Movement will be restricted to Up, Down, Left, Right. Diagonal movement is a possible feature but implementation is dependent on development time.

Environment

Advanced technology based design aboard a ship in space

Goals

Defeat enemies, Collect desired items, clear each level

Defeat

Health based. Defeat at 0 health, potential increase or replenishment in health through items. A Death means the end of the run and all progress made is lost for the following playthrough.

Health Items

Health items will be available throughout the levels to replenish lost health as well as health increase items that Increase the total amount of health the player has for that playthrough

Active Items

Active items will be one of the two available types of utility items. Only one active item can be carried by the player. If the player wishes to pick up a new active item any current active item held will be replaced. Active items are items that have helpful effects that can be chosen when to use.

Passive Items

Passive items will be on of the two available types of utility items. Only one passive item can be carried by the player. If the player wishes to pick up a new passive item any current passive item held will be replaced. Passive items are items that have helpful effects that are always active or self activate on certain conditions met. I.e. health loss, death.

Combat - Directional shooter, up, down, left, right. Single shot default weapon. Item drops may potentially increase fire rate or type, doubleshot, cone etc

Enemies

Brute
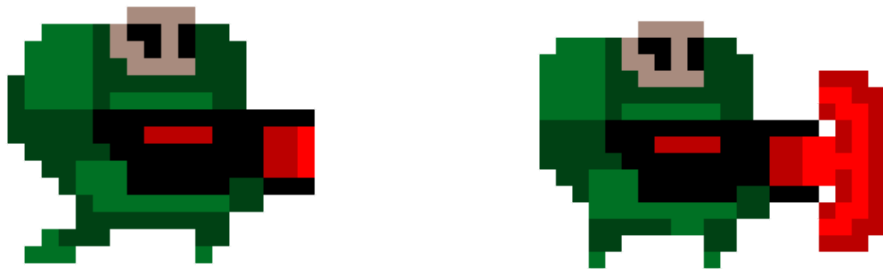
Brutes are large enemies that shoot wide projectiles. They have more health than other enemies and deal significantly more damage if the player is hit by their attack. Brute movement speed is slower that other enemies

Seer

Seers are levitating enemies with rapid fire projectiles. They have less health that others and deal less damage but have significant movement speed and fire rate

Slime
Slimes are filler mobs that deal little damage individually and are slow but are meant to be used in a horde like scenario. Meant to be a melee damage mob so no projectile is present.

Graphics and Art Assets

A simplistic pixel art style is used for graphical assets. The assets used are a combination of publicly available free use assets as well as some self made. The following are examples of art assets and style used for this project.
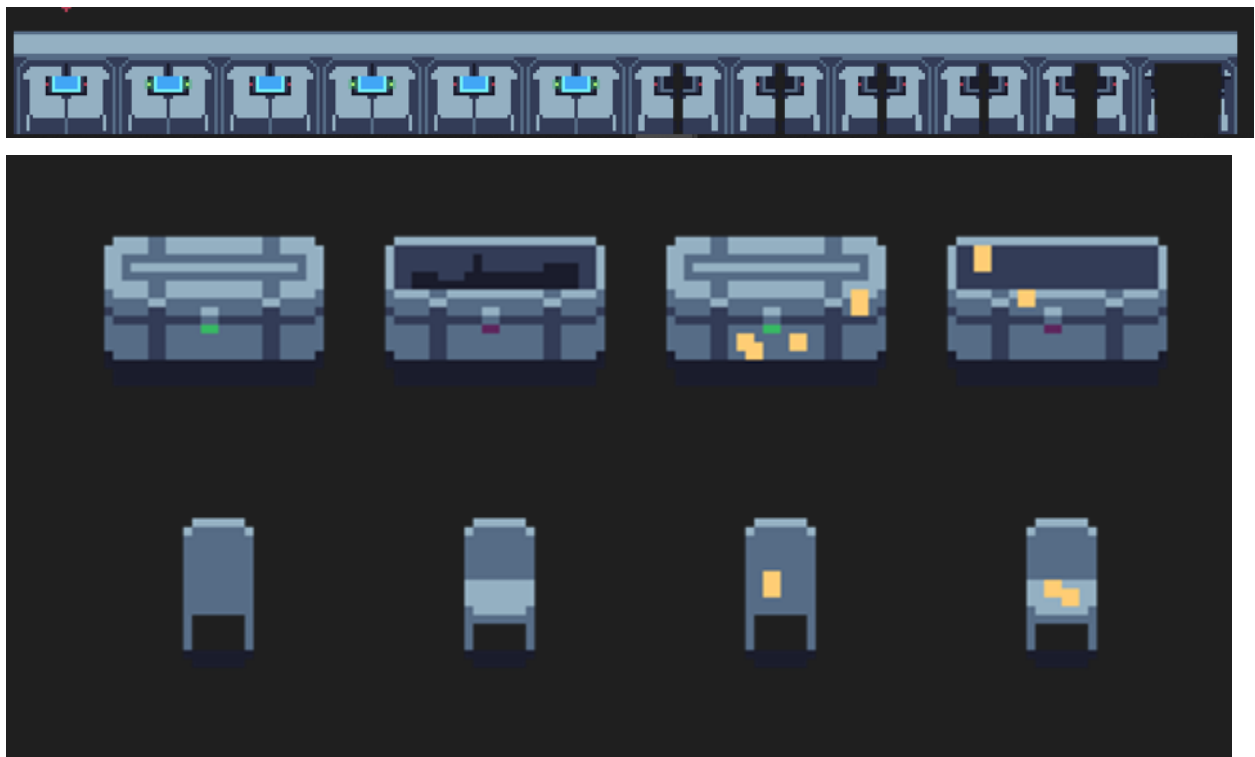
User Interface and HUD

The user interface options should be designed for widescreen monitors with a base resolution of 1280 x 720p. Larger resolutions may be supported by rescaling Interface options.

The heads up display will feature the current weapon modification, if any is present, on the top left of the screen next to a weapon icon. A coin currency will be tracked on the top right. Both items, passive and active, will be displayed on the center bottom of the screen. Health is displayed above the player and moves in line with them. Enemy health is similar.

The goal of the hud is to remain as clean and simple as possible while still displaying all relevant information.
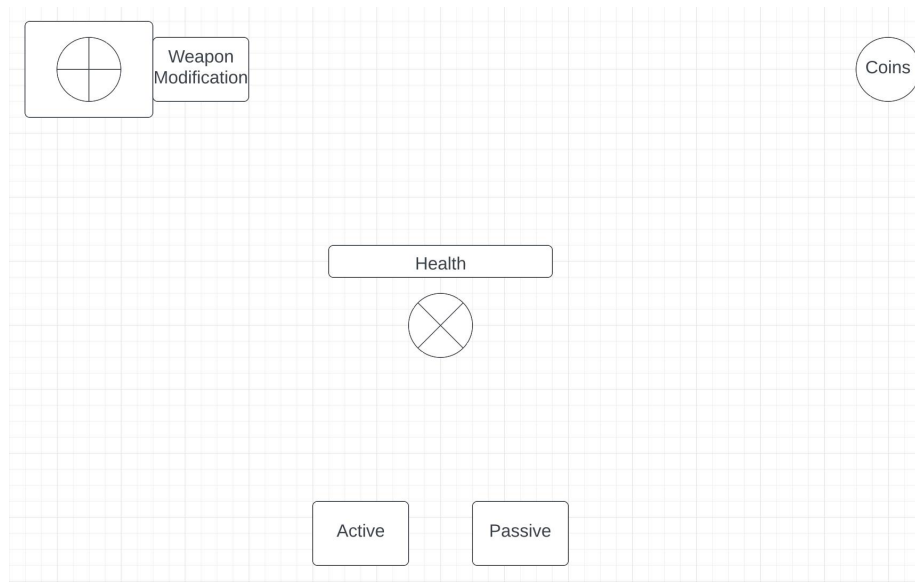
Typeface
This game uses a font by the name of "Vectroid" that gives the project more of a futuristic tech feel while still being clean and legible enough to be present throughout the entire project.

The following is a list of features that could be added in the future to further development on the project.

Procedural Generation
Many games in this genre utilize procedural generation of both levels and enemy type to ensure that every playthrough is unique while reducing the need to manually create levels to use.

Increased Weapon Variety
The game currently features a single weapon type with a few modifications available. Additional weapon types with additional unique and varying modifications would allow the player more options in how they choose to take on the enemy.

Increased Item Variety
Increasing the amount of items in the game will give more chances at a unique playthrough and expand on the few items implemented for proof of concept

Additional Enemy Types
Different enemy types and combinations of enemies can present new and unique combat and tactics that must be used. Additionally Larger Boss type enemies can be added to give the player a larger challenge from time to time