Contents

Game Design Document

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Game Name: Prison Outbreak

Game Story

The world is in turmoil, after the ice caps melted the world sank underwater, now land is highly sought after to feed the re-growing population for the two remaining governments, the east and the west. After the melting polar caps allowed scientists to discover a hidden alien artefact in the ice a strange element was found inside. Scientists believed by exposing humans to various strains of the molecule they could create a more powerful solider to help the ongoing war for land. An underwater prison is set up as a front to house POWs and to secretly experiment on prisoners with the molecule without causing further civil unrest from the already rebellious citizens of the new world.

The game starts when a rouge strain of the molecule causes infected humans to break out of their containment and assault the guards and scientists. The player must defend himself from the zombie onslaught with a weapon he's picked up from a mutilated guard during the chaos of the initial prison riot.

Character 1

Daniel Hurt escaped his cell during the riot, during the commotion he was able to take a gun from a guard's corpse and utilise it as a weapon to protect himself.
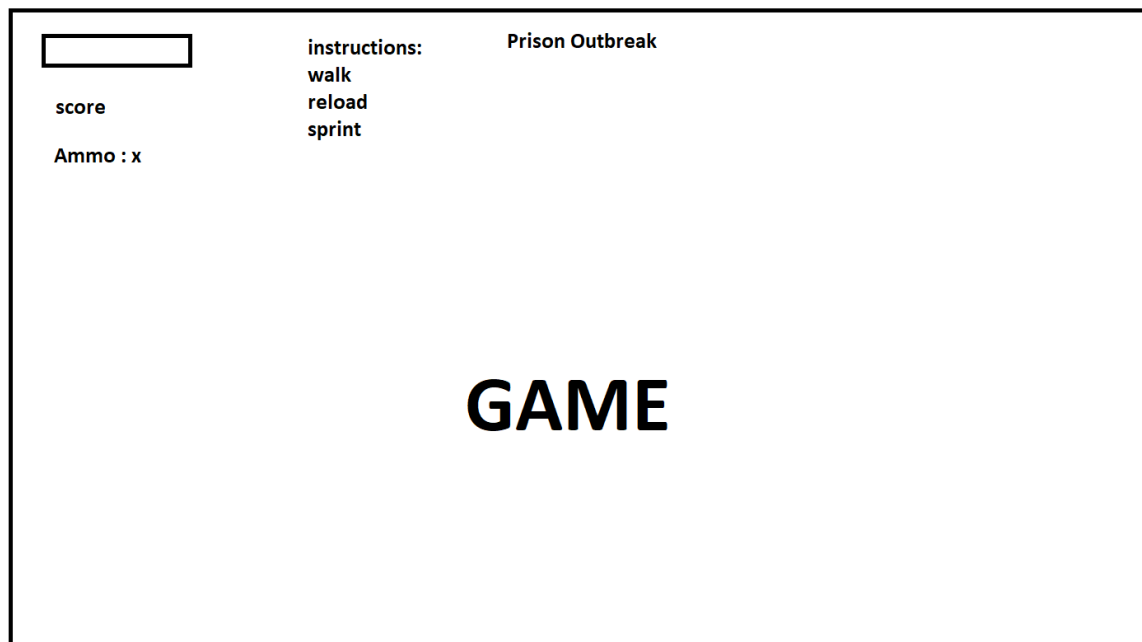

Menus
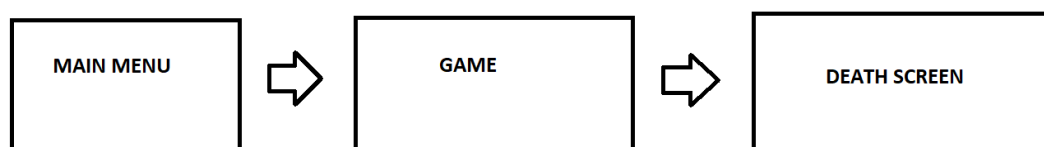
Main menu

Contains two buttons: start game that loads the game and exit that closes the application.

The main menu with have some atmospheric music, that will hopefully set the tone of the game to be serious and suspenseful.

Game

Player health bar will move down and while a zombie is colliding with the player, its represented as a slider that will move down, once it reaches 0 the game with end.

Player score will go up in 10-point increments as a zombie is killed.

Ammo will decrease when a bullet is shot, when it reaches 0 shooting is disabled until the player manually reloads by pressing R.

Sprinting will increase movement to a specific value. Defaulted at 7.

Game over

GAME OVER

SCORE:X

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EXIT APP BUTTON
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Game over title, under will be some flavour text "you were consumed".

Shows the players score.

Button to close the game.

Game Elements

Main Player

Three graphics are used. Daniel is a prisoner, so he wears a prison jumpsuit, typically orange. We see him in an idle stance, the just fired, where the mechanism on the gun fires back and his arms and torso gets lit up from the muzzle flash, as well as some small fire and smoke appearing at the barrel for dramatization.

The reload animation has one image. Although basic, the idea is conveyed accurately. He goes idle to reloading making it seem like he's pulling a mag out and placing it in again.

Property	Description	Type

Health	Once the player takes enough damage the game will end	int
Speed	How fast the player moves	Int
Sprint speed	Dictates how fast sprint speed is, will always have to be higher than speed	int
smoothing	Rotation speed	float

Weapon Script

Daniel will hold an assault rifle; the inspiration isn't based on reality, but it's designed to be believable enough, so the player understands what it is. It shoots rounds big enough to be seen and fast enough, so the player doesn't have to lead their shots in close combat.
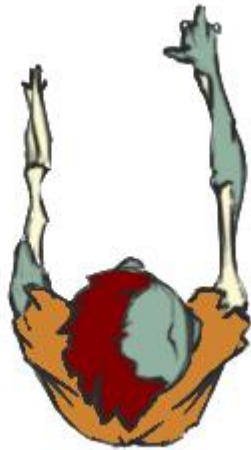

Property	Description	Type
Fire time	How quickly the player shoots	Float
Mag size	The max ammo the player can shoot before having to reload	Int
Current ammo	How many rounds are in the mag	Int
Reload time	How long it takes before the player can start firing again.	Float
Damage	How quickly it decreases enemy health	Int
Speed	Determines simulated velocity	float
Destroy time	How quickly unity removes the object for optimization	float

Enemies

sprite of a zombie edited to have an orange top because it's a zombie prisoner.

I am using Astar pathfinding and several components that allow for accurate enemy movement within the map boundaries.

Property	Description	Type
Health	The zombie's health – pairs with the damage of the bullet to determine how strong or weak the zombie is	Int
Damage	Pairs with the health of the player to lower their hit points while in contact	Int
Speed	How fast the zombie moves	Float
Score	Determines amount of points the player gets per kill.	Int

Map plan

Red circles are marked as zombie spawn areas
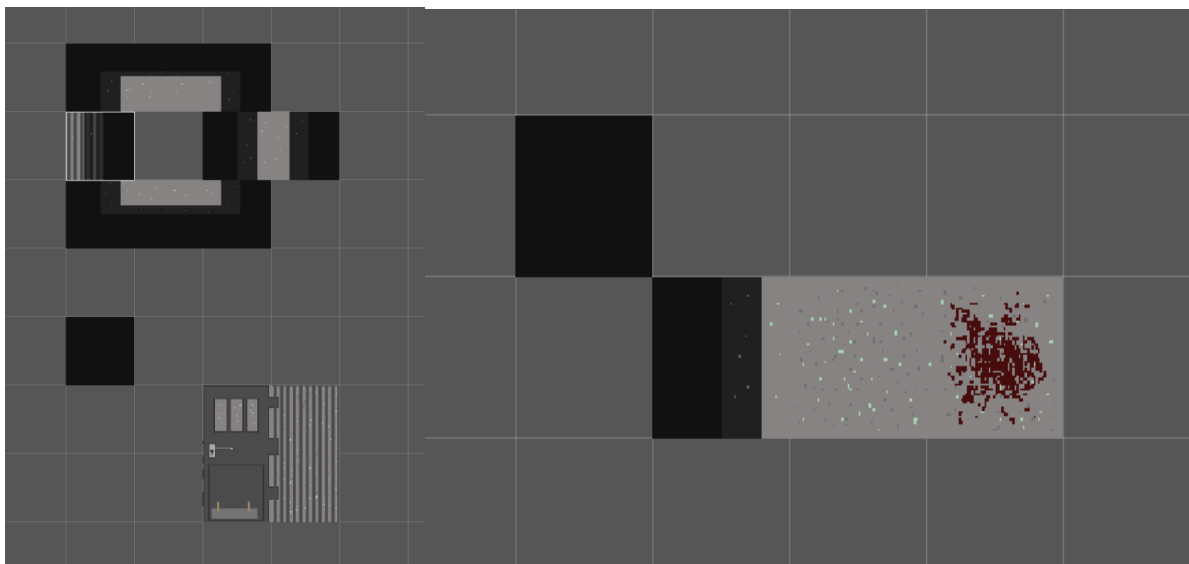
Game Breakdown

The game is a top down shooter, the player moves along a 2D plain to navigate around the map, the map was designed to have tight corners for intense chases but wider areas for brief moments respite, this is to mimic enclosed space but echo communal environments found in prisons. The goal is to kill zombies while avoiding them and managing ammo.

The player has a variety of controls to use:

- W, A, S, D to move

- R to reload
- SHIFT to sprint
- The mouse is used to rotate the player
- LMB is shoot

Feedback

| Feed Back Given	Improvements/ actions
Game works as intended, although if you're just playing the game without reading the itch.io page then you aren't overly aware that it is an endless wave game, so players will be scouring the maps looking for exits that don't exist.	Added a section on the Itch page That says it's a survival game and the objective is to get points module. Shoot zombies and stay alive to win points, try to survive as long as possible!
The sound design combined with the aesthetics helps to create a creepy atmosphere. I'd like the option to lower the volume of the gunshots. The main menu could do with some more graphics, even something like some animations on the title screen would likely help.	I added a picture of a prison and tinted it red. For this build there was no picture and was just black. I added a button to take the user back to the main menu I lowered the volume of the gunshots in unity, so they aren't so loud. I believed I didn't have enough time to implement any animations on the menu screen or to adding a functional volume rocker.
Good use of soundtrack, art assets and level design to create a good atmosphere with the game. Game itself is playable as well. Good game overall.	
The game is enjoyable and you're able to quickly pick up how the game functions, some points of improvement would be the addition of a pause menu, perhaps an objective or at least tell the player it is a survive if possible, game.	
Really good theme, great pathfinding, reload function is good, original zombie artwork would be good :)	

PRESS KIT

Screen Shot of the game
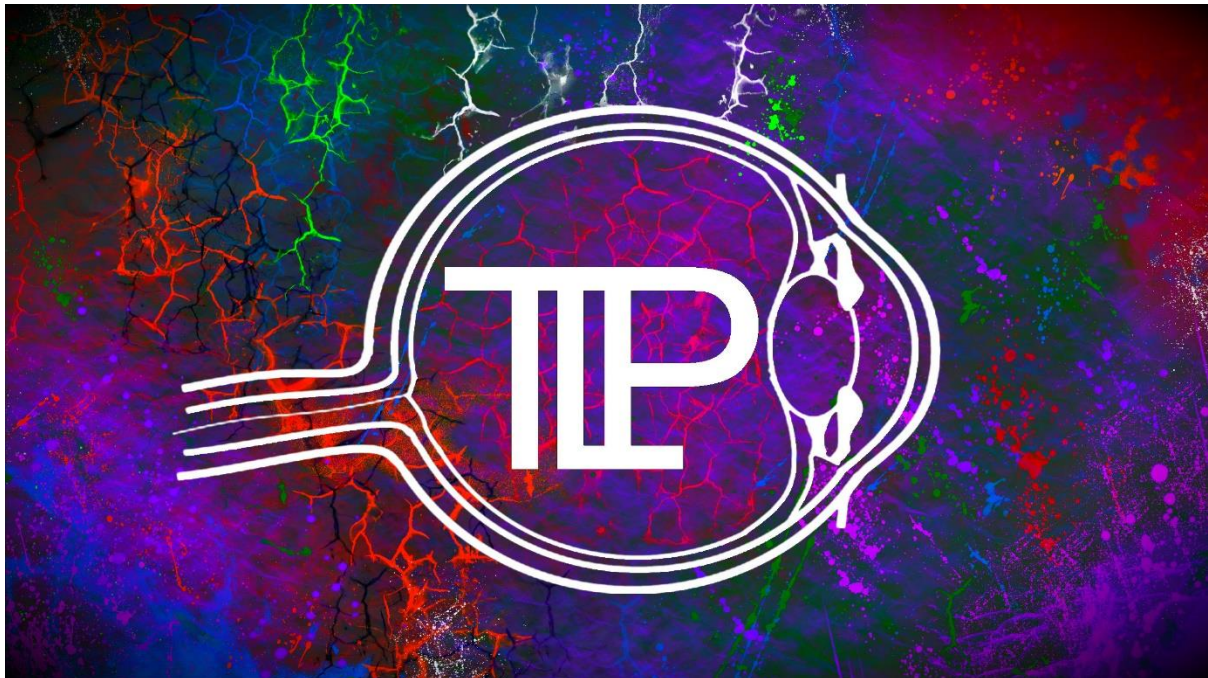

Game screenshot for thumbnail
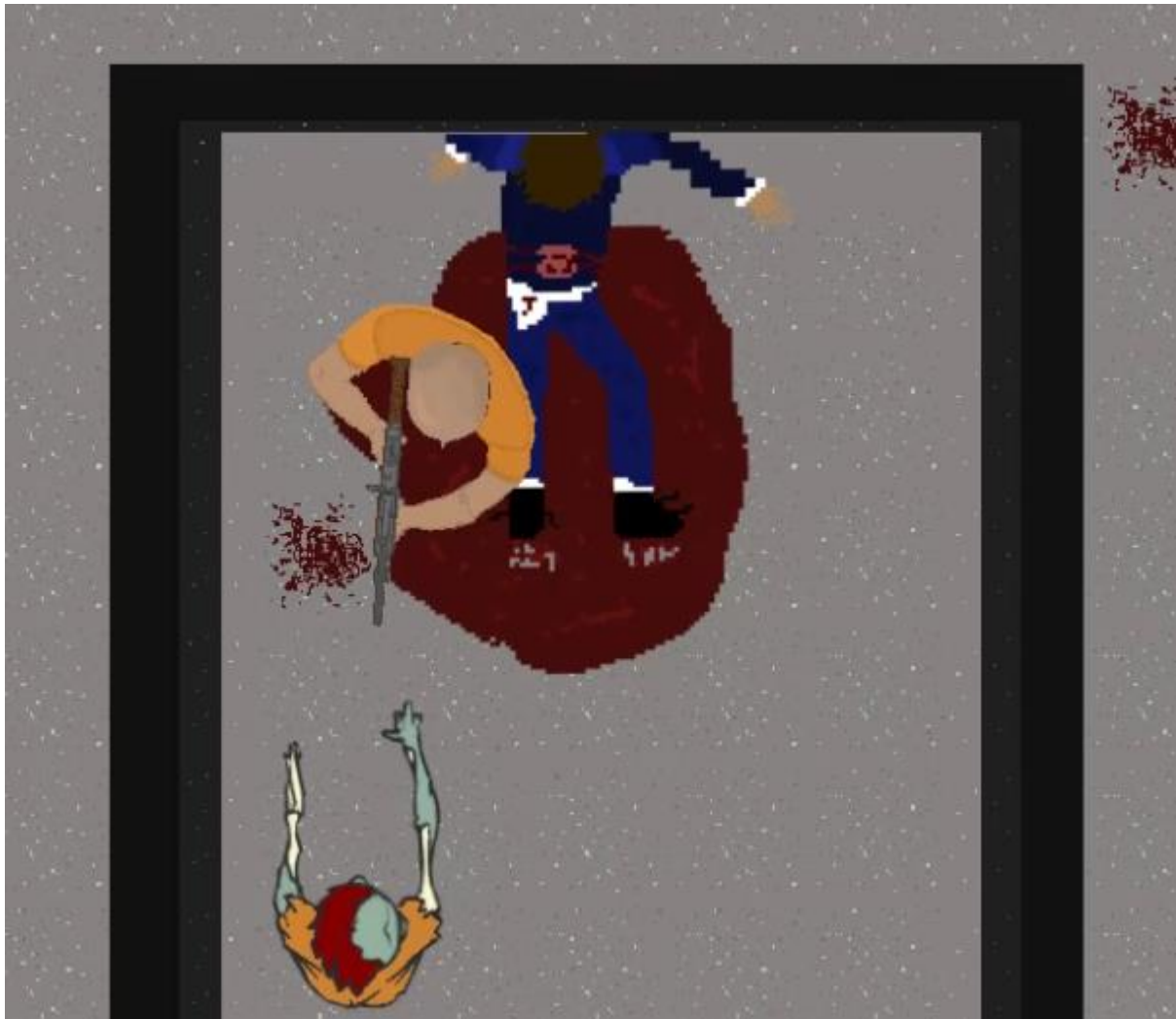
Game over screen
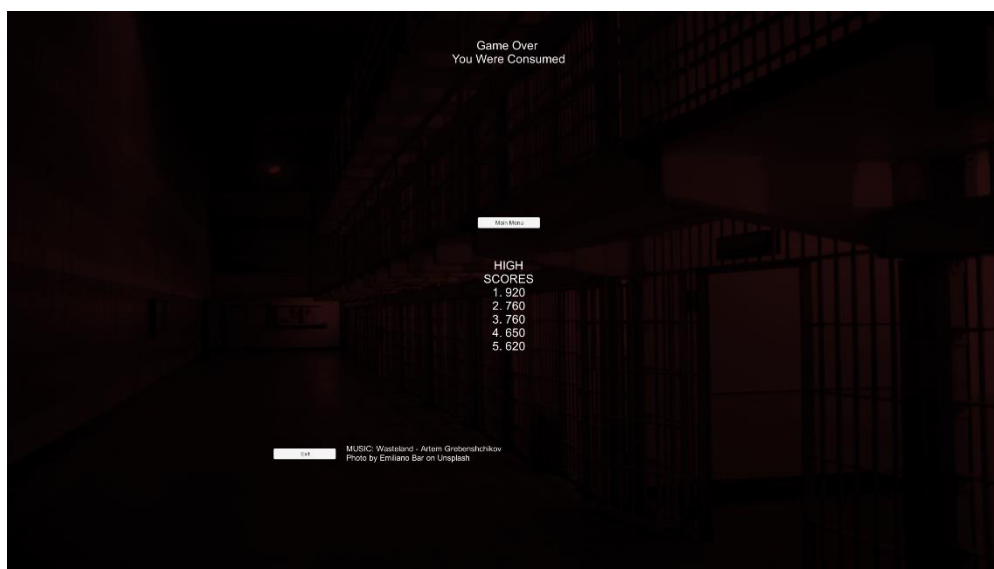
Main menu
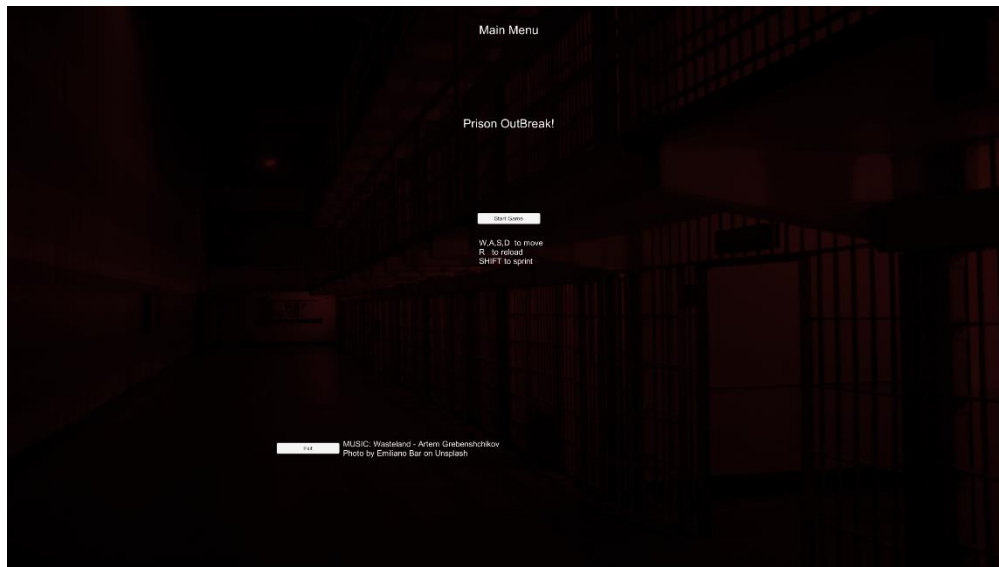
Itch.io username Logo "theletterpurple"

YouTube Video Link: https://www.youtube.com/watch?v=PaY6Ko2WVvU&t=13s

Links for Itch.io, Github and Trello

ITCH.IO LINK: https://theletterpurple.itch.io/prison-outbreak

GITHUB LINK: https://github.com/Dracknid10/zombie-shooter

TRELLO LINK: https://trello.com/b/kKXYXuLr/topdownzombieshooter-166