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Level Design Project

LEVEL DESIGN DOCUMENT

PATIENT ZERO
A LEVEL DESIGN PROJECT

Contents

Overview

Patient Zero takes place in a simulation where the player has the sole goal of exploring each area of the game to their hearts content.

# In-game objectives and win condition

The sole objective of Patient Zero is to explore. That's it.

The win condition of Patient Zero is to reach the end of the simulation, where the player will be asked if they would like to restart the 'simulation'

Roadmap

Initially, I admittedly overscoped the size of my project and created a roadmap that was fairly unrealistic due to 2 reasons.

- Initially, my intentions were to work only in white box which then changed after speaking with my supervisor.
- I didn't account for reiteration and was overall aiming to just 'one and done' each section of my game which was a EXTREMELY bad idea.

Hospital   Flower Field   Aquarium   Forest   Mansion   Cinema   Pier

Time
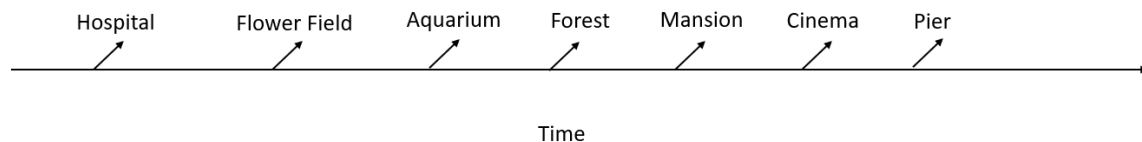
After reconsidering my approach to the project, this was the final roadmap that I settled on and began working on.

Hospital   Flower Field   Aquarium

Time
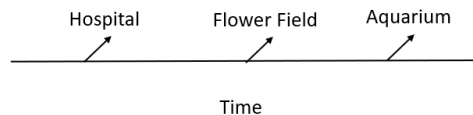
Platforms

Patient Zero is made solely for the PC platform

Controls

Patent Zero Control Scheme

W,A,S,D – Movement

Mouse – Turning

Aims and Goals

My aims and goals with this project are to convincingly convey my intentions to the player with the Level Design doing the talking. The main points I want to convey are the genre, atmosphere and mood of each unique area.

Another aim of mine was to create a stage that was self-sufficient. By this, I mean that the player would be able to gauge the environment and deduce the way that they need to go and drive their own progression. The only exception to this rule is the Aquarium as I built that area with a Free for All / Deathmatch style of map in mind.

Hospital

For the hospital, the genre of game that I wanted to convey to the player is Survival Horror, something akin to the Outlast series. Accompanying a survival horror game, there is almost always a

dark gritty theme and atmosphere which I tried to replicate with the Hospital as well. This section of the project could be a minor section of an Outlast game.

Note: There are no other elements of horror (i.e. enemies, jumpscares etc) within the project. The projects only purpose is to lay out a world where a game within my target genre can flourish.

Flower Field

For the Flower Field, the genre of game that I wanted to convey to the player is Fantasy Action RPG, something akin to Genshin Impact. The fantasy genre tends to host a bright and beautiful world with a lot of open spaces for players to explore which is something I really wanted to replicate with the Flower Field. This section of the project could be a subsection of Mondstadt, which is a hub area of sorts where the player can interact with NPC's and pick up quests.

Aquarium

For the Aquarium, the genre of game that I wanted to convey to the player is FPS Shooter, something akin to a cross between Call Of Duty and Borderlands. The FPS genre must always give players elements of the level to work with to allow them manipulate sightlines as they wish so, when making the Aquarium, this is something I was definitely keeping in mind. This section of the project could be a small Deathmatch map in a game like Call of Duty.
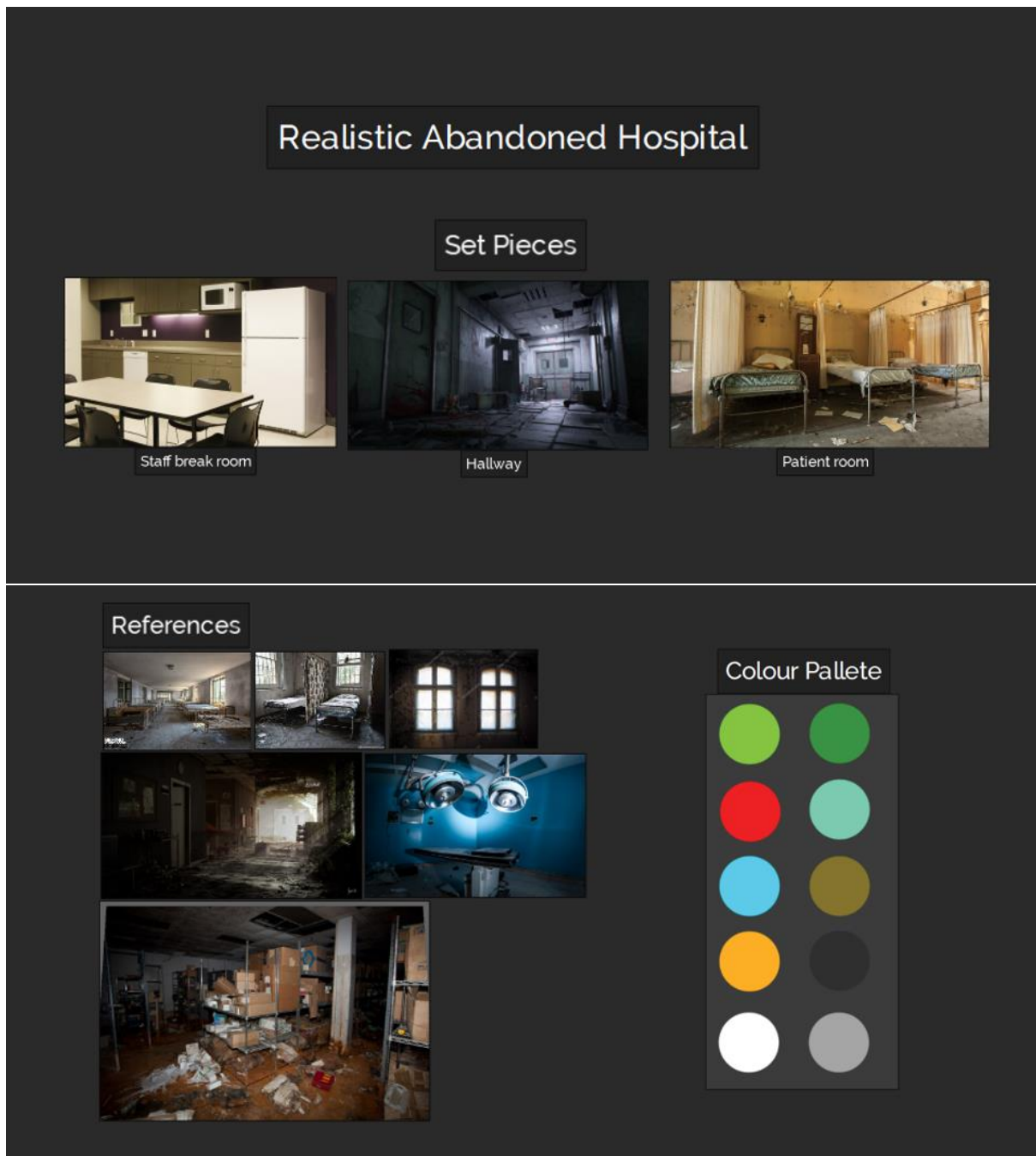
Art Direction

Each section of my project has a distinct Art Direction to differentiate itself from the rest of the section.
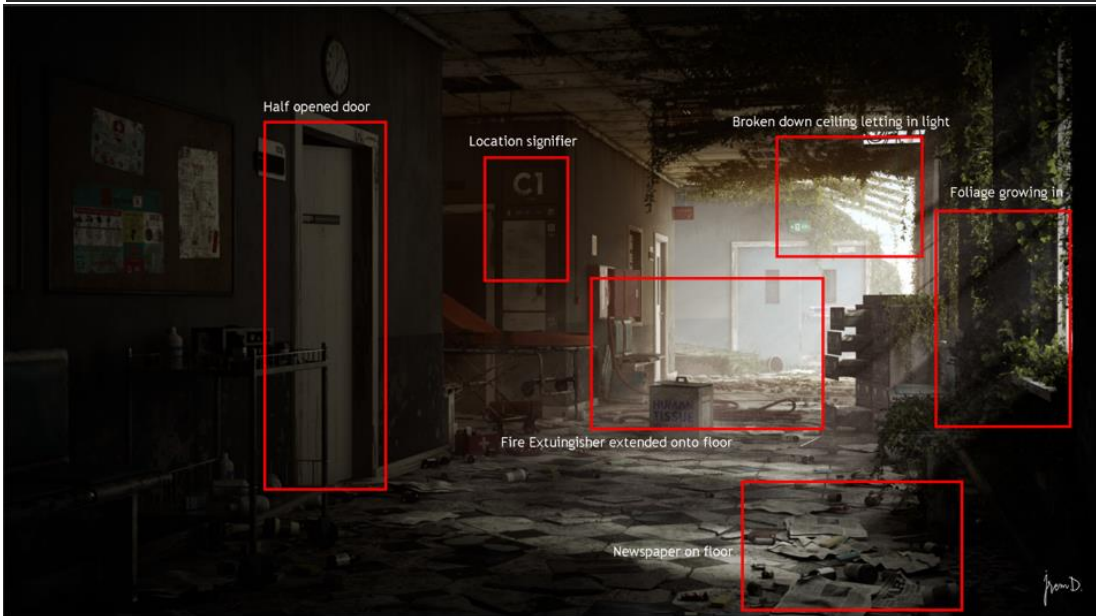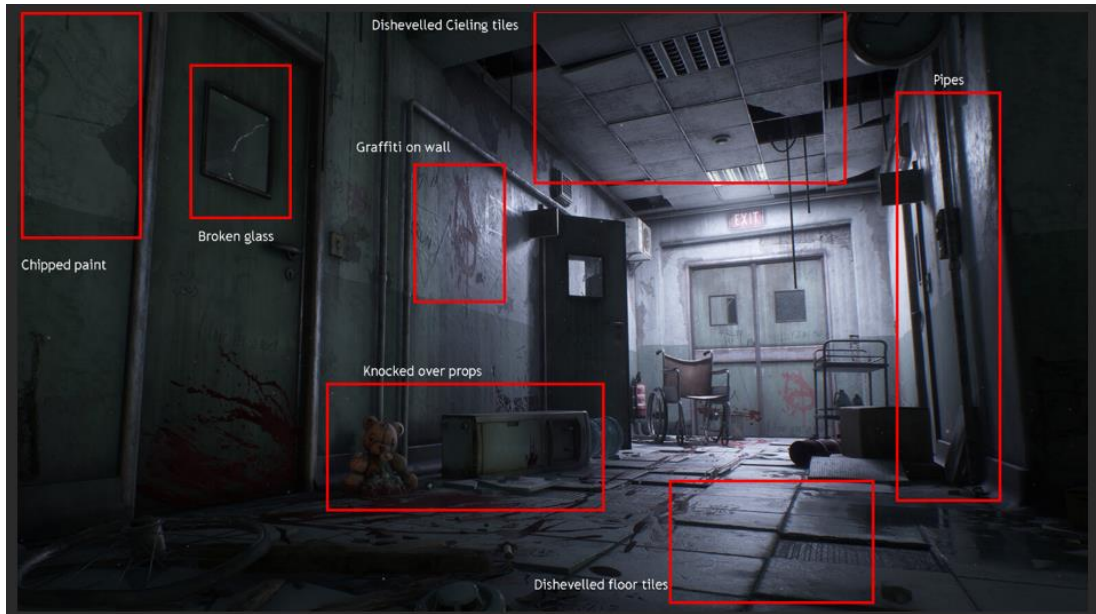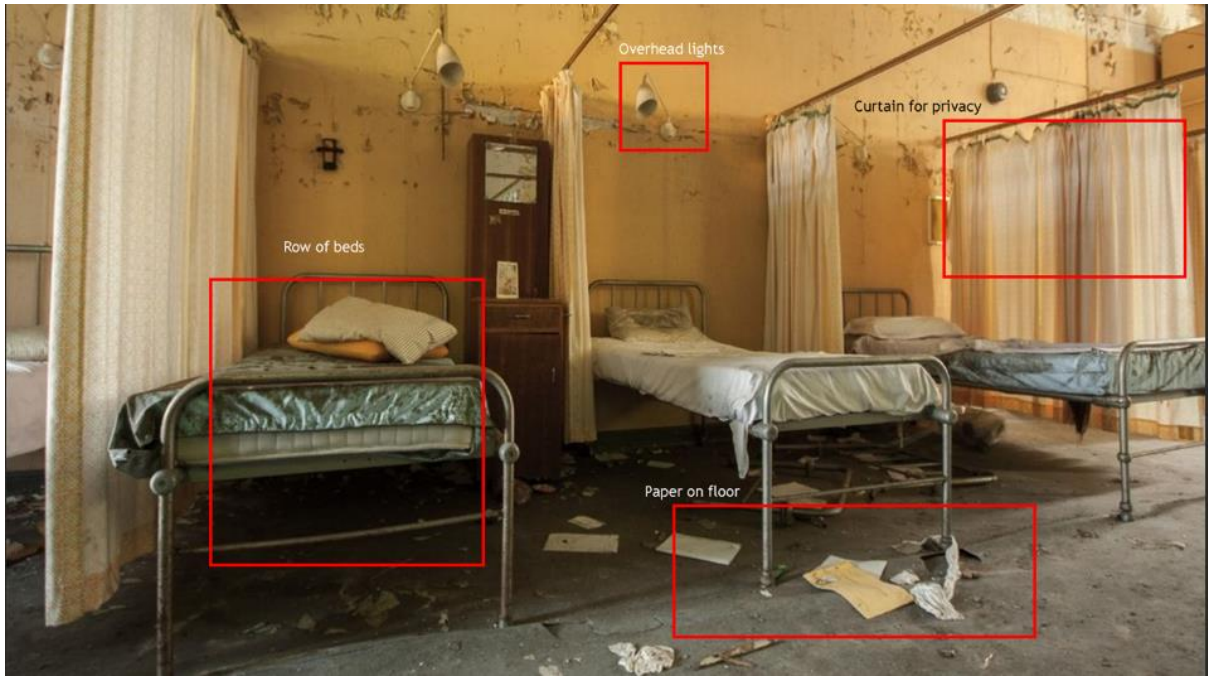
Hospital

The Art Direction I chose to move forward with for the Hospital was a more realistic approach as I think that survival horror game work the best when imitating real life, as it allows the game to blur the line between reality and the game effectively, allowing the game to scare the player easier.

Note: There are no other elements of horror (i.e. enemies, jumpscares etc) within the project. The projects only purpose is to lay out a world where a game within my target genre can flourish.

-Art Bible

Dishevelled Cieling tiles

Pipes

Chipped paint

Broken glass

Graffiti on wall

Knocked over props

Dishevelled floor tiles

Half opened door

Location signifier

Broken down ceiling letting in light

Foliage growing in

Fire Extuingisher extended onto floor

Newspaper on floor

Shelves

Carboard boxes

Support beam

Equipment on floor

Overhead lights
Curtain for privacy
Row of beds
Paper on floor

Rusting that seeps into glass
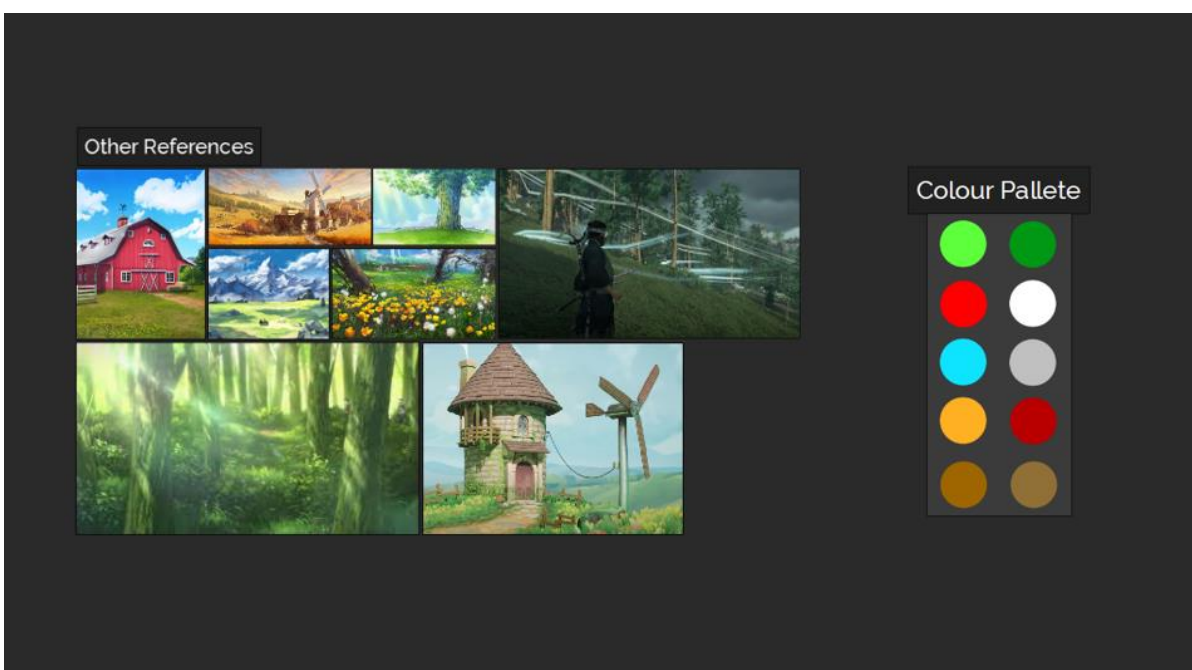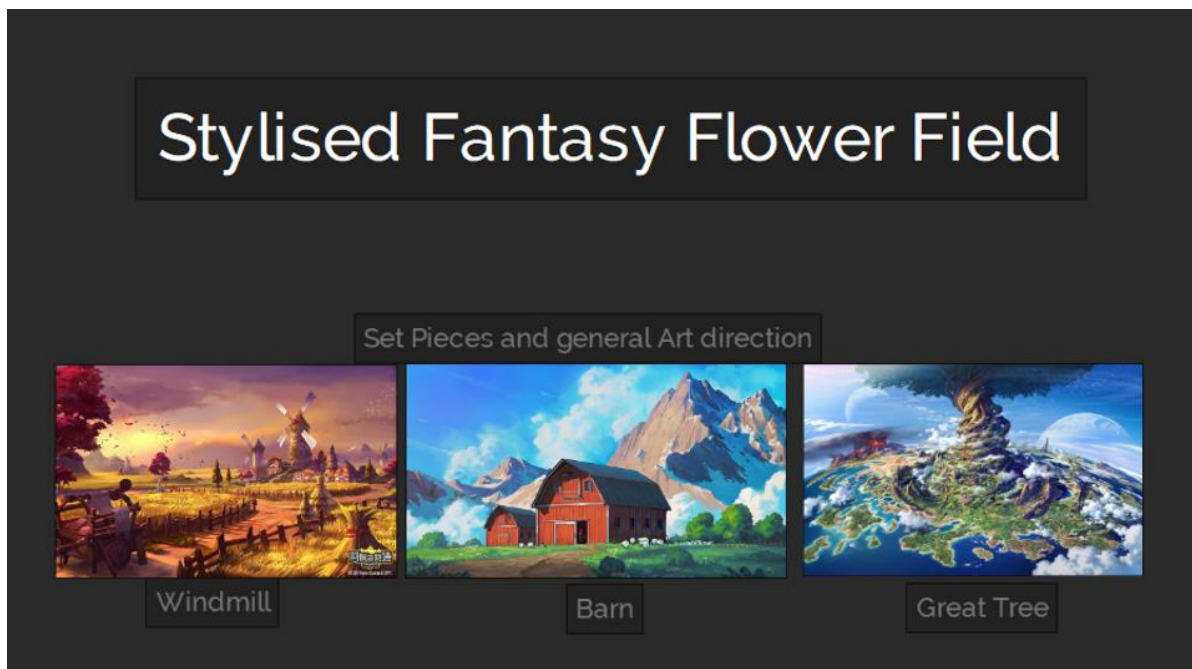Cloudy window
Rusting
Windowsill

Whilst working on the Art bible for the Hospital, I had to take into consideration many different factors such as scene composition, scene clutter, colour palette and distinguishing features. I found that the combination of all of these factors really come together to make the Hospital experience a lot more convincing.
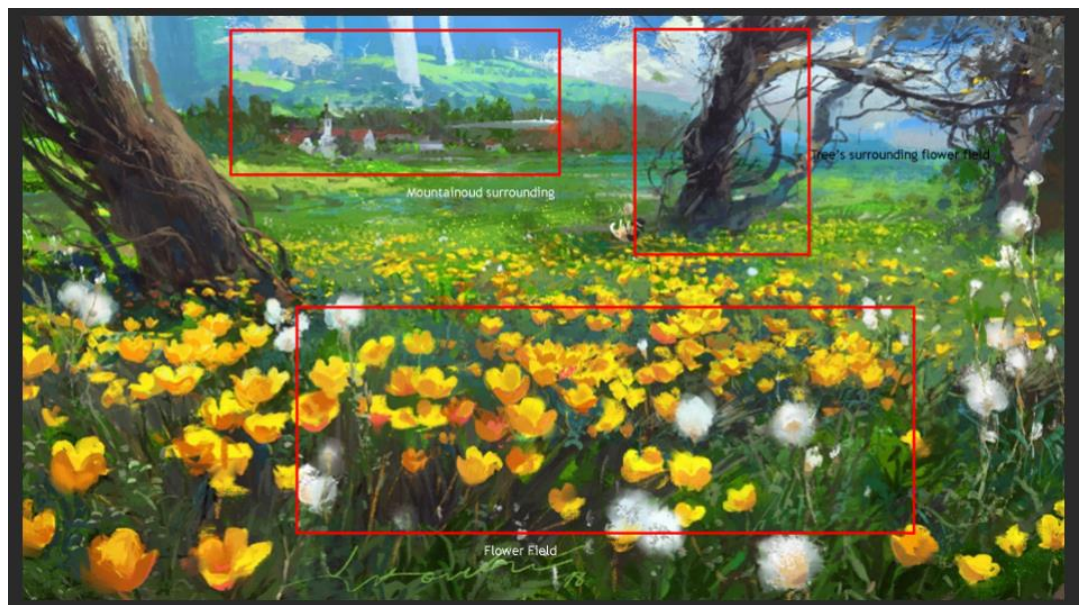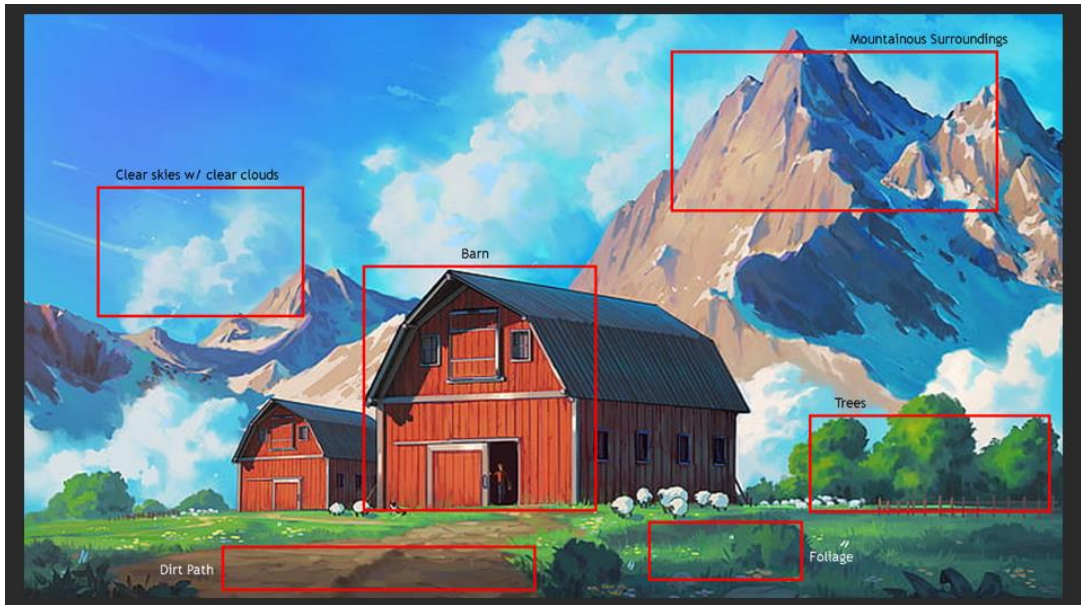
Flower Field

The Art Direction I chose to move forward with the Flower Field is a Fantasy art direction. I think my choice to move forward with this art direction was a good choice as it works hand in hand with the Action RPG genre as it provides players an outlet to create and live out their power fantasy. The fantasy art direction I think helps achieve that goal in 2 different ways.

1). The fantasy genre lends itself better to over the top World Building and VFX that convey the feeling of power and enhance the want/need for exploration.

2). The fantasy genre works really well with bright and colourful worlds that naturally bring forward a positive emotion which intertwines itself with and elevates the power fantasy element of Action RPG's.

-Art Bible

Mountainous Surroundings

Clear skies w/ clear clouds

Barn

Trees

Dirt Path

Foliage

Mountainoud surrounding

Tree's surrounding flower field

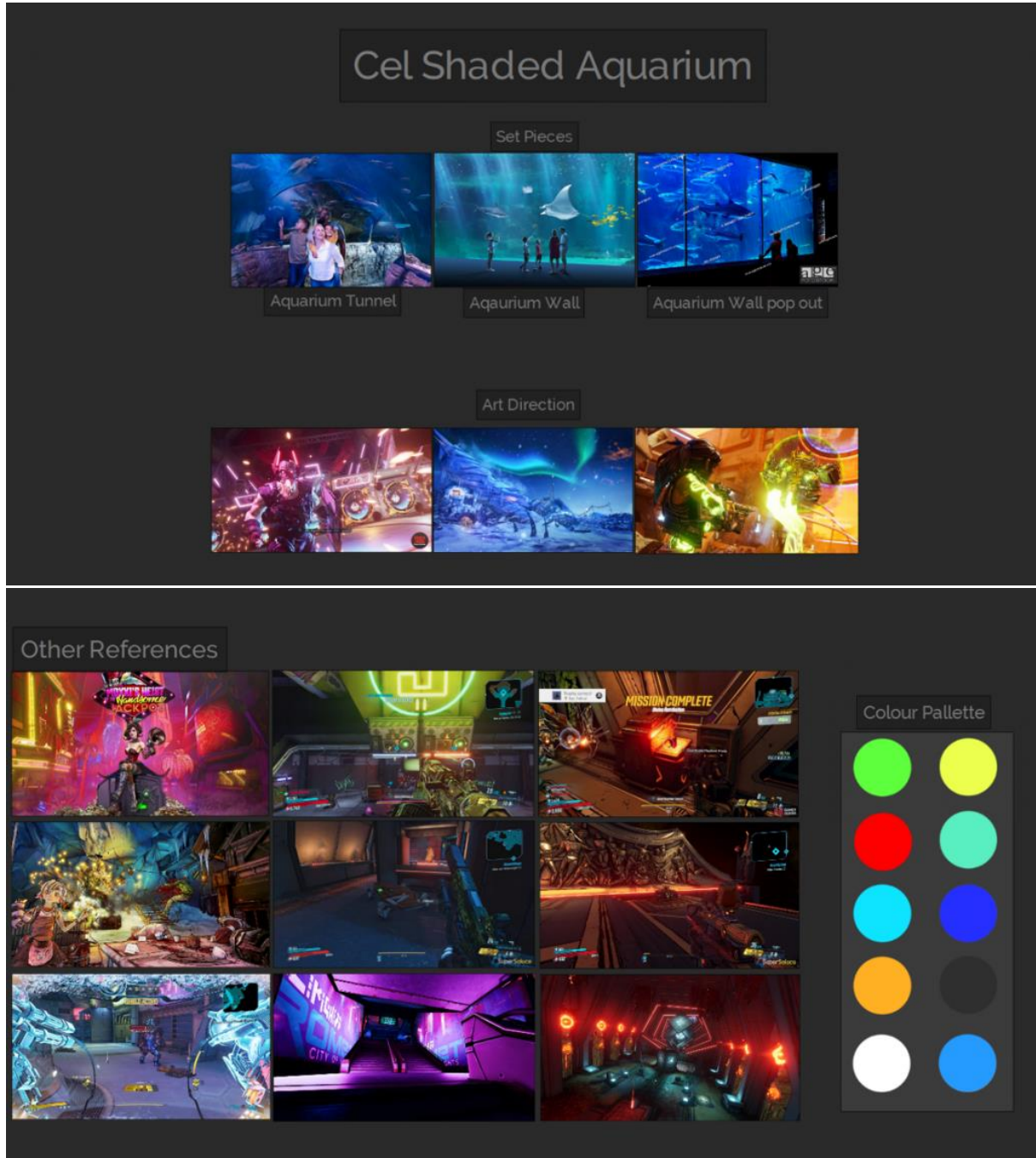Flower Field

Oversized tree atop mountain

Whilst working on the art bible for the Flower Field, the main 2 factors that I had to take into consideration was scene composition and colour palette. Another important thing was the scenes hero assets that help elevate the fantasy feel but the main 2 factors were scene composition and colour palette as these are what the human eye can look at and distinguish as 'Fantasy'.
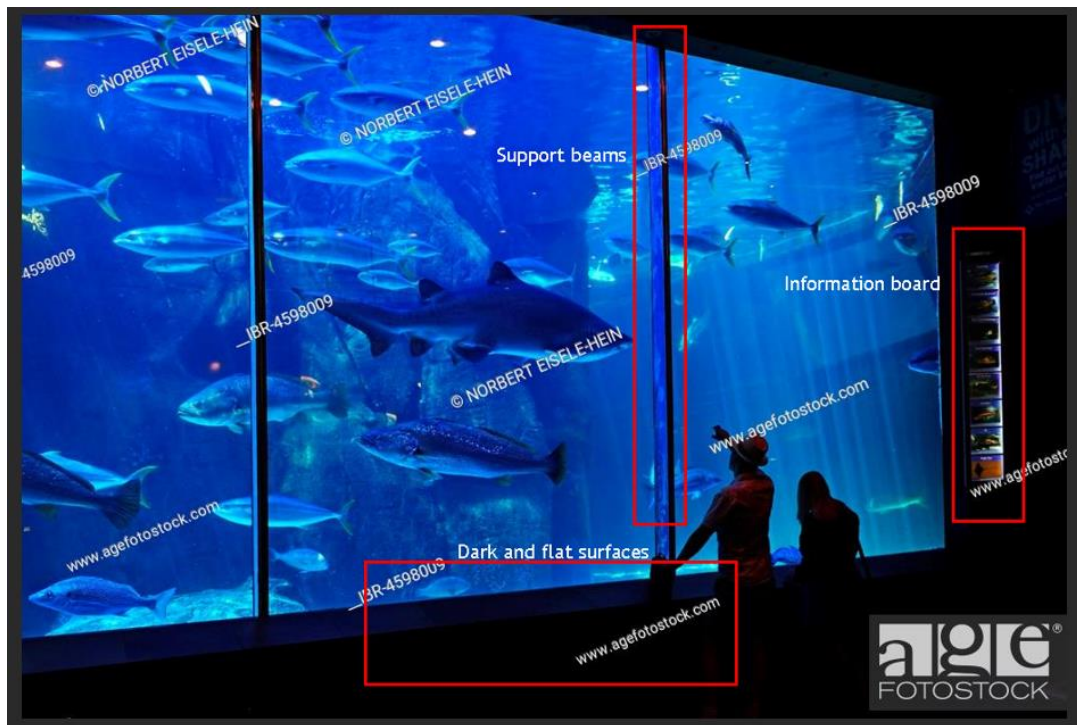
Aquarium

The Art Direction I wanted to aim for when moving forward with the Aquarium was Cel Shading. I chose Cel Shading as I think it complements the lighting nature (emmisive) of my setting and the target genre the map is trying to replicate.

-Art Bible

Water Tunnel

Rocks with varied lighting

Rocks with varied lighting

Emmisive lighting

Whilst working on the Art Bible for the Aquarium, the 2 main factors I had to take into consideration was scene composition and lighting. To capture the atmosphere and feel of an aquarium, I really had to hone in on both of these aspects to convey exactly what I wanted.
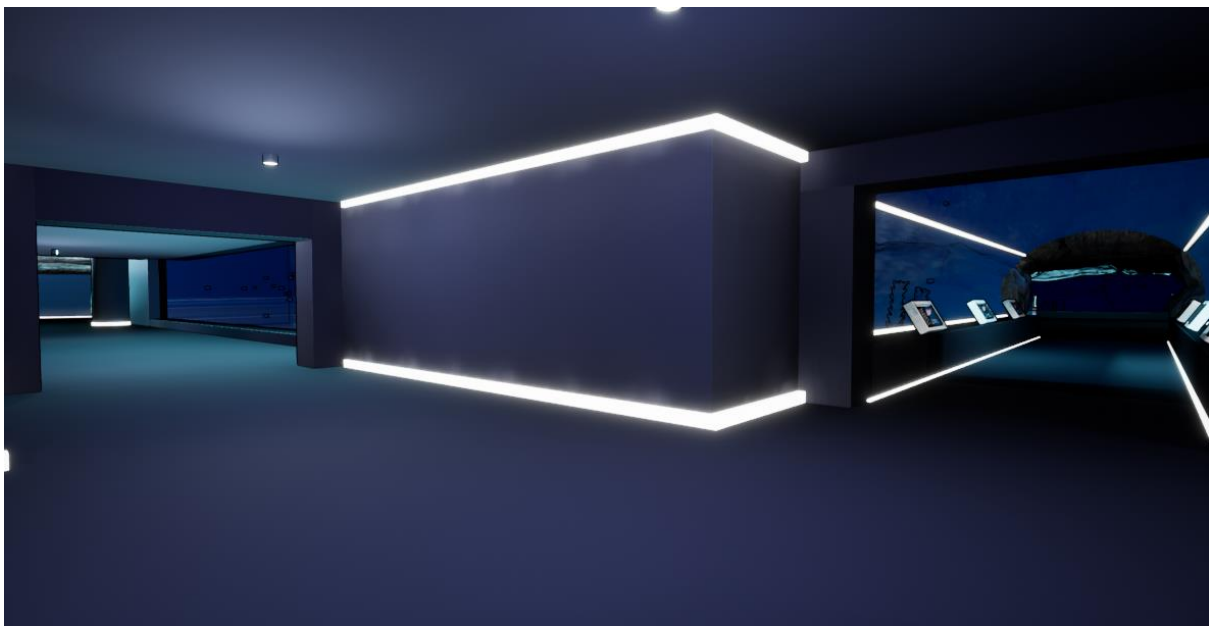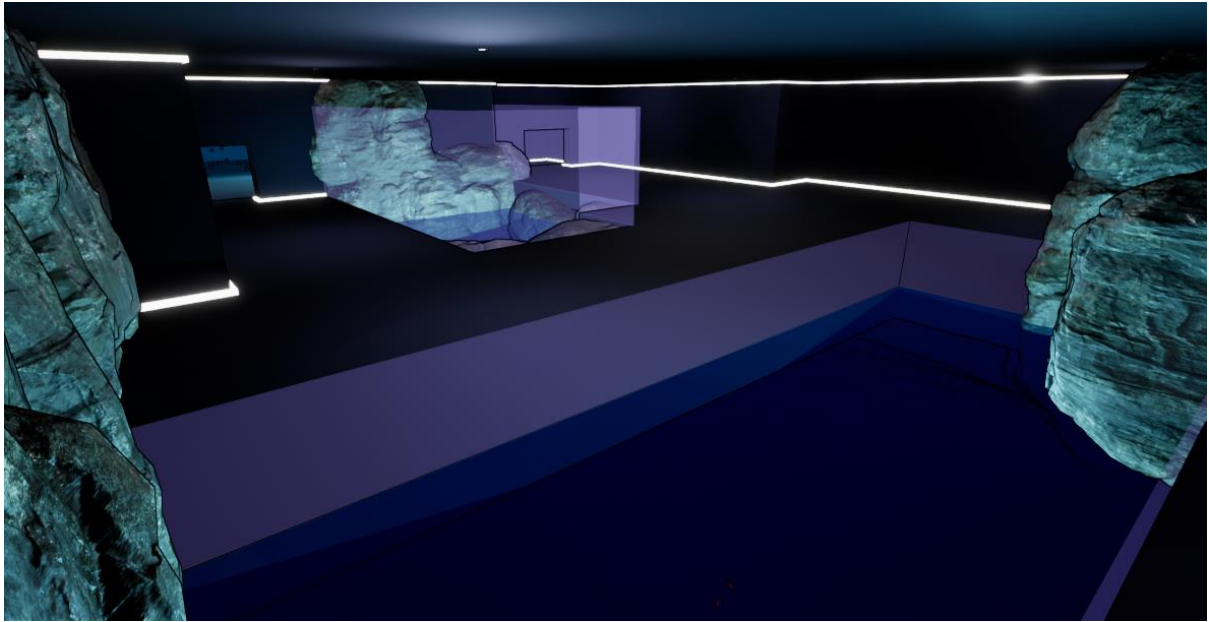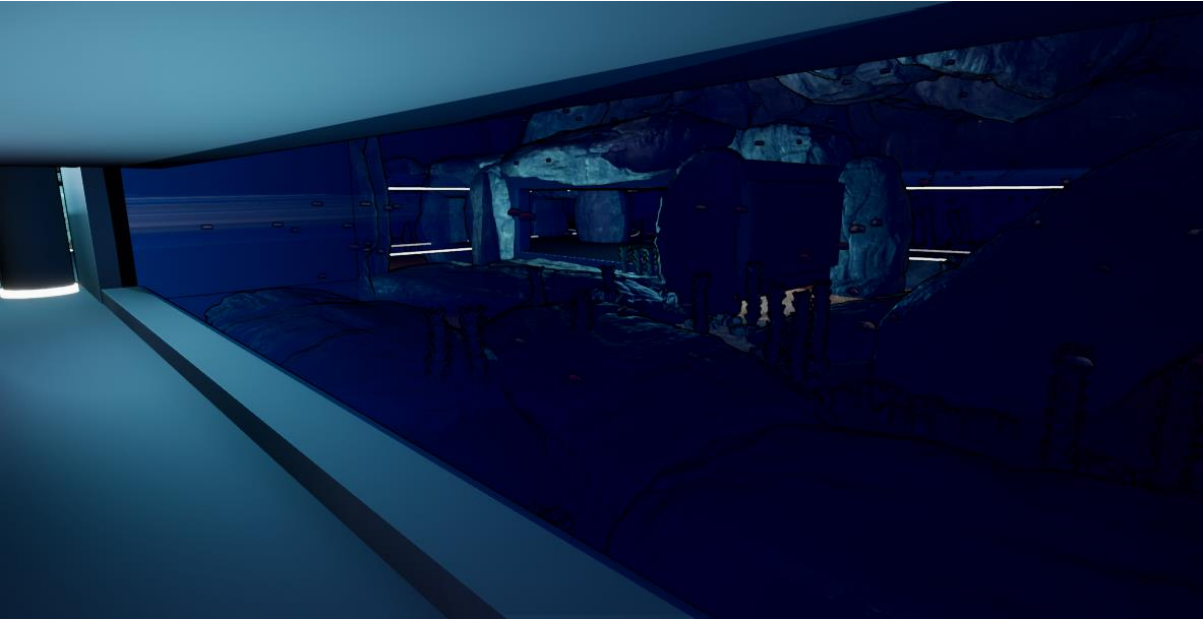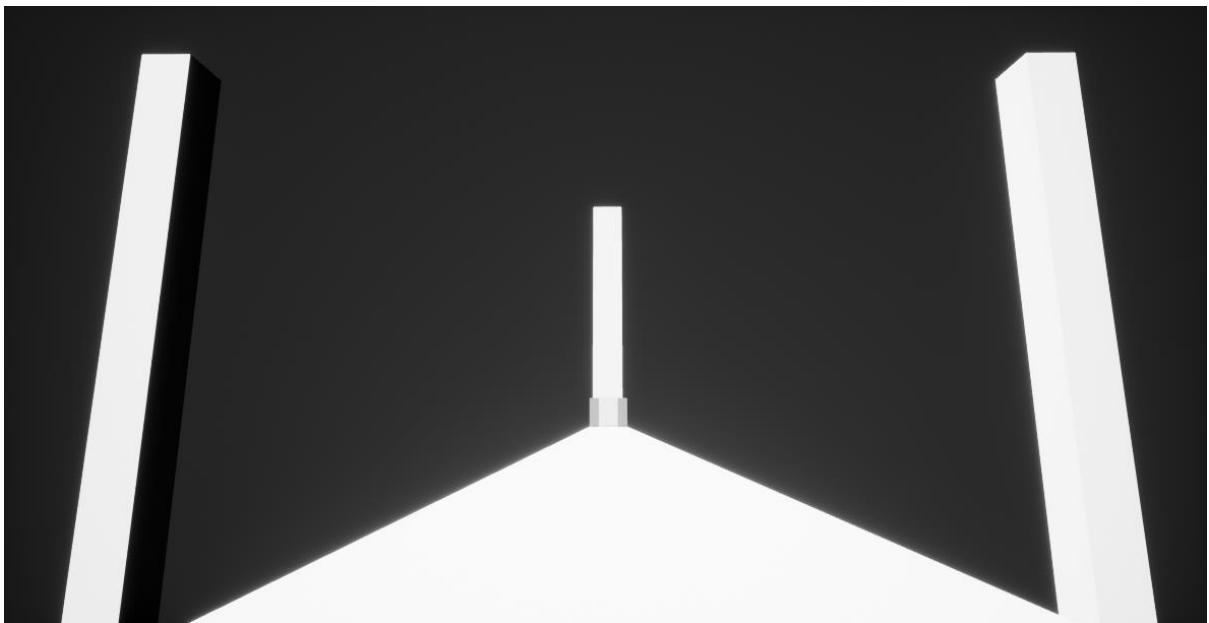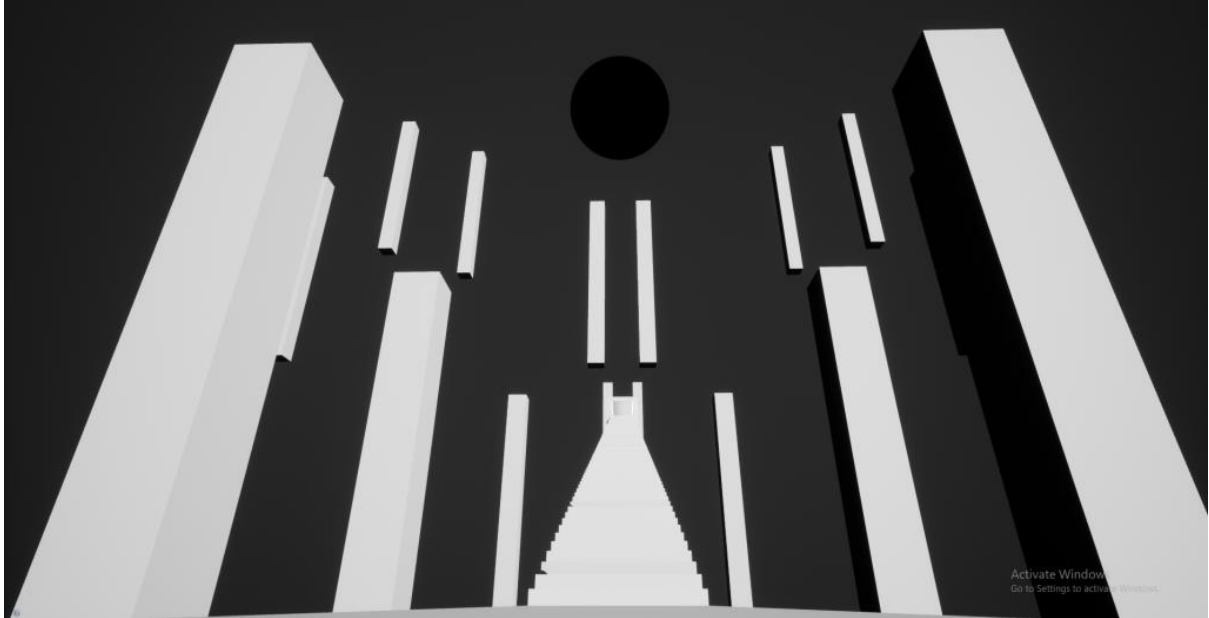
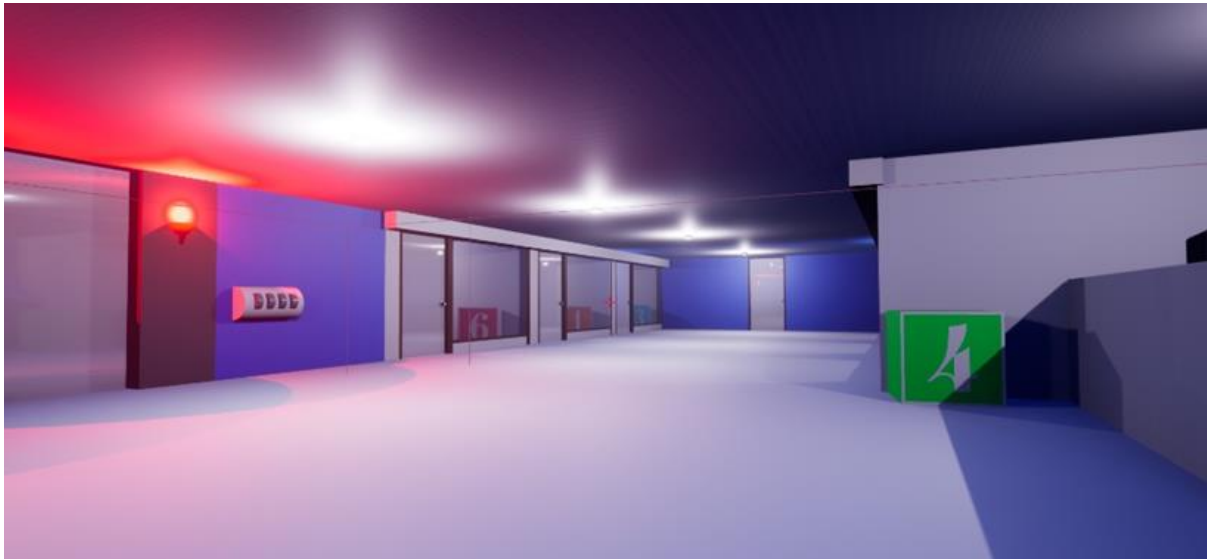# In-game screenshots
Hospital

Flower Field

Aquarium

Simulation

Iteration

My entire project went through many stages of iteration before it landed on the final product it is now. Initially, my project was aiming to be puzzle solving explorer set solely in a hospital.


I later realised that this was not the direction I felt happy going down as it was overall not appealing to me and wasn't playing to my strengths. This then led me to creating my roadmap and shifting my focus on the level design element of the project. This further led to me cutting content from the game that I spent a lot of time on but in the end, just didn't fit the project and would have been to the projects detriment.

When whiteboxing my Hospital and Aquarium, I also found that my first design iteration needed work as aspects of it didn't quite click.
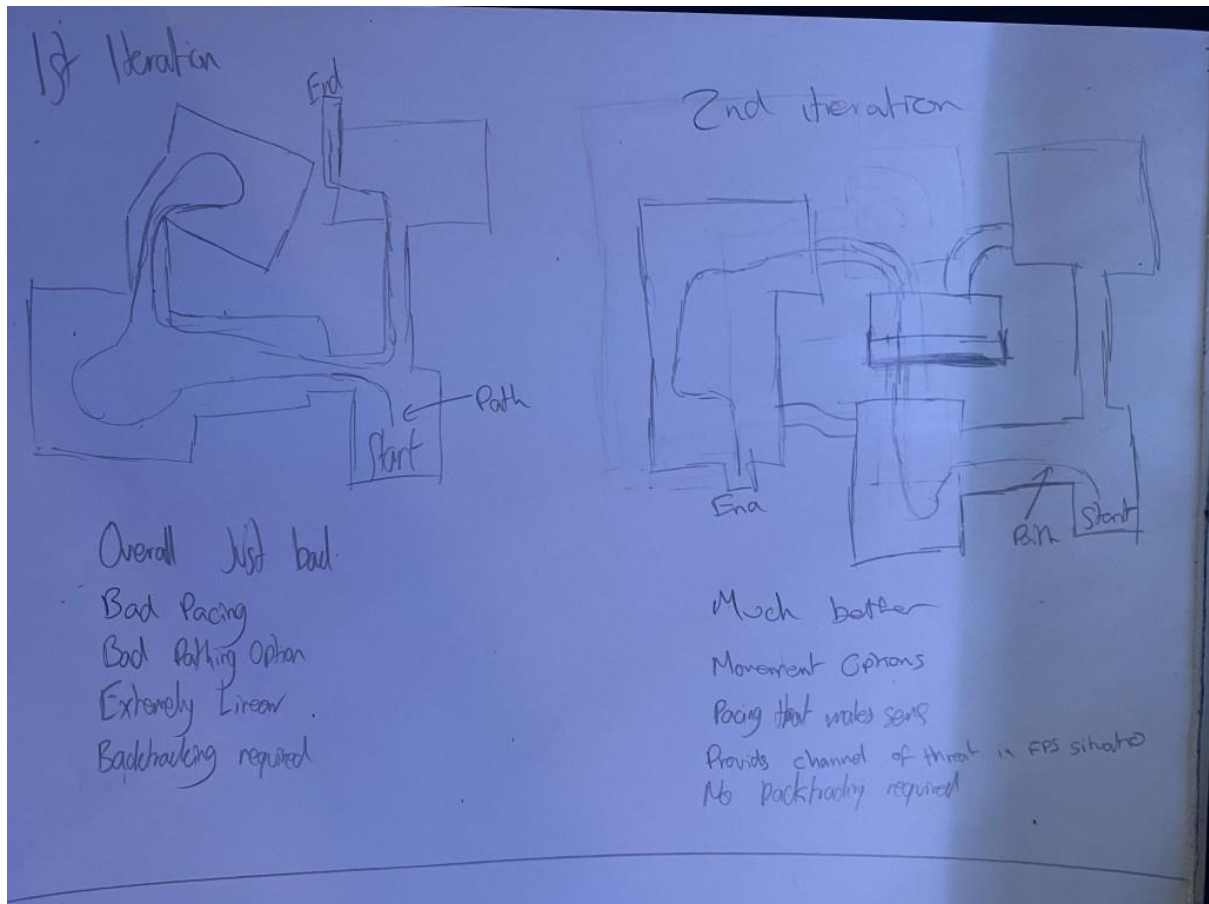
Hospital

When whiteboxing my hospital, I found that the spacing of my composition was much wider than it should have been and was actually taking away from the overall level design quality. After working on some iteration sketches, this was what I decided on moving forward with.
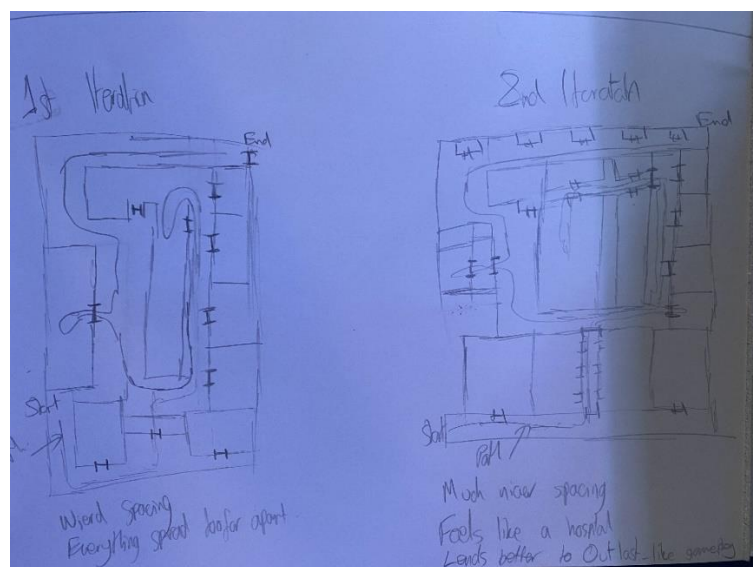
Aquarium

When working on the aquarium, I realised that I initially had forgotten about my initial goal of creating a Deathmatch space and focused heavily on the Aquarium element of the map i.e Lots of linear paths, 1 way entrance/exits etc. When I realised the mistake that I made in the initial whiteblocking phase, I began iterating on my design in hopes of creating a more free flowing space that could host FPS combat.

Overall Just bad
- Bad Pacing
- Bad Pathing Option
- Extremely Linear
- Backtracking required

Much better
- Movement Options
- Pacing that makes sense
- Provides channel of threat in FPS situatio
- No backtracking required

Cut content

Some content that was cut out of the game include mechanics such as

- Throwable and interactable sticky camera
- Keycode door mechanic that gated progression
- A hacking mini game that players needed to complete to continue.

Keypad door

The keypad door's main purpose was the drive player exploration through creating a need to 'find the answer' to the door by having these placed at the end of each unique section. . The player was able to find these answer through coloured blocks that correspond to different digits on the door. These playblocks would then be placed in a way that would require the use of another mechanic, the throwable camera.

Throwable Camera
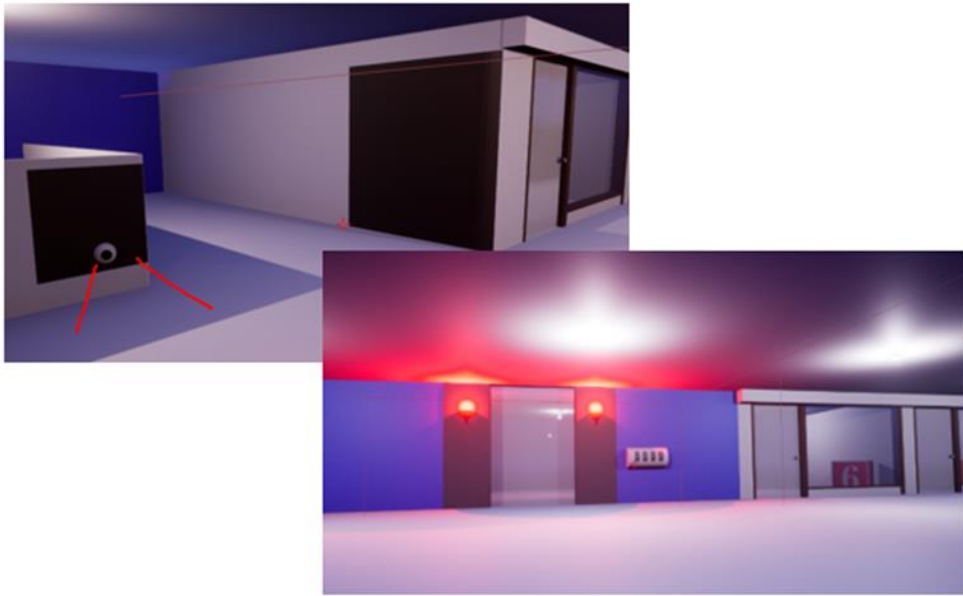
The throwable camera's main use was to gain lines of sight on areas that the player normally would not be able to access by sticking it onto movable walls and accessing the camera when the wall was moved.

Hacking

The main purpose of the hacking mini game was to create another small obstacle for the player to overcome that would also act as a method of breaking up gameplay.

Audio

For each section of the project, I used a unique track for background music to help in setting the mood of the area.

To fill up the empty air of the game, I also added footstep sounds that react to the surface that the player is walking on. These surfaces would be Concrete, Dirt and Wood. Find all audio assets in the Asset list below.

Asset List

Type of Asset	Name	Location	Link	Creator
Asset Pack	Abandoned Hospital	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/abandoned-hospital	Mike Kurabi
Asset Pack	Advances Cel Shader Lite	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/ce2cda95e5f54180b2cf7df24566bdf7	Skull
Asset Pack	Advanced Village Pack	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/advanced-village-pack	Advanced Asset Packs
Asset Pack	Volumetric Glass	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/volumetric-glass	Krystian Komisarek
Asset Pack	Hospital Environment (MODULAR)	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/operating-room-and-hospital-corridor-modular	Aleksandr Zhdanov
Asset Pack	IES Light Profile Pack	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/ies-light-profile-pack	Construct Games
Asset Pack	Infinity Blade: Temple	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/infinity-blade-temple	Epic Games
Asset Pack	Interactive Stylized Low Poly Grass	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/dynamic-stylized-lowpoly-gras	Project Nature
Asset Pack	Modular Medieval Village	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/modular-medieval-village-town-medieval-village-interiors-included	Sidearm Studios
Asset Pack	Rural Australia	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/rural-australia	Andrew Svanberg Hamilton
Asset Pack	Assetsville Town	Unreal Marketplace	https://www.unrealengine.com/marketplace/en-US/product/assetsville-town	Assetsville
Audio	Abandoned City Music	Youtube	https://www.youtube.com/watch?v=A9VAS4tPtFU&t=101s	Cryo Chamber
Audio	Submerged - Ocean Ambient Music	Youtube	https://www.youtube.com/watch?v=PrSXb44xu0s&t=35s	The Guild of Ambience
Audio	Walking on Concrete series	Youtube	https://www.youtube.com/watch?v=BqxWMwAjmfY	Sound Library
Audio	Minecraft Sound Effects: Walking and Running on Wood Sound Effect	Youtube	https://www.youtube.com/watch?v=_NfPjjEPeuM	Minecraft Sound Effects
Audio	Footsteps Walking on Dirt Field | HQ Sound Effects	Youtube	https://www.youtube.com/watch?v=nKfsYzuvIww	Everyday Cinematic Sounds
Audio	Fantasy Village - Music & Ambience	Youtube	https://www.youtube.com/watch?v=K1vUA9NltVw&t=48s	The Vault of Ambience

Please find in the submission folder the full excel sheet.