FOGVILL
AMUSEMENT PARK OF THE DEAD

Level Engineering - Game Idee:

- 3D Horde-FPS inspired by Vampire-Survivor-likes and COD:Zombies
- Ziel/Gameplay-loop:
  - Survive waves of (zombie-like) enemies by fleeing, dodging and shooting them
  - Each killed enemy drops currency that can be collected
  - Buy upgrades located all around the level with the currency for a better chance of surviving the next wave
- Level Engineering Challenges:
  - Maps are bigger areas connected by small corridors
    - size of areas and corridors determines difficulty
    - -> get good overall size balance by using metrics
  - Upgrades are located all over the map
    - player thus need to be able to orientate in the level
    - -> use districts and landmarks for easy navigation

Top-down Map from COD:Zombies map: Kino der Toten (found here)

Source: Here

Level Engineering - Presentation

Game Concept:

- Horde-FPS
- Wave-based
- Enemies get stronger every wave
- Survive by shooting them and running away
- On death, enemies drop currency
- Buy upgrades with currency at special upgrade stations across the map (not implemented yet)

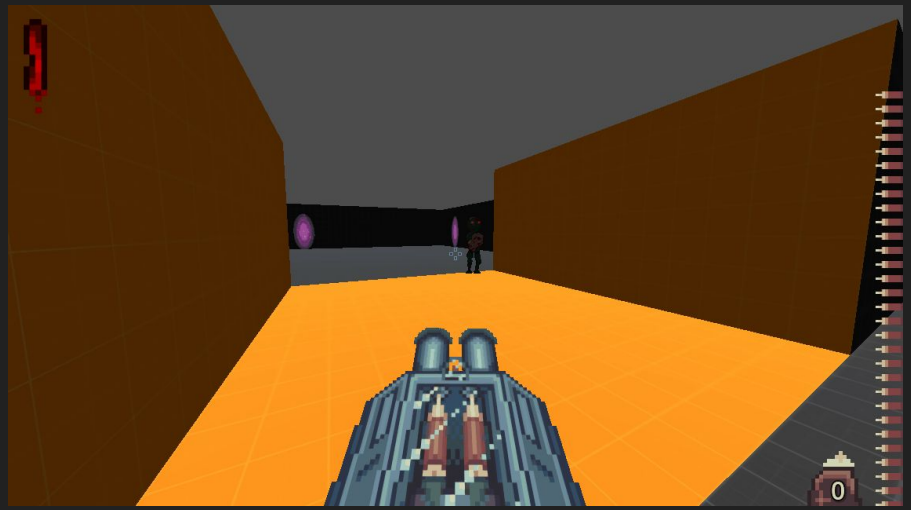
Game Theme / World Idea:

- Amusement park with medievil setting
- Thus mainly medievil buildings but maybe some modern technology (badly) hidden
- Some kind of monsters roam the park at night
- Player breaks into park at night…

Level Engineering - Tools

- No-Clip-Tool:
  - leave player character to fly around without collisions
  - teleport player character
  - pause / play during no-clip
- Cheatmodule:
  - cheat coins
  - make yourself invincible
  - skip to next round
- Playtest area:
  - two rooms connected by one corridor
    - change size of rooms and corridor during play to find good metrics
  - (somehow broke with newer versions of the code)

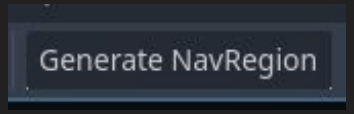
Level Engineering - Tools



Level Engineering - Tools

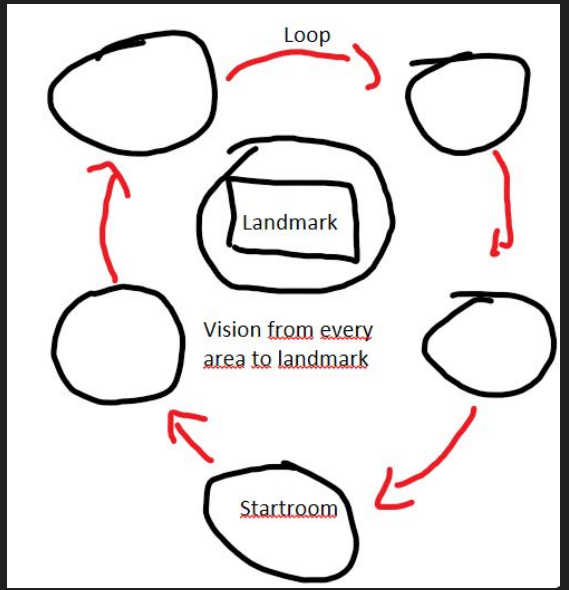
- Drag-N-Drop Play Button:
  - drag the button into a 3d scene to start the scene from that position
  - automatically detects and teleports player character
  - does not modify the scene, or needs modification of the scene

- On Click Nav Generation Button:
  - One click to generate Nav Mesh for entire scene
  - Godot cannot generate nav mesh at import
  - Copies all meshes under Nav Mesh node, generates nav mesh then deletes copies

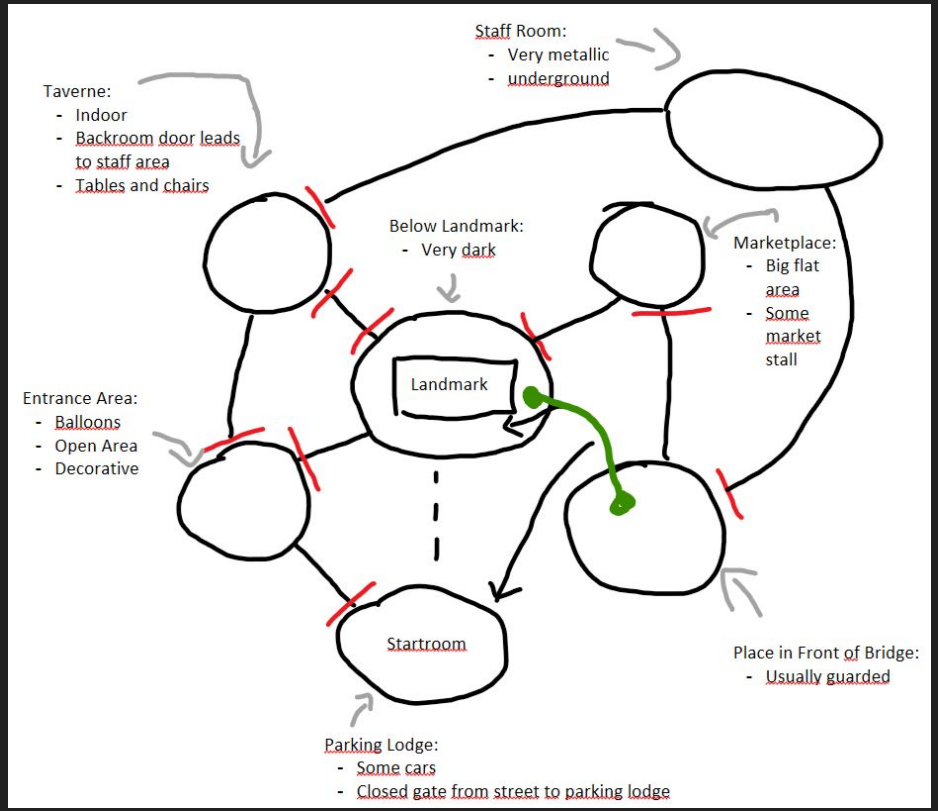


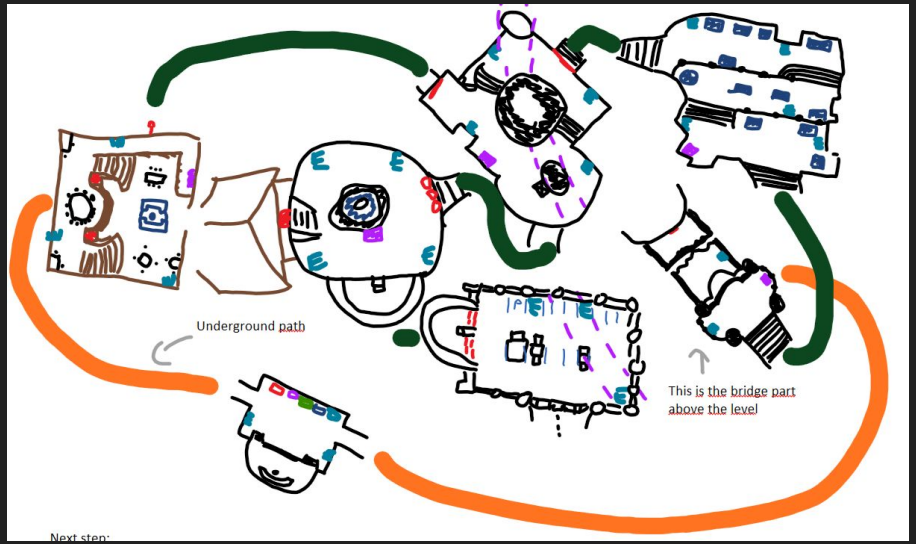
Level Engineering - Level Process

- Supposed to be introduction (at first)
- -> Theme-wise: breaking into amusement park
- -> Gameplay-wise:
  - Simple beginning
  - Good orientation through big landmark in middle
  - Last room leads into first room again
  - Rooms being distinguishable districts



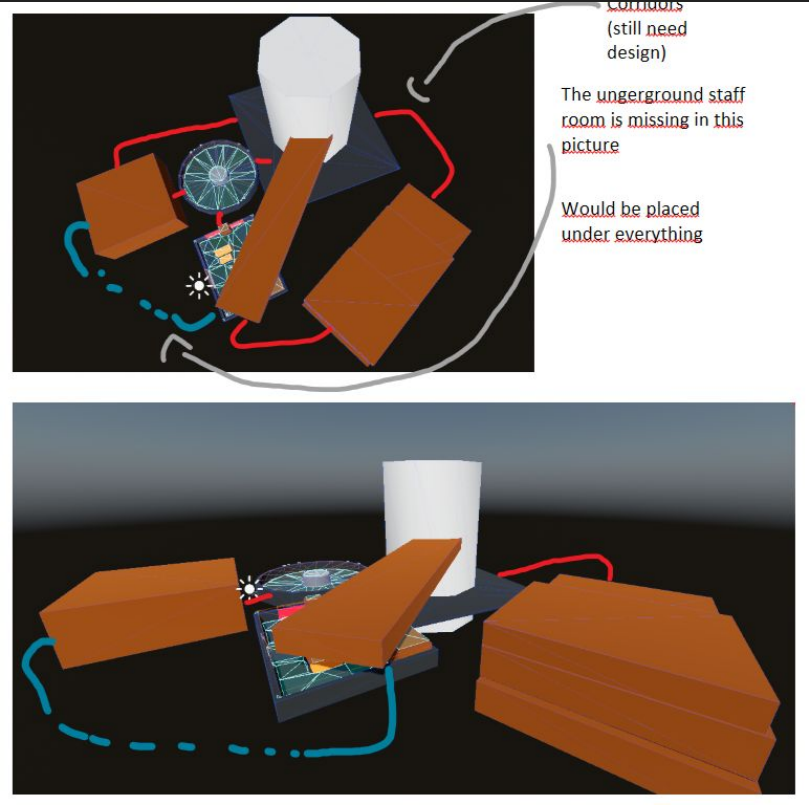
Level Engineering - Level Process

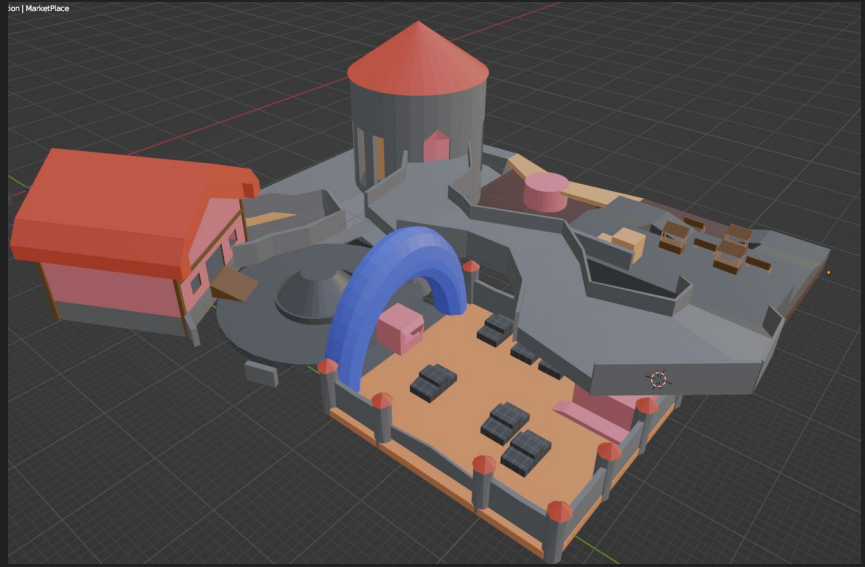




Rough layout -> Room sketches

Level Engineering - Level Process





Rough 3D layout -> Room sketches realized in Blender

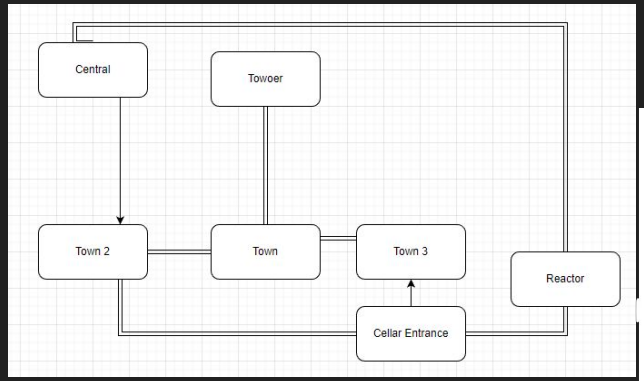
Level Engineering - Level Process

Screenshots with Post-processing

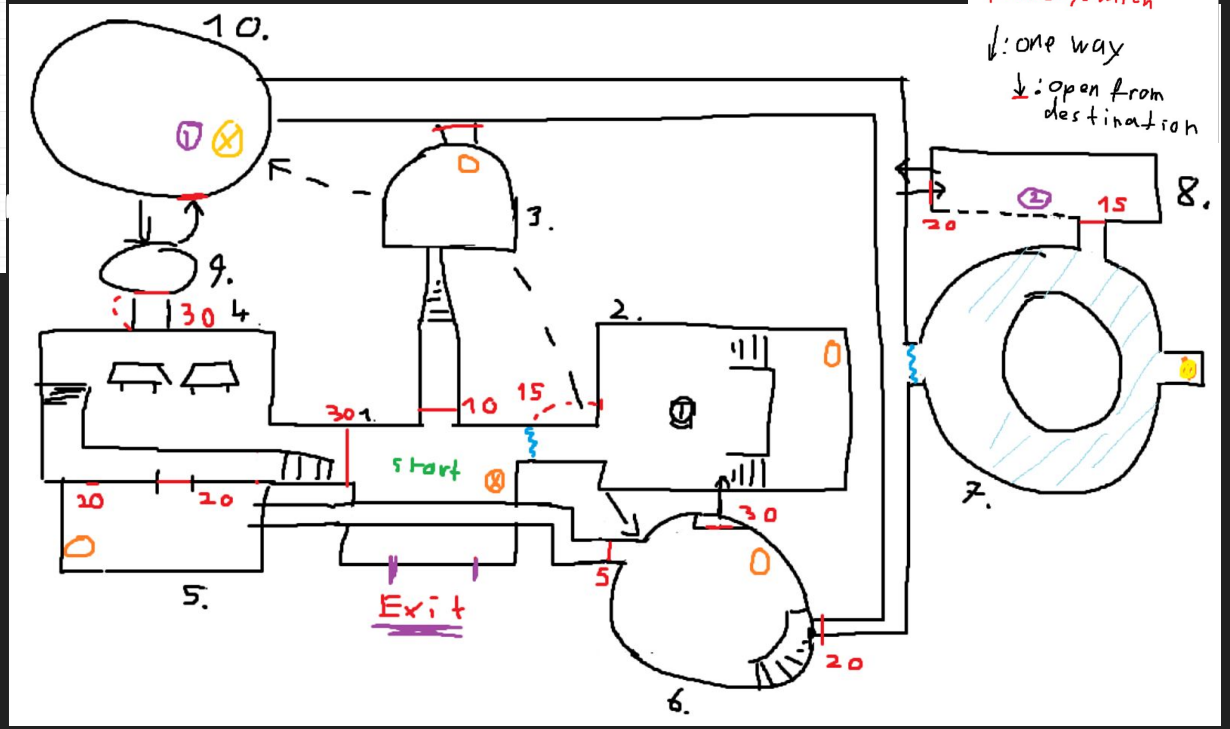
Level Engineering - Level Process

Screenshots with Post-processing

Level Engineering - Total Map Layout



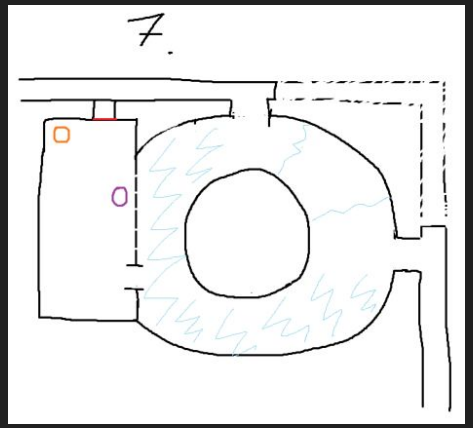
First Layouts and Sketches:



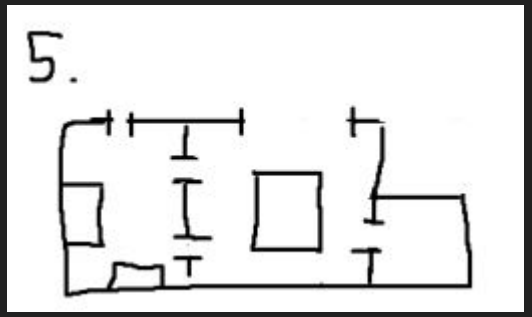
Based on Two Ideas:

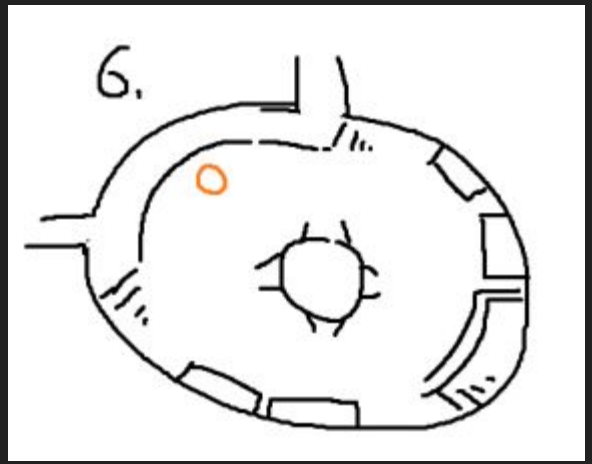
1. **See the whole map from a tower**
2. **Open the exit with two switches located in the sci fi area**

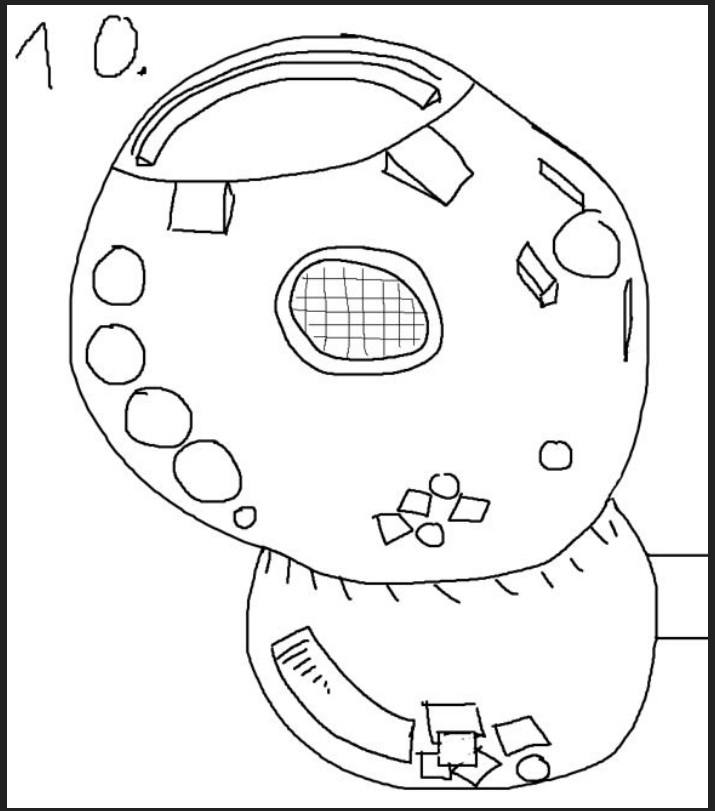
Level Engineering - Control Center Single Room Layouts



Lots of small sketches of single rooms



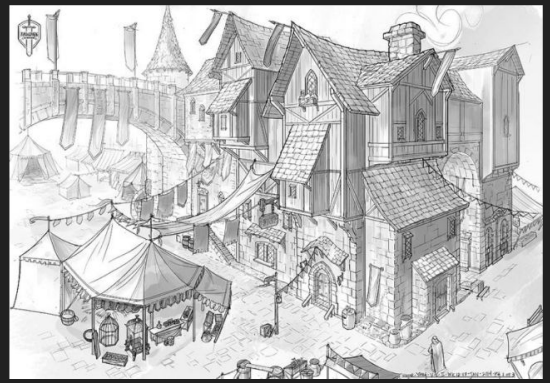




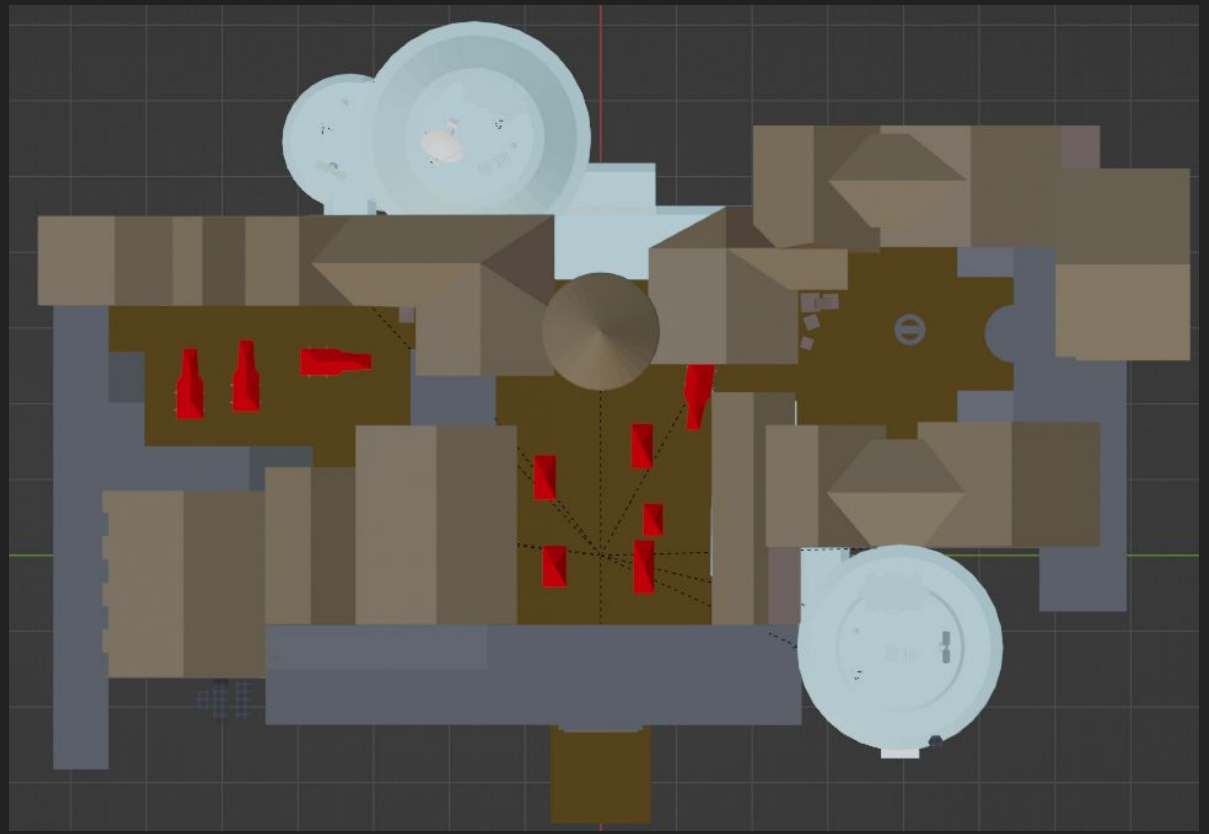
Level Engineering - Mood Board

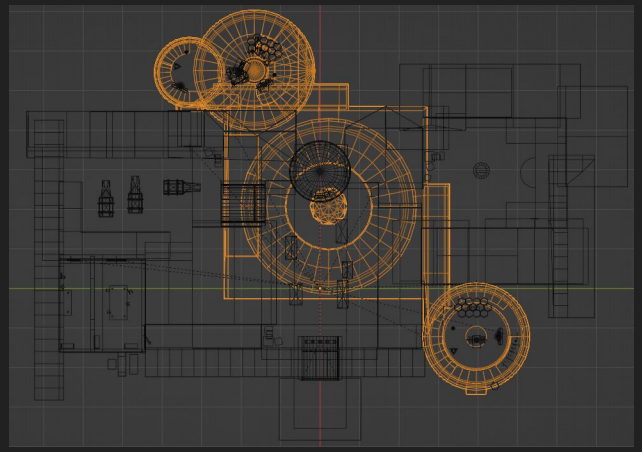
Sci Fi Stuff is hidden behind Medical Buildings

The Round Rooms are important

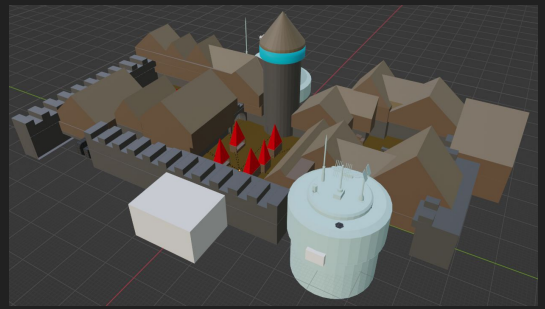


Level Engineering - Map and Final Layout

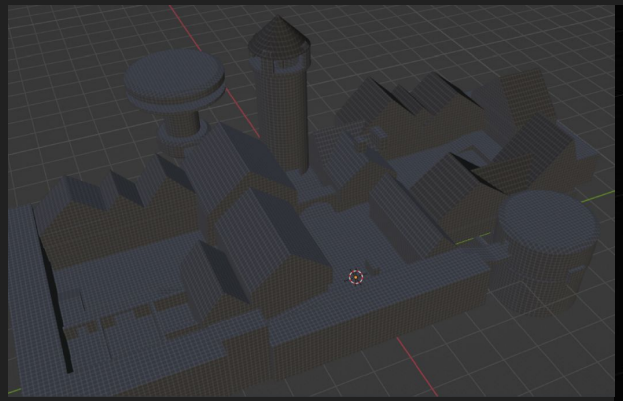


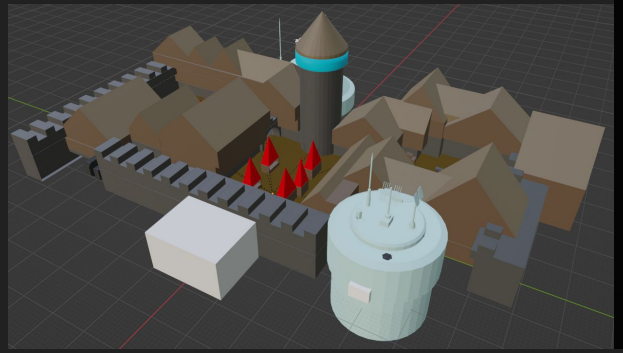


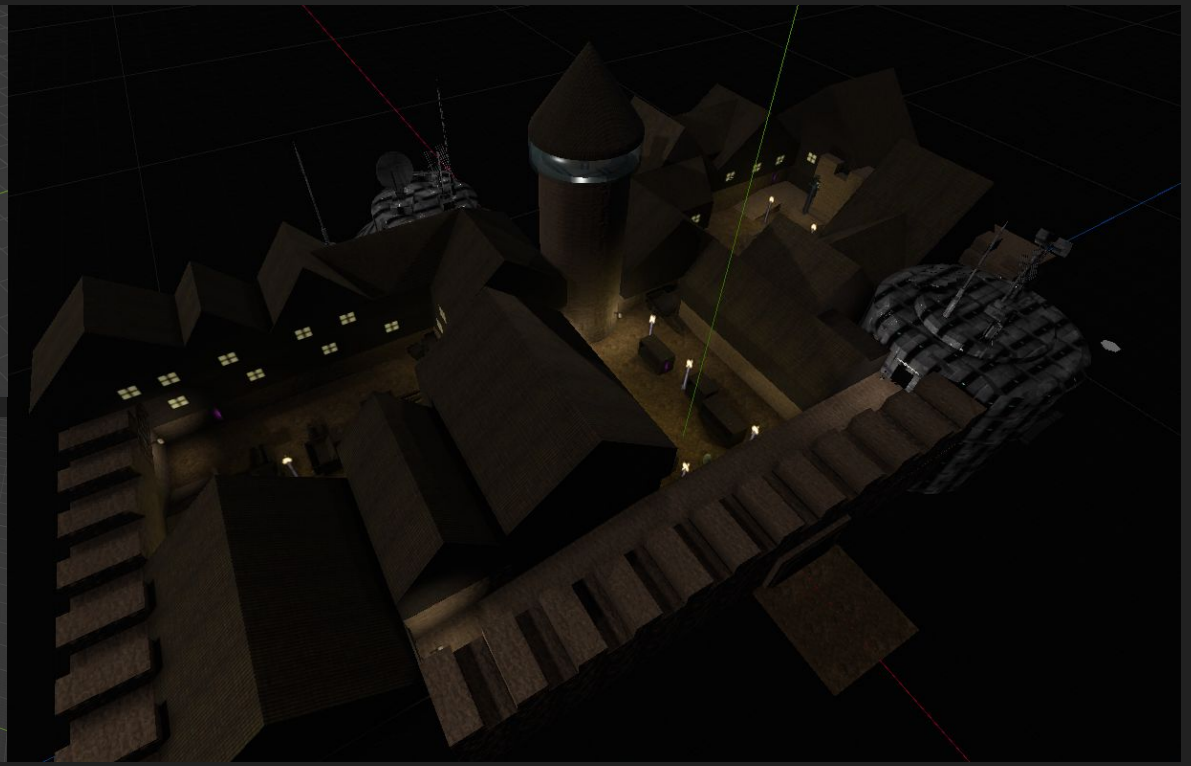
Map In Blender



Level Engineering - Control Center Process







Level Engineering - Control Center Process

Command Room:
Outside and Inside

Reactor
Room:

Level Engineering - Control Center Impressions

The first 3 Areas:

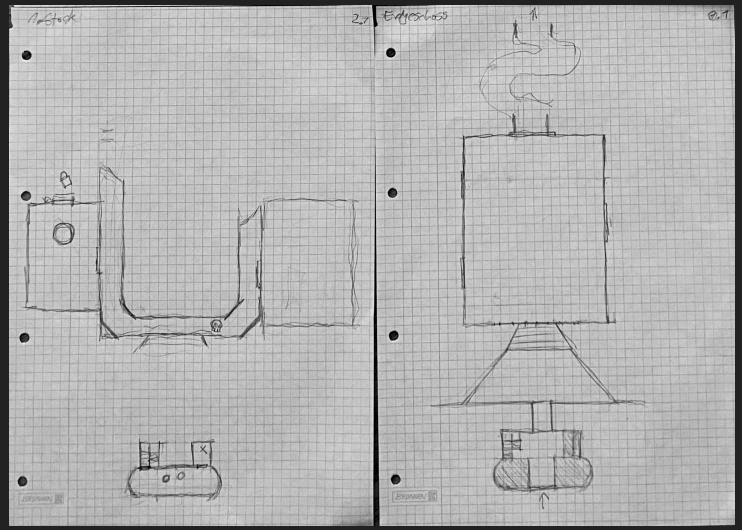
Level Engineering - Castle Progress

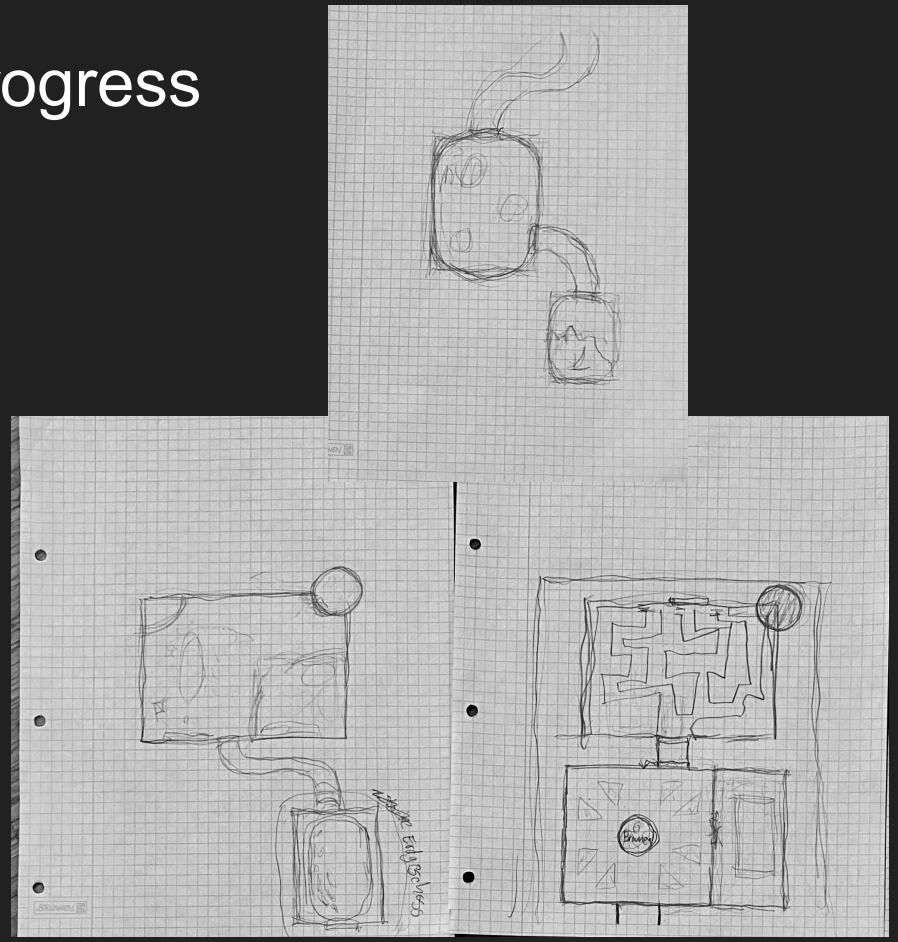
Concept:

- Castle Area, with garden and labyrinth
- See through walls
- Moving through areas and, later, their surveillance rooms

Level Engineering - Castle Progress

Concept Sketch





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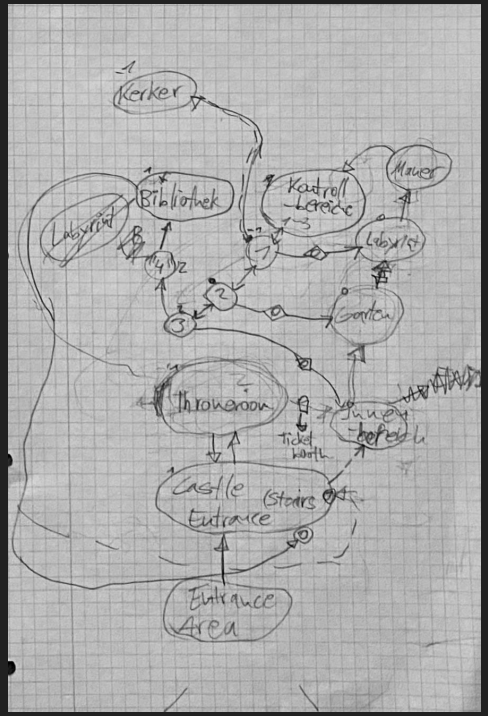
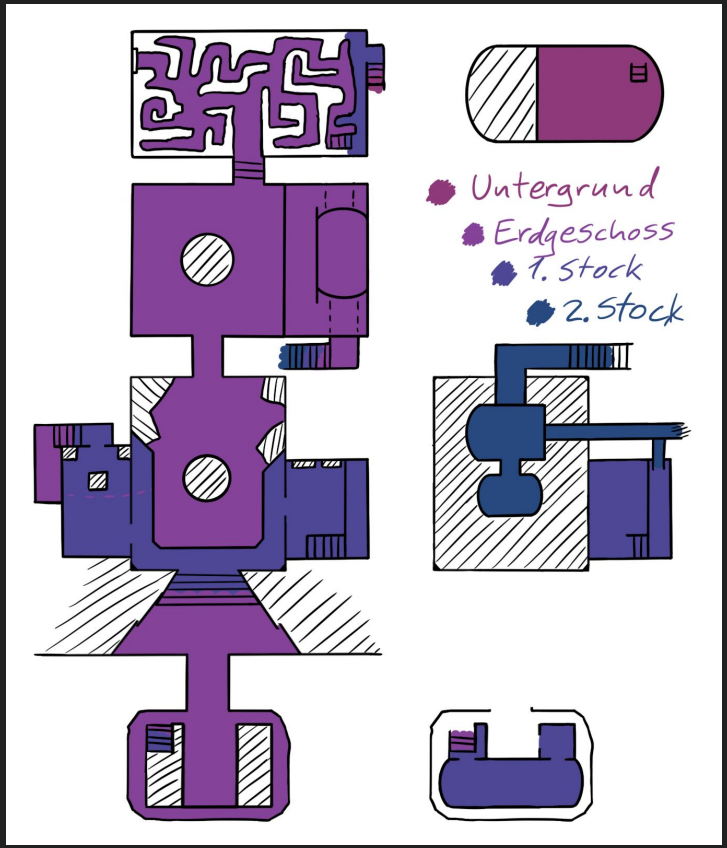
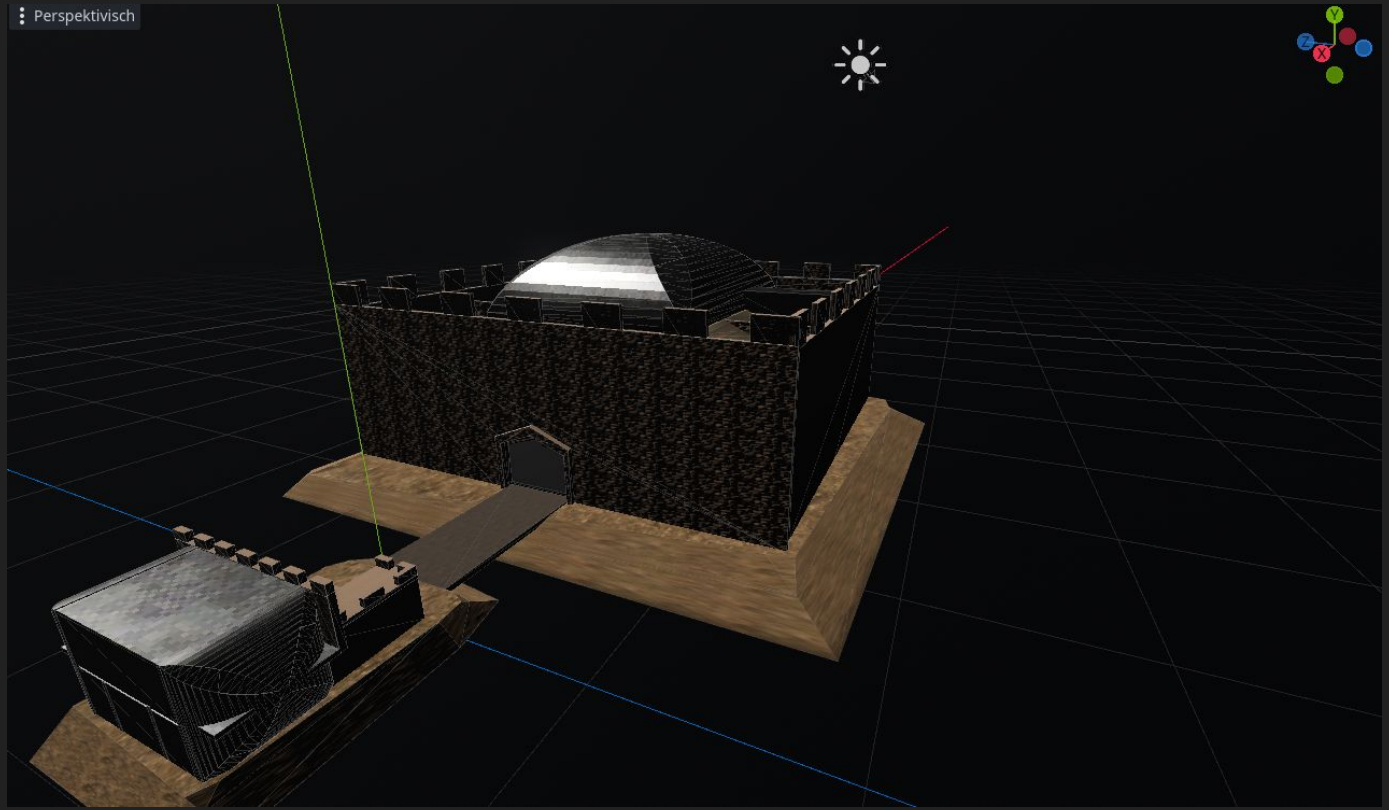




Level Engineering - Castle Progress



Level Engineering - Castle Impressions

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