

Final Changes & Conclusion



Abyssal Isolation

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Submechanophobia

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Final Changes

Since our playtesting sessions, we made a lot of final improvements to our game. Apart from general polishing, especially with regards to visual and audio assets, we also made significant changes according to the feedback we got from our testers:

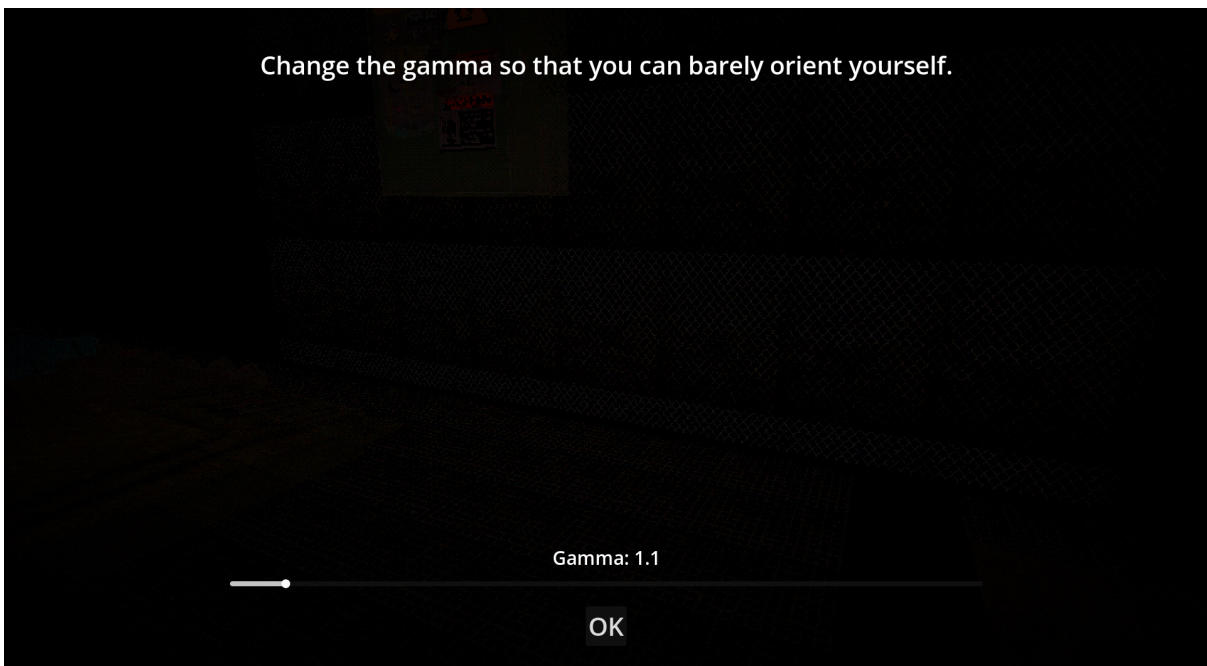
- We reworked the enemy creature's behaviour substantially, moving from simple random exploration only interrupted by an immediate attack behaviour to a more complex AI governed by a state machine that is influenced by the player's general proximity to the creature and some sounds the player produces (e. g. steps, activated pumps, "sound traps" we added, ...). Now the creature can actively search for the player when it has "heard" them but isn't in immediate proximity, disable machines the player has activated and should generally be more of a presence in the game. However, with this rework we also added a "grace period" at the beginning of a playthrough where the creature is inactive while the player has the opportunity to listen to the reactor tutorials and get familiar with the general game mechanics.



- We simplified the reactor mechanics significantly, reducing the player control to only setting a target reactivity and (de-)activating coolant pumps, as well as the target values to only power output (which is also drained by every active room light) and heat (which fails a playthrough when it gets too high).

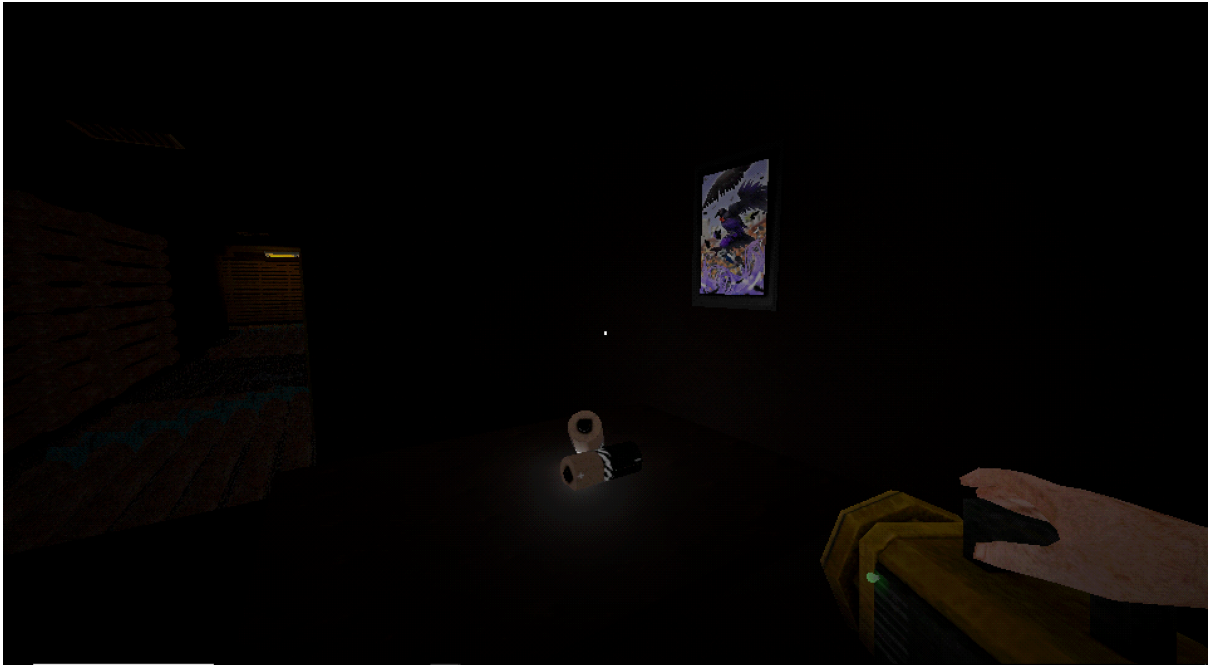


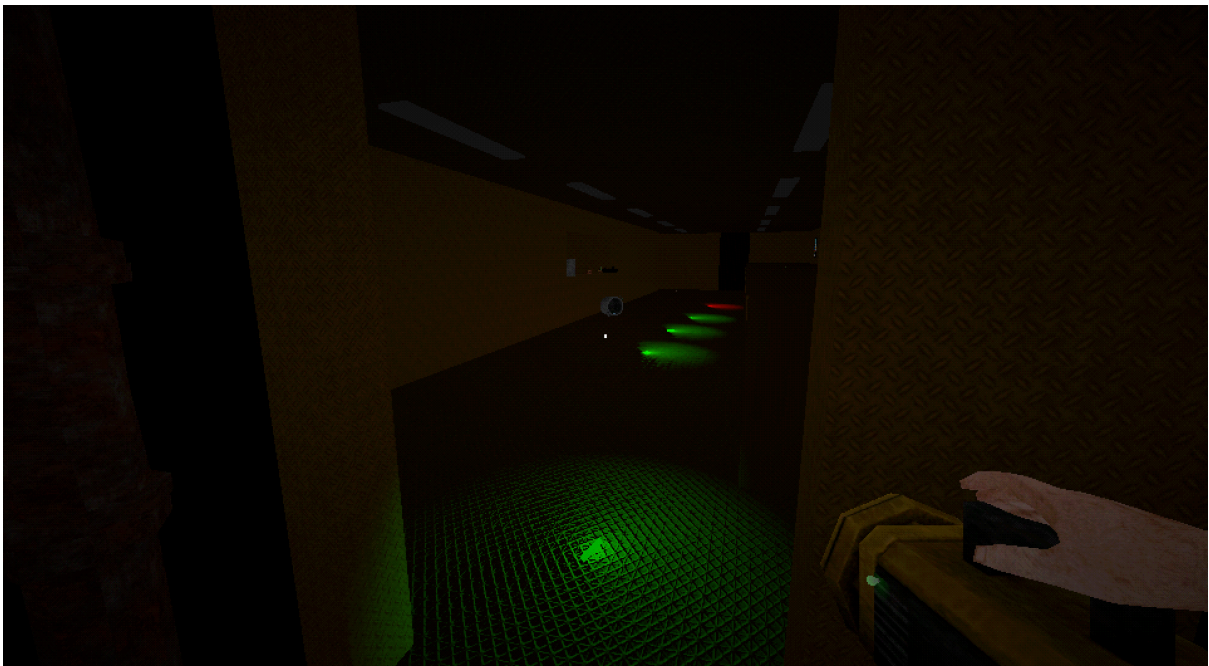
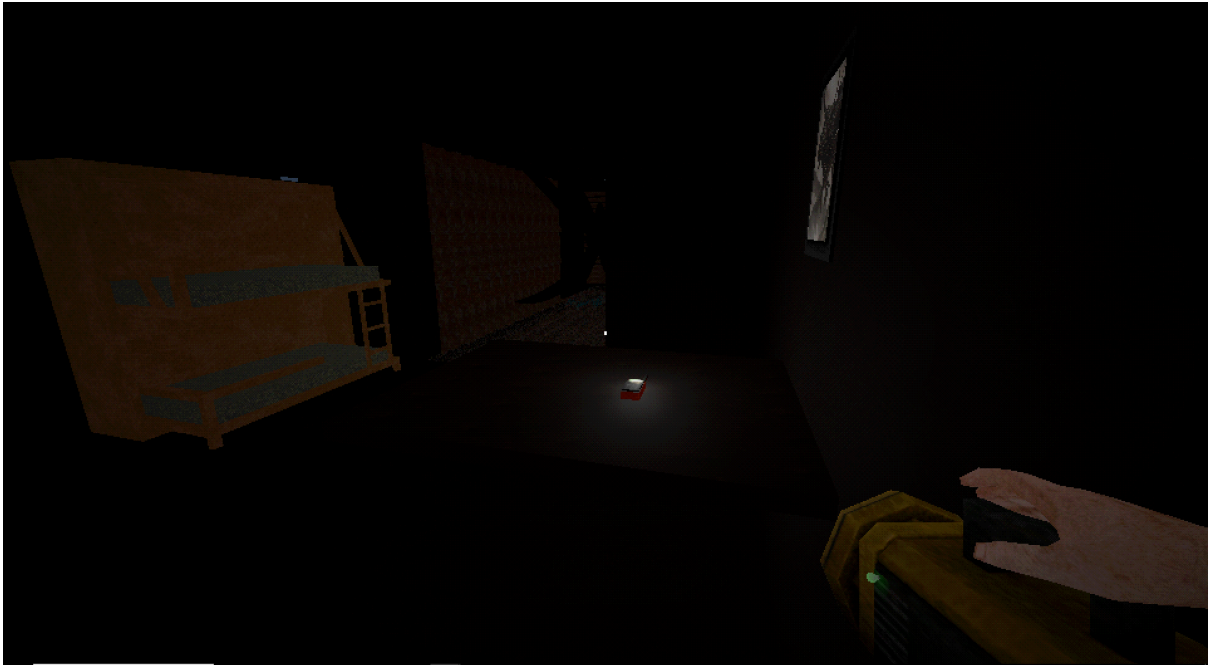
- To prevent the game from going completely dark on some systems when sanity and electricity are low, we lowered the visual effects of sanity drastically and also added a gamma customization screen at the start of the game.



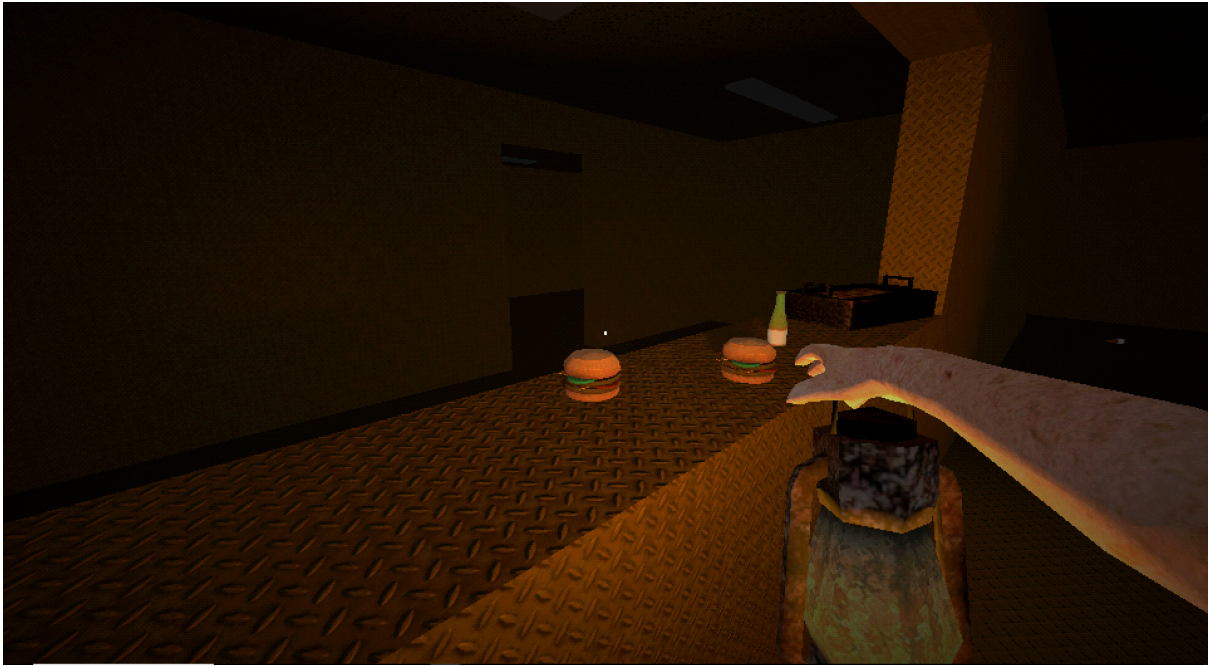
In addition to integrating playtesting feedback we also added several new features to the game before the final release:

- Randomly generated items including batteries for the player's flashlight, single-use glowsticks, walkie-talkies that generate noise to distract the creature and pills that increase sanity.





- A gas lamp the player can use as an alternative to their flashlight. This lamp provides less light in a shorter range but has unlimited fuel rather than relying on battery power.



- A full original soundtrack with four pieces that play in different circumstances (main menu, general gameplay, imminent danger and victory).

Conclusion

Technical Aspects

The first and likely biggest technical challenge all of us faced was getting familiar with Godot, as none of us had worked with the engine before. This also partially explains our slow start during the implementation phase, as this first hurdle needed to be overcome before we could effectively work on our game itself.

In the game itself we set out and succeeded to implement several complex technical features, namely

- (partially) procedural random map generation using a pathfinding algorithm to generate a hallway labyrinth between key rooms
- procedurally animated tentacles on our enemy creature using inverse kinematics
- fully simulated reactor physics (which we later “dumbed down” to improve the fun factor)

Our main success with the game was then to integrate these features into our survival horror framework and balance them out so each one stands out and contributes well to the overall game experience.

“Up & Down” Theme

The provided theme for the course helped us a lot with finding an initial idea for our game (“something on a submarine”) from which we could then develop a fully fledged concept by settling on a genre (survival horror with management elements) and taking inspiration from

other games and movies (Alien, Amnesia: The Bunker, Iron Lung, ...). From there we had plenty of freedom to flesh out this concept with our own ideas and designs.

General Conclusions

We mostly succeeded in implementing the goals set out in our project timeline. Many of the originally planned features are fully implemented as we envisioned them initially. Some features were redesigned or reworked during implementation when we had better design ideas (e. g. sanity system instead of an “oxygen” mechanic) or got feedback from playtesting (e. g. simpler reactor mechanics). However, due to time constraints resulting from the rather cramped course schedule in only a single semester we also had to scrap a couple of planned features entirely, e. g. several additional planned rooms and a puzzle system. Overall, though, we think we succeeded in making a unique and entertaining survival horror experience that fits our concept.

