

# Interim Report



## Abyssal Isolation

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### **Submechanophobia**

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## Current Progress

In the following we (again) show our layered task breakdown and comment on our current status for each layer:

### Functional Minimum

- Reactor Mechanics
- First Person Controller
- Basic Submarine Layout (Reactor, Electrical, Bridge, Walkways)

We have scripted a first version of the reactor's behaviour, based on extensive research about the physics of real nuclear reactors. This includes visuals on the reactor's current core values and dynamic control by the player via specially designed UI. However, in playtesting this turned out to be very hard to balance and not very satisfying and fun, so we are looking at reworking and refining the reactor mechanics further down the line as an additional part of our desired target (added below in red).

Our first person control scheme is finished, the player can navigate our 3D environment in all directions, including jumping, crouching, sliding and peeking around corners, as well as interact with specific interactable environment features (e. g. various consoles in the rooms). The control scheme follows typical first person game conventions, using WASD for directional movement, and Space, Shift, Ctrl, Alt and E for additional actions. Finally, for playtesting we have made a first, very primitive map containing our core rooms as listed in the task breakdown. However, besides the reactor, the actual behaviour and interaction logic of the rooms is still to be implemented (we tested the player interaction using dummy functions that only generate debug outputs). Also, many visual assets are still missing from the map, we plan to add them once we finalize room layouts further down the line.

### Low Target

- Basic Creature Movements
- Creature Design with Spring System
- Lights
- Oxygen
- SFX

We have implemented dynamically controllable lights, using simple toggle logic.

However, as the interaction logic for the electrical room is still missing, this is as of yet unavailable for playtesting.

Alongside coding we have already recorded, edited and curated a decent selection of sound effects and music that should contribute nicely to our final horror atmosphere. However, only a few sound files are integrated into the game by this point, we plan to add more as we finish the corresponding parts of the gameplay.

We have a first version of the creature's inverse kinematics-based animations. However, we are behind on implementing the creature's behaviour, and therefore have not been able to integrate the creature into our playtesting yet.

### Desired Target

- Puzzles
- Procedural Map Generation (incl. more rooms)
- Equipment
- Improved Creature Mechanics + Hiding Spots
- **Reactor Mechanics Rework**

We have implemented a flashlight as our first piece of equipment. Otherwise we are still focusing on finishing our low target and therefore have not progressed further into tasks on this list.

### High Target

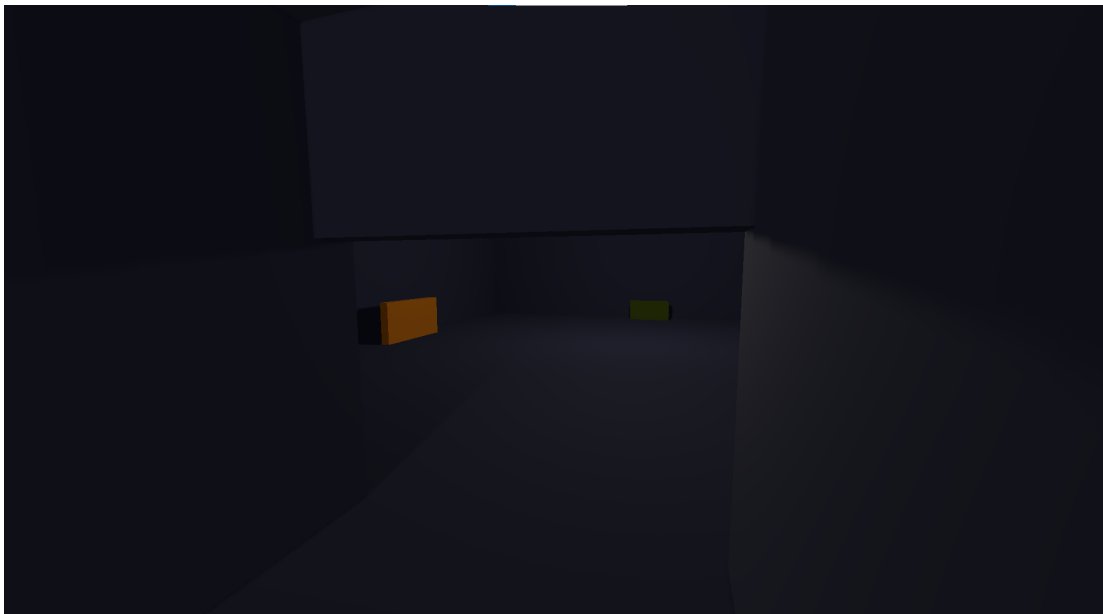
- Story, NPCs
- Alternate Endings
- Submarine Up & Down Mechanics
- Atmospheric Soundtrack
- More Details on the Submarine

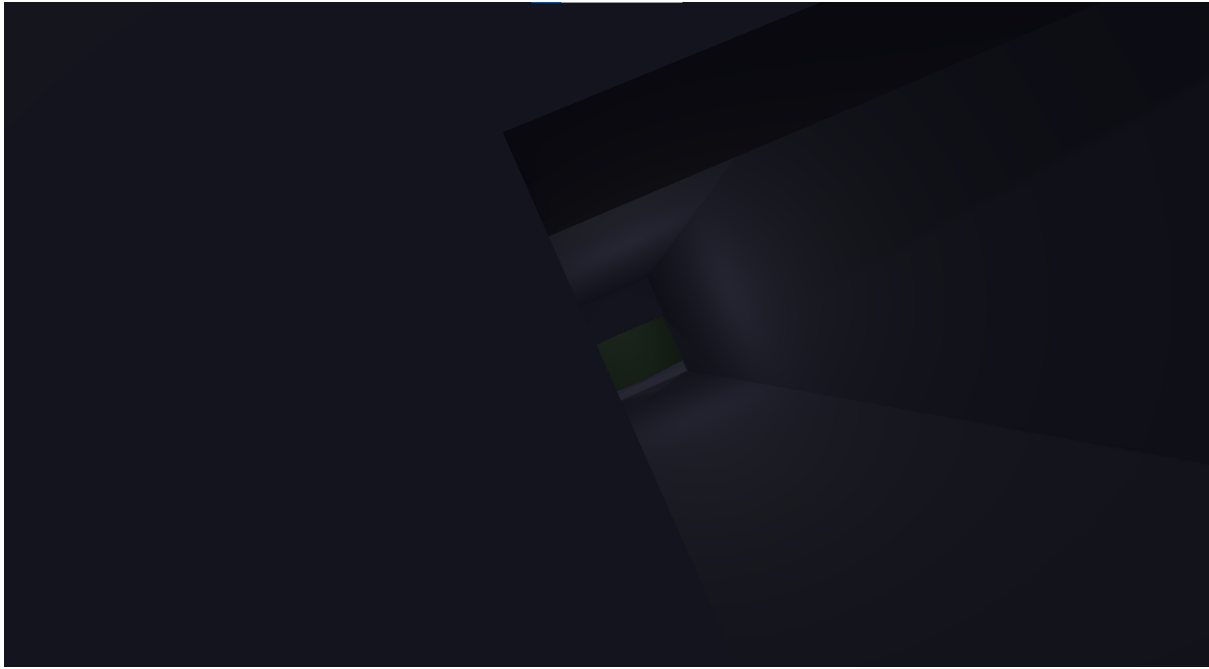
No progress yet apart from some music files.

### Extras

- Submarine Dive Up and Short Landtrips
- Creature AI
- Cutscenes

No progress yet.





## Challenges and Design Changes

As we started working on the project, we focused a lot on setting up a good structure for our work and learning and following best practices for development with Godot. This includes setting up various stub classes and scripts that we can implement later, obtaining and integrating several Godot plugins, e. g. a scene manager, and setting up hooks for future auxiliary systems like a statistics/logging backend. As we are all fairly new to the Godot engine, this learning and setup process took significantly more time and effort than we anticipated which led to us making less progress on the actual implementation of our game itself than we would have wanted so far. However, now that we have laid down these fundamental tools for development, we can hopefully increase our pace for actual gameplay implementation significantly from now on and therefore catch up to our planned timeline over the next months.

In terms of changes to our intended design, we primarily changed our vision for the reactor's implementation, as already mentioned above. Our initial plan of modelling the reactor as close to a real life nuclear reactor as possible turned out not to be very fun, so we are looking at simplifying and gamifying the reactor mechanics significantly, so that other aspects of our game - especially the survival horror part related to the creature - can shine.