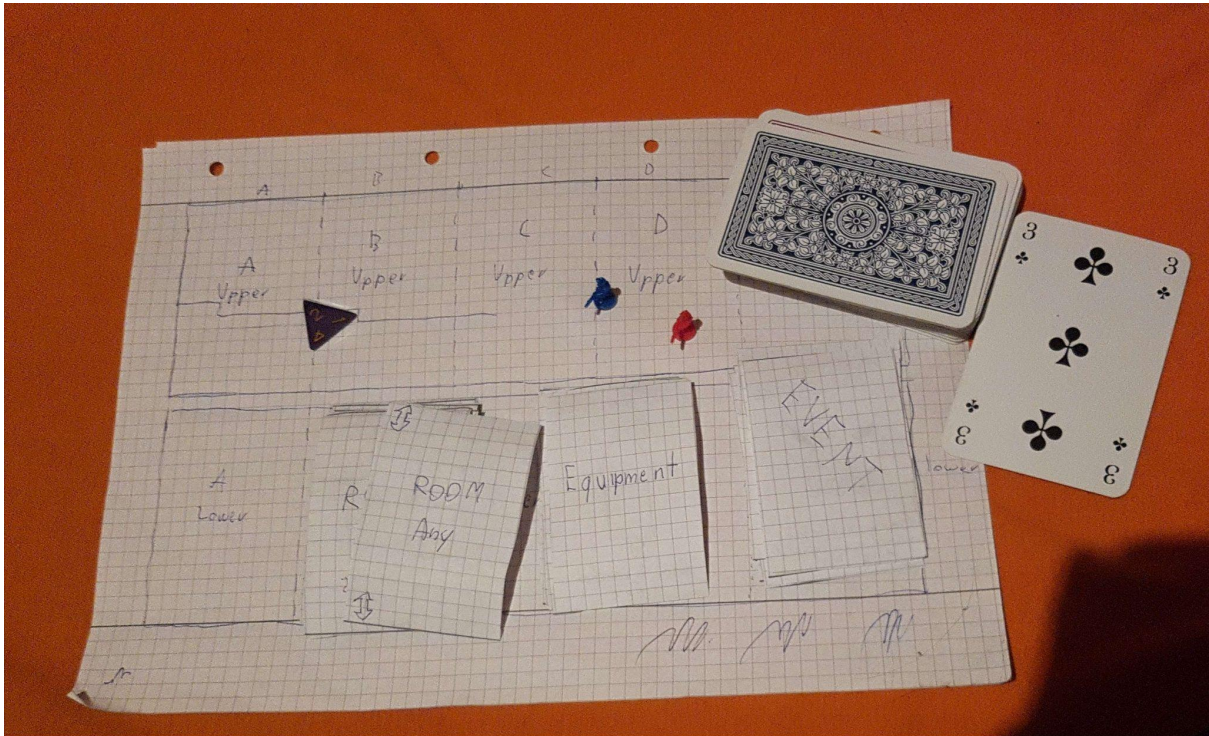


Prototype



Project Abyssal Isolation

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Submechanophobia

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Prototype Design

Material

We model the game as a board game using the following materials:

- A miniature representing the player
- A miniature representing the creature
- A map of the submarine drawn on paper with 10 "slots" for rooms
- 11 smaller maps of individual rooms drawn on paper (one double-sized showing the reactor room)
- A deck of regular playing cards used to simulate reactor activity
- A deck of "cards" made from paper used to simulate random events
- A deck of "cards" made from paper representing equipment the player can find
- A set of tokens made from paper with one of four colours on one side:
 - a. Blue: Represents nothing
 - b. Red: Represents a piece of equipment
 - c. Yellow: Represents danger
 - d. Green: Represents a hiding spot
- A couple of d4 (one of which is used to track the current danger level)



Setup

To generate a random submarine layout for the player the room maps are shuffled and 9 of them (always including those marked with a "!") randomly placed face-down such that certain conditions (noted on the back of the room maps) are fulfilled. The reactor

room is then flipped face-up and the player miniature is placed on it. The three card decks are shuffled. Hereafter play can start.

Gameplay

Player Actions

The prototype is played alone by a player (and one game master tracking hidden rooms and some effects) in individual game turns. During each turn the player first throws a d4 and can then either move their miniature to an adjacent square on the map, interact with a gameplay element on their current square or use a piece of equipment they collected that many times, allowing the player to explore and manage the submarine. Whenever the player moves into a room they had not entered before, the map of the room is turned face-up and random tokens are placed on each designated token spot in the room. Whenever the player moves onto a token, the token is removed and its effect is handled depending on its colour:

- Blue: Nothing happens.
- Red: The player draws a card from the equipment deck.
- Yellow: The danger level increases by one.
- Green: The token is placed back onto its square with the green side up. This square is now a hiding spot.

Interactable gameplay elements include the reactor in the reactor room, the radio in the bridge room, the power system in the electrical room and hiding spots. Interactions are defined as follows:

- Reactor: The player looks at all face-down cards in the reactor room and tracks the changes to the reactor values (more details on reactor mechanics later).
- Radio: Only while communication is available, the player can communicate which they have to do at least once to win the game.
- Electrical: One currently present electrical failure is fixed (taken away).
- Hiding Spot: The player hides, forfeiting an entire turn(!) and staying hidden until their next turn.

The equipment cards the player can find are (each card can be used once):

- Flashlight: The player may look at the 4 next cards on the event deck and place them back in any order.
- Emergency Battery: The player may remove an electrical failure from play without interacting with the electrical room.
- Lamp: The player may look underneath tokens in adjacent rooms for 3 turns.
- Oxygen candle: The reactor gains 1 durability (more details later).
- Soda: The player can move one square for free.

Game Events

At the end of each player turn a card is drawn from the reactor deck and placed face-down in the reactor room. Then a card is drawn from the event deck and its effect is handled. The different event effects are:

- Creature Move: If the danger level is 1, nothing happens. If the danger level is 2 or the player is hidden, the creature moves 2d4 spaces in a random direction. If the danger level is 3/4 and the player is not hidden, the creature moves 2d4/3d4 along the shortest path to the player. If the creature enters the same space as the player, the player loses the game.
- Danger Level Increase. The danger level increases by 1, except if it is already 4, then it resets to 1.
- Electrical Failure: The event card is placed next to the board. From now on every ten turns a previously explored room (except the reactor room) is turned face-down again (when it is explored again, hiding spots are still present).
- Reactor Failure: A card is drawn from the reactor deck and placed face-down into the reactor room.
- Catastrophe: 2 more event cards are drawn and resolved.
- Comms Available: For the next 15 turns communications are available and the radio in the bridge can be used. If comms are already available, 15 turns are added to the currently remaining duration.
- Nothing: ...

Reactor Mechanics

Representing our game's second core mechanic (other than the creature), the reactor mechanics are modelled in more detail than other mechanics on the submarine: The reactor has 5 durability and two different values, stress and cooling (represented by red and black playing cards, respectively), which range from 0 to 50 and each start at 25. When the player interacts with the reactor, the previous reactor activity is revealed using the present face-down cards, with limited control for the player to represent repairs. At the start of the process, the player can decide whether future revealed cards should increase or decrease their corresponding values. Then cards are revealed in order and their corresponding values changed in the chosen direction according to their value. When a card with no value is revealed (aka. a picture card), the player can decide again in what direction the next cards influence the values. When a Joker is revealed, however, the player can immediately reset one of the values to 25 instead. Should the heat level ever reach 50 or the cooling level ever reach 0, the reactor loses 1 durability, making prolonged exploration without reactor maintenance a risky endeavour. The player immediately loses the game when the reactor gets to 0 durability.

Victory Conditions

To win the game the player has to find the bridge, activate the radio to talk to the base and then survive for a limited amount of time, just like in our “real” game. In detail, in the prototype version of the game the player has to find the bridge, then perform reactor interaction once (representing power being diverted to the bridge), then interact with the radio (when comms are available) and finally interact with the reactor once more (to represent submarine maintenance until the game ends). This design forces interaction with the reactor mechanics at least twice, modelling the reactor’s significance.

Playing Experience and Evaluation:

Playing the prototype was overall a nice experience, especially with regards to submarine exploration and the reactor mechanics. After adjusting game balance by changing the amounts of each card in the card decks, we managed to make these core mechanics feel balanced and stand in the foreground, which validates our focus on these aspects for the overall game design. Especially with hiding spots and equipment being distributed randomly (as also planned for our final game) the exploration of even the non-essential submarine rooms felt good and impactful.

However, some design choices still stand out for further consideration: In our prototype the monster sometimes got stuck around the entry point to key rooms like the bridge, giving the player no other choice but to wait for an extended period of time. This was not a good experience and should be prevented in our final game by e. g. adding multiple entry points for each essential room. Also, as our prototype is a board game, we could not create a truly scary atmosphere yet; the visual and sound design necessary for this is therefore still untested.

