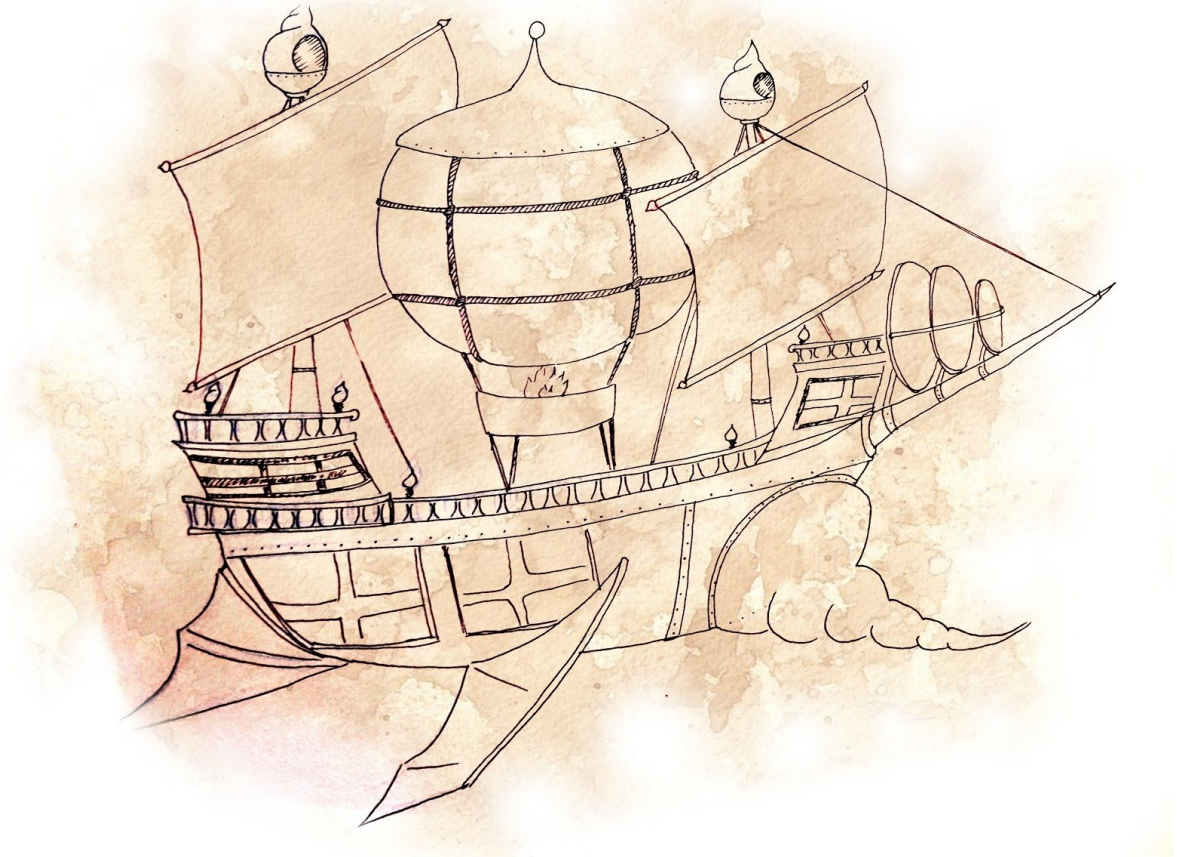


Game prototype for Master of Tempest



A game made by THE TWISTED TRASH PANDAS

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1. Goals

Our main goal of the prototyping stage was to confirm or disprove the hypothesis that asymmetric cooperative gameplay with one player having the information about the environment (*navigator player*) and the other player having the control (*the operator player*) is fun and viable. The proposed gameplay has several aspects, that have to be considered when designing a real-world prototype:

1. Players have to communicate in order to succeed
2. Players have to operate under time pressure
3. The navigator player doesn't have complete information about the environment and has to make decisions on the fly
4. The operator player has to solve a simple puzzle in order to control the ship

We believe the aforementioned aspects to be the core gameplay features of the proposed game.

2. Components

2.a Map

To represent the map, we use a board. The front side of the board (Fig. 1) has multiple objects (obstacles) glued onto it. The navigator player draws all the information needed from it. The back side (Fig. 2) has a grid and is used by the game masters.

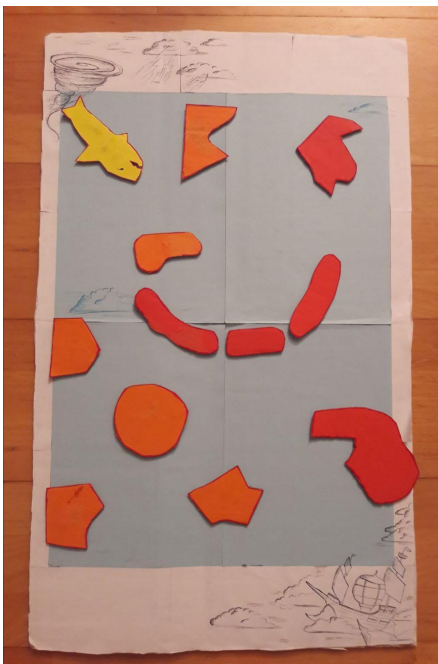


Figure 1 The front side of the map

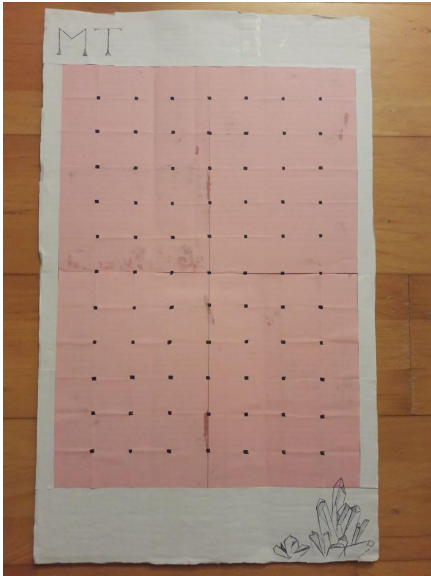


Figure 2 The back side of the map

2.b Ship

For the ship representation, we use two magnets. Those magnets are put against each other with the board between them so that when one of the magnets moves, the other one follows.

2.c Puzzle

The puzzle element of the gameplay is represented by 4 marked magnets, that the operator player has to arrange on a blackboard (Fig. 3) in a special order to change the direction of the ship's movement.

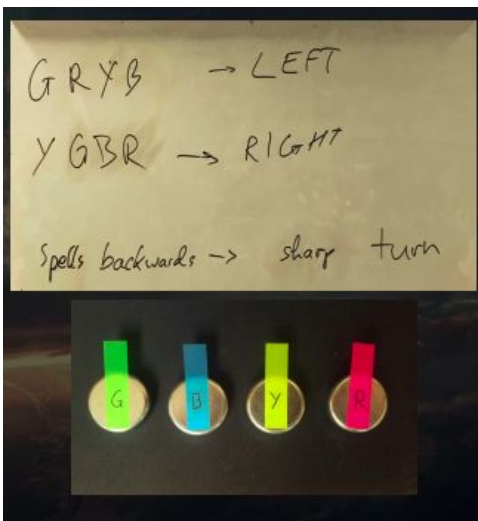


Figure 3 Puzzle

2.d Spyglass

We use a spyglass without optical lenses (Fig. 4) that the navigator player has to look through in order to restrict his/her range of vision.



Figure 4 Spyglass

2.e Stopwatch

A stopwatch is used by the game masters in order to control the pace of the game.

3. Rules

Four people are required to play the game:

1. Navigator player
2. Operator player
3. Timekeeper (game master)
4. Ship mover (game master)

The gameplay happens in discrete steps (turns). Each turn lasts 7 seconds, and at the end of each turn the ship moves one square in the direction it is facing. The game ends when the ship reaches the goal (which is marked with a star on a map), or when the ship hits an obstacle hard enough for the magnets to lose grip.

The task of *the navigator* is to tell the operator in which direction the ship has to be turned so that it doesn't hit an obstacle and moves closer to the destination. To make it more interesting, the navigator player has to restrict his/her vision by looking through the spying glass, imitating "unpredictable changing environment" that is expected to be present in the proposed game. Also, the commands for the turns ("left, right") are processed from the ship mover's perspective, making it more challenging for the navigator to call out the direction changes.

The operator player listens to the directions of the navigator and has to quickly arrange the marked magnets in an order that represents the corresponding direction change. After each turn, he/she has to mix all the magnets back together before arranging them for the new manoeuvre.

Every 7 seconds *the timekeeper* checks the result of the operator's manipulations and tells the ship mover in which direction (if any) the ship needs to be turned. Then *the ship mover* changes the direction the ship is facing accordingly to the timekeeper's input and moves the ship one cell forward on a grid.

This way we manage to fulfil all the requirements listed in the 1st section of the current chapter, as well as to enforce the constant movement on the ship, that captures the feeling of operating something massive with low manoeuvrability.

4. Experience playing the prototype

Before coming up with the final rules for the prototype, we tried out several different approaches, but they failed to capture one of the core aspects of the game.

Playing the final prototype was fun for both roles. Switching the roles also proved to be incredibly fun, offering unique experiences both for the navigator and the operator players, and helping to master the game overall. And it was fun to fail too: feeling the time pressure the navigator was giving the wrong commands, and/or the operator was not able to solve the puzzle in time, which caused excitement and desire to try again.

However, the prototype revealed several important issues that should be addressed during the development of the real game.

After a certain amount of playing sessions, the operator player can memorize the required combinations, making the gameplay trivial. This issue should be solved by adding randomization to the controlling process. Also, we plan to give the operator access to the information about the ship's status and special abilities in order to make the gameplay more intense and interesting, as well as encourage two-way conversation between players.

When the maps had straight paths, the gameplay got boring really fast, since both players had nothing to do but wait. This should be solved by creating a dynamic environment, that constantly requires player's attention and actions.

After many tries, the navigator's gameplay was getting trivial and stale. While this would take more time in a video game, since the medium is much more engaging than the board games, we also should add gameplay complexity for the navigator player. We plan to do it in several ways simultaneously: 1) add extra responsibilities to the navigator player as repairing the ship; 2) divide the visible area of the navigator between two outposts, making him/her to constantly change between them in order to have the full information about the environment.

Exploring the prototype ideas was also fruitful in a way we didn't expect: thinking about the ways to represent player's input in real-world brought ideas that could be used in the final version of the game. For example, we consider keeping the "arrange the objects in a specific order" as a gameplay mechanic for the operator player, instead of using the keyboard input for the spellcasting.

5. Conclusion

Creating a physical prototype helped us to crystallize the core requirements of the gameplay as well as exposed the potential flaws our game might have if we don't address the weak points properly. We believe the idea to be overall viable and will continue working on the project keeping in mind lessons learned.



Figure 5 Creation process