

Mercy Frontier

Batu Aytemiz

Kevin Wu

Brian Wong

Abstract

Inspired by RTS games like Starcraft and Age of Empires, our group endeavored to create a board game that was able to capture the essence of these online digital games. True to the established competitive format, we opted for a 1v1 format, with each player taking control of a single base. Classic game elements such as fog of war and income generation also comprise a key part of our game. The defining feature of our game however is its minion pool. Each player shares a common selection of “mercs” they can employ to aid them in battle,

The objective of the game is to destroy 3 of the opponent’s buildings or to have one minion reach the other side of the board. To begin, each player has a single base they control with a set of amount of workers. Players slowly collect and accumulate a trio of resouces, biofuel, neosteel, and lusorite crystals, that they must employ to either hiring more mercs or building up their infrastructure. Outposts provide a means of acquiring more land to build and gather resources on, and beacons are an end game objective that grants the first player to build 3 an enormously powerful creature.

Like the RTS games that it draws inspiration from, Mercy Frontier utilizes a system where actions increase as the game progresses. However, we may have ultimately made the game begin too slowly to be effective as a board game, as many of the early-game elements of a traditional digital RTS do not translate well to physical game format. If our group decided to work on this game further. early game interaction and incentivizing other forms of play besides infrastructure building would be our top priorities.

Rules

Players: 2

Required materials: Game board, 15 battlefield tiles, Mercenary deck, 90 Resource Tokens (30 green biofuel, 30 blue neosteel, 30 white lucite crystal), 20 Refinery Blocks (7 green biofuel, 7 blue neosteel, 6 lucite crystal), 10 Outpost Blocks (5 orange, 5 yellow), 50 Red Health Tokens, 2 sets of 10 monocolored worker dice, 6 temple blocks (2 green biofuel, 2 blue neosteel, 2 tan compressed lucite crystal).

Objective: Get one merc to the other side of the board OR destroy 3 of your opponent's buildings.

Setup

1. Place the home row tiles uncovered in the rows closest to each player, with one "base" tile in the center for each player. (Two resources on it)
2. Place the rest of the board tiles flipped over and randomly distributed over the rest of the map.
 - a. Under the Middle Tiles, place a "relic card" under each tile.
3. Shuffle the mercenary deck and place it in the "mercenary" space on the side of the board. Flip the first four cards in a row in the remaining space.
4. Place the tokens in their accordingly colored boxes on the other side of the board.
5. Each player starts with 3 of each resource (designated by the blue, green, and white tokens,)
 - a. **In the accelerated version, each player starts with 2 of each resource and a refinery on BOTH resources nodes in their base tile.**
6. The oldest player starts first and takes the priority token. (Red square with an "X")

Playing the Game

There are 4 phases to this game, some of which have sub-phases.

1. **Worker Phase**
 - a. [Worker Placement](#)
 - b. [Resource Collection](#)
 - c. [Worker Purchase](#)
2. **Building Phase**
3. **Mercenaries Phase**
 - a. [Mercenary Purchase](#)
 - b. [Mercenary Placement](#)
4. **Action Phase**
 - a. [Abilities](#)
 - b. [Movement](#)
 - c. [Combat](#)

Worker Phase

1. Worker Placement
 - a. Each player takes their current worker units and places them anywhere in their uncovered territory. Resources will be collected if a worker is on a resource tile, and outposts may be built only if a worker is placed on a tile adjacent to an uncovered board tile. If a player intends to build a building in the later stages of the turn, they must place their worker on a tile on which the building will be placed
2. Resource Collection
 - a. In the resource collection phase, collect a single resource token for each worker on a corresponding resource tile. If there is a refinery on that tile, collect 2 tokens of that resource.
3. Worker Purchase
 - a. Players may then purchase additional workers, although they may only be used next turn.
4. All workers have 1 hp.

Building Phase

1. In the building phase, players may choose to build any building. The requirements are:
 - a. Have the required resources to purchase that building
 - b. Have at least 1 worker unit on a tile that the building will be built on
 - c. Have enough space to fit the building
2. In the case of outposts, have a worker touching the covered tile in which you wish to build an outpost.
 - a. When an outpost is purchased, vertically flip over the covered board tile. An outpost may then be built on any free tile.
3. If a beacon is built, the player immediately gains the effects of the beacon and performs any actions as necessary. If they receive a mercenary, they do not place the mercenary until the Mercenary Placement Phase.
 - a. Middle Tiles have a relic card underneath. Relic cards have powerful persistent abilities that last until a player loses control of the original tile. Once controlled again, the relic card is given to the new controller.
4. All buildings have 1 hp.

Mercenaries Phase

1. Mercenary Purchase
 - a. The player with the priority token may purchase first.
 - b. Purchasing and Card Format
 - i. Each card has a large number in the top right and 3 smaller numbers beneath it next to fuel, steel, and crystal icons.
 - ii. The large number represents the credits each merc requires, and the smaller numbers represent how many credits each resource is worth.

- iii. To purchase a mercenary, the value of total resources paid must be greater than or equal to the total credit cost
 - c. A player may purchase any of the four available mercenaries on his/her turn, as well as pay (2) resources to sweep for a new set of four mercenaries.
 - d. When a player is finished purchasing, replace all mercenaries that were bought with new cards. Each player should always begin purchasing with 4 available mercenaries.
 - e. The other player may now purchase mercenaries.
- 2. Mercenary Placement
 - a. Once a mercenary is purchased, the player takes out the mercenary token from inside the contract card sleeve and **places it anywhere on the board as long as the token overlaps at least one grid space on a tile within the player's zone of control.**
 - b. The contract card itself is placed in one of the player's 5 designated mercenary zones. The player takes the number of health tokens equivalent to the mercenary's health value and places them on the card.
 - c. A player cannot place a mercenary until they have an uncovered tile with enough space to place the token.

Action Phase

- 1. Abilities
 - a. The player with the priority token goes first in the action phase.
 - b. If a mercenary has a non-combat ability, it triggers before movement occurs.
 - c. Movement based abilities are used during the following Mercenary Movement phase
- 2. Movement
 - a. The active player may then move his/her mercenaries based on their rarities
 - i. Common mercenaries can move 2 spaces in any one orthogonal direction.
 - ii. Heroic mercenaries can move 3 spaces in any one orthogonal direction.
 - iii. Legendary mercenaries can move 4 spaces in any one orthogonal direction.
 - b. Mercenaries cannot overlap, so a mercenary in front of another mercenary prevents the second from moving forward.
 - i. If a player chooses, he/she may decide to trample one of their own mercenaries with any other mercenary that he/she owns. The result of this action destroys the mercenary that is trampled and allows the trampler to continue moving forward
- 3. Combat
 - a. When a mercenary comes into contact with an enemy mercenary, all mercenaries interacting this way enter combat

- b. Combat is resolved by having all opposing mercenaries do damage to each other.
 - i. The damage of one mercenary is dealt to the opposing mercenary's health value, and vice versa. Damage is done simultaneously, and players remove the number of health tokens from their mercenary equivalent to the damage done.
 - ii. If a mercenary no longer has any health tokens, it is defeated, its token removed from the game board, placed back into the contract card sleeve, and the contract card is put into the mercenary discard pile.
 - iii. For example, a mercenary with 2 attack and 2 health and a mercenary with 3 attack and 2 health will defeat each other in combat, no matter who was the initiator (unless the 3/2 mercenary has a skill).
 - iv. A 3x3 heroic mercenary can fight two opposing mercenaries at once. In such a case, the heroic mercenary will do its damage to BOTH enemies, while the other two mercenaries will also combine their damage to hit the heroic mercenary.
- c. Once combat is resolved, if the attacking mercenary or mercenaries have any remaining movement left, they may finish moving
4. When all mercenaries have finished moving, the other player begins his/her actions phase.
5. Once both players have finished their action phase, the priority token is passed and a new turn begins.

Play Testing and Changes

1st Play Test

In the first play test we wanted to get a feel for how our mechanics worked. The **3x5 tile set gave the players enough space to maneuver while keeping focused feeling so we decided to carry on with those proportions**. We started thinking about whether to implement a population system for the workers and mercs. Some changes on the starting resources and the cost of the workers were made. At this point we were still trying to implement different victory conditions.

2nd Play Test

We decided to incorporate some hidden information to the game and we realized we could fit the tiles for this purpose. From this point on you had to **uncover the tiles to get access to the materials underneath it**. We started thinking about the design of the cards and we needed to find a way to standardize that. We also realized that we needed a big board to put all the card slots on. Bidding for mercs existed but was clunky.

3rd Play Test

From the feedback we learned that we needed to make the win conditions much easier to comprehend and keep track of. The current system of spawning monsters felt weird because the players could put their monsters on uncovered terrain. At this point we were playing with the idea of advanced resources and increasing the distinction between different resource types. We also started to think about how to differentiate the colors and their respective mercs and this became one thing to look at in our designs.

4th Play Test

In order to help keep track of the board we decided to try flipping tokens that moved. The concerns that we realized in this test is that **workers and resource gathering was a bit too non interactive**. We decided to clarify the rule set regarding worker - merc interactions. From this point on we decided that in order to build you needed a worker to be present in the tile and destroying a building with a worker on top also kills the worker.

5th Play Test

In this iteration we decided to make **crystal a scarce resource and pushed them towards the middle**. In this playtest you could only build within a monsters zone of control but the results showed that it was hard to keep track of. One feedback was to represent health instead of damage with tokens on the acquired contracts. We removed the bidding system and fine tuned the conveyor belt.

6th Play Test

We realized that the temples were boring to build and was non interactive so we decided to give some **battle cries for the temples in addition to the end effect**. We also decided on the temple shapes so they were more distinct than one another. One of the more important changes that occurred in this play test was regarding the movement of the mercs on the field. After **destroying an enemy merc the victor could use its remaining movement points** so that spawn blocking strategy was nullified. James commented on how much he wanted to jump kick some puppies after seeing the circle tokens in the square grid.

7th Play Test

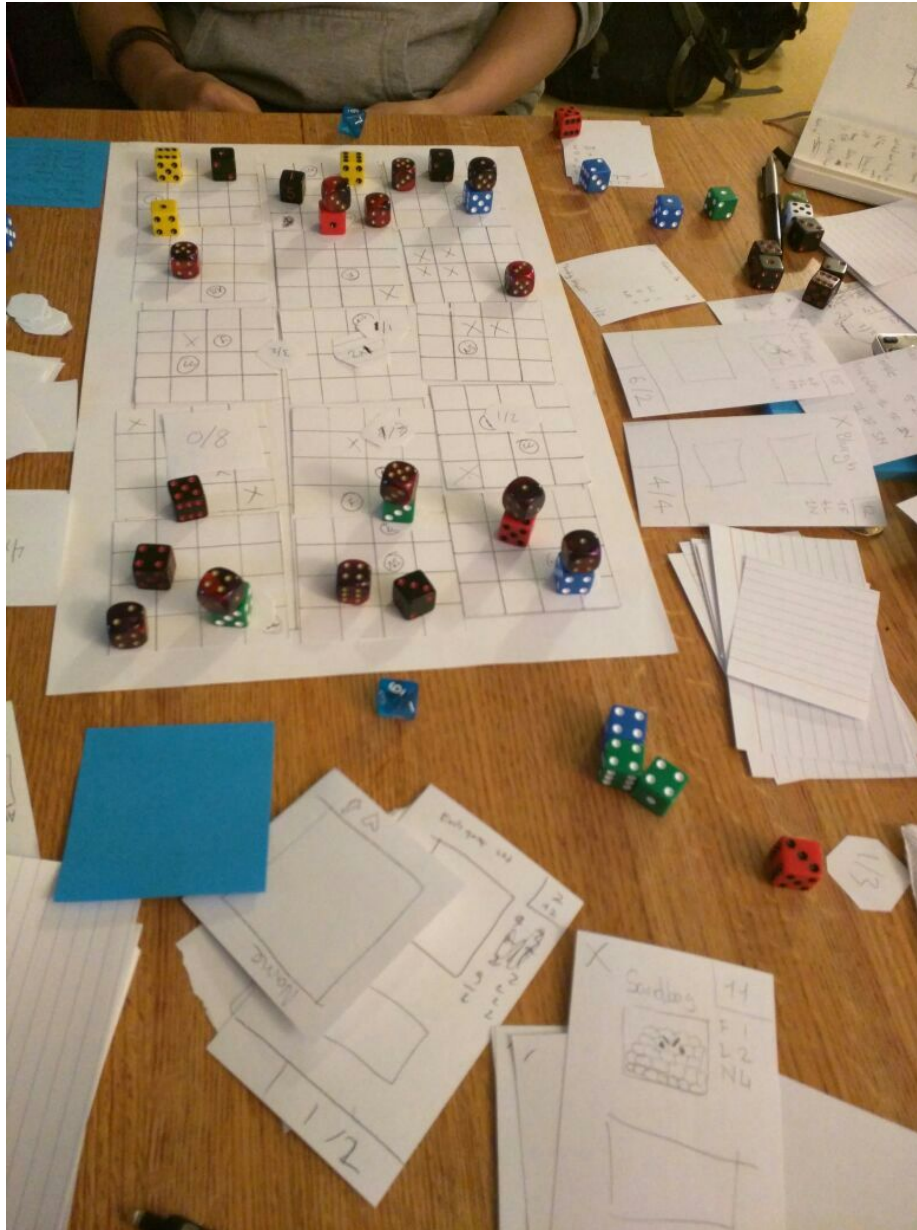
We started looking into a proper way of explaining the rules as it took a long time. We decided the best way was to explain while playing. We were still thinking of **increasing the pace of the game at this point** because it was so slow. This was the first playtest where we tried the build an outpost to uncover style of play and the feedback was much better.

8th Play Test

Before the play test in order to increase the pace of the game we introduced **power points under the middle three tiles**. Whoever captured these tiles would get a bonus notified by the cards underneath those tiles. The comments were mostly regarding the pace of the game, even though the increased speed of the mercs and sub goals the game felt too slow. Even though we managed to capture the RTS feeling on a board game the pacing of the game has to be sped up. We decided to make the movement mandatory with a lane system and considered changing health to be persistent rather than dynamic.

Visual Changes

First Iteration



Second Iteration



Final Iteration

