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Game Concept Paper

My group is proposing game inspired by the book the martian and the movie of the same name. It would feature a lone astronaut suddenly stranded on mars having to fend for herself. It would be similar in execution to other resource management games, or faming games, with a space theme, and an ever escalating difficulty.   Because mars is so incompatible with human life, as she uses up her resources the game will become much more difficult, and winning will hardly be assured. Instead it will be expected that the player replays the game numerous times before surviving to long enough to rescued, and the hazards that confront the player will be randomly generated from a pool of hazards, much like other roguelikes, such as FTL.

Genre: The game will be a top down sci-fi survival, and resource management game. It will feature long stretches of resource management punctuated by brief periods of danger, just to keep the players on their toes.

Style: The game will look a classic top down game from the age of the NES, and SNES, with simple by expressive graphics and (hopefully) a catchy 8bit sound track. It will take place mostly in the reconstructed Mars Habitat, though the player will be expected to venture out on to the martian surface to collect supplies.

The majority of the time the player will be doing simple things like planting and growing seeds, though they will need to collect equipment to increase the size and productivity of their growing environment. This portion of the game will be interrupted by emergencies, such as an airlock leaking, or the water supply to the plants being tainted by chemicals. This will force the player to quickly shift focus to solving the problem at hand.

The game will not feature levels in the traditional sense, and instead time will be illustrated through the passage of in game days, which will be shown being marked off on a calendar as the arrival of the rescue crew grows nearer. With each passing day the equipment around you will deteriorate and you will run out of food. This means that the difficulty will increase with each passing day. This will be signified by an intensifying martian storm that makes it more difficult to see while outside the habitat as well as by an increase in equipment failures, forcing players outside to look for supplies.

The main character of the game will be an astronaut which a player is able to name at the beginning of the game. You will be able to choose from a handful of simple 8Bit character models which would let a player choose someone that they feel comfortable with. There will only be one character, and that is the player, the rest of the hazards will be environmental. There may be the occasional

communication back from earth. This would provide hints to the player, but wouldn't constitute a character. We may implement an A.I. advisor that would be a separate character. This would give us a way to give the player critical information such as how specific game mechanics work.

The plot is simple. The player has become stranded on mars (though we may change this to an undiscovered alien planet to allow for more variety) and now must survive until the rescue party arrives. Should time allow we may include more personal elements such as letters from family members, or loved ones, but for the most part our focus is the survival mechanics.

The goal is simply to survive until you are rescued, though the difficulty of the game will make this a rare occurrence, which means the goal on a single play through is simply to survive as long as possible.

The game is very intentionally going to be a single player game. Its important to highlight the sense of isolation when playing the game. The player needs to understand that they are truly cut off from anyone that could help them.

There is a very simple ai in the game which will introduce new environmental hazards as the player gets closer and closer to being rescued. It will be relatively simple as it wont need to move any enemies around, but will instead choose from a database of catastrophes that could befall the player, and then send one their way. Sort of like the natural disasters in SimCity. It will need to adjust the severity of the disaster depending on how far into the game the player is.

As of right now the design process, and art creation will be divided equally between all the team members. Azzam and Bhavana will be taking on most of the design work, designing specific hazards and guiding development and Adi, and Ben will be in charge of level creation testing. All team members will contribute to coding.
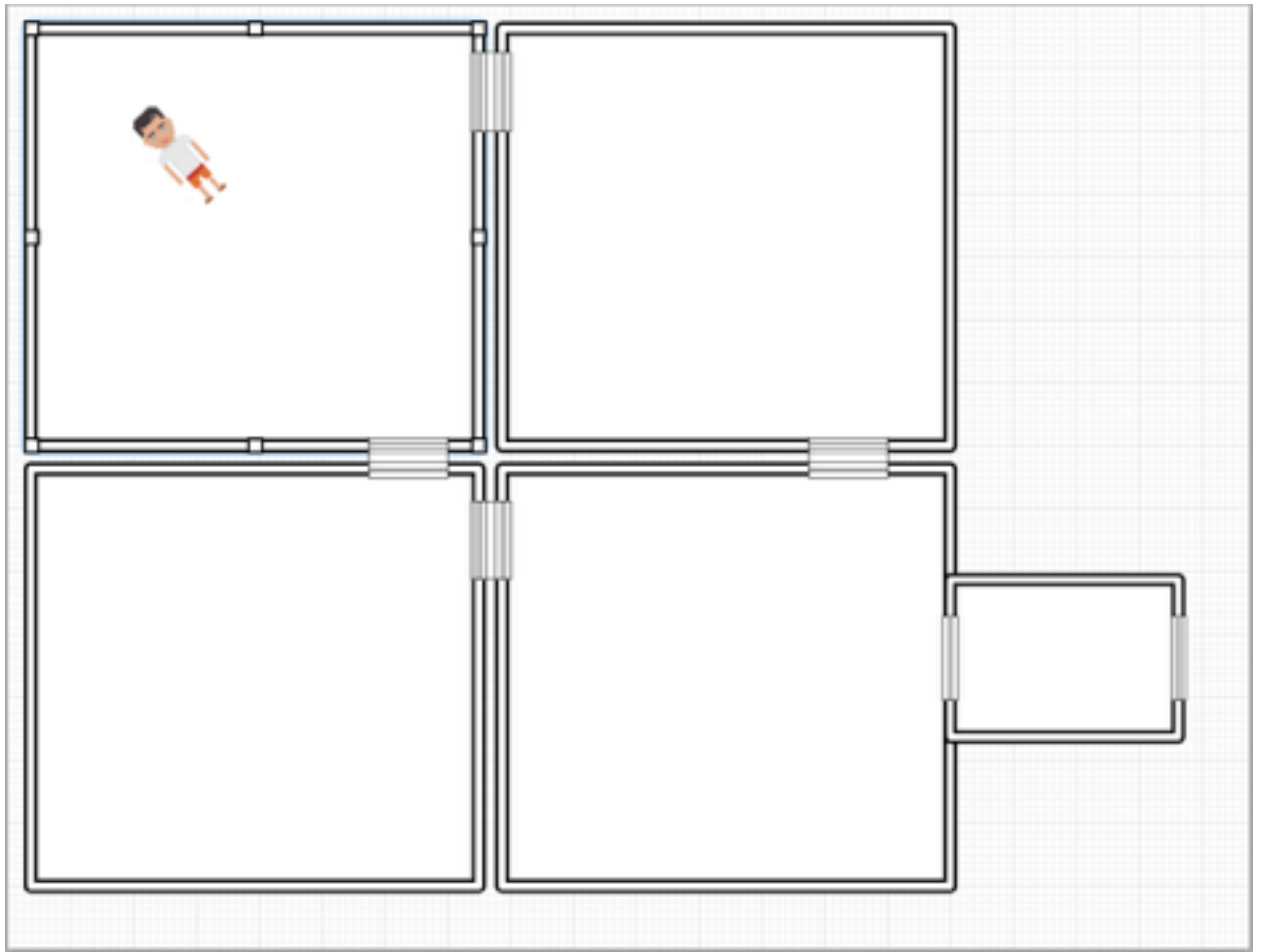
The player will wake up, and if they have not played the game before they will not know where they are. The full view will be of the Habitat, and there will be some dialogue explaining the characters confusion. As the character realized where they are the environment around the habitat will slowly resolve and they will realize that they are still on mars. At that moment the camera will zoom out to a map of the entire area the player can explore.

This will show them some of the features of the surrounding area and also create a sense of isolation. Then, before returning the to player, the screen will back out even further to show them a full map of mars, just to really drive home how alone they are.