Requirements
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1 Functional Requirements

The game Poor Alien has many functionalities, we have worded these functionalities as requirements, and we have sorted the requirements using the MoSCoW model.

1.1 Must Haves

- The game board will consist of a 10x10 square grid.
- The game will have six different tiles with which the board will be filled.
- The game will start with a filled board.
- A tile must be able to move horizontal or vertical by using the keyboard.
- If one tile is moved, the whole row or column will move along with it. The tiles that get past the edge will reappear at the opposite edge.
- A row or column of 3 or more of the same tile (independent of the white outline), will mean that these tiles get removed from the game.
- The tiles above empty tiles will move down one position, the remaining empty tiles shall be filled randomly.
- The game will end when the player runs out of possible moves.

1.2 Should Haves

- The player should be able to start a new game.
- The player should be able to stop a game in progress.
- The game shall end when the player loses or stops the game, or clears all of the white outlining.
- The game will end in a set amount of turns. The amount is based upon the amount of cells which are outlined. (For example 1 outlined cell gives the player five moves).
- Some cells will have a white outline, moving the tile which rests on this cell will not affect the white outline.
- The white outlining of a cell will be removed once a tile in that cell is removed.
- The patterning of white tiles should be preprogrammed.
- The player loses when there are no possible moves left, or if the playerhas run out of moves.
- The player wins when all white outlinings are cleared.

1.3 Could Haves

- The game could have a level or difficulty based system.
- The game could have a scoring system based on the level or difficulty system.
- The players score could be shown during the game.

1.4 Would/Won't Haves

- To be determined.

2 Non-functional Requirements

In addition to the functional requirements described in the previous section, there are also requirements that are not directly related to the functionality of the system, but instead put constraints on the system or the development process. These are the non-functional requirements:

- The game will be implemented in Java.
- The first fully functional version of the game will be delivered on friday September 15, 2017.
- The Scrum methodology will be applied for every iteration after the first fully functional version of the game has been delivered.
- The game will be playable on Windows, Mac OS X and Linux.
- The implementation of the game will have at least 80% of branch test coverage.