NAME: Juliette Love

STUDENT NO.: 2095873

COURSE CODE: WSOA3003A

UNIVERSITY: University of the Witwatersrand

DEPARTMENT: Digital Arts Department

TITLE OF CHOSEN GAME: *Threes*

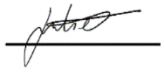
ASSIGNMENT NUMBER AND NAME: Assignment 2: Communication Design MDA Analysis

SUBMISSION DATE: 04/04/2021

Plagiarism Declaration

I, Juliette Love, know and accept that plagiarism (i.e., to use another's work and to pretend that it is one's own) is wring. Consequently, I declare that:

- The following essay is my own work.
- I have correctly acknowledged all direct quotes and paraphrased ideas. In addition, I have provided a complete, alphabetized reference list, as required by the APA method of referencing.
- I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
- I understand that the University of Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I failed to acknowledge the source of the ideas or words in my writing.

Signed: 

Date: 04/04/2021

In this essay the game *Threes* (Sirvo LLC., 2014) will be analysed using the MDA document written by Hunicke, LeBlanc and Zubek. This game's mechanics, dynamics and aesthetics will be discussed with a focus on communication design and feedback.

Mechanics

The mechanics of a game are the different actions that a player is able to perform when interacting with the game system (Hunicke, Le Blanc & Zubek, 2004: 4). Furthermore, it refers to the game components implemented by the creators of the game (Hunicke et al., 2004: 3). The player interacts with this game by swiping to move the tiles on the grid in a specific direction. These tiles move into empty spaces in the direction of the swipe but stay in the same place if other tiles are already occupying that space. If there are empty tiles left behind when the tiles are moved, a single new tile will be generated from that side of the grid. The goal is to merge tiles, which can be done when two tiles with the same number are swiped into one another against a wall of the grid or against other tiles. Through merging, the numbers displayed on each tile are added together to form the new tile number. Tiles showing the numbers 1 and 2 can only be merged with each other to form a white tile with the number 3. The goal is to obtain a tile with the highest number possible. When the grid is full and nothing more can be merged, the game is over. Planning is aided by the information at the top of the screen which displays what type of tile will appear when the player swipes.

These mechanics are communicated in several different ways. There is a short tutorial segment of the game which teaches the player how to move and merge tiles. However, these mechanics are further communicated to the player using feedback. Firstly, the 1 and 2 tiles appear different to the rest of the tiles as they are a solid blue and a solid red colour. This communicates to the player that they cannot be merged in the same way as the other tiles in the game, which are white with a yellow boarder. Furthermore, the other tiles of the game have small faces at the bottom of the tile. When two tiles with the same number are one above the other, the expression on these faces change. For example, when a 3 tile is beneath another 3 tile, the small faces change so that the line of the mouth becomes an "o" shape. If two tiles with the same number are side by side, then the two faces will turn to look at each other. This is a subtle visual cue which prompts the player to merge these two tiles. Colour is also used to draw attention to the highest numbered tile on the grid, as the highest number will be displayed in pink rather than black like the other numbers. This is important as knowing which is the highest number and where it is located is crucial for the player to achieve the goal of the game.

Furthermore, there is audio feedback. When two cards are merged there is a sound effect, such as one of the tiles saying “hello”. This acts as a reward mechanism to the player for merging two tiles. If this is the highest value tile on the grid and there is another tile with the same value already present, these will both make a sound together and jump up and down for a second. This pushes the player towards and reinforces the goal of obtaining the highest value card by merging two current cards with the highest value. If a move cannot be made, a character will say a word such as “nope” to let the player know that this move cannot be completed. This is done in a way which does not disrupt immersion.

Dynamics

Dynamics are created through the interaction of the player with the mechanics and formal components of the game (Hunicke et al., 2004: 2). In this game the player is challenged to manage space within the grid by finding the best way to merge tiles so that they can create the highest number possible. The player may use mechanics such as the slow swipe mechanic, which enables them to see the resulting layout of tiles without committing to a move. The player may also use the “next” hint, which shows what tile will be given to the player when they next swipe. It can be a blue tile, a red tile or a yellow and white tile displaying a 3. Both the slow swipe mechanic and the “next” hint help the player to play strategically as they are able to plan their next move and predict the game with higher accuracy.

Aesthetics

Aesthetics are created as emotional responses within the player as they experience the dynamics of the game (Hunicke et al., 2004: 2). An aesthetic evoked by *Threes* is “challenge”. This is created as the player attempts to strategically think about how they can interact with the tiles in order to have enough space to continue receiving and merging them. The aesthetic of “submission” is also created as *Threes* is a game with simple mechanics (swiping) and a short game loop. Therefore, it is a game which can be used as a pastime. To a lesser extent the aesthetic of “sensation” may be felt as the player receives rewarding feedback, such as the pleasing and positive sound effects when two tiles are merged.

In *Threes* the mechanics and the feedback implemented enables effective communication with the player as they interact with the game system. The resulting dynamics and aesthetics make playing this game an engaging experience with concise feedback.

References:

Hunicke, R., Le Blanc, M., Zubek, R. (2004). MDA: A Formal Approach to Game Design and Game Research. In Proceedings of the AAAI Workshop on Challenges in Game AI. Available from https://users.cs.northwestern.edu/~hunicke/MDA.pdf

Sirvo LLC. (2014). *Threes* [Video game]. Android. Sirvo LLC.