

MDA analysis, Threes

Mandaha Rolivhuwa Shallot (1672977)

University of the Witwatersrand, Johannesburg 2050, South Africa

WSOA3003A (Game Design 3A)

April 2021

Introduction

Basics

Threes is puzzle video Math game released in February 2014, developed and published by Sirvo, It was created in unity and published on iOS, Android, Xbox one, Windows Phone and web browser furthermore, It is a single-player game.

Overview

This a simple one player game where a player slides on a board with tile numbers, the player slides up, down, left and right so basically in four directions. The game has special blue “1s” and red “2s” tiles that can be combined together to form a 3, so from then same numbers must be added to form a higher number which is multiple of three and that is where the name of the game “Threes!” come from.

The tiles in this game have unique characters used as a way of communicating and to get good feedback, As you go up in higher levels you can hear sounds coming from the number tiles and see a bit of background of the card animated to talk make amusing sounds. This game is simple to understand and to play but it becomes difficult to complete as you move higher and that how the system of the game is created and it has been reported that they are only very few people who have reached the high score. The only numbers that are different but can be matched is one and two to form the number three however from that point you add number n with n to form $2n$ (two same single numbers to form a double of that number) .

Each higher numbered tile is worth more points so that gives the player the interest of getting more points. To learn this game before playing there is an option of tutorial of the game where the players learn the basics and mechanics of the game. On top, just above the game board, during game play there is a next tile shown without the number on it which moves down to the board after two numbers have been added and it is only revealed when it is on the board. The game also teaches you which numbers can be added and which ones can't because with 1 and 2 you can't move those tiles adjacent to any other number but you will move them around the board with no addition taking place.

The game has a total of 12 different tile numbers. It only ends when the player runs out of moves and the board gets locked, the game does not have game over text that shows up however when the game ends, the final score of that game round is displayed to the player.

Player

The game requires input from one player expected to play through the game, the mode of the game is "single player mode. The player has the control in the game of movement and choosing the tile numbers to be matched up while engaging with the board and whatever new numbers are being added on the board. The player needs to be strategic to avoid running out of moves very quickly and to be able reach a higher point.

Objectives

The main goal of this game is to get a high score, players have to slide, match up number tiles that get added up and will result in a higher number. This game is also part of learning mathematical skills "addition" because the players get to see the output of the added numbers and that is a way of learning multiplies of three in Math. There are total of 12 kinds of number tiles, the player must add number one and two to form three then from then add same numbers to form multiplies of three.

The player must add the number tiles while keeping track of their movements so that they do not run out of moves fast, therefore the player needs to be strategic. The strategy is to make moves that leaves the most moves available. The score of the board will increase as the player makes more combinations.

Mechanics

In the beginning of the game the player is presented with a grid containing number tiles, to move the player touch on the screen to move in four directions to make combinations of numbers. By swiping up, down, left and right the player creates a game flow thereafter combining two numbers the game brings up a new number time on the board. The number tile 1 and 2 are encoded therefore, when they are moving to the board from outside it shows however the other games do not show until they are brought to the grid.

The game has a natural sequence, the more the moves, the higher the score. Players must also consider the placements of "1s" and "2s", they are different from the other tiles as they can't be combined with any tiles adjacent to them, they only combine with each other. Later In the game after earning a high score, there is a bonus tile which is white in colour and a cross + on top of it, the best strategy is to place it near mixed number tile is usually 6, it will never be the same as your highest scoring tile in the grid therefore the placement of these number tiles lead the game on getting more moves.

Player interaction

Interaction is very important because it brings out communication in game, the must have clear information, the game must not be too complex to play. Looking at this game there is good communication between the player and the game world, information in the game is easily conveyed like the next card we can clearly see its purpose. The number tiles make sounds which keeps the player engaged in the game, it brings out the "fun" of the game so we can see the purpose of the sound used in the game and how it affects game interaction. The game also becomes complex as the player goes higher that keeps the interaction longer

Conclusion

After playing the game several times I experienced “fun” and “overwhelming” feeling for the game starts of simple but become so complex that to get the highest score is hard and my highest was only 3,500. I noticed how important it is to be strategic in this game, knowing your right placements that will give you more moves. The game also has clear communication and feedback because a player can navigate through the game and be able to identify the purpose of the elements in the game play.

References

- <https://en.wikipedia.org/wiki/Threes>
- Wits/Ulwazi/ WSOA3003A communication and feedback
- <https://www.youtube.com/watch?v=vqEeWf1udEc>
- https://www.youtube.com/watch?v=8Bk_ZqlvXqo
- <https://apps.apple.com/us/app/threes/id779157948>
- <https://www.theverge.com/tldr/2017/6/20/15836462/threes-mobile-puzzle-ios-android-end-high-score-12288-how>
- Robin Hunicke, Marc LeBlanc, Robert Zubek
<https://users.cs.northwestern.edu/~hunicke/MDA.pdf>