## Communication Design in Threes

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#### 1 Introduction

This report intends to discuss how the communication design in the mobile game threes. The game's feedback and user interface design will be assessed on how it enhances and communicates the mechanics, dynamics and aesthetics.



Figure 1: A Game-State Screenshot

# 2 Mechanics and Dynamics

The primary game-play loop of the game involves the player moving square sprite pieces which represent the points on a 4x4 grid. Each piece contains a multiple of three with the exception of base pieces which contain a value of either one or two. The player proceeds to merge the pieces to form new ones which contain the sum of the two merged numbers. The player is only able to merge pieces that have matching numbers with the exception of the red and blue pieces which merge to form threes. The player moves all the pieces on the grid one space in one of the possible four directions by swiping in the desired direction. Every time the player moves, another piece is

added to an open space in the grid. The game is over when all the spaces in the grid are filled and there are no possible moves available. A score is calculated where players score points for each square that has a multiple of three. The higher the value, the more valuable it is in terms of points. Pieces valued at one or two do not contribute to the score.

The dynamics which the game-play mechanics invoke, involve the player trying to keep the higher valued pieces together as there are fewer potential pieces to merge with as the values increase. The further apart the higher values become, the more congested the grid becomes. The same is true for the ones and twos as they can only merge with each other to form a three. It is important that the player merges these pieces as soon as possible in order to prevent them getting in the way of merging larger values.

### 3 Information Communication

The game communicates extra parts information to the player which is relevant to the game-play loop using various feedback and visual techniques. For instance, each of the movable game pieces has a specific face that depends on the value it holds. Higher valued pieces even have names that relate to the number on the piece. This becomes relevant to the loop as there is a next piece visual that indicates the next piece to be placed in the grid. The player will only know what number will be on the piece if the can recognise the face that represents that value. Ones and twos are color coded so the player will easily recognise them at the top of the screen. The faces also interact with one another when next to each other as seen between the sixes in figure 1. This further communicates the available moves to the player through sprite design. Different faces make different sounds when being merged together which creates unique sounds whenever the player moves the game pieces. This is not necessarily related to the game-play loop but creates an interesting game feel.

### 4 Aesthetics

The simple nature and mobility of Threes provides a strong sense of submission to the player. The game does not require large amounts of attention as the only input taken in by the player is the directional swiping on a touch screen device. This makes the game an effective pass time. However, it is still able to create a significant amount of challenge. The basic game-play loop is easy to learn but difficult to master as the player must utilize all parts of the feedback loop and information to improve and achieve higher scores.