

# Product Backlog

## Advanced topics:

- Version control
- User experience

## Features:

### Show start screen

How to demo: Start the application. The start screen will then appear.

Notes: The start screen contains the title of the game and a start button.

### Show game grid

How to demo: Click the start button on the start screen.

Notes: The game grid is a 4x4-grid with two tiles of value 2 at random positions in the grid.

### Move tiles without merge

How to demo: Click on one of the arrow keys when there are no tiles of the same value that should merge when the arrow key is pressed.

Notes: The tiles move in the direction of the pressed arrow key to the empty cell closest to the border of the grid.

### Move tiles with merge

How to demo: Click on one of the arrow keys when there are tiles of the same value that should merge when the arrow key is pressed.

Notes: The tiles move in the direction of the pressed arrow key to the empty cell closest to the border of the grid. Tiles of the same value that should merge when the arrow key is pressed, merge into one tile with the value of the sum of the original tiles. The new merged tile cannot merge with another tile during the same move.

### Spawn new tile

How to demo: Click on one of the arrow keys.

Notes: After the tiles have moved, a new tile spawns at a random empty position in the grid. The spawned tile has either the value 2 or 4, with a 9:1 ratio.

### Keep track of score

How to demo: Merge two tiles.

Notes: The score (shown at the top right of the screen) will increase with the sum of the two merged tiles.

### Keep track of best score

How to demo: Finish a game and restart.

Notes: The best score (shown next to the normal score) will now contain the score achieved at the last game. If another game is played, the best score will be the best score of all played games.

**Stop game**

How to demo: Keep clicking the arrow keys, until there are no moves possible.

Notes: If all the cells in the grid have a tile and the tiles cannot merge during a move. The game will stop.

**Show end screen**

How to demo: Stop a game (see “Stop game” above).

Notes: The end screen has a game over message, the user’s score and a play again button.

**Restart game**

How to demo: Click on the new game button during a game or click on the play again button at the end screen.

Notes: A new game will start.