Project #0
Match 3

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Project #0 - Match 3 - Proposal

MVP

- Match 3 JS game with all vector graphics, using CSS, JQuery and Animate.CSS
- Simple Grid GameBoard
- Game Pieces of 5 colors
- Tap-based gameplay.
- Goal Gems Counters 1 colors
- Gameplay Timer
- Dynamically Generated GameBoard
- Tutorial Screen & Endcard

Stretch Goals

- JQuery UI for Drag & Drop gameplay.
- The pieces above the removed pieces will fall into place and new pieces will appear above.
- Dynamically Generate the Gem Goal on reload.
- Two Gem Goals
- Level Based Rounds of increasing difficulty

Milestones

1. Generate Gameboard
2. Randomize Colors on Gameboard
3. Create UI Header and have it update with the current time.
4. Create Function isSameColor() to check if the adjacent pieces are the same color, should return the cardinal directions with a boolean for each.
5. Create Function isMatch() to verify that the connected same-colored pieces are a match, should return the number of pieces that have been matched.
6. Create a match, and have the points added to score.
7. Have the goal counter count matches of the same color.
8. Create an Endgame condition.
9. Create Tutorial Screen to appear before Gameplay.
10. Create Endcard to appear after Gameplay.
11. Create Success & Failure Endcards.

User Stories

1. Tutorial screen appears with a CTA Button.
2. User selects CTA button and game starts.
3. Gameboard and UI appears.
4. The UI has the name of the game, the game timer the score, the match goal, with a colored block representing the goal.
5. User selects a colored game piece, to swap places with another game piece 1 block away to the cardinal directions; top, down, left or right.
6. Matched colors can only be connected by the cardinal directions.
7. If the swapped pieces make a match of at least three of the same colors connecting them, the pieces will be matched, and tallied up.
8. New colored pieces will appear where the matched colored pieces were removed.
9. If there are no potential matches, a randomize button can be pressed to randomize all the colors on the board.
10. When the timer is done, the gameboard and UI disappears and an endcard appears with the final score, the goal counter, and a message congratulating the player if they met the goal, or asking them to try again if they didn't meet the goal. There will be a share and contact info button on it.

Match 3!

Goal:	Timer:	Score:
25	30	30
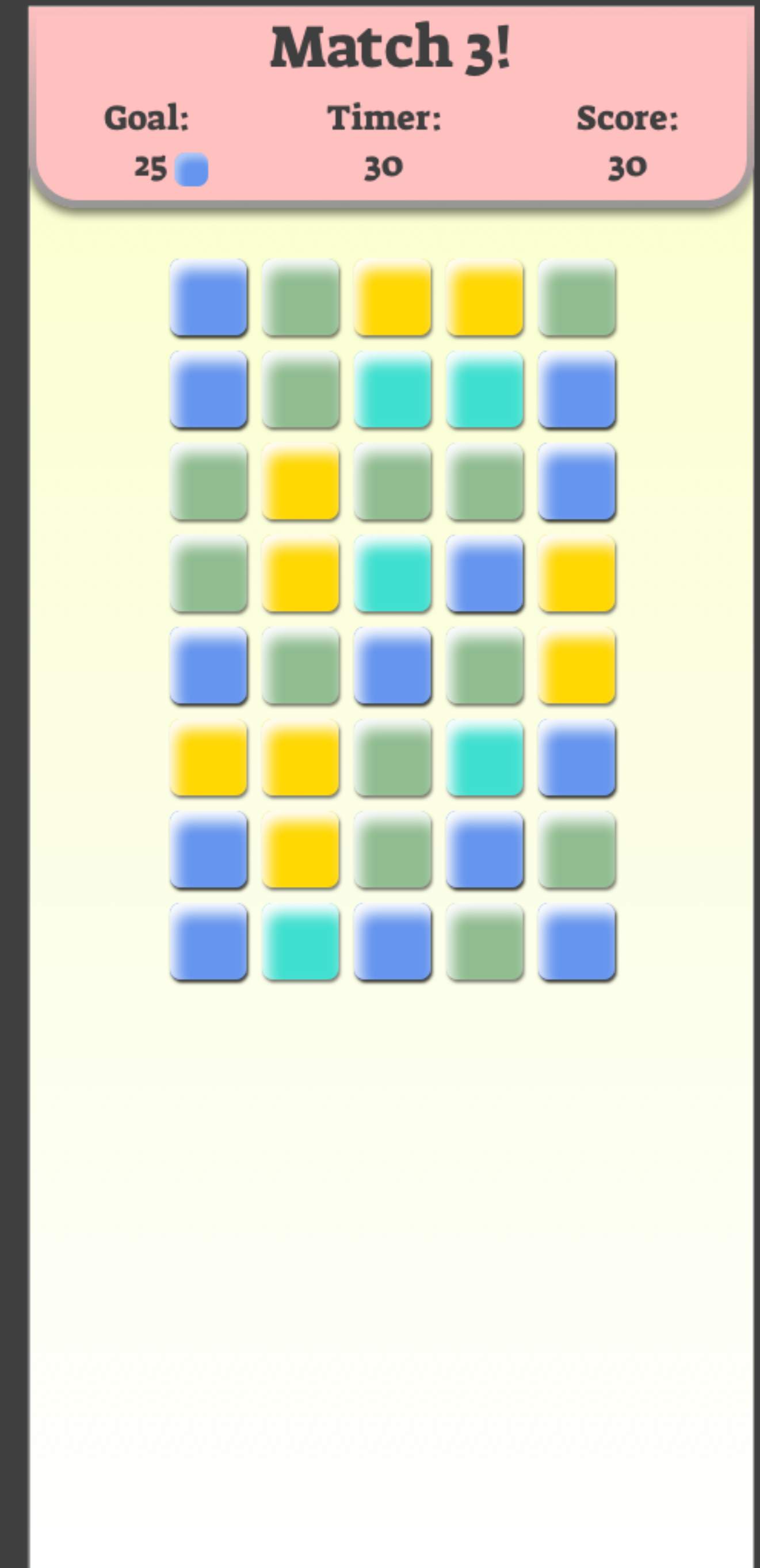
Game Logic

- Tiles are swapped, 1 square in 4 cardinal directions.
- If a color match of at least 3 squares are made during the swap, the blocks are swapped and matches are made.
- If there are no matches of at least 3 squares during the swap, the blocks are placed back where they were, and they glow red once.
- If the matched blocks are the same color as the goal, then double the points go to the score and the blocks are deduced from the goal, plus the blocks glow once the same color as the blocks.
- To check for the same color, the game should check one forward in the $('.squares') array and one back for the same color, also 1 minus the Game.board-height, and one plus the Game.board-height to check the blocks above and below.
- The matched blocks with their indexes should be sent to a Match array. If the match array length is greater than 1, the loop should continue to look for matches from the elements in the match array as the starting point. Only include new elements in the array, if they don't already exist in the array.

Match 3!

Goal: 25

Timer: 30

Score: 30
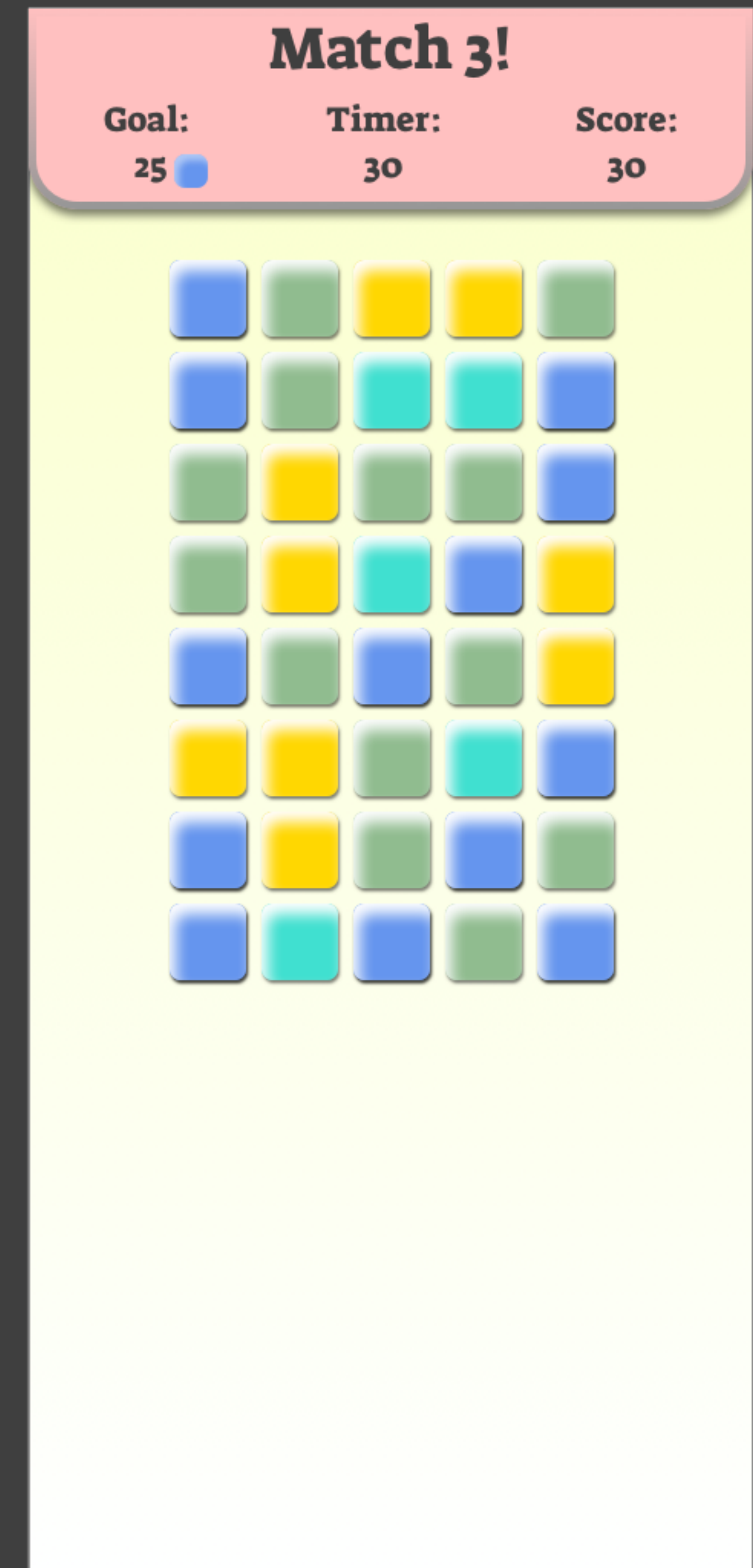
Tutorial screen appears first, with a start button.

When the start button is pressed, the Tutorial screen slides up and becomes the UI.

The text and button should fade out, while the Gameplay UI fades in, and the Gameboard appears.

Match 3

Tap to Swap Gems.

**Match Gems of the same color before the time runs out!**

Start!

Tap to swap gems.

Match at least gems of the same color to remove them from the board.

Only gems touching one another to the top bottom left and right count during a match.

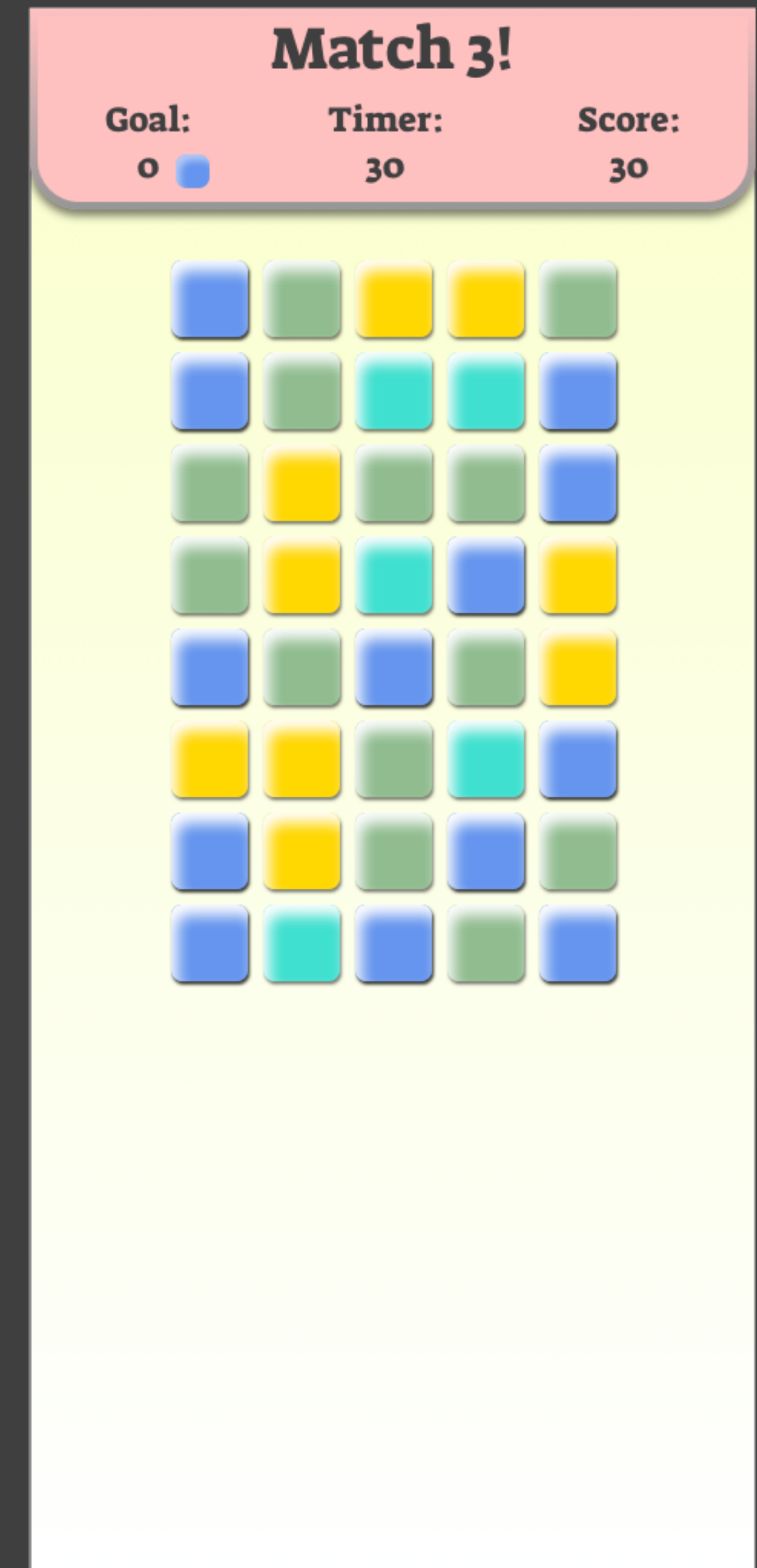Gems that don't match the goal will fall to the bottom, but the score will go up.

Gems that do match the goal will fly to the top.

Match 3!

Goal: Timer: Score:

25   30   30
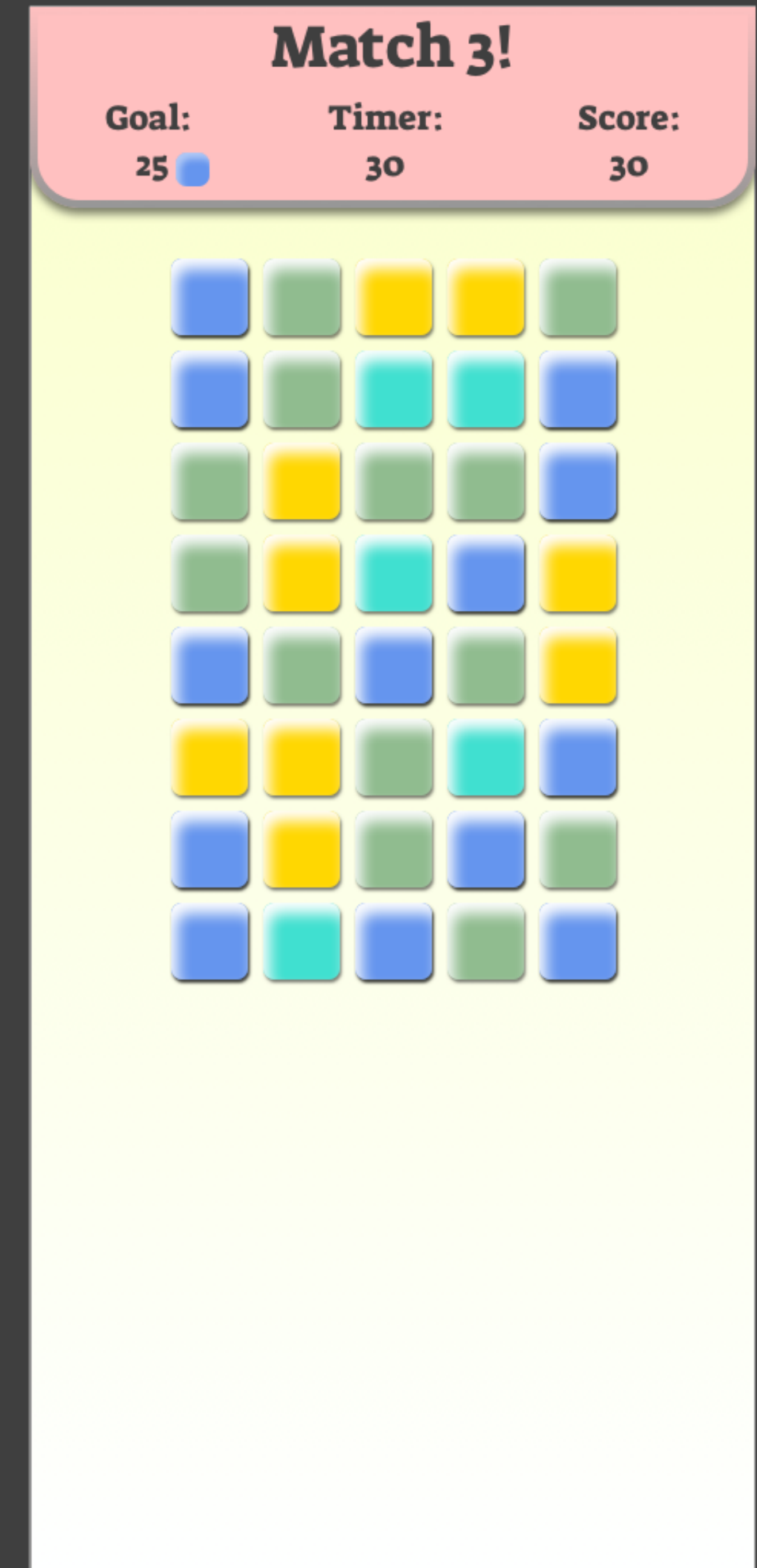
When the Gem Goal has been met, or the timer is over, the endcard will appear.

The Gameboard and UI Text should dissappear, while the UI should slide down becoming the Endcard.

Match 3!

Goal: | Timer: | Score:
0 | 30 | 30

You Won!

Score: 345

Thanks for playing.
If you found this fun or
helpful, share with friends.

Share   Contact

If the player has completed the goal within the timer, the success screen appears.

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If the player has not completed the goal within the timer, the failure screen appears.

Try again!

Score: 125

Thanks for playing.
If you found this fun or
helpful, share with friends.

Share   **Contact**

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