

Assignment

Implement a browser version of the game of memory.

Requirements

1. The game is available on JSFiddle, created from a new fiddle at
<https://jsfiddle.net>
2. It is a single-player game.
3. You may use any popular utility libraries or just plain JS, HTML and CSS.
4. The game board is always square ($N \times N$) where N is some hard coded value you can pick and $N \% 2 = 0$.
5. The game board is composed of randomly generated pairs.
6. Render the game board with HTML.
7. The board should be a grid of squares.
8. The grid line width should be 2px (device-independent-pixels).
9. Use UTF-8 characters for the card images. 🌀 (➊) through 🗿 (➋)
10. All cards start "face-down", displaying a placeholder UTF-8 character of your choosing.
11. The game starts as soon as the page loads after clicking the JSFiddle run button.
12. Clicking on a card that is "face-down" will display the card's UTF-8 character, replacing the "face-down" character.
13. At most, two cards can be visible (face-up) at the same time.
14. If two visible cards do not match, fill the grid boxes containing the two cards with red.
15. If two visible cards match, fill the grid boxes containing the two cards with a color other than red.
16. Display the background color change for the two cards for two seconds.
17. If the two cards matched, remove the cards, display empty boxes.
18. When removing the card background colors, if the cards did not match, change the grid box back to the "face-down" characters.
19. When removing the card background colors, if the cards did match, remove the characters, leaving empty boxes.
20. When all matches are found, change the entire board to the color used when a match is found.

21. Meeting the requirements is all that is necessary, but do fix bugs that make the game unplayable.

Bootstrapping

1. This is not strictly timed, but give yourself roughly 60 to 90 minutes.
2. Click save and bookmark the unique URL in the browser so you won't lose your work.
3. Submit the url when you are finished.