

WEB DEVELOPMENT: MEMORY GAME

PROBLEM STATEMENT:

Find the Pair is a challenging concentration memory game that requires players to spot the identical pairs in each level. Match pairs of shapes together with the help of your memory.

It is a game which aims finding all matching pairs of pictures. At start all pictures are face down, click the boxes to uncover them if the last pictures don't match, they will again turn face down, repeat till you uncover all the pairs.

LANGUAGES USED:

1. **HTML**
2. **CSS**
3. **JavaScript**

DESIGN:

- Contains a header saying "MEMORY GAME" with a blue background.
- A grid of constant size 6*6 which contains 36 photos (18 pairs)
- Each square has two sides a back with a question mark "?" and a picture of an animal on the other side
- A "NEW GAME" Button that can be highlighted when you hover the mouse pointer.
- A "SOLVE" button that can be highlighted when you hover the mouse pointer.
- A timer that tells the player how much time did the game from start to finish took.

FEATURES:

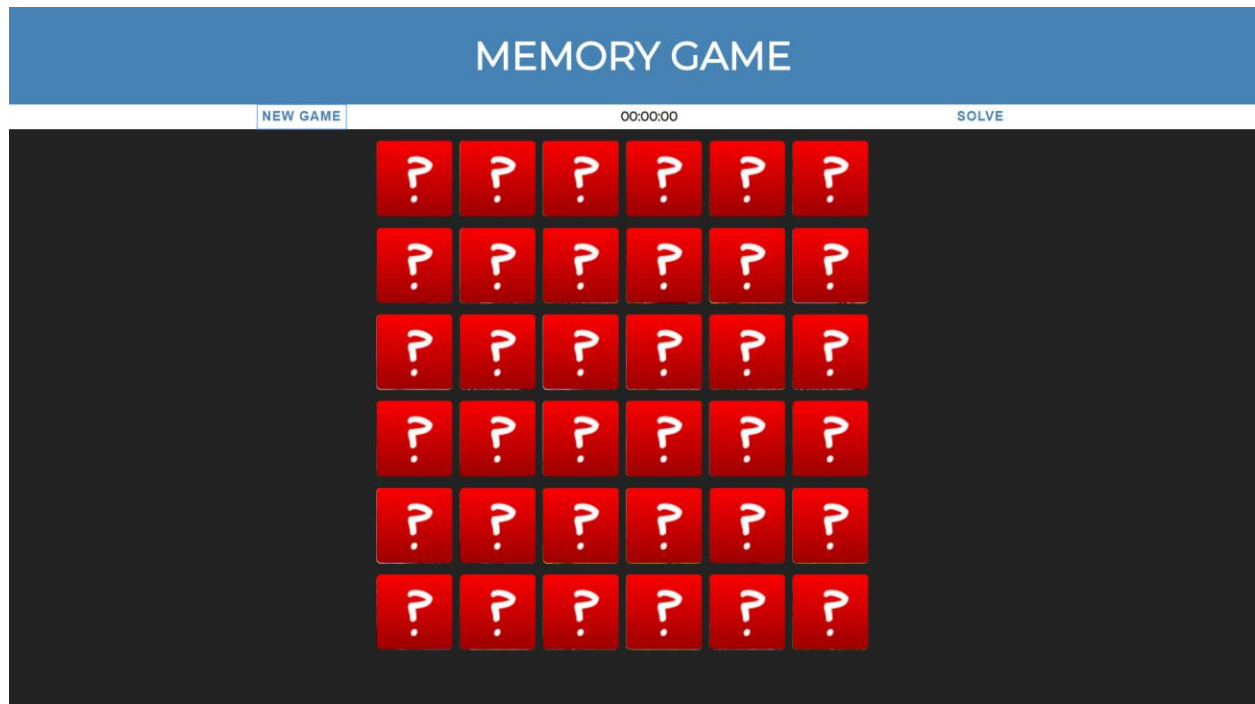
- Each square flip using a 3D rotation animation once clicked on it to reveal the other side of the square.
- A timer that starts once the player clicks on any square as long as it's the first square to be clicked on in any new game, and stops counting when the player wins the game by pairing all the pictures, and turns red when you win the game.
- Once clicked, the picture gets scaled to 0.97 of the original square size, providing a 3D click effect.
- Contains a header saying "MEMORY GAME" with a blue background and changes into "WELL DONE" with a red background when you successfully win the game by pairing all 18 pairs.
- A "NEW GAME" Button that shuffles the pictures and starts the new game even mid-playing the game.
- Clicking "SOLVE" Button flips all squares revealing the pairs, even if it's pressed midway through the game, and the timer stops once you press it whenever the button is pressed indicting the time from the start of the game until it's completely solved
- Special fonts are linked using Google font.
- The buttons "SOLVE" & "NEW GAME" are designed to match the background, color and design wise.

USER MANUAL:

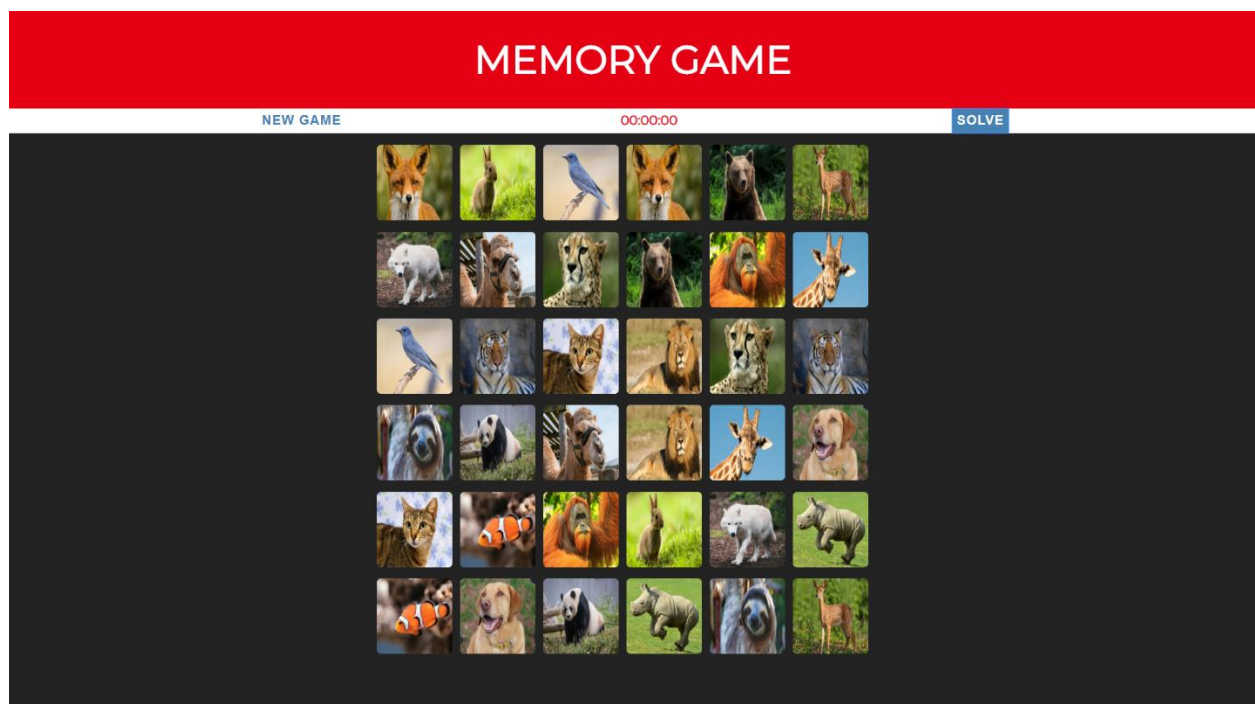
- Open the HTML file
- Click on any square to start the game.
- Keep clicking until you pair all 18 pairs.
- If the player wants to start a new game at any time in the game by pressing "NEW GAME".
- If the player wishes to solve the game midway it can be done by pressing "SOLVE".

SCREENSHOTS AND DEMOS:

1. Opening the HTML file



2. Clicking the "SOLVE" button to solve all of the grid.



3. Clicking "NEW GAME" button, to restart the game.



4. Midgame with the timer counting and some pairs are found already.



5. Two unsimilar pics turning over cause they're not a pair.



6. When you win the game the header changes from "MEMROY GAME" to "WELL DONE!"

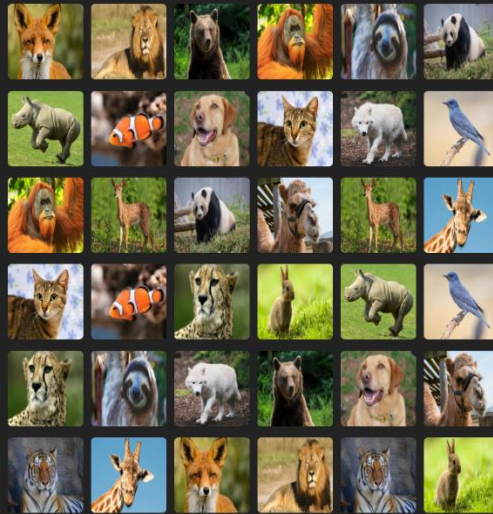


WELL DONE!

NEW GAME

00:03:54

SOLVE



STUDENTS:

- Seif Eldeen Ehab – 34
- AbdelRahman Adel AbdelFattah - 40