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## Memory Game for Kids in JavaScript

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### Content :

#### 1. Creating the structure of the game board.

I started with creating a 4 x 4 grid game board to hold 16 cards using the `html <table>` element. I created a table with 4 rows and 4 columns.

Then I set the images visibility to hidden which turned the game board into a grid with 16 black cells.

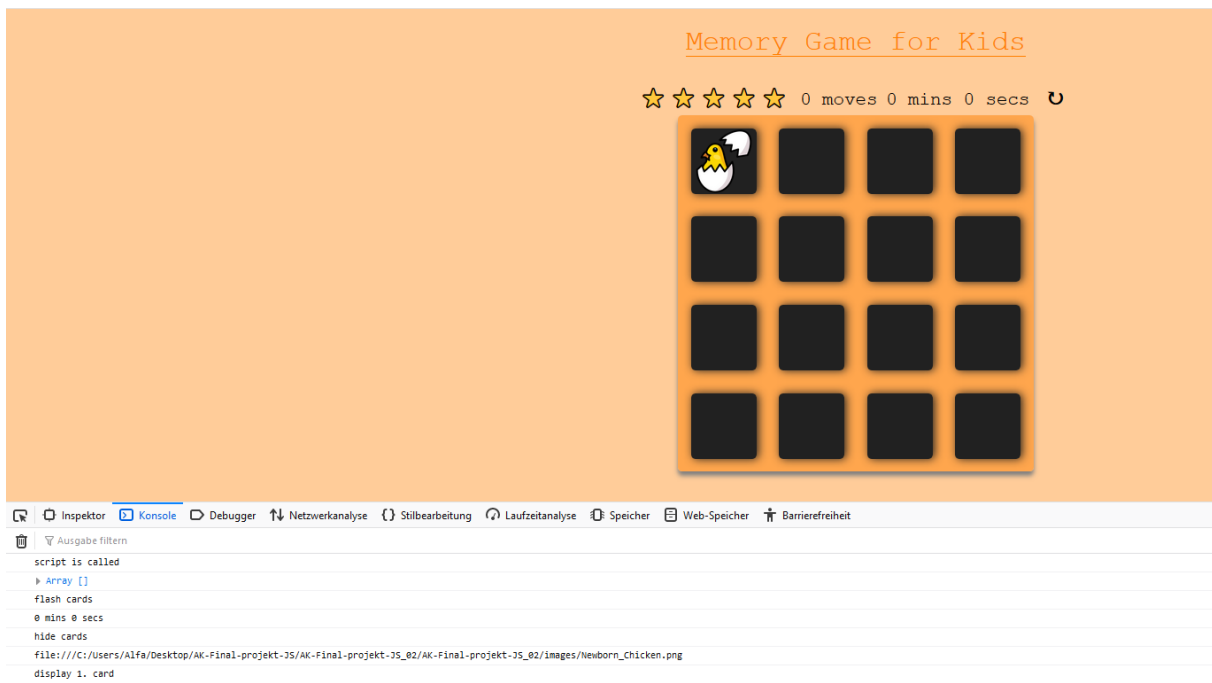


## 2. Displaying the cards images on click of each card

it looks like the images are behind the card and will flip to display the images when clicked.

I collected all the cards i.e all the `<td class="game-card">` and stored them in a variable thus: `let cardElements = document.getElementsByClassName('game-card')`. Then I used a for loop to loop through them and add a click event listener.

```
for(let i = 0; i < cardElements.length; i++) {  
    cardElements[i].addEventListener('click', displayCard)  
}
```



## 3. Shuffling Cards

The game requires that cards had to be shuffled on page load (when the game starts) or on restart. A shuffle function called the Fisher-Yates ([https://en.wikipedia.org/wiki/Fisher-Yates\\_shuffle](https://en.wikipedia.org/wiki/Fisher-Yates_shuffle))

Shuffle was provided already.

Next, I call the startGame() function on page load

```
window.addEventListener('load', startGame);
```

## 4. Matching Cards

Here we have three options

1. when there is no card open, open a card as actual card.
2. when another card open, push the actual card value to first card
3. then again compare both the card

For matching



Or not matching



## 5. Counting and Displaying How Many Moves Player Has Made

call a `moveCounter()` function which increments the number of moves a player has done when two cards have been selected, then sets the `innerHTML` of my counter element to that value.

## 6. Displaying Star Rating that Reflects Player's Performance Based on the Number of Moves Made.

I collected all `.star` elements in an array called `starElementsArray`

Then modified moveCounter() function; reducing opacity

## 7.Display a Modal When The Game Ends

When all cards have been correctly matched; the game ends and a modal should appear to alert the user.

