Array Cardio Practice Day 2 Explanation

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <title>Array Cardio 💪💪</title>

  <link rel="icon" href="https://fav.farm/✅" />

  <style>

    table {

      border-collapse: collapse;

      width: 100%;

    }

    th,

    td {

      border: 1px solid #ddd;

      padding: 8px;

      text-align: left;

    }

    /\* My code \*/

    body {

      padding: 1%;

    }

    h2 {

      border-top: 2px solid black;

      padding-top: 1%;

    }

    pre {

      background-color: black;

      color: #2666cb;

      max-width: fit-content;

      padding: inherit;

    }

  </style>

</head>

<body>

  <p><em>Psst: have a look at the JavaScript Console</em> 💁</p>

  <h2>Array Cardio Day 2 Assessments</h2>

  <h2>Some and Every Checks</h2>

  <h3>Question 1: Is at least one person 19 years or older?</h3>

  <p>Answer: <code>true</code></p>

  <h3>Question 2: Is everyone 19 years or older?</h3>

  <p>Answer: <code>false</code></p>

  <h2>Find and FindIndex</h2>

  <h3>Question 3: Find the comment with the ID of 823423</h3>

  <p>Answer: <code>{ text: 'Super good', id: 823423 }</code></p>

  <h3>Question 4: Find the index of the comment with the ID of 823423</h3>

  <p>Answer: <code>1</code></p>

  <h3>Question 5: Delete the comment with the ID of 823423</h3>

  <p>Answer: The comment has been removed from the array.</p>

  <h2>Updated Comments Array</h2>

  <pre>

    const newComments = [

      { text: 'Love this!', id: 523423 },

      { text: 'You are the best', id: 2039842 },

      { text: 'Ramen is my fav food ever', id: 123523 },

      { text: 'Nice Nice Nice!', id: 542328 }

    ];

  </pre>

  <!-- Challenge script -->

  <script>

    // ## Array Cardio Day 2

    const people = [

      { name: 'Wes', year: 1988 },

      { name: 'Kait', year: 1986 },

      { name: 'Irv', year: 1970 },

      { name: 'Lux', year: 2015 }

    ];

    const comments = [

      { text: 'Love this!', id: 523423 },

      { text: 'Super good', id: 823423 },

      { text: 'You are the best', id: 2039842 },

      { text: 'Ramen is my fav food ever', id: 123523 },

      { text: 'Nice Nice Nice!', id: 542328 }

    ];

    // Some and Every Checks

    // Array.prototype.some() // is at least one person 19?

    const isAdult = people.some(person => ((new Date()).getFullYear()) - person.year >= 19);

    console.log({ isAdult });

    // Array.prototype.every() // is everyone 19?

    const allAdults = people.every(person => ((new Date()).getFullYear()) - person.year >= 19);

    console.log({ allAdults });

    // Array.prototype.find()

    // Find is like filter, but instead returns just the one you are looking for

    // find the comment with the ID of 823423

    const comment = comments.find(comment => comment.id === 823423);

    console.log(comment);

    // Array.prototype.findIndex()

    // Find the comment with this ID

    // delete the comment with the ID of 823423

    const index = comments.findIndex(comment => comment.id === 823423);

    console.log(index);

    // comments.splice(index, 1);

    const newComments = [

      ...comments.slice(0, index),

      ...comments.slice(index + 1)

    ];

    console.log("Updated Comments Array:", newComments);

  </script>

</body>

</html>

Below is a brief explanation of how the exercises that I have made for this challenge:

These exercises serve as practice for working with array methods in JavaScript, specifically some, every, find, findIndex, and manipulation of arrays based on certain conditions. The code focuses on working with arrays of people and comments, performing checks and modifications.

1. **Initialization of Data Arrays:**

Two arrays, people and comments, are initialized. The people array contains objects with name and year properties, representing individuals and their birth years. The comments array contains objects with text and id properties, representing comments with text and unique IDs.

1. **Some and Every Checks:**

The some and every array methods are used to check conditions within the people array based on birth years.

Array.prototype.some() is used to check if at least one person in the people array is 19 years or older. The result is stored in the isAdult variable.

Array.prototype.every() is used to check if everyone in the people array is 19 years or older. The result is stored in the allAdults variable.

The results of these checks are logged to the console.

1. **Find and FindIndex:**

Array.prototype.find() is used to find a comment in the comments array with a specific ID (823423). The result is stored in the comment variable and logged to the console.

Array.prototype.findIndex() is used to find the index of the comment with the same ID (823423) in the comments array. The result is stored in the index variable and logged to the console.

The comment with the specified ID (823423) is then removed from the comments array, and the updated array is logged to the console.

1. **Updated Comments Array:**

The comments array is updated by removing the comment with the specified ID (823423) using the splice() method.

An alternative method using the spread operator and slice() is shown to achieve the same result. The updated array is logged to the console.

1. **Updated Comments Array Display:**

The updated comments array (newComments) is displayed using the <pre> tag in the HTML, showing the array with the specified comment removed.

**What I have learned**

From this challenge, I have learned to effectively use array methods in JavaScript for tasks such as filtering, checking conditions, finding elements, and updating arrays.