

Exercise 3 - Image Slider

Subjects: DOM, Events, Arrays

Objective: Create an image slider that allows users to navigate through a series of images using "Previous" and "Next" buttons. The image slider should adjust the visible image based on user interaction, and also manage boundary conditions (i.e., not moving past the first or last image).

Instructions:

1. JavaScript Functionality:

◦ Initialization:

- Use the `document.querySelectorAll()` method to select all `` elements within the "slider" div. Store these in a variable named `slides`.
- Create a variable named `currentIndex` to keep track of the currently displayed image. Initialize it to `0`, corresponding to the first image.

◦ Moving Between Slides:

- Create a function named `moveSlide()` that accepts a single parameter, `direction`, which will be either `1` (for "Next") or `-1` (for "Previous").
- In this function:
 - Remove the "active" class from the currently displayed image.
 - Adjust the `currentIndex` by adding the `direction` value to it.
 - Handle boundary conditions:
 - If the new `currentIndex` would be less than `0` (trying to go before the first image), reset it to `0`.
 - If the new `currentIndex` would be equal to or greater than the number of slides, set it to the last index.
 - Add the "active" class to the new current image based on the adjusted `currentIndex`.

2. User Interaction:

- Assign the `moveSlide()` function to the "Previous" and "Next" buttons' `onclick` handlers, passing `-1` for "Previous" and `1` for "Next".

3. Test Your Slider:

- Open the HTML file in a browser.
- Click the "Previous" and "Next" buttons to ensure the images are sliding correctly.
- Ensure that you cannot navigate before the first image or after the last image.

4. HTML:

- use the attached HTML code for this exercise.