

JavaScript Challenge 1 - Image Gallery Hover Preview

Objective:

Develop an interactive image gallery that displays a larger preview of an image when the user hovers over a thumbnail. This exercise emphasizes the use of Event Delegation in JavaScript.

Preview Video:

[Link to the video showcasing how the final product should look.](#)

Requirements:

You are provided with the HTML, CSS files, and images. Your task is to write the JavaScript code to achieve the functionality described below.

Verbal Walkthrough:

1. Select Elements:

Begin by selecting the required elements from the DOM, specifically the thumbnails container, the preview container, and the preview image element.

2. Display Preview on Mouseover:

Attach a 'mouseover' event listener to the thumbnails container. Within the handler function, check if the hovered target is an image. If so, extract the source from the target image and set it to the preview image. Finally, make the preview container visible.

3. Hide Preview with Delay on Mouseout:

Add a 'mouseout' event listener to the thumbnails container. In this handler, implement a timeout function to add a small delay (e.g., 300ms) before hiding the preview container. This will create a smoother user experience.

4. Handle Preview Mouseover and Mouseout:

To avoid flickering, you'll need to add 'mouseover' and 'mouseout' event listeners to the preview container itself. For the 'mouseover' event, make sure to clear any existing timeout set for hiding the preview. For the 'mouseout' event, hide the preview immediately.

5. Testing and Debugging:

Thoroughly test your implementation to ensure it functions smoothly. Debug any issues that arise and make necessary adjustments to achieve the desired behavior.

Evaluation Criteria:

- **Correctness:** Does the solution meet all the functional requirements?
- **Use of Event Delegation:** Is event delegation effectively utilized?
- **Code Quality:** Is the code clean, well-organized, and easy to understand?
- **User Experience:** Does the preview display smoothly without any flickering?

Notes:

Feel free to refer to online resources for further guidance. Pay special attention to event handling, event delegation, and the use of the `setTimeout` and `clearTimeout` functions in JavaScript.