

Lab Assignment: Interactive Photo Gallery

Objective:

Create an interactive photo gallery where users can view images, filter by categories, and apply various visual effects to the images. The gallery should be responsive and provide a smooth user experience.

Requirements:

1. HTML Structure (10%)

- Create a basic HTML structure for your photo gallery. Include a header, a section for filters (e.g., buttons to filter images by category), and a section to display images.
- Use semantic HTML5 tags where appropriate.

2. CSS Styling (15%)

- Style your photo gallery to be visually appealing and responsive. Ensure that the gallery looks good on both desktop and mobile devices.
- Use CSS Flexbox or Grid to organize the images.
- Add hover effects to the filter buttons for a better user interaction experience.

3. jQuery Selectors (20%)

- Use jQuery selectors to dynamically update the gallery based on user interactions.
- Implement functionality to filter images by categories using buttons.

4. jQuery Events (25%)

- Handle click events on filter buttons to update the gallery view.
- Implement a lightbox feature: when an image is clicked, it should be displayed in a larger view with a dark background overlay. Users should be

able to close the lightbox view and return to the gallery.

5. jQuery Effects (20%)

- Apply visual effects to the gallery, such as fading in/out images when filtering or when opening/closing the lightbox.
- Optionally, add animation effects when hovering over images.

6. Integration and Interactivity (10%)

- Ensure that all parts of the gallery work together smoothly. The filters, image display, and effects should be seamlessly integrated for a cohesive user experience.
- Test the gallery to ensure it is fully responsive and functional across different browsers and devices.

Deliverables:

- Source code files for HTML, CSS, and jQuery.
- Submit on Blackboard and Github

Assessment Criteria:

- **Functionality:** How well does the gallery work? Are all requirements met?
- **Code Quality:** Is the code well-organized, commented, and adhering to best practices?
- **Design and Usability:** Is the gallery visually appealing and user-friendly?
- **Responsiveness:** Does the gallery work well on both desktop and mobile devices?

This assignment is designed to test a range of skills, including basic HTML and CSS for layout and styling, and more advanced jQuery techniques for dynamic content manipulation and event handling. It offers a hands-on opportunity to create a project that is both visually engaging and interactive.