

Main: https://github.com/Shina003/csc372_projects

Client_site_v3: https://github.com/Shina003/csc372_projects/tree/client_site_v3

Live website: <https://csc372-projects.onrender.com>

Answer to questions

Answer the following questions to explain how you optimized your scripts with jQuery:

a. jQuery Selection

1. What element(s) did you change to be accessed with jQuery instead of JavaScript DOM queries?

In my Contact form, I replaced all the regular JavaScript DOM selections with jQuery. Instead of using `document.getElementById` to grab form elements, I switched to jQuery selectors like `$('#contactForm')` and `$('.form-control')`.

2. How did caching improve performance for frequently accessed elements?

Caching improved performance because I frequently used these elements during form interactions. Instead of searching the DOM each time I needed an element, I could simply refer to the cached references I stored at the start.

b. jQuery Methods

3. What jQuery method(s) did you use to update the DOM tree, manipulate elements, and manage content dynamically?

I added animations with `.fadeIn()` and `.fadeOut()` for showing/hiding elements, and `.slideUp()` and `.slideDown()` for form transitions.

c. jQuery vs. JavaScript

4. Did you rewrite all the code in your script(s) to use only jQuery? If so, explain why.

I didn't rewrite everything in jQuery because I still needed React for the component structure and state management. I discovered that using both together worked best. React handled the component lifecycle and state, while jQuery took care of DOM manipulation and animations.

5. If not, explain why you still needed to use JavaScript for certain features. Provide advantages and disadvantages of using jQuery over plain JavaScript in your project.

Answer the following questions to explain how you used jQuery's event-handling methods and built-in effects:

a. jQuery Events

1. Which event(s) did you modify? How?

In the contact form, I added different jQuery event handlers to enhance the user experience, making it more interactive and responsive. I had the form submission handler (`$form.on('submit')`), which takes care of form validation and the submission. Input fields utilize focus and blur events (`$inputs.on('focus')` and `$inputs.on('blur')`) to give users responses when they interact with the form fields. also, a reset button click event (`$('#resetForm').on('click')`) enables users to clear the form and start over after submission.

2. Why did jQuery's event methods improve your site's performance or maintainability?

jQuery's event methods greatly improved the performance and maintainability of the Contact form implementation. By using event delegation, i minimized memory usage because fewer event listeners had to be attached to the DOM, which is especially advantageous for dynamic elements.

b. jQuery Effects

3. List the effects and animations you implemented.

- I used `fadeIn()/fadeOut()` for showing/hiding validation messages
- I used `slideUp()/slideDown()` for form submission animation
- I used `addClass()/removeClass()` with CSS transitions for smooth hover effects

4. How did they improve the user experience on your site?

jQuery effects improved the user experience of the Contact form by adding different visual feedback elements. As users engage with the form, there are visual cues and features, which makes the interface feel more responsive and engaging.