8. Assuming you have the HTML shown in Figure 9.4 and the CSS classes shown in Figure 9.5, write the event handling code which will toggle (add or remove) the CSS class `box` to the `<footer>` element whenever the user clicks one of the `<li>` elements within the `<nav>` element.
9. Why is JavaScript form validation not sufficient when validating form data?
10. How do AJAX requests differ from normal requests in the HTTP request–response loop?

9.6.3 Hands-On Practice

PROJECT 1: Art Store

DIFFICULTY LEVEL: Beginner

HANDS-ON EXERCISES

Project 9.1

Overview

You will demonstrate your ability to respond to events, select and modify elements via the DOM, and to validate form data.

Instructions

1. You have been provided with the HTML file (**chapter09-project01.html**) that represents the data entry form shown in Figure 9.19. Examine this file in browser.
2. You will notice that some of the form elements have the CSS class `hilightable` specified in their `class` attribute. Add listeners to the `focus` and `blur` events of all elements that have this `hilightable` class. In your event handlers for these two events, simply toggle the class `highlight` (which is in the provided CSS file). This will change the styling of the current form element. Be sure to set up these listeners *after* the page has loaded.
3. You will notice that some of the form elements have the CSS class `required` specified in their `class` attribute. We will not submit the form if these elements are empty. Add an event handler for the submit event of the form. In this handler, if any of the required form elements are empty, add the CSS class `error` to any of the empty elements. As well, cancel the submission of the form (hint: use the `preventDefault()` method).
4. Add the appropriate handler for these required controls that will remove the CSS class `error` that have changed content.

Test

1. Test the form in the browser. Verify the highlighting functionality works by tabbing from field to field. Try submitting the form with blank fields to verify the error formatting works. Verify the error formatting is removed if you add content and then resubmit.

hilightable fields

required fields

Add handlers for the focus and blur events. These handlers will toggle (add or remove) the class highlight

When user submits, if any of the required fields is empty, then add the class error to the required elements
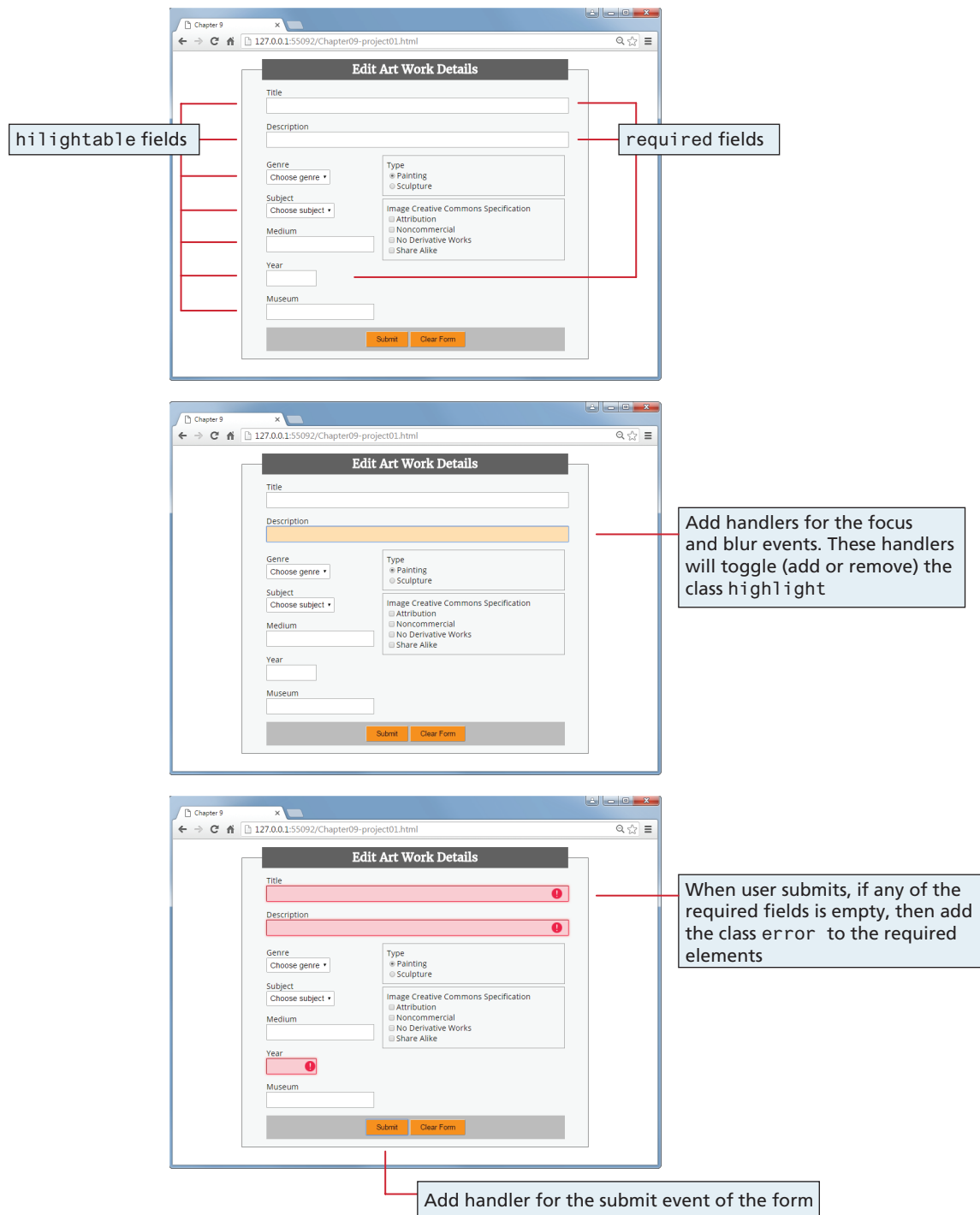
Add handler for the submit event of the form

FIGURE 9.19 Finished Project 1